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## Taxing Wages

## 2010-2011

SPECIAL FEATURE:
TRENDS IN PERSONAL INCOME TAX AND SOCIAL SECURITY CONTRIBUTION SCHEDULES

# Taxing Wages 2011 

SPECIAL FEATURE: TRENDS IN PERSONAL INCOME TAX AND EMPLOYEE SOCIAL SECURITY CONTRIBUTION SCHEDULES

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## Foreword

$\mathrm{T}_{\mathrm{h}}$his annual publication provides details of taxes paid on wages in all thirty-four Member countries of the OECD.* The information contained in the Report covers the personal income tax and social security contributions paid by employees, the social security contributions and payroll taxes paid by their employers and cash benefits received by families. The objective of the Report is to illustrate how personal income taxes, social security contributions and payroll taxes are calculated and to examine how these levies and cash family benefits impact on net household incomes. The results also allow quantitative cross-country comparisons of labour cost levels and of the overall tax and benefit position of single persons and families.

The Report shows the amounts of taxes, social security contributions, payroll taxes and cash benefits for eight family-types, which differ by income level and household composition. It also presents the resulting average and marginal tax rates. Average tax rates show that part of gross wage earnings or total labour costs which is taken in tax (before and after cash benefits), social security contributions and payroll taxes. Marginal tax rates show the part of an increase of gross earnings or total labour costs that is paid in these levies.

The focus of the Report is the presentation of accurate estimates of the tax/benefit position of employees in the edition year (2011). In addition, the Report shows definitive data on the tax/benefit position of employees for the year 2010. It is important to note that, starting from the Report's edition in 2005, the definition of the average worker has been broadened from average manual production worker (ISIC Sector D) to average worker (ISIC Rev. 3.1 Sectors C to K or ISIC Rev. 4 Sectors B to N) including both manual and non-manual workers.**

The Report is structured as follows. The Overview at the beginning of the Report reviews the main results for 2011. Part I of the Report (International Comparisons) reviews the main results for 2011 and 2010 and is divided into three sections. The first section reviews the main results for 2011, which are summarised in comparative tables and figures included at the end of that section. The second section presents a graphical exposition of the estimated tax burden on labour income in 2011 for gross wage earnings between 50 per cent and 250 per cent of the average wage. The third section reviews the main results for 2010, which are summarized in the comparative tables at the end of that section and compares them with the 2011 figures. Part II of the Report focuses on the historical trends in the tax burden for the period 2000-11. Country tables specifying the wage levels considered and the associated tax burdens for eight separate family types are found in Part III, together with descriptions of the tax/ benefit system of each country. The methodology used - and its limitations - are set out in Part IV.

The Report has been prepared under the auspices of the Working Party on Tax Policy Analysis and Tax Statistics of the Committee on Fiscal Affairs and has benefited from financial support provided by the Commission of the European Communities. It is published on the responsibility of the Secretary-General of the OECD.

* Previous editions were published under the title The Tax/Benefit Position of Employees (1996-98 editions) and The Tax/Benefit Position of Production Workers (editions published before 1996).
** Annex C presents historical series using the old definition of the average production worker (1979-2004).


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## Table of contents

Overview ..... 11

1. Introduction ..... 11
2. Review of results for 2011 ..... 12
Notes ..... 25
Special Feature: Trends in personal income tax and employee social security contribution schedules ..... 27
3. Introduction ..... 28
4. Description of personal income tax schedules ..... 30
5. Income thresholds associated with the top and bottom statutory tax rates ..... 48
6. Statutory personal income tax schedules in relation to marginal and average tax rates ..... 54
7. Employee social security contribution schedules ..... 59
8. Conclusions ..... 64
Annex. Statutory, marginal and average personal income tax rate schedules ..... 67
Part I
INTERNATIONAL COMPARISONS
Tax burdens, 2011 estimates ..... 78
I.1. Income tax plus employee and employer contributions less cash benefits, 2011 Table. As \% of labour costs, by family-type and wage level ..... 84
Figure. Income tax plus employee and employer contributions less cash benefits, 2011 ..... 85
I.2. Income tax plus employee contributions, 2011
Table. As \% of gross wage earnings, by family-type and wage level ..... 86
Figure. Income tax plus employee contributions, 2011 ..... 87
I.3. Income tax plus employee contributions less cash benefits, 2011
Table. As \% of gross wage earnings, by family-type and wage level ..... 88
Figure. Income tax plus employee contributions less cash benefits, 2011 ..... 89
I.4. Income tax, by family-type and wage level, 2011
Table. As \% of gross wage earnings ..... 90
Figure. Income tax, by family-type, 2011 ..... 91
I.5. Employee contributions, 2011
Table. As \% of gross wage earnings, by family-type and wage level ..... 92
Figure. Employee contributions, 2011 ..... 93
I.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, 2011
Table. As \% of labour costs, by family-type and wage level ..... 94
Figure. Marginal rate of income tax plus employee and employer contributions less cash benefits, 2011 ..... 95
I.7. Marginal rate of income tax plus employee contributions less cash benefits, 2011 Table. As \% of gross wage earnings, by family-type and wage level ..... 96
Figure. Marginal rate of income tax plus employee contributions less cash benefits, 2011 ..... 97
I.8. Increase in net income after an increase of 1 currency unit in gross wages, 2011 Table. By family-type and wage level (\%) ..... 98
I.9. Increase in net income after an increase of 1 currency unit in gross labour cost, 2011 Table. By family-type and wage level (\%) ..... 99
I.10. Annual gross wage and net income, 2011
Table. In US dollars using PPP, by family-type and wage level ..... 100
I.11. Annual labour costs and net income, 2011
Table. In US dollars using PPP, by family-type and wage level ..... 102
Graphical exposition of the 2011 estimated tax burden ..... 104
Tax burdens, 2010 definitive results (and changes to 2011) ..... 141
I.12. Income tax plus employee and employer contributions less cash benefits, 2010 ..... 144
I.13. Income tax plus employee contributions, 2010 ..... 145
I.14. Income tax plus employee contributions less cash benefits, 2010 ..... 146
I.15. Income tax, by family-type and wage level, 2010 ..... 147
I.16. Employee contributions, 2010 ..... 148
I.17. Marginal rate of income tax plus employee and employer contributions less cash benefits, 2010 ..... 149
I.18. Marginal rate of income tax plus employee contributions less cash benefits, 2010 ..... 150
I.19. Increase in net income after an increase of 1 currency unit in gross wages, 2010 ..... 151
I.20. Increase in net income after an increase of 1 currency unit in gross labour cost, 2010 ..... 152
I.21. Annual gross wage and net income, 2010 ..... 153
I.22. Annual labour costs and net income, 2010 ..... 155
Part II
TAX BURDEN TRENDS 2000-11
9. Historical trends ..... 158
10. Tax wedge ..... 158
11. Average income tax rate ..... 159
12. Net personal average tax rate ..... 160
13. Progressivity ..... 161
14. Families ..... 161
II.1a. Income tax plus employee and employer contributions less cash benefits, single persons, $67 \%$ of average earnings ..... 163
II.1b. Income tax, single persons, $67 \%$ of average earnings ..... 164
II.1c. Income tax plus employee contributions less cash benefits, single persons, $67 \%$ of average earnings ..... 165
II.2a. Income tax plus employee and employer contributions less cash benefits, single persons, $100 \%$ of average earnings ..... 166
II.2b. Income tax, single persons, $100 \%$ of average earnings ..... 167
II.2c. Income tax plus employee contributions less cash benefits, single persons, $100 \%$ of average earnings ..... 168
II.3a. Income tax plus employee and employer contributions less cash benefits, single persons, $167 \%$ of average earnings ..... 169
II.3b. Income tax, single persons at $167 \%$ of average earnings ..... 170
II.3c. Income tax plus employee contributions less cash benefits, single persons at $167 \%$ of average earnings ..... 171
II.4a. Income tax plus employee and employer contributions less cash benefits, single parent at $67 \%$ of average earnings ..... 172
II.4b. Income tax, single parent at 67\% of average earnings. ..... 173
II.4c. Income tax plus employee contributions less cash benefits, single parent at $67 \%$ of average earnings ..... 174
II.5a. Income tax plus employee and employer contributions less cash benefits, married couple at 100\% of average earnings. ..... 175
II.5b. Income tax, married couple at $100 \%$ of average earnings. ..... 176
II.5c. Income tax plus employee contributions less cash benefits, married couple at $100 \%$ of average earnings ..... 177
II.6a. Income tax plus employee and employer contributions less cash benefits, married couple at $100 \%$ and $33 \%$ of average earnings ..... 178
II.6b. Income tax, married couple at $100 \%$ and $33 \%$ of average earnings ..... 179
II.6c. Income tax plus employee contributions less cash benefits, married couple at $100 \%$ and $33 \%$ of average earnings ..... 180
II.7a. Income tax plus employee and employer contributions less cash benefits, married couple at $100 \%$ and $67 \%$ of average earnings ..... 181
II.7b. Income tax, married couple at $100 \%$ and $67 \%$ of average earnings ..... 182
II.7c. Income tax plus employee contributions less cash benefits, married couple at $100 \%$ and $67 \%$ of average earnings ..... 183
II.8a. Income tax plus employee and employer contributions less cash benefits, married couple at $100 \%$ and $33 \%$ of average earnings ..... 184
II.8b. Income tax, married couple at $100 \%$ and $33 \%$ of average earnings ..... 185
II.8c. Income tax plus employee contributions less cash benefits, married couple at $100 \%$ and $33 \%$ of average earnings. ..... 186
II.9. Annual average gross wage earnings, single individual no children, 2000-11 (US dollars using PPP) ..... 187
II.10. Annual average gross wage earnings, single individual no children, 2000-11 (national currency) ..... 188

## Part III <br> COUNTRY DETAILS, 2011

Australia ..... 191
Austria ..... 205
Belgium ..... 217
Canada ..... 227
Chile ..... 241
Czech Republic ..... 249
Denmark ..... 257
Estonia ..... 269
Finland ..... 277
France ..... 285
Germany ..... 297
Greece ..... 309
Hungary ..... 319
Iceland ..... 327
Ireland ..... 337
Israel ..... 347
Italy ..... 357
Japan ..... 367
Korea. ..... 379
Luxembourg ..... 389
Mexico ..... 399
Netherlands ..... 409
New Zealand ..... 423
Norway ..... 431
Poland ..... 441
Portugal ..... 451
Slovak Republic ..... 463
Slovenia ..... 473
Spain. ..... 483
Sweden ..... 493
Switzerland ..... 503
Turkey ..... 517
United Kingdom ..... 525
United States ..... 533

## Part IV <br> Methodology and limitations

Methodology ..... 544

1. Introduction ..... 544
2. Calculation of gross wage earnings. ..... 544
3. Estimating gross wage earnings in 2011 ..... 548
4. Coverage of taxes and benefits ..... 552
5. Taxpayer characteristics. ..... 553
6. Calculation of personal income taxes ..... 553
7. State and local income taxes ..... 554
8. Social security contributions ..... 554
9. Payroll taxes ..... 555
10. Church tax ..... 556
11. Family cash benefits from general government ..... 556
12. Payable tax credits ..... 556
13. The calculation of marginal tax rates ..... 557
Limitations ..... 559
14. General limitations ..... 559
15. Some specific limitations on the income tax calculation ..... 560
16. Limitations to time-series comparisons ..... 560
A note on the tax equations ..... 562
Annex A. Source of earnings data ..... 566
Annex B. Exchange rates and purchasing power parities of national currencies, 2011 ..... 568
Annex C. Historical series under the old definition of average worker, 1979-2004 ..... 569

## Overview

Thhis Report provides unique information for each of the OECD countries on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for one- and two-earner households, and the implied total labour costs for employers. These data are widely used in academic research and in the formulation and evaluation of social and economic policies. The taxpayer specific detail in this Report enables it to complement the information provided annually in the Revenue Statistics, a publication providing internationally comparative data on tax levels and tax structures in the thirty-four member countries. The methodology followed in this Report is set out briefly in the introduction section below and described in more detail in Part IV.

The present edition provides estimates of tax burdens and of the tax "wedge" between labour costs and net take-home pay for eight illustrative family types on comparable levels of income. The key results for 2011 are summarised in Section 2 below. Part I of the Report presents more detailed results for 2011, together with definitive results for 2010 and discusses the changes between the two years. Part II of the Report reviews historical changes in tax burdens between 2000 and 2011.

## 1. Introduction

This section briefly introduces the methodology employed for this Report, which focuses on employees. It is assumed that their annual income from employment is equal to a given ratio of the average full-time adult gross wage earnings for each OECD economy, also referred to as the average wage (AW). This covers both manual and non-manual workers for either industry Sectors C-K inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 3 (ISIC Rev. 3) or industry Sectors B-N inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev. 4). ${ }^{1}$ Further details are provided in Table 0.6 as well as in Part IV of this Report. Additional assumptions are made regarding other relevant personal circumstances of these wage earners in order to determine their tax/benefit position. The taxes included in the present Report are confined to personal income tax, social security contributions and payroll taxes (which, in this Report, are aggregated with employer social contributions in the calculation of tax rates) payable on gross wage earnings. Consequently, any income tax that might be due on non-wage income and other kinds of taxes - e.g. corporate income tax, net wealth tax and consumption taxes - are not taken into account. The benefits included are those paid by general government as cash transfers, usually in respect of dependent children.

Prior to the 2004-05 edition of this Report, these calculations were based on the narrower concept of average full time wages of manual workers in the manufacturing sector, referred to as the average production worker (APW). Moving to the new definition has involved a break in the time series for the earnings measure, and for the corresponding Taxing Wages tax rate results. However, this Report does include historical figures for the new average worker definition from 2000. For Turkey, the gross wage earnings of the average worker under the new AW wage definition are not available and therefore, the figures continue to be based on the old APW wage definition.

For most OECD countries, the tax year is equivalent to the calendar year, the exceptions being Australia, New Zealand and the United Kingdom. In the case of New Zealand and the United Kingdom, where the tax year starts in April, the calculations apply a "forward looking" approach. This implies that, for example, the tax rates reported for 2011 are those for the fiscal year 2011-12. However, in Australia, where the tax year starts in July, it has been decided to take a "backward looking" approach in order to present more reliable results. So, for example, the year 2011 in respect of Australia has been defined to mean its fiscal year 2010-11.

This Report contains several measures of taxation on labour. Most emphasis is given to the tax wedge - a measure of the difference between labour costs to the employer and the corresponding net take-home pay of the employee - which is calculated by expressing the sum of personal income tax, employee plus employer social security contributions together with any payroll tax, minus benefits as a percentage of labour costs. Employer social security contributions and - in some countries - payroll taxes are added to gross wage earnings of employees in order to determine a measure of total labour costs. Of course, it should be recognised that this measure may be less than the true labour costs faced by employers because, for example, employers may also have to make non-tax compulsory payments. The average tax wedge measures identify that part of total labour costs which is taken in tax and social security contributions net of cash benefits. In contrast, the marginal tax wedge measures identify the part of an increase of total labour costs that is paid in these levies.

In addition, there is a focus on the personal average tax rate in the calculations. The net personal average tax rate is the term used when the personal income tax and employee social security contributions net of cash benefits are expressed as a percentage of gross wage earnings. The net personal marginal tax rate shows the part of an increase of gross wage earnings that is paid in personal income tax and employee social security contributions net of cash benefits.

## 2. Review of results for 2011

### 2.1. Tax wedge

Table 0.1 shows that the tax wedge between total labour costs to the employer and the corresponding net take-home pay for single workers without children, at average earnings levels, varied widely across OECD countries in 2011 (see column 1). While in Belgium, Germany, Hungary and France, the tax wedge rates are around $50 \%$ or higher, they are under 20\% in Chile, Israel, Mexico and New Zealand. The highest tax wedge rate is observed in Belgium (55.5\%) and the lowest in Chile (7\%).

The changes in tax wedge rates between 2010 and 2011 for an average worker without children are described in column 2 of Table 0.1. The tax wedges increased in twenty-six countries and fell in six. The largest increase was in Hungary ( 2.77 percentage points). New Zealand (-1.12 percentage point) was the only country with a decrease of more than one percentage point.

In general, the rises in tax wedge rates are driven by higher income taxes (see column 3). This was the major factor in eighteen of the countries showing an overall increase. The largest increases in income taxes as a percentage of labour costs were in Ireland ( 3.82 percentage points) where more than half of the increase was offset by a reduction in employee social security contributions and Hungary ( 2.4 percentage points). In New Zealand, the whole of the 1 percentage point fall is attributed to income taxes. By contrast, higher employee and employer social security contributions account for virtually all of the increased tax wedge in Germany, Japan, Korea, Luxembourg and Norway. In the United States, where the overall tax wedge fell by 0.9 percentage points, a rise in income tax was offset by a decrease in employee social security contributions.

Table 0.2 and Figure 0.1 show the constituent components of the tax wedge, i.e. income tax, employee and employer social security contributions, for 2011, as a percentage of labour costs for a single individual without children on average earnings. The labour costs in Table 0.2 are expressed in terms of dollars with equivalent purchasing power. Figure 0.1 shows that the average tax wedge in OECD countries is 35.2 per cent.

The percentage of labour costs paid in income tax varies considerably within OECD countries. The lowest figures are in Chile (zero), Korea (3.9\%) and Mexico (4.4\%). The highest values are in Denmark (28\%), with Australia, Belgium and Iceland all between 21 and $26 \%$. The percentage of labour costs paid in employee social security contributions also varies widely ranging from zero in Australia and New Zealand to $17.4 \%$ in Germany and $19 \%$ in Slovenia. Employers in France pay 29.7 per cent of total labour costs in social security contributions (including payroll taxes), the highest amongst OECD countries. These contributions are also more than 20 per cent of labour costs in nine other countries - Austria, Belgium, Czech Republic, Estonia, Hungary, Italy, Slovak Republic, Spain and Sweden.

As a percentage of labour costs, the total of employee and employer social security contributions exceeds 20 per cent in more than half of the OECD countries. It also exceeds one-third of total labour costs in six OECD countries: Austria, Belgium, the Czech Republic, France, Germany and Hungary.

### 2.2. Personal average tax rates

The personal average tax rate is defined as income tax plus employee social security contributions as a percentage of gross wage earnings. ${ }^{2}$ Table 0.3 and Figure 0.2 show the personal average tax rates for a single worker without children at the average earnings level in 2011. The gross wage earnings figures in Table 0.3 are expressed in terms of dollars with equivalent purchasing power. Figure 0.2 provides a graphical representation of the personal average tax rate decomposed between income tax and employee social security contributions.

Table 0.1. Comparison of total tax wedge
As \% of labour costs ${ }^{1}$

| Country ${ }^{2}$ | Total tax wedge 2011 | Annual change 2011/10 (in percentage points) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Tax wedge | Income tax | Employee SSC | Employer SSC ${ }^{3}$ |
|  | (1) | (2) | (3) | (4) | (5) |
| Belgium | 55.5 | 0.16 | 0.04 | -0.01 | 0.13 |
| Germany | 49.8 | 0.59 | 0.04 | 0.28 | 0.28 |
| Hungary | 49.4 | 2.77 | 2.39 | 0.39 | 0.00 |
| France | 49.4 | 0.03 | 0.04 | -0.01 | 0.00 |
| Austria | 48.4 | 0.24 | 0.24 | 0.00 | 0.00 |
| Italy | 47.6 | 0.44 | 0.44 | 0.00 | 0.00 |
| Sweden | 42.8 | 0.04 | 0.05 | 0.00 | 0.00 |
| Finland | 42.7 | 0.24 | 0.08 | 0.03 | 0.13 |
| Slovenia | 42.6 | 0.11 | 0.11 | 0.00 | 0.00 |
| Czech Republic | 42.5 | 0.38 | 0.38 | 0.00 | 0.00 |
| Estonia | 40.1 | 0.09 | 0.09 | 0.00 | 0.00 |
| Spain | 39.9 | 0.14 | 0.14 | 0.00 | 0.00 |
| Portugal | 39.0 | 1.38 | 1.38 | 0.00 | 0.00 |
| Slovak Republic | 38.9 | 0.95 | 0.95 | 0.00 | 0.00 |
| Denmark | 38.4 | 0.09 | 0.08 | 0.00 | 0.00 |
| Netherlands | 37.8 | -0.34 | -0.14 | 0.01 | -0.21 |
| Turkey | 37.7 | -0.16 | -0.16 | 0.00 | 0.00 |
| Norway | 37.5 | 0.25 | 0.03 | -0.02 | 0.24 |
| Luxembourg | 36.0 | 1.65 | 0.29 | 0.72 | 0.64 |
| Poland | 34.3 | 0.12 | 0.12 | 0.00 | 0.00 |
| Iceland | 34.0 | 0.63 | 0.63 | 0.00 | 0.00 |
| United Kingdom | 32.5 | -0.08 | -0.56 | 0.25 | 0.23 |
| Canada | 30.8 | 0.33 | 0.19 | 0.00 | 0.14 |
| Japan | 30.8 | 0.58 | -0.09 | 0.33 | 0.34 |
| United States | 29.5 | -0.93 | 0.93 | -1.82 | -0.04 |
| Ireland | 26.8 | 0.95 | 3.82 | -2.87 | 0.00 |
| Australia | 26.7 | -0.18 | 0.04 | 0.00 | -0.22 |
| Switzerland | 21.0 | 0.27 | 0.10 | 0.09 | 0.09 |
| Korea | 20.3 | 0.20 | -0.22 | 0.23 | 0.19 |
| Israel | 19.8 | 0.41 | 0.32 | 0.05 | 0.03 |
| Mexico | 16.2 | 0.62 | 0.59 | 0.00 | 0.04 |
| New Zealand | 15.9 | -1.12 | -1.12 | 0.00 | 0.00 |
| Chile | 7.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| Greece ${ }^{4}$ |  |  |  |  |  |

1. Single individual without children at the income level of the average worker.
2. Countries ranked by decreasing labour costs.
3. Includes payroll taxes where applicable.
4. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook Volume 2011 (No. 90).
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Table 0.2. Income tax plus employee and employer social security contributions

| Country ${ }^{2}$ | Total tax wedge ${ }^{3}$ | Income tax | Social security contributions |  | Labour costs ${ }^{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employee | Employer ${ }^{5}$ |  |
|  | (1) | (2) | (3) | (4) | (5) |
| Germany | 49.8 | 15.9 | 17.4 | 16.5 | 65788 |
| Belgium | 55.5 | 21.7 | 10.8 | 23.1 | 64169 |
| Netherlands | 37.8 | 14.5 | 14.0 | 9.2 | 60765 |
| Luxembourg | 36.0 | 13.3 | 11.7 | 11.0 | 60063 |
| Austria | 48.4 | 11.9 | 14.0 | 22.6 | 59671 |
| France | 49.4 | 10.0 | 9.6 | 29.7 | 58862 |
| United Kingdom | 32.5 | 14.1 | 8.5 | 9.9 | 57711 |
| Norway | 37.5 | 19.0 | 6.9 | 11.6 | 57278 |
| Sweden | 42.8 | 13.6 | 5.3 | 23.9 | 55351 |
| Switzerland | 21.0 | 9.4 | 5.8 | 5.8 | 54919 |
| Finland | 42.7 | 18.5 | 5.8 | 18.4 | 53652 |
| United States | 29.5 | 15.7 | 5.2 | 8.7 | 51255 |
| Japan | 30.8 | 6.6 | 11.7 | 12.4 | 51089 |
| Denmark | 38.4 | 28.0 | 10.7 | 0.0 | 48994 |
| Korea | 20.3 | 3.9 | 7.3 | 9.2 | 48370 |
| Italy | 47.6 | 16.1 | 7.2 | 24.3 | 48025 |
| Australia | 26.7 | 21.0 | 0.0 | 5.6 | 47530 |
| Spain | 39.9 | 12.0 | 4.9 | 23.0 | 46151 |
| Iceland | 34.0 | 25.6 | 0.5 | 8.0 | 44011 |
| Ireland | 26.8 | 13.5 | 3.6 | 9.7 | 43442 |
| Canada | 30.8 | 13.9 | 6.5 | 10.5 | 41939 |
| Portugal | 39.0 | 10.9 | 8.9 | 19.2 | 34446 |
| Israel | 19.8 | 8.0 | 7.4 | 4.5 | 33594 |
| New Zealand | 15.9 | 15.9 | 0.0 | 0.0 | 32426 |
| Slovenia | 42.6 | 9.7 | 19.0 | 13.9 | 32018 |
| Czech Republic | 42.5 | 8.9 | 8.2 | 25.4 | 27963 |
| Hungary | 49.4 | 13.6 | 13.6 | 22.2 | 25960 |
| Turkey | 37.7 | 10.7 | 12.9 | 14.2 | 25323 |
| Estonia | 40.1 | 12.5 | 2.1 | 25.6 | 25051 |
| Poland | 34.3 | 5.9 | 15.5 | 12.9 | 23607 |
| Slovak Republic | 38.9 | 7.5 | 10.6 | 20.8 | 23460 |
| Chile | 7.0 | 0.0 | 7.0 | 0.0 | 14530 |
| Mexico | 16.2 | 4.4 | 1.2 | 10.5 | 12337 |
| Greece ${ }^{6}$ |  |  |  |  |  |

1. Single individual without children at the income level of the average worker.
2. Countries ranked by decreasing labour costs.
3. Due to rounding, the total in column (1) may differ by one or more percentage points from the sum of columns (2)-(4). For Denmark, the Green Check (cash benefit) contributes to the difference as it is not included in columns (2)-(4).
4. Includes payroll taxes where applicable.
5. Dollars with equal purchasing power.
6. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook Volume 2011 (No. 90).

Figure 0.1. Income tax plus employee and employer social security contributions
As \% of labour costs, 20111, 2


1. Single individual without children at the income level of the average worker.
2. Includes payroll taxes where applicable.
3. The 2011 average earnings for Greece was not available at the final compilation stage.

Figure 0.2 shows that on average, the personal average tax rate in OECD countries is $25 \%$. Belgium at $42.2 \%$ of gross earnings has the highest rate with Denmark and Germany being the only other countries with rates of more than $35 \%$. Chile and Mexico have the lowest personal average tax rates with 7.0 and $6.3 \%$ of gross average earnings respectively. Korea is the only other country with a rate of less than $15 \%$.

The impact of taxes and benefits on worker's take-home pay varies greatly among OECD countries. Such wide variations in the size and make-up of tax wedges reflect in part differences in:

- the overall ratio of aggregate tax revenues to Gross Domestic Product; and
- the share of personal income tax and social security contributions in national tax mixes.

The mix of taxes paid out of gross wage earnings also varies greatly between countries as illustrated in Figure 0.2.

In 2011, the share of income tax within the personal average tax rate is more important than the share of the employee social security contributions for 23 of 34 OECD member countries. No employee social security contributions are levied in Australia and New Zealand and the rates are comparatively small in Estonia, Iceland and Mexico. In contrast, the single worker at the average wage level paid substantially more employee social security contributions than personal income tax in six countries - Japan, Korea, Poland, Slovak Republic and Slovenia plus Chile, where the average worker did not pay personal income tax in 2011. In 10 countries - Austria, Czech Republic, France, Germany, Hungary, Israel, Luxembourg, the Netherlands, Portugal and Turkey - the income tax and employee social security contributions as percentages of gross earnings are almost equivalent (differences of less than 3 percentage points).

### 2.3. Family tax rates

Table 0.4 compares the tax wedges for a one-earner married couple with two children and a single individual without children, at average earnings levels. These tax wedges varied widely across OECD countries in 2011 (see columns 1 and 2). The size of the tax wedge for the family is generally lower than the one observed for the individual without children, since many OECD countries provide a fiscal benefit to families with children through advantageous tax treatment and/or cash transfers.

The savings realised by a one-earner married couple compared to a single worker are greater than 20 per cent of labour costs in the Czech Republic and Luxembourg and greater than 15 per cent of labour costs in six other countries - Belgium, Germany, Hungary, Ireland, New Zealand and Slovenia. The tax burdens are the same in Chile and Mexico and different by less than two percentage points in Turkey (see columns 1 and 2).

In 26 of 34 OECD countries, the change in the tax wedge of an average one-earner married couple with two children between 2010 and 2011 does not exceed plus or minus one percentage point (see column 3). There are increases of greater than 1 percentage point in six countries - Ireland (2.4), Portugal (2.3), Slovak Republic (2.1), Iceland (1.9), Luxembourg (1.8) and Germany (1.1). The tax wedge fell by 3.9 percentage points in Hungary. In 2011, the tax wedge of families decreased in also five other countries: Netherlands, New Zealand, Turkey, United Kingdom and United States. The change in the tax wedge of a single taxpayer without children at the average wage level was greater than one percentage point in 4 OECD countries. Detailed explanations on the latter are given in the above Section 2.1.

Table 0.3. Income tax plus employee social security contributions, 2011 ${ }^{1}$

| As\% of gross wage earnings |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country ${ }^{2}$ | Total payment ${ }^{3}$ | Income tax | Social security contributions | Gross wage earnings ${ }^{4}$ |
|  | (1) | (2) | (3) | (4) |
| Netherlands | 31.4 | 16.0 | 15.4 | 55165 |
| Germany | 39.9 | 19.0 | 20.9 | 54949 |
| Luxembourg | 28.1 | 15.0 | 13.1 | 53480 |
| United Kingdom | 25.1 | 15.6 | 9.5 | 52013 |
| Switzerland | 16.1 | 10.0 | 6.2 | 51738 |
| Norway | 29.3 | 21.5 | 7.8 | 50644 |
| Belgium | 42.2 | 28.2 | 14.0 | 49351 |
| Denmark | 38.7 | 28.0 | 10.7 | 48994 |
| United States | 22.8 | 17.2 | 5.7 | 46800 |
| Austria | 33.4 | 15.3 | 18.1 | 46211 |
| Australia | 22.3 | 22.3 | 0.0 | 44853 |
| Japan | 21.0 | 7.6 | 13.4 | 44738 |
| Korea | 12.3 | 4.3 | 8.1 | 43943 |
| Finland | 29.8 | 22.7 | 7.2 | 43798 |
| Sweden | 24.8 | 17.8 | 7.0 | 42118 |
| France | 28.0 | 14.3 | 13.7 | 41361 |
| Iceland | 28.3 | 27.8 | 0.5 | 40507 |
| Ireland | 18.9 | 14.9 | 4.0 | 39226 |
| Canada | 22.7 | 15.5 | 7.3 | 37549 |
| Italy | 30.8 | 21.3 | 9.5 | 36361 |
| Spain | 21.9 | 15.6 | 6.4 | 35528 |
| New Zealand | 15.9 | 15.9 | 0.0 | 32426 |
| Israel | 16.1 | 8.4 | 7.7 | 32098 |
| Portugal | 24.5 | 13.5 | 11.0 | 27836 |
| Slovenia | 33.4 | 11.3 | 22.1 | 27578 |
| Turkey | 27.4 | 12.4 | 15.0 | 21736 |
| Czech Republic | 23.0 | 12.0 | 11.0 | 20868 |
| Poland | 24.6 | 6.8 | 17.8 | 20567 |
| Hungary | 35.0 | 17.5 | 17.5 | 20202 |
| Estonia | 19.6 | 16.8 | 2.8 | 18639 |
| Slovak Republic | 22.9 | 9.5 | 13.4 | 18589 |
| Chile | 7.0 | 0.0 | 7.0 | 14530 |
| Mexico | 6.3 | 4.9 | 1.4 | 11035 |
| Greece ${ }^{5}$ |  |  |  |  |

1. Single individual without children at the income level of the average worker.
2. Countries ranked by decreasing gross wage earnings.
3. Due to rounding total may differ one percentage point from aggregate of columns for income tax and social security contributions.
4. Dollars with equal purchasing power.
5. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook Volume 2011 (No. 90).
StatLink nilist http://dx.doi.org/10.1787/888932588518

Figure 0.2. Percentage of gross wage earnings paid in income tax and employee social security contributions, 2011 ${ }^{1,2}$


1. Countries ranked by decreasing tax burden.
2. Single individuals without children at the income level of the average worker.
3. The 2011 average earnings figure for Greece was not available at the final compilation stage.

StatLink Ailisk http://dx.doi.org/10.1787/888932586732

Table 0.4. Comparison of total tax wedge by family type
As \% of labour costs

| Country ${ }^{1}$ | Family ${ }^{2}$ total tax wedge 2011 | $\begin{aligned} & \text { Single }{ }^{3} \text { total } \\ & \text { tax wedge } 2011 \end{aligned}$ | Annual change 2011/10 (in percentage points) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Family tax wedge | Single tax wedge | Difference between single and family (4)-(3) ${ }^{4}$ |
|  | (1) | (2) | (3) | (4) | (5) |
| France | 42.3 | 49.4 | 0.1 | 0.0 | -0.1 |
| Belgium | 40.3 | 55.5 | 0.4 | 0.2 | -0.3 |
| Italy | 38.6 | 47.6 | 0.8 | 0.4 | -0.4 |
| Finland | 37.7 | 42.7 | 0.4 | 0.2 | -0.2 |
| Sweden | 37.3 | 42.8 | 0.2 | 0.0 | -0.1 |
| Austria | 37.1 | 48.4 | 0.6 | 0.2 | -0.4 |
| Turkey | 36.3 | 37.7 | -0.2 | -0.2 | 0.1 |
| Spain | 34.2 | 39.9 | 0.2 | 0.1 | -0.1 |
| Germany | 34.0 | 49.8 | 1.1 | 0.6 | -0.5 |
| Hungary | 32.8 | 49.4 | -3.9 | 2.8 | 6.7 |
| Estonia | 31.2 | 40.1 | 0.4 | 0.1 | -0.3 |
| Norway | 31.0 | 37.5 | 0.4 | 0.2 | -0.2 |
| Netherlands | 30.7 | 37.8 | -0.2 | -0.3 | -0.2 |
| Portugal | 29.2 | 39.0 | 2.3 | 1.4 | -1.0 |
| Poland | 28.4 | 34.3 | 0.0 | 0.1 | 0.1 |
| Denmark | 27.4 | 38.4 | 0.3 | 0.1 | -0.2 |
| United Kingdom | 26.4 | 32.5 | -0.1 | -0.1 | 0.0 |
| Slovak Republic | 25.0 | 38.9 | 2.1 | 1.0 | -1.2 |
| Slovenia | 23.2 | 42.6 | 0.3 | 0.1 | -0.2 |
| Japan | 23.0 | 30.8 | 1.0 | 0.6 | -0.4 |
| Czech Republic | 21.7 | 42.5 | 0.6 | 0.4 | -0.3 |
| Iceland | 21.0 | 34.0 | 1.9 | 0.6 | -1.2 |
| Canada | 18.9 | 30.8 | 0.8 | 0.3 | -0.5 |
| United States | 18.2 | 29.5 | -0.1 | -0.9 | -0.9 |
| Korea | 17.9 | 20.3 | 0.1 | 0.2 | 0.1 |
| Mexico | 16.2 | 16.2 | 0.6 | 0.6 | 0.0 |
| Israel | 16.0 | 19.8 | 0.1 | 0.4 | 0.3 |
| Australia | 15.2 | 26.7 | 0.6 | -0.2 | -0.8 |
| Luxembourg | 13.4 | 36.0 | 1.8 | 1.7 | -0.1 |
| Switzerland | 8.4 | 21.0 | 0.2 | 0.3 | 0.0 |
| Ireland | 7.1 | 26.8 | 2.4 | 0.9 | -1.4 |
| Chile | 7.0 | 7.0 | 0.7 | 0.0 | -0.7 |
| New Zealand | -1.2 | 15.9 | -0.3 | -1.1 | -0.8 |
| Greece ${ }^{5}$ |  |  |  |  |  |

1. Countries ranked by decreasing tax wedge of the family.
2. One-earner married couple with two children and earnings at the average wage level.
3. Single individual without children and earnings at the average wage level.
4. Due to rounding total may differ one percentage point from the subtraction results of columns 4 and 3 .
5. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Source: Country submissions, OECD Economic Outlook Volume 2011 (No. 90).
StatLink 게st http://dx.doi.org/10.1787/888932588537

A comparison of the changes in tax wedges between 2010 and 2011, between one-earner married couples with two children and single persons without children, at the average wage level, is shown in column 5 of Table 0.4. The fiscal preference for families increased in five OECD member countries: Hungary, Israel, Korea, Poland and Turkey. Additionally, the effects of changes in the tax system on the tax wedge were independent of the family type in Mexico, Switzerland and United Kingdom.

Figure 0.3 compares the net personal average tax rate for the average worker between single individuals and a one-earner married couple with two children. These results show

Figure 0.3. Income tax plus employee contributions less cash benefits, by family-type


1. Countries ranked by decreasing rates for single taxpayer without children.
2. Family types: a single individual without children and earnings at the average wage level and a one-earner married couple with two children and earnings at the average wage level.
3. The 2011 average earnings figure for Greece was not available at the final compilation stage.

StatLink बillst http://dx.doi.org/10.1787/888932586751
the same pattern as those for the tax wedge results. This is because employer social security contributions which are not taken into account in the former but included in the latter are independent of family type. The savings realised by a one-earner married couple are equal to or greater than 20 per cent of earnings in five countries - the Czech Republic (27.8\%), Luxembourg (25.4\%), Slovenia (22.6\%), Ireland (21.8\%) and Hungary ( $21.3 \%$ ). In contrast, the savings as percentage of gross earnings are less than 10 per cent of earnings in eleven countries - Japan ( $8.9 \%$ ), the Netherlands ( $7.8 \%$ ), Spain (7.4\%), Norway (7.3\%), Sweden (7.2\%), Poland (6.8\%), the United Kingdom (6.7\%), Finland (6.1\%), Israel (4.0\%), Korea ( $2.7 \%$ ) and Turkey (1.6\%). The burden is the same in Chile and in Mexico. It is also interesting to note that when cash benefits are taken into account, the tax burden measure for one-earner married couples with two children becomes negative in the Czech Republic, Ireland and New Zealand because cash benefits exceed the income tax and social security payments.

### 2.4. Wages

Table 0.5 shows gross wage earnings of the average worker in each OECD member country for years 2010 (column 1) and 2011 (column 2). For most countries, the gross average wage (AW) earnings for 2011 are estimated by the OECD Secretariat by applying the figures for the change in the compensation per private sector employee as presented in the OECD Economic Outlook 90 Database to the final average wage values provided by OECD member countries. More information on the values of the average wage and the estimation methodology is included in Part IV. 3 of this Report. The annual change of the nominal wage of an average worker - shown in column 3 - varied between a decline of -2.1 per cent (Korea) and an increase of 7.2 per cent in Chile. ${ }^{3}$ To a large extent, the changes reflect the different inflation levels of individual OECD countries - see column 4 of Table 0.5. The annual change in real wage levels (before personal income tax and employee social security contributions) is found to be in the -2.3 to +2.3 per cent range for most countries; see column 5 of Table 0.5 . Korea ( -6.3 per cent), United Kingdom ( -4.3 per cent), Chile ( 3.6 per cent) and Poland ( 2.7 per cent) show changes in real wages before tax that are outside this range.

When comparing wage levels, it is important to note that the definition of average wage earnings can vary between countries due to data limitations. For instance, the average wage figure for some countries does not include the wages earned by supervisory and managerial workers and not all countries exclude the wage earnings from part-time workers. The methods adopted for calculating the average wage measure for each country are described in details in Part IV of this Report (Table IV.3).

Table 0.6 provides more information on whether the average wages for the years 2000 to 2011 have been calculated for industry Sectors C-K inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 3 (ISIC Rev. 3) or industry Sectors B-N inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev. 4).

Most OECD countries have calculated average wage earnings on the basis of sectors B-N in the ISIC Rev. 4 Industry Classification since 2008 or 2009. Some countries have revised the average wage values using the ISIC Rev. 4 Classification or any variant for prior years as well. This is the case, for example, in Australia, the Czech Republic, Estonia, Greece, Iceland, Italy, Japan, the Slovak Republic, Slovenia, Spain and Sweden.

Table 0.5. Comparison of wage levels

| Country | Gross wage in national currency |  | Annual change 2011/2010 (in percentage) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2011 | Gross wage | Inflation ${ }^{1}$ | Real wage before tax | Change in personal average tax rate ${ }^{2}$ |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Australia | 66724 | 69903 | 4.8 | 3.5 | 1.2 | 0.0 |
| Austria | 38504 | 39263 | 2.0 | 3.5 | -1.5 | 0.3 |
| Belgium | 41499 | 42740 | 3.0 | 3.4 | -0.4 | 0.1 |
| Canada | 44717 | 46163 | 3.2 | 2.8 | 0.4 | 0.2 |
| Chile | 5508104 | 5907326 | 7.2 | 3.5 | 3.6 | 0.0 |
| Czech Republic | 287320 | 290481 | 1.1 | 1.7 | -0.6 | 0.5 |
| Denmark | 376073 | 382850 | 1.8 | 2.7 | -0.9 | 0.1 |
| Estonia | 9580 | 9916 | 3.5 | 5.1 | -1.5 | 0.1 |
| Finland | 39982 | 41445 | 3.7 | 3.2 | 0.4 | 0.2 |
| France | 34849 | 35859 | 2.9 | 2.1 | 0.8 | 0.0 |
| Germany | 42400 | 43855 | 3.4 | 2.4 | 1.0 | 0.5 |
| Greece ${ }^{3}$ | 20457 |  |  |  |  |  |
| Hungary | 2511852 | 2624088 | 4.5 | 3.9 | 0.5 | 3.6 |
| Iceland | 5256000 | 5577213 | 6.1 | 4.0 | 2.0 | 0.7 |
| Ireland | 32308 | 32841 | 1.7 | 1.1 | 0.5 | 1.1 |
| Israel | 113280 | 119016 | 5.1 | 3.5 | 1.5 | 0.4 |
| Italy | 28224 | 29030 | 2.9 | 2.7 | 0.2 | 0.6 |
| Japan | 4773076 | 4781406 | 0.2 | -0.3 | 0.5 | 0.4 |
| Korea | 36929183 | 36154826 | -2.1 | 4.4 | -6.3 | 0.0 |
| Luxembourg | 49317 | 49890 | 1.2 | 3.5 | -2.3 | 1.3 |
| Mexico | 87324 | 89944 | 3.0 | 3.4 | -0.4 | 0.7 |
| Netherlands | 45215 | 45904 | 1.5 | 2.5 | -1.0 | -0.2 |
| New Zealand | 48007 | 49395 | 2.9 | 4.2 | -1.3 | -1.1 |
| Norway | 469247 | 487324 | 3.9 | 1.5 | 2.3 | 0.1 |
| Poland | 36121 | 38557 | 6.7 | 4.0 | 2.7 | 0.1 |
| Portugal | 17352 | 17588 | 1.4 | 3.5 | -2.0 | 1.7 |
| Slovak Republic | 9325 | 9658 | 3.6 | 4.1 | -0.5 | 1.2 |
| Slovenia | 16915 | 17373 | 2.7 | 1.8 | 0.9 | 0.1 |
| Spain | 24786 | 25223 | 1.8 | 3.0 | -1.2 | 0.2 |
| Sweden | 368208 | 375436 | 2.0 | 2.9 | -0.9 | 0.1 |
| Switzerland | 75331 | 77414 | 2.8 | 0.4 | 2.3 | 0.2 |
| Turkey | 21661 | 22636 | 4.5 | 6.2 | -1.6 | -0.2 |
| United Kingdom | 34297 | 34286 | 0.0 | 4.5 | -4.3 | -0.3 |
| United States | 45688 | 46800 | 2.4 | 3.2 | -0.8 | 1.0 |

1. Estimated percentage change in the total consumer price index.
2. Difference in the personal average tax rate of the average worker (single without children) between 2011 and 2010.
3. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook Volume 2011 (No. 90).
StatLink (illst http://dx.doi.org/10.1787/888932588556

Australia (for all years) and New Zealand (years 2004 to 2011) have provided values based on the 2006 ANZSIC industry classification, divisions B to N, which substantially overlaps the ISIC Rev. 4, Sectors B to N. For New Zealand, the years prior 2004 continue to be based on sectors $\mathrm{C}-\mathrm{K}$ in ANZSIC. In general, the change in the industry classification has had only a small impact on the level of the average wage earnings but the results reported in this Report for the years before 2011 may slightly deviate from the values reported in last year's edition on this account.

In 2011, Statistics Austria delivered data on the average wage level according to the ISIC classification from the year 2004 onwards. The figures for years 2004 to 2007 are based

Table 0.6. Average Wage Industry Classification

|  | Years for which ISIC Rev. 3.1 or any variant (Sectors C-K) has been used to calculate the AW | Years for which ISIC Rev. 4 or any variant (Sectors B-N) has been used to calculate the AW |
| :---: | :---: | :---: |
| Australia* |  | 2000-11 |
| Austria* | 2004-07 | 2008-11 |
| Belgium | 2000-07 | 2008-11 |
| Canada | 2000-11 |  |
| Chile | 2000-11 |  |
| Czech Republic |  | 2000-11 |
| Denmark | 2000-07 | 2008-11 |
| Estonia |  | 2000-11 |
| Finland | 2000-07 | 2008-11 |
| France | 2000-07 | 2008-11 |
| Germany | 2000-05 | 2006-11 |
| Greece* |  | 2000-10 |
| Hungary | n.a. | n.a. |
| Iceland* |  | 2000-11 |
| Ireland* | 2000-07 | 2008-11 |
| Israel | 2000-11 |  |
| Italy |  | 2000-11 |
| Japan |  | 2000-11 |
| Korea | 2000-08 | 2009-11 |
| Luxembourg | 2000-04 | 2005-11 |
| Mexico* |  |  |
| Netherlands | 2000-07 | 2008-11 |
| New Zealand* | 2000-03 | 2004-11 |
| Norway | 2000-08 | 2009-11 |
| Poland | 2000-07 | 2008-11 |
| Portugal | 2000-06 | 2007-11 |
| Slovak Republic* |  | 2000-11 |
| Slovenia |  | 2000-11 |
| Spain |  | 2000-11 |
| Sweden |  | 2000-11 |
| Switzerland | 2000-07 | 2008-11 |
| Turkey* |  |  |
| United Kingdom | 2000-06 | 2007-11 |
| United States | 2000-06 | 2007-11 |

* Australia: Based on ANZSIC06 such that the categories subtantially overlap with ISIC 4, Sectors B-N.

Austria: 2000-03 average wage values are not based on the NACE (ISIC) classification.
Greece: The 2011 average earnings figure for Greece was not available at the final compilation stage.
Iceland: Using the national classification system that corresponds with the NACE Rev. 2 classification system.
Ireland: Values from 2000 to 2007 are based on Sectors C-E. From 2008 onwards, they are based on Sectors B-E.
Mexico: 2000-11 average wage values are based on an ISIC version prior to ISIC Rev. 3.1.
New Zealand: See the note for Australia, which applies from 2004.
Slovak Republic: Average wage values based on ISIC Rev. 4 classification ( B to N ) and include income from self-employment. Turkey: The average wage is based on the average production worker wage ISIC Rev. 3.1, Sector D.
on ISIC Rev. 3.1 (Sectors C to K) and those for subsequent the years on ISIC Rev. 4 (Sectors B to N ). These new figures eliminate some major sources of tax free income (e.g. surcharge for overtime work), and income which is not modelled in the Taxing Wages calculations (e.g. dismissal pay). Up to the 2010 edition of Taxing Wages, gross wages were actually reduced by $2 \%$ in the calculation of taxable income in order to reflect an estimated amount of the tax free income. There still continues to be some overestimation of taxable income
in the new figures because the basic payments of overtime work (not the surcharge) are still included.

In the current edition of Taxing Wages, the average wage figures for Ireland have been amended for all the years from 2000 to 2010. The previous figures were based on an earnings survey that has been discontinued by the Central Statistics Office in Ireland because of concerns about the methodology. The new figures, which cover both full and part-time workers, are based on NACE Rev. 1, sectors C to E, for years 2000 to 2007 and on NACE Rev. 2, Sectors B to E, for 2008 and subsequent years. They are lower than the previous values that were computed on the basis of full-time employees only and on sectors C to K (NACE Rev. 1).

## Notes

1. Not all national statistical agencies use ISIC Rev. 3 or Rev. 4 to classify industries. However, the Statistical Classification of Economic Activities in the European Community (NACE Rev. 1 or Rev. 2), the North American Industry Classification System (US NAICS 2002) and the Australian and New Zealand Standard Industrial Classification (ANZSIC 2006) include a classification which broadly conforms either with industries C-K in ISIC Rev. 3 or industries B-N in ISIC Rev. 4.
2. In the Netherlands, a slightly different division is made between personal income taxes and employee social security contributions as compared to the methodology applied in this Report.
3. The National Statistics Institute (INE) made important changes to the indexes related with labour in January 2010.

# Special Feature: Trends in personal income tax and employee social security contribution schedules 

## 1. Introduction

Taxes on labour income - including personal income taxes and social security contributions - account for roughly one half of total tax revenue, on average, across OECD countries. High reliance on labour income taxation often results in high tax burdens on workers. Tax burdens can be measured with several alternative indicators, including marginal and average personal tax rates. Marginal personal tax rates, which indicate the tax payable on an additional currency unit of earnings, affect incentives to increase work effort, to follow training or to look for a better-paid job. Average personal tax rates, which indicate the share of gross earnings spent on taxes, may affect incentives to participate in the labour market. Average personal tax rates that increase with income imply that the amount of tax paid is related to an individual's capacity to pay, and that the tax and benefit system is progressive. Average and marginal personal tax rates on wage income are determined by the interaction of provisions that define the tax base, statutory tax rates, and tax credits that are deducted after the application of tax rates to the tax base. The Taxing Wages series presents these and other key tax burden indicators annually for OECD member countries. To shed light on the underlying differences in average and marginal personal tax rates, this Special Feature takes a close look at statutory personal income tax (PIT) rates, the income thresholds where PIT and employee social security contribution (SSC) rates apply, and other statutory provisions that shape the average and marginal personal tax burden on labour income.

While statutory tax rates are only one of the components that determine average and marginal personal tax rates, they are of great importance for various reasons. First, given that policymakers cannot directly adjust average and marginal tax rates, changes to statutory rates are a powerful policy tool to indirectly change tax burdens and modify incentives to work and build human capital. Second, while average and marginal tax rates involve complex calculations that must rely on a variety of assumptions, statutory rates are defined by legislation and do not require computation. As such, they can be easily known by the general public. Third, due to their unambiguous nature, statutory rates, and particularly top statutory PIT rates, are often cited as a relevant indicator of taxation in international comparisons.

In conjunction with statutory rates, other elements of the tax system defined in the legislation determine average and marginal personal tax rates. For example, lump sum or tapered basic allowances reduce average tax rates for taxpayers who claim them and create a positive relationship between average tax rates and income. Personal income surtaxes are additional taxes on income that is already subject to tax; as such, they increase marginal tax rates. Social security contributions sometimes reduce marginal personal income tax rates when PIT relief is provided for them, but also increase the combined PIT and employee SSC ("all-in") marginal tax rates, affecting the progressivity of the tax system as a whole. More generally, all tax reliefs that vary with income (such as in-work tax credits) affect marginal (and average) personal income tax rates, creating a gap between
marginal and statutory tax rates, and all lump-sum reliefs (such as most basic personal allowances) affect average personal income tax rates, contributing to the gap between average and statutory tax rates.

Among the statutory provisions presented in this Special Feature, the most well-defined trend across OECD countries has been towards a reduction in top statutory PIT rates, inclusive of surtaxes and sub-central income taxes. In fact, the OECD-wide average top statutory PIT rate decreased significantly in each of the last three decades, from 1980 to 2010. This does not, however, imply that all countries have continuously reduced their top rates - for example, six countries increased their top rate in 2010 signalling a trend reversal that continued in 2011 and 2012. From 2000 to 2010, top "all-in" rates fell in most OECD countries along with top statutory PIT rates, though PIT rate cuts were partly offset by increases in SSC rates or thresholds in some countries.

Other clear trends that emerged from 2000 to 2010 include a reduction in the income threshold where the top statutory PIT rate applies (minimising the impact of the top statutory rate cuts), and a reduction in the statutory rate applicable at average wage earnings (in line with the reduction in the average personal tax rate for average earnings). In contrast, over the same time period, OECD countries diverged in their policies regarding changes to the bottom statutory rate and the threshold where a single earner begins to pay income tax, with little change observed in the corresponding OECD-wide averages.

During the 1980's, the number of central-level statutory tax brackets strongly declined in most of the 22 OECD countries for which data are available. However, this marked trend has no longer been observed after 1990. Comparing 2000 to 2010, no clear trend emerges either regarding the direction of changes in the number of central-level tax brackets. It appears that changes in the number of tax brackets have been, with exceptions, not a policy goal in itself but rather a tool to reduce or increase tax burdens, particularly at high income levels. Indeed, the number of central level personal income tax brackets, the top statutory PIT rate, and the income threshold at which this rate applies tended to move in the same direction over the last decade.

This Special Feature is organised as follows: Section 2 describes the basic features of PIT schedules in OECD countries in 2010 as well as trends since 2000 (or 1981, where possible). The PIT features described are the number of statutory tax brackets and rates, the top and bottom statutory rates, the statutory rate applicable to average earnings, surtaxes and provisions that exempt from tax an initial portion of income. Statutory tax rates in this report refer to effective statutory rates, that is, they take into account applicable surtaxes or deductions for other income taxes paid. Section 2 provides context for the statutory rates described in Section 2 by presenting the income level at which taxpayers begin to pay income tax and the threshold at which they become subject to the top statutory PIT rate. Section 4 discusses the difference between marginal, average and statutory PIT rates, as well as changes from 2003 to 2010. These differences are described graphically in the Annex. Section 5 describes the earnings level at which taxpayers begin or stop paying employee SSC, and the impact of employee SSC rates on the top "all-in" marginal personal tax rate. Section 6 concludes by summarizing the main trends described in the previous sections. The data underlying the discussion and graphs in this Special Feature are available electronically in spreadsheet format through the StatLink hyperlinks beneath the Figures in this report.

## 2. Description of personal income tax schedules

### 2.1. Statutory personal income tax rates

### 2.1.1. Trends in the number of personal income tax brackets

By 2010, personal income tax schedules in OECD countries contained relatively few tax brackets compared to the early 1980's (see Figure S.1). In 1981 it was common for OECD countries to have ten or more tax brackets and no OECD country had a single-rate PIT structure. Among the 22 OECD countries for which 1981 data is available, 5 of them had more than 20 (non-zero) income tax brackets - Italy (32), Spain (30), Mexico (27), Belgium (24) and Luxembourg (21) - and 9 other countries had 10 or more brackets - Japan (19), Sweden (18), the United States (16), Greece (15), Canada (13), France (12), Portugal (12), Austria (11) and the Netherlands (10). In contrast, by 2010, only 2 of the 34 OECD countries had 10 or more tax brackets - Luxembourg (16) and Switzerland (10) - and 3 countries had a single PIT rate - the Czech Republic, Estonia and the Slovak Republic.

The number of brackets decreased most significantly during the 1980's. On average across OECD countries, there were 14 PIT brackets in 1981, falling to 6 by 1990. These averages must be compared with caution as 1981 data are not available for four countries included in the 1990 sample. Among the 22 OECD countries for which 1981 and 1990 data are both available, 15 countries had fewer brackets in 1990 than in 1981, and only Australia, Luxembourg and Switzerland ended the decade with more tax brackets than in 1981.

The trend towards fewer PIT brackets decelerated in the 1990's and was no longer observed during the 2000's. As a result, the average number of tax brackets in OECD countries has remained fairly stable since the 1990's.

Figure S.1. Number of central personal income tax brackets ${ }^{1,2}$


1. Number of non-zero central government statutory income tax rates on different taxable income ranges. Zero-rate brackets are excluded for comparability with countries with basic personal allowances or tax credits which effectively result in zero-tax rates on an initial range of income. In Germany, the PIT schedule is formula-based. Figures for Germany indicate the number of distinct formulas that apply to different income ranges. The Norwegian and Swedish two-tiered surtaxes are treated as two additional tax brackets when applicable.
2. Countries are ranked by decreasing number of tax brackets in 2010.

* In 1981, Italy had 32 non-zero central tax brackets.
** 22-country average. The number of tax rates is not applicable in the Czech Republic, Estonia, Hungary, Poland, the Slovak Republic, Slovenia, and not available for Chile, Finland, Germany, Iceland, Korea and Turkey.
*** 26 -country average. The number of tax rates is not applicable in the Czech Republic, Estonia, Poland, the Slovak Republic, Slovenia, and not available for Chile, Korea and Turkey.
Source: OECD Tax Database Table I. 1 (www.oecd.org/ctp/taxdatabase).

On average across OECD countries, there were five central PIT brackets in 2000, compared to six in 1990. These averages must also be compared with caution, as 1990 data are not available or applicable for eight OECD countries included in the 2000 sample (e.g. Eastern European OECD member countries). Among the 26 OECD countries for which 1990 and 2000 data are available, 10 countries - Australia, Austria, France, Greece, Hungary, Ireland, Italy, Luxembourg, Spain, Sweden - had fewer brackets in 2000 than in 1990, and 7 countries - Finland, Iceland, Mexico, the Netherlands, New Zealand, the United Kingdom and the United States - increased the number of tax brackets over the same period. The remaining 8 countries - Belgium, Canada, Denmark, Germany, Israel, Japan, Portugal, Norway and Switzerland - had the same number of brackets at the beginning and end of the decade.

Comparing 2000 to 2010, no clear trend emerges. Roughly a third of OECD countries reduced their number of tax brackets, one third kept them constant and just under one third introduced new tax brackets. As a result, the average number of central PIT brackets across OECD countries in 2010 remained at five, unchanged from 2000. Countries that eliminated tax brackets did so mainly during the middle of the decade. In contrast, the addition of new tax brackets is a more recent phenomenon corresponding to recent fiscal consolidation efforts.

Among countries that reduced their number of tax brackets, the Slovak Republic and the Czech Republic implemented single-rate schedules in 2004 and 2008, respectively. Hungary and Poland cut their number of brackets from three to two in 2005 and 2009, respectively. France reduced its number of tax brackets from six to four in 2007. Several OECD countries reduced their number of tax brackets twice during the decade. By 2010, Belgium had five brackets after having eliminated a bracket in 2002 and then in 2003; Finland had four brackets after eliminating one in 2001 and another one in 2007; Spain had four brackets after eliminating one in 2003 and another one in 2007; Slovenia had three brackets after eliminating two in 2005 and then one in 2007; and Turkey had four brackets after eliminating one in 2005 and another one in 2006. Mexico decreased and increased its number of tax rates five times during the decade, starting with 10 brackets in 2000 and ending with eight in 2010.

Among countries that introduced tax brackets during the 2000's, Canada increased its number of brackets from three to four in 2001 and the United States increased its number of brackets from six to seven in the same year. Chile added a tax bracket in 2002, raising the total to seven. Israel added two tax brackets in 2002, but only one of them remained in place in 2003. Japan added two tax brackets in 2007, raising the total to six. Germany modified its formula-based structure and introduced a fourth distinct formula, corresponding to a new top statutory rate, in 2007. Greece, Iceland and Portugal added tax brackets in 2010 as part of their fiscal consolidation strategies. Greece converted its three-bracket PIT structure into an eight-bracket structure. Iceland moved from a single-rate structure to a three-bracket structure, and Portugal introduced one additional tax bracket, raising the total to eight.

Australia, Estonia, Ireland, Italy, Korea, Luxembourg, the Netherlands, New Zealand, Sweden, Switzerland and the UK had the same number of tax brackets in 2000 and in 2010. This does not imply a lack of changes in the number of brackets over the past ten years. For example, the UK reduced its number of brackets from three to two in 2008, but added a third bracket again in 2010. New Zealand had four tax brackets every year during the decade, except for 2008, when it had seven brackets.

While reductions in the number of tax brackets over the past decade have generally been accompanied by reductions in top statutory PIT rates, there have been some exceptions where the top rate did not change - namely, Hungary and Slovenia in 2005, and

Turkey in 2006. Likewise, increases in the number of tax brackets tended to be accompanied by increases in top statutory rates, though not always. Among countries that increased their number of tax brackets from 2000 to 2010, Germany, Greece, Iceland, Japan and Portugal increased their top statutory rates when introducing new brackets. In contrast, Chile and the United States reduced their top statutory rate when they added tax brackets, and Canada held its top rate constant.

### 2.1.2. Trends in top statutory personal income tax rates

Along with a general reduction in the number of tax brackets over the last three decades, OECD countries have seen a general reduction in their top statutory PIT rates. Like with the number of tax brackets, the reduction in top statutory PIT rates was most pronounced during the 1980's. Across OECD countries for which data are available, the average combined central and sub-central top statutory rate (including surtaxes and taking into account the deductibility of sub-central or other income taxes from the central tax base) declined by more than 15 percentage points, from $65.7 \%$ in 1981 to $50.6 \%$ in 1990 . But unlike the number of tax brackets, top statutory rates have continued to display a pronounced declining trend well after the 1980's. The average top statutory rate across OECD countries declined by about four percentage points in the 1990's (to $46.5 \%$ in 2000), and then by almost five percentage points in the 2000's (to $41.7 \%$ in 2010; see Figure S.2). Changes in the average top rate across OECD countries must be interpreted with caution because rates are not available or applicable for ten countries in 1981 and for seven countries in 1990. However, if these countries were excluded from the analysis, the top rate would still display a declining trend (see Table S.1).

Figure S.2. Top combined statutory personal income tax rate ${ }^{1,2}$


1. The sum of the central and sub-central top rates in PIT rate schedule, inclusive of surtaxes and adjusted for the deductibility of sub-central or other income taxes from the central tax base where applicable.
2. Countries are ranked by decreasing top statutory rates in 2010.

* 24 -country average. The top rate is not applicable in the Czech Republic, Estonia, Hungary, Poland, the Slovak Republic, Slovenia, and not available for Chile, Iceland, Korea and Turkey.
** 27-country average. The top rate is not applicable in the Czech Republic, Estonia, Poland, the Slovak Republic, Slovenia, and not available for Chile and Korea.
Source: OECD Tax Database Tables I.1, I. 2 and I. 3 (www.oecd.org/ctp/taxdatabase).
StatLink .inst http://dx.doi.org/10.1787/888932586789

Table S.1. Average top combined statutory personal income tax rate in OECD countries

|  | 1981 | 1990 | 2000 | 2010 |
| :--- | :---: | :---: | :---: | :---: |
| Countries for which rates are available for 1981 and later years | $65.7 \%$ | $50.7 \%$ | $48.9 \%$ | $45.8 \%$ |
| Countries for which rates are available/ applicable for 1990 and later years |  | $50.6 \%$ | $48.2 \%$ | $44.9 \%$ |
| All OECD countries |  |  | $46.5 \%$ | $41.7 \%$ |

Relative to 2000, five countries had higher top statutory PIT rates by 2010 - Iceland, Ireland, Portugal, Sweden and the UK. Three countries - Austria, Greece and Japan - had identical top rates at the beginning and end of the decade. The remaining 26 OECD countries had lower top statutory rates by the end of the decade. The largest decline in the top statutory rate over the past ten years was observed in the Slovak Republic, where the top rate of $42 \%$ in 2000 declined to $38 \%$ in 2002 , and then to $19 \%$ in 2004 when the country moved to a single-rate PIT structure. The Czech Republic also drastically reduced its top statutory rate, from $32 \%$ to $15 \%$, when it adopted a single-rate PIT schedule and broadened the tax base in 2008. In France, the top statutory rate (including the universal social contribution and the contribution to the reimbursement of social debt) decreased by more than 12 percentage points, from $58.27 \%$ in 2000 to $45.78 \%$ in 2010. In Mexico, although the top statutory rate of $30 \%$ is now lower than it was in 2000 (40\%), it was temporarily raised from $28 \%$ as a fiscal consolidation measure in 2010.

The largest increase in the top statutory rate was observed in the United Kingdom, where the top rate was raised from 40 to $50 \%$ in 2010 as a fiscal consolidation measure. Prior to 2010 , the top rate in the UK had not been higher than $40 \%$ since 1987. However, the income threshold at which the $50 \%$ rate applies (i.e. gross earnings of 4.3 times the average wage) is considerably higher than the threshold where the top rate of $40 \%$ previously applied (1.3 times the average wage), which highlights the difficulties in drawing conclusions about tax burdens and the impacts of taxation on incentives by focusing merely on statutory tax rates. Indeed, the threshold at which the top rate begins to apply changed in real earnings terms in most OECD countries over the last decade, as will be discussed in Section 3.1.

The trend towards lower top statutory rates from 2000 to 2010 is pronounced with regards to central taxation but less clear in the context of sub-central taxation (see Figure S.3). Central (and combined) top statutory tax rates declined in 10 of the 13 OECD countries with sub-central taxation - Belgium, Canada, Denmark, Finland, Iceland, Italy, Korea, Norway, Spain and the United States - and increased in only one of them (Japan). On the other hand, the representative sub-central top statutory rates declined in seven OECD countries - Belgium, Denmark, Japan, Korea, Norway, Switzerland and the United States and increased in five countries - Finland, Iceland, Italy, Spain and Sweden. Except for Denmark, Iceland, Japan and Switzerland, changes in top sub-central rates have been smaller in magnitude than changes in top central rates. Therefore, in the remaining countries, trends in top combined rates have been driven by changes in top central rates.

The difference in trends at the central and sub-central level may be partly due to the fact that in countries with sub-central personal income taxes, central tax schedules have multiple tax brackets but sub-central tax schedules tend to consist of a single tax rate (except in Canada, Spain and Switzerland). Thus, sub-central governments have traditionally had less manoeuvrability to reduce their top statutory rate without implementing broad-based PIT cuts. At the same time, some sub-central governments have been able to raise their top

Figure S.3. Top statutory central and sub-central personal income tax rates ${ }^{1}$


1. Countries are ranked by decreasing top central tax rates in 2010.

Source: OECD Tax Database Tables I.1, I. 2 and I. 3 (www.oecd.org/ctp/taxdatabase).
statutory rates to take up fiscal room resulting from central level tax cuts. For example, cuts to the central top rate were accompanied by increases to the sub-central top rate in Finland, Iceland (until 2005) and Spain. The reverse trend occurred in Japan in 2007, when a three percentage point reduction in the top sub-central rate was introduced along with an increase of the same magnitude in the top central rate.

### 2.1.3. Trends in statutory personal income tax rates levied at the average wage

While much attention is devoted to top statutory rates in international tax comparisons, top rates in many countries are relevant for a relatively small segment of the population with high incomes (see Section 3.1). The statutory income tax rate levied at average gross wage earnings is the tax rate that applies to the last (marginal) currency unit of taxable income which corresponds to average gross wage earnings, assuming that the only source of income is wage earnings. This tax rate includes surtaxes where applicable. In most OECD countries, the taxable income which corresponds to the average wage is lower than the average wage as a result of basic and work-related tax allowances. However, in Australia, Canada, Ireland, Israel and New Zealand, taxable income equals earnings for people earning the average wage as long as no family-related or non-standard allowances are claimed (i.e. allowances other than a basic personal allowance or general work-related allowances available to all workers). In 2010, taxable income was higher than the corresponding average wage for single taxpayers claiming standard allowances in the Czech Republic, Hungary and the Netherlands. This is due to the inclusion of employer social security contributions in the tax base of the Czech Republic and Hungary, and the inclusion of income-based tax credits in the tax base of the Netherlands.

Figure S. 4 shows the average combined central and sub-central statutory rate on average gross wage earnings (which are shown in Table II. 10 of the Taxing Wages report) for single individuals who claim generally available allowances in OECD countries in 2000 and 2010. Figures for prior years are not presented because average wage estimates for years prior to 2000 are not available. Non-standard allowances are excluded from the analysis for conceptual comparability across countries. In practice, the statutory tax rate

Figure S.4. Statutory personal income tax rate at average wage earnings ${ }^{1,2}$


1. The statutory tax rate that applies to the last marginal unit of taxable income corresponding to average wage earnings, inclusive of surtaxes where applicable.
2. Countries are ranked by decreasing combined tax rates in 2010.

Source: OECD Tax Database Tables I.1, I.2, I. 3 (www.oecd.org/ctp/taxdatabase), OECD calculations, Taxing Wages model.
on average earnings could be lower for individuals claiming non-standard allowances. Thus, a narrow tax base that relies on highly targeted allowances results in different individuals, with similar earnings levels facing different statutory tax rates on their last marginal unit of earnings.

From 2000 to 2010, the average combined central and sub-central statutory tax rate on average wage earnings for single individuals across OECD countries declined by about three percentage points, from 30.5 to $27.4 \%$. This decline reflects a reduction in the statutory tax rate on the average wage in 23 OECD countries. The combined statutory rate applicable to average earnings did not change in four countries - Chile, Japan, Norway and Australia - and increased in seven countries - Austria, Greece, Iceland, Korea, New Zealand, Spain and the United States. In Chile, the statutory rate on average earnings was zero in 2000 and 2010 as a result of basic personal allowances that exceeded the average wage in both years, reducing taxable income to zero. Changes over time in the statutory tax rate on average wage earnings may stem from changes to statutory tax rates, changes to standard and work-related tax allowances that affect the relationship between gross wage earnings and taxable income, and the difference between the growth rate of the average wage and the indexation factors that apply (if any) to tax bracket thresholds and tax allowances. For example, in New Zealand the average wage rose by about $37 \%$ from 2000 to 2010 while the threshold where the third statutory rate begins to apply grew by $26 \%$ over the same period. As a result, the taxable income of an average full-time earner moved from the second tax bracket to the third tax bracket, explaining the sharp increase in the statutory rate applicable at the average wage.

In countries where sub-central taxation applies, the statutory central rate has in some cases moved in a different direction than the statutory sub-central tax rate (see Figure S.4). For example, in Spain the central tax rate on average wage earnings declined from 20.17\% to $18.27 \%$ from 2000 to 2010, but the sub-central rate increased from 3.83 to $9.73 \%$ over the same period, resulting in an overall increase in the combined statutory tax rate on average
wage earnings. In Norway, the combined central and local statutory PIT rate was set at a maximum of $28 \%$ throughout the period. However, the local rate at average wage earnings declined from 17.65 to $15.45 \%$ while the central rate increased from 10.35 to $12.55 \%$. In Sweden, while the central rate applying to the average wage dropped to zero, the average sub-central rate increased slightly, from 30.38 to $31.56 \%$. Those earning the average wage had taxable income slightly above the threshold for the zero-rate central tax bracket in 2000 but slightly below the threshold in 2010, which resulted in a large drop in the central statutory rate levied at average earnings. This change occurred (in spite of base broadening measures) because the initial portion of income exempt from tax (i.e. the sum of the basic allowance and the zero-rate bracket threshold) grew faster than the taxable income associated with the average wage.

Statutory tax rates on average earnings tend to be higher than the average personal income tax rate on average earnings, except under a system with a flat tax rate and no allowances or tax credits. Even in countries with a single statutory rate - the Czech Republic, Estonia and the Slovak Republic - the average tax rate is lower than the statutory tax rate on the average wage as a result of basic personal allowances or tax credits. Figures S. 5 and S. 6 illustrate the difference between the statutory and average personal income tax rate applicable on average wage earnings for a single childless individual claiming standard tax reliefs. The graphs show that in this basic scenario the average tax rate is lower than the statutory tax rate on average earnings in all OECD countries, although the magnitude of the difference varies significantly across countries. On average across the OECD, the average tax rate was less than half the statutory rate in both 2000 and 2010. Tax filers who are married or have children, or single taxpayers claiming non-standard tax reliefs could face different average and statutory rates than those shown in the graphs, although their average tax rates would also tend to be lower than their statutory rates due to progressive features of income tax systems.

Figure S.5. Combined personal income tax rates levied at the average wage in countries where the statutory rate decreased ${ }^{1}$


On average across countries, the average personal income tax rate on average earnings decreased from 16 to $14.5 \%$ from 2000 to 2010. In many OECD countries, reductions in the statutory tax rate applicable on the average wage have been consistent with reductions in the corresponding average tax rate (Figure S.5). Likewise, increases in the statutory tax rate have been consistent with increases in the average tax rate (Figure S.6). However, changes in statutory rates alone do not explain changes in tax burdens. In fact, from 2000 to 2010, noticeable increases in the average tax rate on average earnings took place in Mexico and the Netherlands in spite of reductions in the statutory rate. The average tax rate also increased or remained relatively stable while the statutory rate decreased in the Czech Republic, Italy, Poland, Portugal, the Slovak Republic and Switzerland. In contrast, in New Zealand and the United States the average tax rate fell even though the statutory tax rate increased.

Figure S.6. Combined personal income tax rates levied at the average wage in countries where the statutory rate did not decrease ${ }^{1}$


1. For each group, countries are ranked by increasing statutory tax rates in 2010.

Source: OECD Tax Database Tables I.1, I.2, I. 3 (www.oecd.org/ctp/taxdatabase), OECD calculations, Taxing Wages model.

Inconsistencies in the direction of change between statutory tax rates and average income tax rates may stem from changes in the level of basic or other work-related allowances, changes in bracket thresholds due to indexation or other policy changes, changes in the statutory tax rates levied on the portion of income below the threshold where the statutory tax rate on average earnings begins to apply, or changes in tax credits (which affect the average tax rate but not the statutory rate). In general, the average tax rate is more sensitive to changes in the tax structure than the statutory rate (see Table S.2). For example, in Australia the average tax rate on the average wage decreased by more than four percentage points from 2000 to 2010 while the statutory tax rate remained constant. The average tax rate declined because the income threshold at which the second non-zero bracket begins to apply increased by more than the average wage, and the statutory rate on the first non-zero tax bracket was reduced. Neither of these changes affected the statutory tax rate on average earnings, which corresponds to the second non-zero bracket rate.

Table S.2. Factors influencing average and statutory personal income tax rates levied at the average wage ${ }^{1}$

| Impact of... | ... on the statutory tax rate | ... on the average tax rate |
| :---: | :---: | :---: |
| A reduction in the statutory tax rate on taxable income corresponding to the AW | Reduction | Reduction |
| An increase in the basic personal allowance (non-tapered) | Reduction if taxable income moves into a lower tax bracket |  |
| An increase in other non-income related allowances |  |  |
| An increase in income-related allowances (e.g. social security contributions) |  |  |
| An increase in the upper threshold of tax bracket(s) below the taxable income corresponding to the AW |  |  |
| A reduction in the statutory tax rate(s) on the tax bracket(s) below the taxable income corresponding to the AW | No impact |  |
| An increase in non-income related tax credits |  |  |
| An increase in income-related tax credits |  |  |
| Indexation of tax bracket thresholds | Reduction if taxable income grows at a slower pace than the indexation factor and taxable income moves into a lower bracket | Reduction if taxable income grows at a slower pace than the indexation factor and initial income is above the first bracket threshold |

1. These impacts assume that the average personal income tax rate is positive before changes to the tax structure are implemented. The statutory tax rate refers to the rate associated with the taxable income that corresponds to the average wage.

### 2.1.4. Trends in bottom statutory personal income tax rates

Several OECD countries have PIT schedules that begin with a zero-rate tax bracket. As will be discussed in Section 2.3, as an alternative, countries can exempt from tax an initial tranche of taxable income by using tax allowances or tax credits. For this reason, a more appropriate comparison of statutory rates at the bottom of the taxable income scale consists in comparing the lowest non-zero statutory rate in the PIT schedule, which is defined here as the bottom statutory personal income tax rate. The bottom rate often interacts with basic allowances and income-based tax reliefs to determine marginal and average tax rates at the bottom of the income scale. But the bottom statutory rate ultimately affects all taxpayers, not only those with lower incomes, through its impact on average tax rates. A reduction in the bottom rate, while holding the first non-zero bracket threshold constant, reduces taxes for all taxpayers.

Figure S .7 shows the bottom combined statutory personal income tax rate in OECD countries, defined as the lowest possible non-zero effective statutory PIT rate, inclusive of surtaxes and sub-central taxes if applicable. It is the statutory tax rate that corresponds to the first unit of taxed earnings of a single taxpayer not claiming non-standard reliefs and whose income is too high to benefit from standard tax reliefs that are tapered with income. In most countries with sub-central taxation, the bottom rate is the sum of the lowest non-zero rate and the lowest non-zero sub-central rate, or in the case of Belgium and Korea, the lowest non-zero central rate augmented by the sub-central surtax rate. However, in Canada, Finland, Japan, Sweden, Switzerland and the United States, the lowest combined rate consists only of the lowest sub-central rate, given that the central PIT schedules have zero-rate tax brackets, allowance or tax credits such that no central tax is due on the first unit of earnings that is subject to sub-central tax. In contrast, in Denmark (in 2010) the bottom rate is just the first statutory rate in the central rate schedule; a lump sum allowance for social security contributions reduces the sub-central tax and health tax base but not the central tax base.

Figure S.7. Bottom statutory personal income tax rate ${ }^{1,2}$


1. The lowest non-zero effective statutory PIT rate, including surtaxes and sub-central taxes where applicable. 2. Countries are ranked by decreasing bottom tax rates in 2010.

Source: Tax Database, Tables I.1, I.2, I. 3 (www.oecd.org/ctp/taxdatabase), OECD calculations.

Comparisons of bottom statutory PIT rates across countries and over time must be made with caution, since the income level at which a taxpayer becomes subject to this statutory rate may vary significantly. Generally, this income level is threshold where a single individual first starts to pay income tax (see Section 3.2). However, this is not always the case. For example, in 2010 in Mexico, the first unit of earnings of a high-income taxpayer was subject to the first statutory rate in the PIT schedule ( $1.92 \%$, the bottom rate), while a lower-income single taxpayer who earned $70 \%$ of the average wage - the threshold where the tax liability first turns positive - was subject to the third statutory rate in the PIT schedule ( $10.88 \%$ ). The difference arises because only the lower-income taxpayer is exempt from tax on the first MXN 61000 of income as a result of the income-based employment subsidy credit and work-related allowances. In Ireland, Japan and the United States, the bottom statutory rate does not correspond to the statutory rate payable at the income threshold where a single taxpayer begins to pay tax either.

In 2010, the highest bottom rate was observed in Iceland ( $37.22 \%$ ). The bottom combined statutory rate also exceeded $25 \%$ in Austria ( $36.5 \%$ ), Sweden ( $31.56 \%$, on average), Norway ( $28 \%$ ) and Belgium ( $26.85 \%$ ). At the other end, the lowest (representative) bottom statutory rate was levied in Mexico (1.92\%), followed by the Netherlands (2.3\%), the United States ( $2.5 \%$, the local rate in Detroit), Switzerland (4.38\%, the rate in Zurich) and Chile (5\%).

Unlike the top statutory rate and the statutory rate applicable to the average wage, the average bottom statutory PIT rate across OECD countries did not follow a clear trend over the past decade. The bottom rate decreased in 17 OECD countries, increased in 13 OECD countries, and remained constant in 4 countries. A comparison of the 2000 and 2010 (unweighted) average bottom rate in OECD countries could be misleading due a small number of countries where large changes occurred.

The sharpest increase occurred in Austria, where the bottom statutory rate increased from $21 \%$ in 2000 to $36.5 \%$ in 2010. However, this increase in the tax rate was accompanied by a substantial increase in the threshold where the first non-zero bracket rate begins to
apply - from about $12 \%$ of the average wage in 2000 to about $28 \%$ of the average wage in 2010. In Greece, the bottom tax rate increased from $5 \%$ in 2000 to $18 \%$ in 2010. Throughout the decade the bottom rate changed several times in Greece, reaching a high of $29 \%$ in 2007 . The bottom rate also increased by five percentage points or more in the United Kingdom (from 10 to 20\%), the Slovak Republic (from 12 to 19\%), Spain (from 18 to $24 \%$ ) and Japan (from 5 to $10 \%$ ).

Relative to the large increases observed in some countries, reductions in the bottom rate were modest in most countries where they took place. The sharpest reduction was observed in Denmark, where the bottom rate dropped from 39.8 to $3.67 \%$. This was a result of a base broadening reform that took effect in 2002 at the central government level (lump sum SSCs are no longer deductible). Thus, the first unit of taxed earnings is now subject to the central tax at the lowest rate of $3.67 \%$ (i.e. excluding the health tax), while previously the bottom rate was the sum of the central and sub-central rates. However, although the bottom rate dropped significantly, the income range where it applies is relatively short (see charts in the Annex).

In countries where sub-central income taxation applies, the lowest non-zero statutory rate can vary significantly between the central and representative sub-central levels (see Figure S.8). For example, the lowest sub-central rates are significantly below the lowest rates at the central level in Belgium, Italy and Korea. In Belgium and Korea there is no statutory sub-central tax rate; instead, the local tax is calculated as a surtax on the central income tax. For 2010, this corresponded to an effective lowest rate of $1.85 \%$ on average across municipalities in Belgium and of $0.6 \%$ at the local level in Korea, both significantly below the lowest central rates of 25 and $6 \%$, respectively. In Italy, while the lowest central rate in 2010 was $23 \%$, the lowest sub-central rate in Rome (the most representative city) was $2.2 \%$.

Figure S.8. Lowest statutory central and sub-central personal income tax rates ${ }^{1,2}$


1. The lowest non-zero PIT rates at the central and sub-central levels, including surtaxes where applicable. In the case of Korea and Belgium, where sub-central taxes are calculated as a surtax on central income tax, the effective statutory tax rate corresponding to the lowest central tax rate is shown.
2. Countries are ranked by decreasing lowest central rates in 2010.

* The lower set of sub-central rates refers to tax rates in the representative city of Detroit while the upper set refers to tax rates in the representative state of Michigan.
Source: Tax Database, Tables I.1, I.2, I. 3 (www.oecd.org/ctp/taxdatabase).

In contrast, in 2010, the lowest sub-central statutory rate was higher than the lowest central rate in Japan, Switzerland and Scandinavian countries. In Denmark, Finland, Norway and Sweden the lowest sub-central statutory rate was considerably higher than the lowest central statutory rate. Indeed, the lowest sub-central rate in Denmark (25.64\%) and Sweden ( $31.56 \%$ ) was higher than the lowest central rate in most OECD countries, including those without sub-central taxation. In Denmark, the bottom local tax rate was $25.64 \%$ on average while the bottom central rate was $3.67 \%$ in 2010 . The difference was larger in 2000, when the bottom local rate was $32.8 \%$ on average and the bottom central rate was $7 \%$. The gap between the bottom central and sub-central rate narrowed partly because the county tax previously levied at the sub-central government level was replaced in 2008 with an $8 \%$ health care tax levied by the central government. A similar trend is observed in Norway, where the gap between the bottom local rate and the bottom central rate narrowed from 7.3 percentage points in 2000 to 2.9 percentage points in 2010, with the combined rate being held constant.

Shifts from sub-central towards central taxation at the bottom of the income scale are limited to Denmark and Norway. In most other countries, sub-central bottom rates moved in the same direction as central bottom tax rates over the past decade. However, Iceland and Japan saw a reverse trend, from central towards sub-central taxation. In 2007, Japan replaced its progressive sub-central rate structure (with rates ranging from 5 to $13 \%$ ) with a single (10\%) rate structure, while at the same time introducing a new bottom bracket and rate at the central level. In Sweden and Switzerland, the representative lowest sub-central rates changed slightly while the lowest central rates remained constant.

### 2.2. Surtaxes

A personal income surtax, or surcharge, is an additional tax on income that is also taxed through the regular PIT rate schedule. This may include payments that are identified by governments as separate taxes but which are levied on a similar tax base as the regular personal income tax. In 2010, seven OECD countries - Australia, Denmark, France, Germany, Ireland, Luxembourg and Turkey - levied surtaxes at the central government level and some Canadian provinces levied sub-central surtaxes. Single-rate surtaxes are in place in Denmark, France, Luxembourg and Turkey. Multi-tiered surtaxes are in place in Australia, Germany, Ireland, and in the Canadian province of Ontario.

A surtax can be levied in several different ways. For example, it can be calculated as a percentage of the PIT liability net of refundable tax credits, as is done in Germany, or gross of non-refundable tax credits, as is done in Luxembourg. In Canada, the central government surtax in place until 2000 was based on the PIT liability net of non-refundable tax credits but gross of refundable tax credits, as is the surtax currently in place in Ontario, the representative Canadian province considered in this report (most other Canadian provinces do not levy surtaxes). The impact of non-refundable tax credits is magnified when the surtax is applied to the tax liability net of these tax credits. That is, tax credits reduce not only the general tax liability but also the surtax liability.

Surtaxes can also be levied on a tax base that is broader or narrower than the taxable income base that applies to the regular PIT rate schedule. If the surtax base is broader, it could be argued that it entails a separate tax rather than a surtax. For example, France's Universal Social Contribution (CSG) and Social Debt Contribution (CRDS), and Turkey's stamp tax on wages are levied on gross pay. The Irish income levy is levied on gross family
income. These payments, which are not categorized as social security contributions, are considered personal income surtaxes to the extent that gross pay is also taxed through the regular PIT rate schedule.

In some countries, one or more additional statutory tax rates are levied on the same tax base that is subject to the basic or standard PIT schedule. While countries may label these as separate taxes - the Medicare Levy in Australia, the Health Care Tax in Denmark, the Ontario Health Premium in Canada - they are effectively surtaxes as long as the tax base is the same (or narrower) as the standard PIT base. Furthermore, these surtaxes could potentially be incorporated into the regular PIT schedule to improve simplicity and transparency, although this might require shifts in the tax burden of some taxpayers. This reform has been initiated in Denmark, where the Health Care Tax will be gradually incorporated into the lowest statutory central PIT rate between 2012 and 2019. In Norway, the additional graduated tax rates on labour (and pension) income are considered a surtax in the context of a dual income tax system and in Sweden the additional graduated rates on taxable income in place in 1990 were considered a surcharge. However, for the purposes of the Taxing Wages report, these Norwegian and Swedish rates are not considered surtaxes because they can be smoothly incorporated into the labour income tax schedule as additional tax brackets (as reflected in Figure S.1).

Surtaxes in place in OECD countries in 1990, 2000 and 2010 are described in Table S.3. While surtaxes are sometimes introduced as temporary revenue raising measures, they often become long-term features of the PIT system. For example, the German Solidarity Surcharge was introduced in 1991 as a 12-month measure to help cover the costs of German re-unification. It was subsequently re-introduced in 1995 and continues to be levied. In 1993, Belgium introduced the Complementary Crisis Contribution as a deficit reduction measure to meet the entry requirements for the European Economic and Monetary Union. The surtax was only abolished in 2003.

Apart from Belgium, the only other country to eliminate a surtax in the past 10 years was Canada, which eliminated its central-level surtax in 2001 following a period of budgetary surpluses. Denmark and Ireland, on the other hand, introduced central-level surtaxes in 2008 and 2010, respectively, to support their fiscal consolidation efforts.

The impact of surtaxes on top statutory rates varies across OECD countries. In 2010, they added less than one percentage point to the top combined statutory rate in Luxembourg (increasing it from 38 to $38.95 \%$ ) and Turkey (from 35 to $35.66 \%$ ); between one and five percentage points in Australia (from 45 to $46.5 \%$ ), Germany (from 45 to $47.48 \%$ ) and Ireland (from 41 to $46 \%$ ); and more than five percentage points in Canada (from 40.16 to $46.41 \%$ ), Denmark (from 44.31 to $52.54 \%$, on average) and France (from 40 to $45.78 \%$ ). In some countries, surtaxes also affect the bottom (non-zero) statutory personal income tax rate. For example, surtaxes increase the lowest statutory central rate in France (from 5.5 to 7.76\%), Ireland (from 20 to 22\%), Luxembourg ( $8 \%$ to 8.2\%) and Turkey ( $15 \%$ to $15.66 \%$ ).

The fact that surtaxes affect the bottom statutory rate in some countries reflects that although surtaxes are sometimes associated with high incomes, the threshold at which a taxpayer begins to pay surtax is not always high. For example, individuals are subject to the stamp tax in Turkey and the Universal Social Contribution and Social Debt Contribution in France on their first unit of earnings. The Australian Medical Levy is payable by single individuals who earn $28 \%$ of the average wage (for families the threshold at which the levy begins to be paid is higher, depending on the number of adults and dependent children).

Table S.3. Central and sub-central government surtaxes and additional personal income taxes on labour income ${ }^{1,2}$

|  | 1990 |  | 2000 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | Taxable Income | Medicare Levy | Taxable Income | Medicare Levy | Taxable Income | Medicare Levy |
|  | $\begin{gathered} 11745-12528 \\ \text { (singles) } \\ 23245-24794 \\ \text { (couples) } \end{gathered}$ | $\begin{gathered} 20 \% \\ \text { (singles) } \\ 20 \% \\ \text { (couples) } \end{gathered}$ | $\begin{gathered} 13550-15941 \\ \text { (singles) } \\ 22865-26900 \\ \text { (couples) } \end{gathered}$ | $\begin{gathered} 10 \% \\ \text { (singles) } \\ 10 \% \\ \text { (couples) } \end{gathered}$ | $\begin{gathered} 18488-21750 \\ \text { (singles) } \\ 31196-36701 \\ \text { (couples) } \end{gathered}$ | $\begin{gathered} 10 \% \\ \text { (singles) } \\ 10 \% \\ \text { (couples) } \end{gathered}$ |
|  | $\begin{aligned} & >12528 \text { (singles) } \\ & >24794 \text { (couples) } \end{aligned}$ | $1.25 \%$ of $\mathrm{I}^{3}$ | $>15941$ (singles) <br> > 26900 (couples) | 1.5\% of $\mathrm{TI}^{3}$ | $>21750$ (singles) <br> > 36701 (couples) | 1.5\% of $\mathrm{TI}^{3}$ |
| Belgium |  |  | Family Taxable Income | Complementary Crisis Contribution |  |  |
|  |  |  | 0-800 000 | $1 \%$ of TI |  |  |
|  |  |  | 800 000-850 000 | $\begin{gathered} 1 \%+1 \% \text { * } \\ (\mathrm{TI}-800000) / 50000 \end{gathered}$ |  |  |
|  |  |  | 850 000-1200 000 | $2 \%$ of TI |  |  |
|  |  |  | 1200000-1250000 | $\begin{gathered} 2 \%+1 \% \text { * } \\ (\mathrm{TI}-1200 \text { 000)/50 } 000 \end{gathered}$ |  |  |
|  |  |  | > 1250000 | 3\% |  |  |
|  |  |  | Family Taxable Income | Special Annual SSC |  |  |
|  |  |  | 750 000-850 000 | 9\% |  |  |
|  |  |  | $850000-2426924$ | 1.3\% |  |  |
| Denmark |  |  |  |  | Taxable Income | Health Care Tax |
|  |  |  |  |  | No limit | $8 \%$ of TI |
| Canada (Central) | Basic PIT (after credits) | Surtax | Basic PIT (after credits) | Surtax |  |  |
|  | No limit | 5\% of PIT | > 15500 | 5\% |  |  |
|  | > 15000 | 3\% |  |  |  |  |
| Canada - Ontario (Sub-central) |  |  | Basic PIT (after credits) | Surtax | Basic PIT (after credits) | Surtax |
|  |  |  | > 3561 | 20\% | $>4006$ | 20\% |
|  |  |  | > 4468 | 36\% | > 5127 | 36\% |
| France |  |  | Gross Pay | Universal Social Contribution (CSG) | Gross Pay | Universal Social Contribution (CSG) |
|  |  |  | No limit | 7.125\% of GP | No limit | 7.275\% of GP |
|  |  |  | Gross Pay | Social Debt <br> Contribution (CRDS) | Gross Pay | Social Debt <br> Contribution (CRDS) |
|  |  |  | No limit | 0.475\% of GP | No limit | 0.485\% of GP |
| Germany |  |  | PIT | Solidarity Surcharge | PIT | Solidarity Surcharge |
|  |  |  | $\begin{gathered} 918-1170 \text { (singles) } \\ 1836-2340 \text { (couples) } \end{gathered}$ | 20\% (singles) <br> 20\% (couples) | $\begin{gathered} 972-1239 \text { (singles) } \\ 1944-2478 \text { (couples) } \end{gathered}$ | 20\% (singles) <br> 20\% (couples) |
|  |  |  | $\begin{aligned} & >1170 \text { (singles) } \\ & >2340 \text { (couples) } \end{aligned}$ | $5.5 \%$ of $\mathrm{PIT}^{3}$ | $\begin{aligned} & >1239 \text { (singles) } \\ & >2478 \text { (couples) } \end{aligned}$ | $5.5 \%$ of $\mathrm{PIT}^{3}$ |
| Ireland |  |  |  |  | Gross Family Income | Income Levy |
|  |  |  |  |  | Up to 75036 | 2\% |
|  |  |  |  |  | 75036-174980 | 4\% |
|  |  |  |  |  | > 174980 | 6\% |
| Luxembourg | PIT | Solidarity Surtax | PIT | Solidarity Surtax | PIT | Solidarity Surtax |
|  | No limit | $5 \%$ of PIT | No limit | 2.5\% of PIT | No limit | 2.5\% of PIT |
| Turkey |  |  | Gross Pay | Stamp Tax | Gross Pay | Stamp Tax |
|  |  |  | all | 0.006\% of GP | all | 0.66\% of GP |

Note: Norway's two-tiered surtax is not presented here as it is treated as two additional brackets in this report.

1. For each year and country, the surtax base is shown in the left column and the surtax rate and name are shown in the left column. Unless otherwise noted, when a surtax is multi-tiered, rates in the right column apply to the income/tax/gross pay range in the corresponding column to the left.
2. Surtax base values refer to the national currency of each country in the given year.
3. Surtax rate applies to all taxable income in Australia or all PIT in Germany (not just the range shown to the left).

GP = Gross Pay; PIT = Personal Income Tax; TI = Taxable Income
Sources: Taxing Wages 2009-10; Taxing Wages 2000-01; The Tax/Benefit Position of Production Workers 1987-1990.

However, even if the income level at which a taxpayer becomes subject to surtax is low, a surtax can increase the progressivity of the personal income tax system if the surtax itself displays progressive features (e.g. if an initial income band is exempt from surtax). Progressivity may increase in particular when the surtax consists of a multi-tiered schedule (e.g. Ireland), if it is phased in with income (e.g. Australia and Germany), or when it is levied as a percentage of an already progressive basic income tax (e.g. Luxembourg).

### 2.3. Zero-rates, basic allowances and basic tax credits

All OECD countries have basic provisions in place that exempt an initial level of earnings from personal income tax (although not necessarily from certain surtaxes or social security contributions) regardless of family circumstances such as marital status or number of children. The rationale for these provisions may vary: it may be argued that a minimum amount of income should be exempt because it is generally spent on basic necessities, which is analogous to exempting basic food and shelter from VAT, or that it should be exempt because it must be spent to generate income (e.g. commuting expenses). Alternatively, the primary purpose of a basic allowance may be to increase the progressivity of the tax system, particularly when there is a single or few tax brackets.

Exempting an initial level of income can be achieved with a zero-rate bracket, a basic personal allowance, or a basic personal tax credit. A zero-rate bracket applies a zero tax rate to the portion of taxable income below the tax bracket threshold. A basic personal allowance removes a portion of gross income from the tax base by reducing taxable income. Finally, a tax credit offsets the tax liability associated with a portion of income. Thus, an initial level of income can be exempted from tax at any stage in the calculation of taxes payable - when the tax base is determined (through an allowance), when tax on taxable income is calculated (through a zero statutory rate), or when net tax is calculated (through tax credits).

Zero-rate tax brackets result in a zero tax liability on the units of taxable income below the bracket threshold, which is effectively an exemption on that portion of taxable income. For example, if the upper threshold for the zero-rate bracket is 10000 currency units, all taxpayers are exempt from tax on 10000 units of their taxable income (which in the absence of any allowances would equal 10000 units of gross earnings). A universal basic allowance of 10000 currency units achieves a similar result by exempting from tax 10000 currency units of gross earnings. Individuals earning 10000 or less are exempt from tax on all their earnings under both policy tools. For those earning more than 10000 , the tax allowance and zero-rate bracket result in identical average tax rates if the taxable income thresholds for all the tax brackets over the zero-rate bracket are shifted by 10000 currency units relative to the bracket thresholds under the basic allowance. Under this set of conditions, a reform that replaces a flat basic allowance with a zero rate would be neutral.

Such type of reform was implemented in Greece in 2009. The basic personal allowance was eliminated and a zero-rate bracket was introduced; its upper threshold was identical to the former basic allowance. As a result, the first EUR 12000 of income were exempted from tax before and after the reform. However, the tax bracket thresholds for the non-zero rate brackets were not shifted by the amount of the basic allowance. In the absence of any other changes, this would have raised the tax burden of taxpayers whose taxable income was in the second non-zero rate bracket or higher. However, the Greek reform also reduced the first and second non-zero statutory rates, creating an offsetting effect.

When the value of a basic personal allowance varies with income, zero-rate brackets and basic allowances no longer produce the same result for all taxpayers, even if bracket thresholds are properly adjusted. The basic allowance is tapered with income in the Slovak Republic, Slovenia and the United Kingdom. In the Slovak Republic, the basic allowance is gradually reduced when earnings exceed 1.9 times the average wage and is fully eliminated when earnings reach 3.8 times the average wage. In Slovenia, those claiming the maximum allowance (earning less than $62 \%$ of the average wage) are exempt on almost twice the earnings as those claiming the minimum allowance (i.e. those earning more than $71 \%$ of the average wage). In the UK, taxpayers earning more than 3.2 times the average wage do not enjoy an exemption on any portion of their income. In Ireland, the low income exemption and the marginal relief tax rate for those who earn less than twice the amount of exempt income are similar to a tapered basic allowance. In Norway, the basic allowance increases with income for some income levels, with a lower and upper limit. Income-based basic personal allowances cannot be replaced with zero-rate brackets in a neutral way, that is, without affecting the tax liability of at least some taxpayers.

An alternative method of exempting an initial level of income from tax is to provide a basic non-refundable (wastable) tax credit similar to a basic allowance. A basic tax credit of 10000 currency units multiplied by the lowest non-zero statutory rate effectively exempts the first 10000 of taxable income. For taxpayers whose taxable income is subject only to the first non-zero statutory rate, this tax credit has the same result as a basic allowance of 10000 currency units. However, for those with higher taxable incomes, the tax credit reduces the tax liability by less than an allowance of the same amount because the allowance is valued at the taxpayer's marginal tax rate but the tax credit is valued at a fixed and lower rate. In other words, while a basic allowance exempts the last 10000 currency units of taxable income, the tax credit in this example exempts the first 10000 units of taxable income (see Table S.4).

Table S.4. Example of the equivalence between zero-rate brackets, basic allowances and basic tax credits

|  | 10000 Zero Rate Bracket |  | 10000 Basic Allowance |  | 10000 Basic Tax Credit (valued at the lowest PIT rate) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Personal Income Tax Schedule |  |  |  |  |  |  |
|  | Taxable Income | Rate | Taxable Income | Rate | Taxable Income | Rate |
|  | 0-10 000 | 0\% | 0-10 000 | 10\% | 0-10 000 | 10\% |
|  | 10 000-20 000 | 10\% | > 10000 | 20\% | > 10000 | 20\% |
|  | > 20000 | 20\% | N/A |  | N/A |  |
| Case Examples (assuming no other allowances) |  |  |  |  |  |  |
| Gross <br> Earnings | Taxable Income | PIT Liability | Taxable Income | PIT Liability | Taxable Income | PIT Liability |
| 10000 | 10000 | $(10000 * 0 \%)=0$ | $10000-10000=0$ | $(0 * 10 \%)=0$ | 10000 | $\begin{gathered} (10000 * 10 \%) \\ -(10000 * 10 \%)=0 \end{gathered}$ |
| 20000 | 20000 | $\begin{gathered} (10000 * 0 \%) \\ +[(20000-10000) \\ * 10 \%]=100 \end{gathered}$ | $\begin{gathered} 20000-10000 \\ =10000 \end{gathered}$ | $(10000 * 10 \%)=100$ | 20000 | $\begin{gathered} (10000 * 10 \%) \\ +[(20000 \\ -10000) * 20 \%] \\ -(10000 * 10 \%) \\ =\mathbf{2 0 0} \end{gathered}$ |

A basic refundable (non-wastable) tax credit not only exempts an initial level of income, like a basic non-refundable tax credit, but also provides a negative tax (a subsidy) for low-income individuals with small or no personal income tax liabilities. Refundable tax credits in OECD countries are generally targeted rather than provided broadly to all tax filers. Many refundable tax credits available regardless of family status are employment-related (e.g. Mexico's employment subsidy credit, the earned income tax credits in Finland and Sweden, etc.). Whether employment-related or not, in most cases the exemption is provided only to taxpayers with total income under certain thresholds as a result of provisions that reduce the value of the tax credit as income rises.

Zero-rates, basic personal allowances and basic personal tax credits introduce progressivity in the tax schedule because the value of the tax relief they provide expressed as a share of income declines as income rises, which entails average tax rates that increase with income. But while standard tax allowances are valued at a taxpayer's marginal tax rate, tax credits are valued at a fixed rate or, in the case of tapered tax credits, at a rate that decreases with income. Therefore, basic personal tax credits (in multi-tiered PIT schedules) and tapered basic allowances can increase the progressivity of the tax system more than flat allowances because the tax relief they provide as a percentage of income for those with high incomes is lower than the tax relief provided by a tax allowance.

Provisions that exempted an initial level of income from tax in OECD countries in 2000 and 2010 are summarized in Table S.5. In countries with dual income tax systems (Finland, Norway and Sweden) they refer to exemptions that reduce the earned income tax liability. Nine OECD countries have PIT schedules with a zero-rate tax bracket - Australia, Austria, Finland, France, Germany, Greece, Luxembourg, Sweden and Switzerland. Fourteen OECD countries provide basic personal allowances (or equivalent "exempt income" levels) - Belgium, Chile, Estonia, Ireland, Japan, Korea, Norway, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, the United Kingdom, and the United States. Eleven OECD countries have non-refundable basic personal tax credits - Australia, Canada, the Czech Republic, Denmark, Iceland, Ireland, Israel, Italy, the Netherlands, Poland and Portugal. From 2000 to 2010, the only countries that have replaced the policy tool used to exempt an initial level of earnings have been the Netherlands and the Czech Republic, which replaced their basic allowances with wastable tax credits when they implemented base broadening reforms in 2001 and 2008, respectively.

Hungary, Mexico, New Zealand and Turkey have provisions that exempt an initial portion of employment income but, unlike other countries without dual income tax systems, do not extend this relief to other sources of income. For example, the Mexican employment subsidy credit (a refundable tax credit that is tapered with income) in combination with the holiday bonus and end-of-year bonus (standard work-related tax reliefs) results in a zero (or negative) tax liability for workers earning up to $70 \%$ of the average wage. Hungary, New Zealand and Turkey exempt an initial portion of employment income for lower income workers through non-refundable tax credits; these are tapered with income in the first two countries. Work-related lump sum allowances or tax credits, whether tapered with income or not, also exist in most other OECD countries. Like generally available basic reliefs and zero-rate brackets in Table S.3, work-related provisions affect the income threshold where taxpayers begin to pay income tax (see Section 3.2).

From 2000 to 2010, the value of basic exemptions (tax allowances, tax credits or zero-rated brackets) expressed as a share of the average wage increased by at least two

Table S.5. Central level zero-rate brackets, basic allowances and basic tax credits as a percentage of the average wage ${ }^{1,2,3}$

|  | 2000 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Measure | Amount (\% of AW) | Measure | Amount (\% of AW) |
| Australia | Zero-rate bracket | 15 | Zero-rate bracket | 9 |
|  | Wastable tax credit (t) | 2 | Wastable tax credit (t) | 13 |
| Austria | Zero-rate bracket | 12 | Zero-rate bracket | 29 |
| Belgium | Basic allowance | 16 | Basic allowance | 15 |
| Canada | Wastable tax credit | 19 | Wastable tax credit | 23 |
| Chile | Basic allowance | 120 | Basic allowance | 111 |
| Czech Republic | Basic allowance | 22 | Wastable tax credit | 43 |
| Denmark | Wastable tax credit | 12 | Wastable tax credit | 11 |
| Estonia | Basic allowance | 16 | Basic allowance | 18 |
| Finland | Zero-rate bracket | 30 | Zero-rate bracket | 38 |
| France ${ }^{4}$ | Zero-rate bracket | 15 | Zero-rate bracket | 17 |
| Germany | Zero-rate bracket | 20 | Zero-rate bracket | 19 |
| Greece | Zero-rate bracket | 71 | Zero-rate bracket | 59 |
| Hungary ${ }^{5}$ |  |  |  |  |
| Iceland | Wastable tax credit | 41 | Wastable tax credit | 42 |
| Ireland | Wastable tax credit | 21 | Wastable tax credit | 23 |
|  |  |  | Basic allowance (t) | $13^{6}$ |
| Israel | Wastable tax credit | 49 | Wastable tax credit | 49 |
| Italy |  |  | Wastable tax credit | 28 |
| Japan | Basic allowance | 8 | Basic allowance | 8 |
| Korea | Basic allowance | 3 | Basic allowance | 4 |
| Luxembourg | Zero-rate bracket | 19 | Zero-rate bracket | 23 |
| Mexico ${ }^{7}$ |  |  |  |  |
| Netherlands | Basic allowance | 13 | Wastable tax credit | $13^{8}$ |
| New Zealand ${ }^{5}$ |  |  |  |  |
| Norway | Basic allowances (i) | 20 | Basic allowances (i) | 16 |
| Poland | Wastable tax credit | 10 | Wastable tax credit | 9 |
| Portugal |  |  | Basic allowance | 24 |
|  | Wastable tax credit | 12 | Wastable tax credit | 14 |
| Slovak Republic | Basic allowance | 25 | Basic allowance (t) | 43 |
| Slovenia | Basic allowance | 12 | Basic allowance (t) | 36 |
| Spain | Basic allowance | 19 | Basic allowance | 21 |
| Sweden | Zero-rate bracket | 88 | Zero-rate bracket | 101 |
|  | Basic allowance (i) (t) | 3 | Basic allowance (i) (t) | 5 |
|  | Non-wastable tax credit (t) | 3 |  |  |
| Switzerland | Zero-rate bracket | 25 | Zero-rate bracket | 18 |
| Turkey | Basic allowance | 4 | 5 |  |
| United Kingdom | Basic allowance | 18 | Basic allowance (t) | 19 |
| United States | Basic allowance | 22 | Basic allowance | 13 |

[^0]percentage points in 12 countries, decreased in 6 countries, and did not significantly change in 13 OECD countries. The largest increase was observed in Italy, followed by Portugal, Slovenia, the Czech Republic, the Slovak Republic and Austria. In these countries, the value of the exemption as a percentage of the average wage increased by more than 15 percentage points. In Italy and Portugal this was due to the introduction of new provisions; in others cases it was the result of an enhancement of the basic provisions, which generally accompanied major changes to statutory tax rates. For example, Austria, the Czech Republic, and the Slovak Republic enhanced their basic provisions as they reduced the number of tax brackets and increased the bottom statutory rate. Over the same decade, the value of the basic exemption declined the most (by at least eight percentage points) in Greece, Chile and the United States. In these countries, though the basic exemptions increased in terms of national currency, they decreased as a share of the average wage, which grew at a faster pace.

## 3. Income thresholds associated with the top and bottom statutory tax rates

### 3.1. Income threshold where single individuals start paying the top statutory rate

A key difficulty in comparing top statutory rates across OECD countries is that the threshold at which the top combined statutory personal income tax rate begins to apply varies significantly across countries. In particular, the threshold tends to be lower in countries with fewer tax brackets and higher in countries with a large number of tax brackets. The value of personal allowances also affects the threshold at which the top rate begins to apply, if the threshold is measured in terms of gross earnings. Holding tax bracket thresholds constant, an increase in tax allowances translates into higher gross income thresholds at which the top statutory rate is levied. Figure S. 9 shows the income threshold where a single individual who claims standard reliefs starts facing the top combined statutory PIT rate, expressed as a percentage of a full-time worker's average wage.

Not surprisingly, in countries with a single statutory tax rate - the Czech Republic, Estonia and the Slovak Republic - the income threshold where the top statutory rate begins to apply is considerably lower than in all other OECD countries. (In these countries, this is also the threshold where a single taxpayer first begins to pay tax, which is in turn higher in the Czech Republic and the Slovak Republic than in most other OECD countries.) Although there is only one statutory rate in these countries, the threshold for the top rate is greater than zero as a result of basic personal allowances or credits. In the Czech Republic, while the top statutory rate theoretically applies to the first unit of earnings, in practice taxpayers do not start paying tax before earning $43 \%$ of the average wage as a result of the basic personal tax credit.

In contrast, the threshold at which the top statutory rate begins to apply is highest in countries with a larger number of tax brackets. In Chile, the top rate of $40 \%$ affects individuals whose earnings are more than 16.4 times the average wage. This high threshold is the result of a personal tax structure with seven tax brackets and a generous basic allowance that exceeds the average wage. The income threshold is also high in Portugal, where there are eight tax brackets, and in the United States, where there are six. In Portugal, the top rate of $45.88 \%$ begins to apply when earnings exceed 9.7 times the average wage. In the United States, the top combined rate of $41.9 \%$ begins to apply when earnings exceed 8.4 times the average wage.

Figure S.9. Income threshold where the top combined statutory personal income tax rate is levied (multiple of the average wage) ${ }^{1,2}$


1. Multiple of the average wage where the top combined central and sub-central personal income tax rate begins to apply for a single individual claiming only standard tax allowances. For the Czech Republic, the 2010 figure denotes the threshold where a single taxpayer begins to pay tax.
2. Countries are ranked by decreasing threshold in 2010.

* Values not shown: Chile 2010: 14.0; Chile 2000: 16.3; Portugal 2010: 9.7; US 2010: 8.4; US 2000: 8.9; Mexico 2000: 49.8; Turkey 2000: 11.5; Slovak Republic 2000: 7.9.
Source: OECD Tax Database Table I. 7 (www.oecd.org/ctp/taxdatabase).

A country-by-country comparison of Figure S. 1 (in Section 2.1) and Figure S. 9 reveals the connection between changes in the number of tax brackets and changes in the income threshold at which the top statutory rate is levied. Comparing 2000 to 2010, the threshold for the top combined rate decreased in 11 of the 13 countries where the number of central tax brackets was reduced (Austria, Belgium, the Czech Republic, Finland, France, Mexico, Poland, the Slovak Republic, Slovenia, Spain and Turkey). And among the nine countries where the number of central tax brackets increased, the threshold for the top combined rate increased in six of them (Canada, Germany, Iceland, Israel, Japan and Portugal).

However, changes in the threshold at which the top statutory rate begins to apply have not been driven only by changes to the number of tax brackets. Overall, from 2000 to 2010, the gross income threshold at which the top statutory rate begins to apply (expressed as a multiple of the average wage) decreased in 20 OECD countries, increased in 11 countries and remained relatively stable in 3 countries. As shown in Figure S.9, changes were radical in some countries and subtle in others.

In absolute terms, the largest reduction in the income threshold at which the top rate begins to apply was observed in Mexico. There, the threshold at which the top rate of $40 \%$ began to apply in 2000 was 49.8 times the average wage. By 2010, the threshold at which the top rate of $30 \%$ began to apply had fallen to 4.5 times the average wage. This drastic reduction was the result of reforms that gradually reduced the top statutory rate between 2002 and 2007, and a subsequent reform that increased the threshold for the top rate while introducing new tax brackets. By 2010, Mexico's PIT schedule consisted of eight tax brackets with significantly lower rates and thresholds (as a multiple of AW) than the ten-bracket schedule in 2000. The two other countries that greatly reduced the threshold at which the top PIT rate begins to be levied are those that implemented reforms that instituted a single-rate tax structure within
the decade - the Czech Republic and the Slovak Republic. In these countries, the threshold dropped by more than $80 \%$, from 2.5 to 0.4 times the average wage in the Czech Republic, and from 7.9 to 0.5 times of the average wage in the Slovak Republic. The threshold declined by more than $60 \%$ in Slovenia and Turkey and by more than $40 \%$ in Belgium, Korea, Luxembourg and Spain.

Negligible changes occurred in Greece, Japan and Sweden. Small changes in the threshold at which the top rate applies may be caused by governments' indexation policies, which may be explicit or consist of ad hoc increases every few years. Tax allowances and top bracket thresholds that are not indexed annually to earnings growth are likely to grow at a slightly different pace than the average wage, leading to small changes in the value of the top income threshold expressed as a multiple of the average wage. On the other hand, seemingly small changes in the threshold over the ten year period may also reflect the cumulative impact of various policy changes with offsetting effects.

Large increases in the income threshold where the top statutory rate begins to apply have often been led by policy changes concerning the top statutory tax rate. Among the countries that increased their top statutory rates at some point over the last ten years, Germany, Greece, Iceland, Israel, Portugal, and the United Kingdom did so by introducing additional tax brackets at the top end of the PIT schedule, while Ireland introduced a multi-tiered surtax. Consequently, the threshold at which the top rate applies more than doubled over then ten year period in Germany (from 1.8 to 6.1 times the average wage), Ireland (from 0.7 to 4.4 times the average wage), Portugal (from 3.4 to 9.7 times the average wage) and the United Kingdom (from 1.3 to 4.4 times the average wage), and increased by more than $70 \%$ in Israel (from 2.4 to 4.2 times the average wage).

Indeed, top statutory rates and the thresholds where they begin to apply have tended to move in the same direction (along with the number of tax brackets). Among the 26 countries where the top combined statutory rate fell from 2000 to 2010 (see Section 2.1.2), the threshold for the top rate declined in 19 of them. The exceptions are Australia, Canada, Denmark, Estonia, Germany, Hungary and Israel, where the threshold increased while the top rate decreased. Among them, the threshold increased the most in Australia, where it more than doubled within the decade. Among the five countries where the top combined rate was higher in 2010 than in 2000, the threshold increased in all of them except Sweden, where it remained constant.

The fact that top statutory rates and the thresholds where they begin to apply have tended to move in the same direction among OECD countries means that conclusions about trends in the tax burden of high income earners cannot be derived by simply comparing top statutory rates. Moreover, though outside the scope of this report, the overall income tax burden of high income earners is also affected by their eligibility for non-standard PIT reliefs and changes in capital income taxation.

### 3.2. Income threshold where single individuals start paying income tax

Zero-rate brackets, basic allowances and basic personal tax credits described in Section 2.3 imply that individuals are generally not subject to tax on the first unit of earnings, introducing progressivity in the PIT rate schedule. Thus, statutory tax rates generally lead to a positive tax liability only once a taxpayer has earned income exceeding a given threshold. Exceptions include the French Universal Social Contribution (CSG) and the Social Debt Contribution (CRDS) and the Turkish stamp tax on wages, which apply on the first unit of earnings.

Figure S .10 shows the income threshold, as a multiple of the average wage, where a single taxpayer begins to pay income tax. This threshold is defined here as the gross income level where the combined central and sub-central tax liability, net of refundable tax credits, first becomes greater than zero for a single individual who claims only standard reliefs (i.e. basic allowances and general work-related allowances available to all workers). The threshold may be different for tax filers who are married, have children or claim non-standard allowances. The threshold at which a single taxpayer becomes subject to income tax is calculated according to tax provisions and may in some cases be smaller than the 12-month legal minimum wage for a full-time employee. Note that to the extent that countries provide cash benefits comparable to refundable tax credits, the income thresholds at which the tax liability net of subsidies first becomes positive may be higher than the thresholds presented here.

The statutory rate that corresponds to the earnings level where a single taxpayer becomes subject to income tax is generally the bottom statutory rate as defined in Section 2.1.5. However, in 2010 this was not the case in Ireland, Japan, Mexico and the United States. In Japan, lump sum local taxes result in a positive tax liability before taxable income and the statutory tax rate turn positive. In the other three countries, provisions targeted at low-income taxpayers raise their tax-free income level above the upper threshold for the bottom statutory rate.

On average across OECD countries, individuals begin to pay income tax when they earn roughly one third of the average wage. However, the threshold varies considerably across countries. In 2010, French taxpayers were subject to income tax (CSG and CRDS) on their first unit of earnings, as were Turkish taxpayers. However, in the absence of surtaxes, a single employee claiming standard tax reliefs would have been able to earn free of tax $50 \%$ of the average wage in France or $24 \%$ of the average wage in Turkey. In contrast,

Figure S.10. Income threshold where a single individual starts paying income tax (multiple of the average wage) ${ }^{1,2}$


1. Multiple of the average wage where the average combined central and sub-central personal income tax liability first becomes positive for single taxpayers without children claiming (only) standard tax reliefs.
2. Countries are ranked by decreasing threshold in 2010.

* The value for Chile is $140 \%$ of the AW in 2010 and $149 \%$ of the AW in 2000.

Source: OECD calculations, Taxing Wages model.

Chilean taxpayers could earn $140 \%$ of the average wage before they began to pay income tax in 2010, mainly due to a generous basic personal allowance.

From 2000 to 2010, the earnings threshold where single taxpayers become subject to income tax increased on average across OECD countries, from $30 \%$ of the average wage to $33 \%$ of the average wage. The threshold decreased in 13 countries, remained relatively stable in 7 countries, and increased in the remaining 14 countries.

While the threshold decreased in various countries, the decline was only materially significant in Korea (from 52 to $24 \%$ of the average wage) and Mexico (from 99 to $70 \%$ of the average wage). In Korea, the change was mainly driven by the fact that the first KRW 5000000 of employment income were previously fully deductible whereas in 2010, only $80 \%$ of this amount could be deducted as an allowance. In Mexico, a reduction in the value of both the employment subsidy credit and the fiscal subsidy reduced the threshold in gross earnings terms.

Among the OECD countries where the threshold increased, it increased the most in Hungary (from the first unit of earnings to $34 \%$ of the average wage), followed by Slovenia (from 15 to $46 \%$ of the average wage), the Slovak Republic (from 29 to $50 \%$ of the average wage) and the Czech Republic (from 25 to $43 \%$ ). In Hungary, the increase was due to an enhancement of the employee tax credit, which previously reduced the tax liability and now exempts an initial portion of income for lower income workers. In Slovenia, the threshold increased primarily with the introduction of additional general allowances for low income people in 2008. In the Slovak Republic and the Czech Republic, the threshold where tax becomes payable increased as a result of the reforms that replaced their multi-rate PIT schedule with a single tax rate and a significantly higher basic allowance or basic tax credit.

In countries with sub-central personal income taxes, the income threshold at which the combined central and sub-central tax liability becomes positive may differ from both the income threshold at which central taxes begin to apply and the threshold at which sub-central taxes begin to apply (see Table S.6). This is the case when either the central or sub-central government offers refundable tax credits that effectively offset some of the tax liability imposed by the other level of government. For example, Canada, Finland, Sweden, the United States offer central level refundable in-work tax credits. Beyond reducing the central tax liability to zero, these tax credits notionally offset some of the sub-central tax liability in these four countries. That is, in the absence of central government taxes and credits, the income threshold at which sub-central taxes begin to be paid would be lower than otherwise.

Table S.6. Income threshold where a single individual starts paying personal income tax, by level of government, 2010 (as a multiple of the average wage)

| Countries with national EITCs <br> and sub-central taxes | Central Tax ${ }^{1}$ | Sub-central Tax ${ }^{2}$ | Combined Central <br> and Sub-central Tax |
| :--- | :---: | :---: | :---: |
| Canada | 0.324 | 0.308 | 0.319 |
| Finland | 0.64 | 0.09 | 0.12 |
| Sweden | 1.67 | 0.05 | 0.15 |
| United States | 0.38 | 0.06 | 0.27 |

[^1]In other countries with sub-central taxation, the threshold at which the combined central and sub-central tax liability first becomes positive is the lesser of the threshold at which central taxes begin to apply and the threshold at which sub-central taxes begin to apply, as is the case in Denmark, Iceland, Japan and Switzerland. In the remaining countries with sub-central taxation (Belgium, Italy, Korea, Norway and Spain) the threshold is identical at the central and sub-central levels.

In Belgium and Korea, sub-central taxes are calculated as a percentage of central tax liability, and therefore begin to apply at the same income levels as central taxes. In 2010, the sub-central threshold also equaled the central threshold in Italy, Norway and Spain. Except for these five countries, the threshold at which a single taxpayer begins to pay income tax can vary significantly at the central and sub-central level (see Figure S.11). The sharpest contrast is observed in Sweden, where in 2010 taxpayers began paying municipal taxes when they earned $5 \%$ of the average wage but were not subject to central income tax until they earned more than $167 \%$ of the average wage. The threshold at which Swedish municipal taxes begin to apply is low as a result of a relatively small income-tested basic personal allowance, which ranged from 0.03 to 0.09 times the average wage in 2010. While the central government provides the same basic allowance, its PIT schedule also contains a long zero-rate bracket with an upper taxable income threshold that is slightly above the average wage.

Figure S.11. Income threshold where a single individual start paying central or sub-central income tax (multiple of the average wage) ${ }^{1,2}$


1. Multiple of the average wage where the average combined central and sub-central personal income tax liability first becomes positive for single taxpayers without children.
2. Countries are ranked by decreasing central threshold in 2010.

* In Sweden, the threshold for paying central tax was $167 \%$ of the AW in 2010 and $107 \%$ of the AW in 2000.

Source: OECD calculations, Taxing Wages model.

In 2010, the threshold at which a taxpayer begins to pay sub-central income tax was also lower than the threshold at which central tax begins to be paid in Canada, Finland, Iceland, Japan, Switzerland and the United States. The income threshold where sub-central tax begins to be paid was higher than the threshold for central taxes only in Denmark (in 2010), where lump sum unemployment insurance contributions were deducible from the sub-central tax base but not from the central tax base.

From 2000 to 2010, the threshold at which sub-central taxes begin to apply increased drastically in Iceland (where the first unit of earnings was previously subject to tax), and to a lesser extent in Switzerland. The threshold for local taxes declined the most in Korea, paralleling the decline in the threshold for central taxes.

Like in Korea, the earnings level where sub-central taxes begin to apply has moved in the same direction as the threshold where central taxes first become payable in most of the 13 OECD countries with sub-central taxation. The exception is Switzerland, where the sub-central threshold increased while the central threshold decreased in the past decade. In Canada, while both the central and sub-central thresholds increased, the central threshold now exceeds the sub-central threshold as a result of the introduction of a refundable earned income tax credit at the national level.

## 4. Statutory personal income tax schedules in relation to marginal and average tax rates

Statutory tax rates are among the main tools governments possess to determine the tax burden at different levels of income. However, comparisons of statutory PIT rates between countries or over time must be interpreted with care. For instance, two countries with identical statutory personal income tax rate schedules can display significant differences in the actual tax burden their populations face due to different tax reliefs and the definition of the tax base. Also, the replacement of a zero rate bracket or basic allowance with a basic personal tax credit (e.g. as in the Czech Republic) could give the impression that the tax burden has increased for lower income taxpayers if only statutory rates are considered. A more complete comparison should thus consider average and marginal tax rates as well as statutory tax rates.

As a result of allowances, exemptions and tax credits, statutory PIT rates do not generally coincide with average personal income tax rates (i.e. personal income taxes as a percentage of gross earnings). This particularly applies to low income levels, as most countries implement tax relief measures mainly targeted at low income earners. At higher income levels, statutory rates tend to be higher than average tax rates as a result of tax reliefs provided without income limits (e.g. universal basic allowances) and, in most OECD countries, graduated rate schedules. In the presence of tax reliefs that vary with income, statutory tax rates also differ from marginal personal income tax rates (i.e. personal income tax paid on an additional unit of gross earnings). This tends to be the case at income levels where targeted income-based tax relief is being phased in or phased out (tapered), or when social security contributions or non-tax compulsory payments are deductible from the PIT base.

To compare average, marginal and statutory PIT rates, the graphs in the Annex of the Special Feature show personal income tax rates by level of gross income expressed as a percentage ( $0 \%$ to $500 \%$ or $1000 \%$ ) of the average wage, as defined in Table II. 10 of the Taxing Wages report. There are two graphs for each country, the first showing the statutory tax rate and the average tax rate in 2003 and 2010. The year 2003 was chosen because it is the earliest year for which the Taxing Wages model can derive statutory rate schedules. The second graph displays personal income tax rates in 2010, and shows the marginal tax rate in addition to the statutory tax rate and the average tax rate. The graphs apply to a single taxpayer without children claiming only standard reliefs available to all wage earners. It is assumed that this taxpayer works full-time regardless of income. As a result, tax rates shown for low income levels should be interpreted with caution in the presence
of minimum wage legislation (which is ignored here) or tax relief based on number of hours of work. It is assumed that gross income consists entirely of wage earnings and, where applicable, taxable benefits or taxable tax credits granted generally to all wage earners meeting the income requirements. All tax rates refer to combined central and sub-central tax rates, including surtaxes where applicable. For 2010, the threshold where a single taxpayer begins to pay income tax (Figure S.10) can be identified in the Annex as the gross earnings level where the average PIT rate first turns positive. The threshold where a single taxpayer begins to face the top statutory PIT rate (Figure S.9) can also be observed in the charts in the Annex of this Special Feature.

For better comparability between countries and over time, the statutory tax rates shown in the Annex reflect the equivalence between zero-rate brackets and basic personal allowances by placing gross earnings rather than taxable income on the horizontal axis. The statutory rate for any given gross earnings level refers to the rate applicable to the corresponding level of taxable income. This means that for countries with a basic allowance, the statutory PIT schedule (as defined in terms of taxable income) is shifted by the amount of the allowance (when defined in terms of gross earnings). Thus, the statutory rate on one unit of gross earnings is $0 \%$ in countries with basic or work-related lump-sum allowances and in countries with zero-rate tax brackets. In contrast, the rate is positive in countries with basic personal tax credits, which limits the comparability of charts between countries with tax credits and those with standard allowances and/or zero-rated brackets.

While this section focuses on personal income tax systems, it is important to remember that social security contributions also affect the overall personal tax burden of individuals. Thus, while some countries may have lower marginal and average income tax rates than others because social security contributions are deductible, their net personal average and marginal tax rates (encompassing PIT and employee SSC) may ultimately be higher than in countries without such deductions or with lower or no SSCs. Net personal average and marginal tax rates for 2011, as well as the separate contributions of PIT and employee SSC towards them, are shown in the country graphs of Part I of this report.

### 4.1. Average income tax rates compared to statutory tax rates

From 2003 to 2010, there was a trend across OECD countries towards reduced statutory and average tax rates, at least for some income intervals. In most countries where the average tax rate decreased from 2003 to 2010, the statutory rate was cut at least for some brackets. Indeed, reductions in average tax rates can be at least partly explained by these cuts to statutory rates, particularly among those with high incomes. However, at low income levels reductions can to a greater extent be explained by increased basic allowances and tax credits. Average tax rates have increased in only few countries, though increases have not been significant in any of them.

From 2003 to 2010, 15 countries noticeably cut statutory and average income tax rates, though not necessarily for all tax brackets - Australia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Israel, Norway, New Zealand, Mexico, Poland, Slovak Republic and Slovenia. There are differences among countries regarding the income levels that benefited from the rate cuts. In some countries, the reductions were targeted at middle-income or high-income earners. In others, they were more general and applied to most of the income distribution. In general, statutory rates did not substantially decrease at low income levels. Reductions in the average tax rate on low incomes have mainly been achieved through more generous basic and work-related reliefs.

Among the countries that cut their tax rates, nine of them - Australia, Denmark, Estonia, Finland, France, Hungary, Israel, Mexico and Slovenia - implemented statutory rate cuts for almost the entire income distribution, though not necessarily by the same magnitude for all income levels. Statutory rate cuts in most of these countries were accompanied by a reduction in the average tax rate. The most significant reductions in the average tax rate took place in Israel and Australia. In contrast, in France, where statutory rate cuts were significant at most income levels, average tax rates were almost unchanged (except for earnings between $15 \%$ and $30 \%$ of the average wage) as a result of PIT base broadening.

Countries that targeted statutory rate cuts at high income levels include the Czech Republic, New Zealand, Norway, Poland and the Slovak Republic. The Czech Republic and the Slovak Republic replaced their multiple statutory rate schedule with a single rate structure, in 2008 and 2004 respectively, which led to significant reductions in the statutory rates for high income levels. The Czech Republic simultaneously replaced its basic allowance with a new tax credit, ensuring that the average tax rate for low income earners was either reduced or remained at $0 \%$. In the Slovak Republic the basic allowance was enhanced, and in 2010 taxpayers with up to $50 \%$ of the average wage were not subject to PIT. In Norway, a tax reform implemented from 2004 to 2006 reduced the statutory rates for income above the average wage. For income below the average wage the statutory rate was unchanged from 2003 to 2010, but the average tax rate was reduced through enhancements in the basic allowance.

Several countries have targeted tax reductions at low and/or middle-income earners. These cuts have mainly been achieved through more generous basic and work-related reliefs instead of bottom statutory rate cuts, which have not been as widespread as top statutory rate cuts (as discussed in Section 2.1.4). In Sweden, for instance, the average tax rate decreased significantly, especially for low to middle-income earners, while statutory rates remained relatively unchanged from 2003 to 2010. The decrease in the average tax rate was the result of an increase in the tax credit for social security contributions and the introduction of an annual earned income tax credit. However, in Hungary a large reduction in the average tax rate for low and middle-income earners was mainly the result of significant reductions of the statutory rate for these groups.

Average tax rates have not significantly increased in any OECD country, even though a small group of countries increased the statutory rate for some income levels. These include Chile, Korea and the United Kingdom, where the statutory rate increased significantly for some income levels. Statutory rate increases were smaller in Italy, Iceland, Ireland, Japan, Luxembourg, Netherlands, Portugal and Turkey. These countries, except Iceland, also experienced minor increases in the average tax rate. In Spain, several changes to the statutory rate structure, both to the brackets thresholds and statutory tax rates, led to an increase in the average tax rate for low- and middle-income earners.

In some countries, including Austria, Belgium, Canada, France, Switzerland and the United States, statutory and average tax rates did not significantly change, even though some of these countries changed some of their bracket thresholds and/or statutory tax rates. The average tax rate for low income levels ( $20 \%$ to $60 \%$ of the average wage) increased slightly in Belgium, while it decreased slightly for income levels below the average wage in the United States. In contrast, the average tax rate in Greece was unchanged for most income levels in spite of the introduction of new tax brackets and rates, except for those earning between $80 \%$ and $170 \%$ of the average wage, for whom the average rate increased slightly.

Negative average tax rates over some income ranges are observed in Austria, Belgium, Canada, France, Mexico, the Slovak Republic, Sweden, the United Kingdom and United States as a result of work-related non-wastable tax credits. When only personal income tax rates are considered, and not social security contributions, these tax credits result in negative average (and marginal) tax rates for some (low) income levels, though actual tax liability may still be positive when social security contributions are included in the tax burden. In the United Kingdom, the tax credit is conditional on hours worked. The tax rates shown in the graphs in the Annex are based on the assumption that the taxpayer is eligible for this credit at low income levels. However, because taxpayers are unlikely to meet the eligibility criteria at very low income levels, the tax rates shown for the United Kingdom are truncated at $-10 \%$. For presentation purposes, the tax rates shown for Mexico are truncated at $-30 \%$ even though the average tax rate can be lower at low income levels due to an employment subsidy credit of MXN 4884.24 (in 2010) that is tapered with income.

### 4.2. Marginal income tax rates compared to statutory tax rates

Marginal personal income tax rates differ from statutory rates when tax reliefs vary with income or at very low income levels (where income is not subject to tax). For any given income level, the marginal rate (on gross earnings) is lower than the statutory rate (on the taxable income corresponding to gross earnings) when additional income results in increased tax relief, and higher than the statutory rate when tax relief is reduced with additional income. When the rate at which reliefs are reduced accelerates, the marginal rate increases. As described in Section 2.3, in some OECD countries basic allowances and tax credits are gradually reduced (or increased) when income exceeds a given threshold, reaching zero (or a maximum amount) at a given income level. At this income level, where the impact of increasing or decreasing reliefs is exhausted, marginal and statutory tax rates merge (in the absence of other income-related tax relief). In some countries, at least some social security contributions are levied without a ceiling and are partly or fully deductible from taxable income or give rise to tax credits. Unlike other allowances and tax credits, tax reliefs related to these social security contributions often reduce the marginal tax rate below the statutory tax rate for high income as well as for low income earners.

Marginal tax rates differ from statutory rates, at least for some income ranges, in all OECD countries except Mexico. In most countries there is an income interval where the marginal tax rate is lower than the statutory rate. Few countries have marginal rates that are consistently higher than statutory rates, and several countries have uneven marginal rate schedules that peak at various levels of income. Marginal rate schedules tend to be more uneven at the bottom of the income distribution, where income-based standard reliefs for wage earners are of greater significance.

In nine countries - Austria, Belgium, France, Iceland, Japan, Korea, Poland, Slovenia and Switzerland - the marginal tax rate is lower than the statutory rate for almost the entire income distribution, though there are a few minor exceptions in some of the countries. All of these countries provide allowances for some or all social security contributions or non-tax compulsory payments. Since these allowances are not tapered with income and, except in Austria, there are no ceilings on the total amount of social security contributions (or NTCPs), the gap between the marginal and statutory tax rates on high incomes can be fully explained by these deductions. In Austria, the assumption made in the 2010 Taxing Wages publication that $2 \%$ of gross earnings are tax-free explains the difference between the statutory and marginal tax rate at high income levels.

At lower income levels, these nine countries provide other allowances and tax credits that also affect the marginal rate. Some of these tax reliefs decrease with income, thus narrowing the gap between the statutory and marginal rate for low income earners. In some cases, tax reliefs that are tapered with income may even lift the marginal rate above the statutory rate. For example, in France the marginal tax rate is higher than the statutory rate for income between 45 and $65 \%$ of the average wage as a result of the employment premium, a refundable tax credit that is reduced with earned income and capped at $65 \%$ of the average wage. In Belgium, a reduction of individual social security contributions is granted depending on income, in addition to a PIT allowance for social security contributions paid and a PIT allowance for work-related expenses that is calculated as a percentage of income with a decreasing rate. These three provisions result in an uneven ratio between the marginal rate and the statutory rate, though the marginal rate remains lower than the statutory rate for most of the income scale.

Finland, the Netherlands and Portugal also grant uncapped deductions for (some) social security or non-tax compulsory contributions. In these countries the marginal rate is also lower than the statutory rate at high income levels. However, the marginal rate is equal or higher than the statutory rate at some other points of the income distribution.

Another set of countries have marginal rates that differ from the statutory rate at the low to middle income range but eventually merge with the statutory rate at high income levels. These countries are Australia, Canada, Germany, Italy, Luxembourg, New Zealand, the Slovak Republic, Spain, Sweden, Turkey, and the United States. In most of these countries, statutory and marginal rates are identical at high income levels because either an allowance is not provided for social security contributions, or these contributions are capped (before income reaches five times the average wage). In contrast, in most of these countries marginal rates have uneven structures relative to the statutory rate at low and/or middle income levels. For example, in Canada, Sweden and the United States, nonwastable in-work tax credits lead to negative marginal tax rates for some low income levels where the statutory rate is positive.

In few countries - Chile, Estonia, Israel and Norway - discrepancies between the marginal and statutory rates are minor. In the United Kingdom, the marginal rate equals the statutory rate at most income levels, with two significant exceptions. At income between 20 and $40 \%$ of the average wage and between 280 and $320 \%$ of the average wage the marginal rate is considerably higher. The first peak is a result of the reduction of the Working Tax Credit, and the second peak is due to the tapering of the basic personal allowance.

It is not common for the marginal tax rate to be consistently higher than the statutory rate. However, this is the case in the Czech Republic and Hungary, where marginal rates are higher than statutory tax rates for all income levels subject to tax. In these countries the statutory rate is levied on gross earnings augmented with employer social security contributions, leading to a marginal tax rate that is higher than the statutory tax rate.

Overall, while marginal and average personal income rates are strongly influenced by, and tend to evolve together with, statutory tax rates, the graphical comparison of these rates in different countries shows that the definition of the tax base is an equally important factor in shaping tax burdens and work incentives along the income scale.

## 5. Employee social security contribution schedules

### 5.1. Income threshold where single individuals start and stop paying employee SSC

In most OECD countries, employee social security contributions are payable by all taxpayers on their first unit of earnings. However, some countries implement minimum income thresholds below which social security contributions are not payable. This is the case with all forms of employee social security contributions in seven countries - Austria, Belgium, Canada, Ireland, Norway, Sweden and the UK - as well as some (but not all) employee SSCs in Hungary (pension contributions) and Luxembourg (dependency insurance).

In most of these countries, the minimum income threshold is a low-income exemption that benefits taxpayers with total gross earnings below the threshold. Taxpayers who earn more are usually subject to SSC on their first unit of earnings. For example, this is the case with employment insurance contributions in Canada, and pension contributions in Norway and Sweden. In 2010, low-income exemptions ranged from $4 \%$ of the average wage in Canada to $46 \%$ of the average wage in Ireland.

Unlike low-income exemption thresholds, SSC floors exempt an initial portion income from SSC for all taxpayers, regardless of their income. All taxpayers are exempt from SSC on an initial portion of their income in Austria, Ireland and the United Kingdom, where all SSCs are subject to floors. In Ireland, however, the floor for social insurance is gradually reduced with income, like a tapered SSC allowance.

While some countries exempt low incomes from SSCs, others implement minimum SSC liabilities. In the Slovak Republic, Spain and Turkey, full-time workers are deemed to earn a minimum amount of income subject to SSC. This minimum SSC tax base tends to correspond to the legal minimum wage. In Denmark, there is also a minimum SSC liability, though rather than calculated as a deemed minimum tax base multiplied by the SSC rate, it is a lump sum charge for unemployment insurance.

SSC ceilings are more common than minimum income thresholds, as can be seen in Figure S.12, which shows the value, as a percentage of the average wage, of low-income exemptions, floors, minimum liabilities and ceilings in countries where upper or lower limits are in place for all employee SSCs.

Total employee SSCs are capped at a maximum level when an income ceiling is exceeded in 14 OECD countries - Austria, Canada, Chile, the Czech Republic, Germany, Greece, Israel, Italy, Mexico, the Netherlands, the Slovak Republic, Spain, Sweden and Turkey. In some countries, some but not all SSCs are capped at a maximum level (e.g. social insurance in Ireland; pension contributions in Hungary, Japan, Korea and the United States; unemployment insurance contributions in France and Switzerland). In 2010, gross earning ceilings in countries where total SSCs were capped ranged from 0.7 times the average wage in the Netherlands to 8.45 times the average wage in Israel.

In most of the countries where total SSCs are capped, the gross earnings threshold at which the maximum SSC contribution is reached is below the threshold at which the top statutory PIT rate begins to apply, which implies that SSC rates do not increase the marginal personal tax rate (encompassing PIT and employee SSC) beyond the top statutory PIT rate for taxpayers facing this top rate. The exceptions are the Czech Republic, Israel, Italy, Mexico and the Slovak Republic, where taxpayers continue to pay SSC after their income has exceeded the threshold at which the top PIT rate applies.

Figure S.12. Employee social security contribution thresholds, 2010 (multiple of the average wage) ${ }^{1,2}$


1. A floor is an initial portion of income not subject to SSC, which is equivalent to a universal SSC allowance provided irrespective of income. A low-income exemption is the income threshold that determines whether SSC is payable or not. Those with income above the threshold must pay SSC on their total income or, in the presence of a floor, on their income above the floor. A minimum tax base are the deemed minimum earnings subject to SSC for full-time workers. A ceiling is the income threshold above which SSCs are no longer payable.
2. Countries are sorted from smallest to largest SSC ceiling in 2010. In Belgium, Ireland, Norway and the UK there are no ceilings on the total amount of SSC. Countries not shown in the graph do not impose lower or upper thresholds on the total amount of SSC.

* In Ireland, the floor applies to those whose total gross earnings exceed the low-income exemption. The floor is gradually reduced when gross income exceeds the ceiling for pension and social insurance (EUR 67357 in 2010).
Source: OECD Tax Database Table III. 1 (www.oecd.org/ctp/taxdatabase) and OECD calculations.
StatLink . बillst http://dx.doi.org/10.1787/888932586979


### 5.2. Top all-in rates

The impact of social security contributions rates on marginal tax rates can be summarised by the all-in tax rate (also referred to in Taxing Wages as the marginal personal tax rate), which is the sum of the combined central and sub-central marginal PIT rate, including applicable surtaxes, and the marginal employee SSC rate(s). The top all-in rate is the marginal combined PIT and SSC rate that applies on the first currency unit of gross earnings subject to the top statutory PIT rate. As defined here, the top all-in rate is not necessarily the maximum personal marginal rate, nor the marginal rate that applies on the highest possible income. Instead, it indicates the marginal tax rate for a taxpayer when she or he begins to face the top statutory PIT rate. It reflects the interaction between SSC rates, the top statutory rate and any other provisions that increase or reduce the marginal PIT rate.

The main form of interaction between PIT and SSC is the deductibility of SSC payments from the PIT base (or the inclusion of SSC in the case of the Czech Republic and Hungary). Employee SSCs levied on gross earnings (as opposed to taxable income) are deductible from the central government PIT base in 20 OECD countries - Austria, Belgium, Denmark, Estonia, Finland (only pension contributions), France, Germany, Greece, Iceland, Italy, Japan, Korea (only pension contributions), Luxembourg (except for dependency insurance), Poland, Portugal, the Slovak Republic, Slovenia, Spain, Switzerland and Turkey. In most of these countries, contributions are fully deductible except in Germany, where there is partial deductibility. In addition, Canada and Sweden provide personal income tax credits for SSCs paid. Due to the interaction between SSC and PIT provisions as well as possible SSC ceilings, the top all-in rate does not generally equal the sum of the top
statutory PIT rate and the top (or last applicable) statutory SSC rate (i.e. the statutory SSC rate on the highest possible income that is still subject to SSC).

There are four situations under which the top all-in rate can be lower than the sum of the top statutory PIT rate and the top (or the last applicable) statutory employee SSC rate:
a) An allowance or tax credit is provided for employee SSC contributions that increase with income, and these are either not capped or capped at a ceiling that is higher than the threshold for the top statutory PIT rate. In this case, the allowance or tax credit reduces the top marginal PIT rate. In the absence of other income-related allowances/ credits, the top all-in rate will equal the top marginal PIT rate plus the statutory SSC rate applicable at the gross earnings level at which a person begins to pay the top statutory PIT rate.

- In 2010, among the 22 countries that provided PIT relief in respect of some or all employee SSCs, contributions were not capped in Belgium, Denmark, Estonia, Finland, France, Iceland, Japan, Korea, Luxembourg, Poland, Portugal, Slovenia and Switzerland; they were capped above the threshold for the top statutory PIT rate in Italy and the Slovak Republic.
b) SSC contributions are capped and the SSC ceiling(s) is (are) lower than the threshold for the top statutory PIT rate. In this case, an allowance or tax credit for SSCs does not reduce the top marginal PIT rate. Unless other income-related allowances or credits are provided, the top all-in rate will equal the top marginal PIT rate.
- In 2010, this was the case in Canada, Chile, Germany, Greece, Spain, Sweden and Turkey.
c) Other income-related tax relief is provided to taxpayers subject to the top statutory PIT rate.
- For example, in 2010, non-tax compulsory payments that increase with income were deductible from the tax base in Iceland and the Netherlands.
d) The statutory SSC rate applicable at the earnings level at which a taxpayer first becomes subject to the top statutory PIT rate is lower than the top (or last applicable) employee SSC rate.

The top all-in rate may even be lower than the top statutory PIT rate. In 2010, for single individuals claiming standard reliefs, this was the case in Austria, Iceland, Japan and the Netherlands. At the other extreme, the top all-in rate may be higher than the sum of the top statutory PIT rate and the statutory SSC rate applicable at the income threshold for the top statutory PIT rate. In 2010, this was the case in the Czech Republic and Hungary.

Figure S .13 shows the difference between top statutory PIT rates and top-all in rates faced by single individuals claiming only standard tax reliefs in OECD countries in 2010. Apart from countries with no SSCs (Australia and New Zealand), the top all-in rate was identical to the top statutory rate in the seven countries where the ceiling for employee SSCs was below the threshold for the top statutory PIT rate (Canada, Chile, Germany, Greece, Spain, Sweden and Turkey). The top all-in rate was lower than the top statutory rate in five countries - Austria, Iceland, Japan, Switzerland and the Netherlands. In the remaining 21 OECD countries, the top all-in rate was higher than the top statutory PIT rate as a result of employee SSCs. In these countries, the difference between the top statutory PIT rate and the top all-in rate may be less than the full statutory SSC rate when tax relief is provided for SSC, which reduces the top marginal PIT rate under the conditions described above.

In 2010, social security contributions had the largest impact on the top all-in rate for single individuals in Hungary ( 26 percentage points) and the Czech Republic (16 percentage points).

Figure S.13. Top combined statutory and all-in tax rates on wage income, 2010 ${ }^{1,2}$


1. The top "all-in" tax rate is the marginal personal tax rate paid by households on the first currency unit of taxable income subject to the top statutory tax rate. The top statutory tax rate is the top combined statutory PIT rate in the tax rate schedule.
2. Countries are ranked by decreasing top all-in rate.

Source: OECD Tax Database Table I. 7 (http://www.oecd.org/ctp/taxdatabase).

This is the result of the inclusion of employer social security contributions in the PIT base (in Hungary, this is done through a $27 \%$ gross-up of taxable income), and the fact that employers (and employees) continue to pay contributions on income above the threshold for the top statutory PIT rate.

When some or all SSC contributions are capped at a maximum level but their income ceiling is higher than the threshold where the top statutory PIT rate begins to apply, the top all-in rate will tend to be higher than the all-in rate applicable on the highest possible income. For example, in Italy the top all-in rate of $50.9 \%$ applies to earnings of 3 times the average wage (corresponding to the taxable income threshold for the top PIT bracket). However, because SSC are no longer payable on earnings of more than EUR 92 147, a taxpayer earning 3.3 times the average wage faces a lower all-in rate of $45.2 \%$. A similar situation occurs in Luxembourg, where the top all-in rate of $47 \%$ applies to average wage earnings, but the all-in rate drops to $40.4 \%$ for taxpayers with more than 2.1 times the average wage. The top all-in rate is also higher than the all-in rate faced by higher income taxpayers in the Czech Republic, the Slovak Republic, Finland, France and Mexico. In the first two countries, this is due to the interaction of single-rated PIT schedules and SSC ceilings. In France and Mexico, (some) social security contributions are capped above the income threshold for the top statutory PIT rate. In Finland, the income level where the top statutory rate kicks in is within the phase-out range of the central earned income tax credit and the local earned income allowance.

The top all-in rate can be lower than the all-in rate applicable at lower income levels (i.e. below the taxable income threshold for the top PIT bracket). For example, in the United Kingdom, this is the result of a basic allowance that is gradually reduced with income but is fully eliminated before income reaches the threshold for the top PIT bracket. In France, the all-in rate faced by a single worker earning half of the average wage is higher than the top all-in rate due to the phase-out of the in-work tax credit (prime pour l'emploi). High SSC rates on contributions that are capped at income levels below the threshold for
the top PIT rate could produce similar results. The top-all in rate can also be lower than the all-in rate applicable at higher income levels (over the taxable income threshold for the top PIT bracket). This could be the result of tax relief provisions that are reduced with income and eliminated only after income exceeds the top PIT bracket threshold. The top all-in rate is lower than the all-in rate applicable at higher income levels (at least over some high income intervals) in Belgium and the Slovak Republic.

On average across OECD countries, the top all-in rate fell from 49.4\% in 2000 to $45.4 \%$ in 2010 (see Figure S.14). This trend parallels the decline in the average top statutory PIT rate over the same period. In fact, the drop in top all-in rates was primarily driven by statutory PIT rate cuts, although changes in SSC schedules also played a (smaller) role. The top all-in rate fell in 25 countries, with the most significant declines in Hungary (from 78\% to 58\%), the Slovak Republic (from 42 to 30\%), Mexico (from 43 to 32\%) and the Netherlands (from 60 to $50 \%$ ). The rate increased in nine countries, although the changes were negligible in Austria, Greece, Iceland, Sweden and Turkey. The most significant increase occurred in the United Kingdom, where the top all-in rate increased from 40 to $50 \%$ as a result of the introduction of a new top PIT bracket and rate. The only countries where the top all-in rate and top statutory PIT rate moved in different directions are France and Italy, where the top all-in rate increased despite reductions in the top statutory PIT rate.

This section has shown that social security contributions can have significant impacts on marginal tax rates, even at high income levels in many countries. Relying solely on top statutory PIT rates for international competitiveness analyses would thus present an incomplete picture. Furthermore, while trends in top statutory and marginal PIT rates have been broadly paralleled by top all-in rates, the gap between them has tended to widen over time. This is perhaps not surprising in light of the general trend across OECD countries towards an increased share of employee (and employer) social security contributions in the tax revenue mix.

Figure S.14. Top all-in rate on wage income ${ }^{1,2}$


1. The top "all-in" tax rate is the marginal personal tax rate paid by households on the first currency unit of taxable income subject to the top statutory tax rate.
2. Countries are ranked by decreasing top all-in rate in 2010.

Source: OECD Tax Database Table I. 7 (http://www.oecd.org/ctp/taxdatabase).

## 6. Conclusions

This Special Feature compared statutory personal income tax and employee social security contribution provisions across OECD countries and over time, including statutory tax rates, the income thresholds where they apply, personal income surtaxes and provisions that exempt a minimum amount of income from tax. The relationship and differences between statutory, marginal and average personal income tax rates has also been discussed, as well as the contribution of SSC rates towards top all-in marginal tax rates.

The following trends have been identified:

- The average number of tax brackets in OECD countries strongly declined in the 1980's and remained relatively stable throughout the 1990's and 2000's. Over the last decade, reductions in the number of tax brackets have been generally accompanied by reductions in the top statutory PIT rate. The introduction of new tax brackets, though less common, has generally resulted in higher top statutory PIT rates. It thus appears that changes in the number of tax brackets have been, with exceptions, not a policy goal in itself but rather a tool to reduce or increase tax burdens, particularly at high income levels.
- On average across OECD countries, the top statutory PIT rate, inclusive of surtaxes and sub-central taxes, has declined significantly in each of the past three decades. However, Iceland, Ireland, Mexico, Portugal, Sweden and the United Kingdom increased their top PIT rate in 2010, signalling a reversal in the trend at a time of fiscal consolidation.
* Among the 13 countries with sub-central taxation, the top combined statutory PIT rate declined in 10 of them over the past decade. However, these reductions were mainly driven by changes in top central tax rates (which were usually higher than sub-central rates to begin with). Indeed, some sub-central governments, such as those in Finland and Spain, have been able to raise their top statutory rates to take up fiscal room resulting from central level tax cuts.
* While some sub-central governments with taxing powers raised their top statutory PIT rates, no previously unitary country (as of 2000) introduced sub-central personal income taxation.
- From 2000 to 2010, the level of earnings at which taxpayers become subject to the top statutory PIT rate changed alongside the number of tax brackets and the top statutory PIT rate. Reductions in the top statutory PIT rate and/ or in the number of tax brackets have generally been accompanied by reductions in the threshold at which the top rate applies. Conversely, the threshold for the top PIT rate has generally increased in countries that increased their top statutory PIT rate and/ or introduced new brackets.
* The trend towards lower top PIT rates, lower top thresholds and fewer tax brackets occurred not only in countries that implemented flat tax reforms (the Czech Republic and the Slovak Republic), but also notably in Belgium, Mexico, Slovenia and Turkey.
- In the last decade, the statutory PIT rate levied on the average wage of a single worker declined in 23 OECD countries. Among them, the decline generally coincided with a trend towards lower average tax rates on average earnings. Conversely, increases in the statutory PIT rate levied on the average wage have frequently been paralleled by increases in the average personal income tax rate.
- In contrast, there was no clear trend in the bottom statutory PIT rate from 2000 to 2010. While it decreased in many OECD countries, it increased in others. The magnitude of the changes varied significantly across countries.
* Where applicable, drastic changes in the bottom rate have often been accompanied by changes in the gross income range over which it applies, as was the case in Denmark and Austria.
* Although several countries have targeted tax burden reductions at low and/or middle-income earners, these cuts have mainly been achieved through more generous basic and work-related reliefs.
- The level of earnings at which taxpayers start paying PIT has not displayed a clear trend either. Over the last decade, it decreased in various countries, most notably in Korea and Mexico, and increased or remained stable in others.
* In countries with sub-central taxation, the income threshold at which taxpayers begin to pay central taxes may be significantly different from the threshold where they start to pay sub-central taxes. However, refundable tax credits at one level may offset the tax liability at the other level, so that the threshold where the combined tax liability becomes positive is somewhere in between the central and sub-central thresholds.
- Eight OECD countries - Australia, Canada, Denmark, France, Germany, Ireland, Luxembourg and Turkey - levied surtaxes or additional income taxes at the central or sub-central level in 2010. The calculation of surtaxes, including the base and number of rates, varies considerably among these countries. Surtaxes create complexity and reduce transparency in the tax system. They may also increase or reduce the progressivity of personal income taxes, depending on their design.
* Progressivity may increase when the surtax consists of a multi-tiered schedule (e.g. Ireland), if it is phased in with income (e.g. Australia and Germany), or when it is levied as a percentage of an already progressive basic income tax (e.g. Luxembourg). It may be reduced in some cases, when the surtax is similar to a proportional tax.
- All OECD countries exempt an initial portion of earnings from personal income tax through provisions such as basic personal tax allowances, basic personal tax credits or zero-rate tax brackets. However, in some countries the exemption is limited to employment income and/or to taxpayers with incomes below a certain threshold.
* The particular type of tool used to exempt income in each country has tended to remain constant over time, with the exception of the Czech Republic and the Netherlands.
* The value of the basic exemption, expressed as a share of the average wage, noticeably increased in more than a third of OECD countries and decreased in only six countries over the last decade.
- Statutory tax rates are only one element that helps determine tax liabilities and marginal tax rates. A graphical comparison of statutory, average and marginal personal income tax rates along the income distribution shows that these rates often differ from each other in OECD countries.
*While marginal rates may be higher, lower or equal to statutory tax rates at different stages of the income scale, average tax rates are always lower than statutory rates (for the average single full-time earner) as a result of tax reliefs and, in most countries, graduated PIT schedules.
- Employee social security contributions are payable on the first unit of earnings in most OECD countries, but are capped when income exceeds a certain level in 14 countries. Contributions are deductible from the PIT base in 20 OECD countries and may be claimed as a tax credit in 2 countries, thus reducing marginal personal income tax rates in most OECD countries.
* Among the few countries where minimum income thresholds for employee SSCs apply, three of them impose floors (all taxpayers are exempt from SSC on income below the threshold) and five of them offer low-income exemptions (taxpayers with earnings above the threshold are liable for SSC on their income exceeding a floor). Three other countries implement minimum SSC liabilities, whereby full-time workers are deemed to earn a minimum amount of income subject to SSC.
- The top all-in rate summarizes the impact of employee SSCs on top marginal tax rates. In most OECD countries employee social security contribution rates increase the top all-in rate, which is the combined marginal PIT and SSC rate applicable where a taxpayer becomes subject to the top statutory PIT rate. However, the top all-in rate is not always higher than the top statutory PIT rate, for example, if SSCs are capped at lower income levels or if there are income-based tax reliefs available to those with higher incomes. At the other extreme, the top all-in rate may be higher than the sum of the top statutory PIT rate and the corresponding statutory employee SSC rate.
* In 2010, the top all-in rate was lower than the top statutory PIT rate in Austria, Iceland, Japan and the Netherlands. The two rates were equal in Canada, Chile, Germany, Greece, Spain, Sweden, Turkey, and in countries that do not levy employee SSCs (Australia and New Zealand).
* In 2010, the top all-in rate in the Czech Republic and Hungary was higher than the sum of the statutory PIT and employee SSC rates as a result of the inclusion of employer SSC in the personal income tax base.
- The top all-in rate declined on average across OECD countries from 2000 to 2010, primarily as a result of lower top statutory PIT rates, and to a lesser extent due to changes in SSC schedules. However, the average gap between the top all-in rate and the top statutory PIT rate widened, from 2.9 percentage points to 3.7 percentage points, reflecting the growth of employee SSC as a share of total tax revenues in most countries. Moreover, the reductions in the income threshold where the top all-in rate applies that occurred in most OECD countries over the same period have minimised the impact of top all-in rate cuts on the tax burden of high income earners.


## ANNEX

## Statutory, marginal and average personal income tax rate schedules

Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage








Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage










Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage





## —— Statutory tax rate -=-=-=. Average tax rate <br> —— Marginal tax rate





Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage









Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage


Japan: 2003, 2010



| Statutory tax rate | -=- Average tax rate |
| :---: | :---: |
| Marginal tax rate |  |






Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage










Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage

Statutory tax rate in 2010
Average tax rate in 2010
Average tax rate in 2003





| Statutory tax rate | --=- $=$ Average tax rate |
| :---: | :---: |
| Marginal tax rate |  |






Income tax rates for single full-time workers with no children by level of gross earnings expressed as a $\%$ of the average wage










Income tax rates for single full-time workers with no children by level of gross earnings expressed as a \% of the average wage


## PART I

## International comparisons

This Section provides unique information for each of the OECD countries on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. It provides detailed results for 2011; definitive results for 2010 and discusses the changes between the two years. Results reported include the marginal and average tax burden for eight different family types.

## Tax burdens, 2011 estimates

Thhis Section comments on Tables I.1-I. 11 and Figures I.1-I.6. These summary tables show results for eight family-types, characterised by different family status (single/married, $0-2$ children), economic status (one-/two-earner household) and wage level ( 33 per cent, 67 per cent, 100 per cent and 167 per cent of annual gross wage earnings of an average worker).

Table I. 1 and Figure I. 1 in Part I show the average tax wedge (combined burden of income tax, employee and employer social security contributions) taking into account the amount of cash benefits each specific family-type is entitled to. Total levies due minus transfers received are expressed as a percentage of total labour costs, defined as gross wage plus employers' social security contributions (including payroll taxes). In the case of a single person at the average wage level the wedge ranges from 7.0 per cent (Chile) and 15.9 per cent (New Zealand) to 49.8 per cent (Germany) and 55.5 per cent (Belgium). For a one-earner married couple with two children at the same wage level the wedge is lowest in New Zealand ( -1.2 per cent) and Chile ( 7.0 per cent) and highest in Belgium ( 40.3 per cent) and France (42.3 per cent). As stated in Section 2.3 of the Overview, the wedge tends to be lower for a married couple with two-children at this wage level than for a single individual without children due to receipt of cash benefits and/or more advantageous tax treatment. It is also interesting to note that the wedge for a single parent with two children earning 67 per cent of the average wage level is negative in Australia ( -6 per cent), Canada ( -6.3 per cent), New Zealand ( -18.7 per cent) and Ireland ( -24.6 per cent). This result is because the value of the cash benefits received by these families plus any applicable non-wastable tax credits exceeds the sum of the total tax and social security contributions that are due.

Table I. 2 and Figure I. 2 present the combined burden of the personal income tax and employee social security contributions, expressed as a percentage of gross wage earnings (the corresponding measures for income tax and employee contributions separately are shown in Tables I. 4 and I.5). A single person at the average wage level without children is liable to an average tax plus contributions burden of over 40 per cent in Belgium ( 42.2 per cent). The lowest average rates (below 20 per cent) were in Estonia ( 19.6 per cent), Ireland (18.9 per cent), Israel and Switzerland (16.1 per cent), New Zealand (15.9 per cent), Korea (12.3 per cent), Chile ( 7.0 per cent) and Mexico ( 6.3 per cent).

Table I. 3 shows the combined burden of income tax and employee social security contributions with the levies due being reduced by the entitlement to cash benefits for each family-type. Figure I. 3 illustrates this burden for single individuals without children and one-earner married couples with two children at average earnings, respectively. Comparing Tables I. 2 and I.3, the average tax rates for families with children (columns 4-7) are lower in Table I.3, because many OECD countries support families with children through cash benefits. A lower burden is observed for a single individual without children
at 67 per cent of the average wage in the case of Canada because of a cash transfer paid to mitigate the burden imposed by the federal consumption tax (further details can be found in the country chapter contained in Part III of this Report) and in Denmark for single taxpayers at 67 and 100 per cent of the average wage and two-earner married couples without children, one partner at average earnings and the other partner at 33 per cent of the average wage, receiving a green check to compensate for increased environmental taxes.

Cash benefits are provided in a majority of OECD countries. For single parents with two children earning 67 per cent of the average wage level, 26 countries provide benefits that range from 45.9 per cent of income (Ireland) to 1 per cent (Chile). The benefits are at least 25 per cent of income in 4 other countries: Denmark ( 25.9 per cent), Australia ( 26.5 per cent), Canada ( 27.1 per cent) and New Zealand ( 33.2 per cent). 25 countries provide benefits for a one-earner married couple with two children earning 100 per cent of the average wage level, although these are less generous relative to income, ranging from 17.1 per cent (New Zealand) to 4 per cent (Israel and Portugal). The lower level of importance of cash benefits for the married couple can be attributed to three reasons: single parents may be eligible for more generous treatment; the benefits themselves may be fixed in absolute amount; and/or the benefits may be subject to income testing.

Table I. 4 shows personal income tax due as a percentage of gross wage earnings. For single persons without children at the average wage (column 2) - the income tax burden varies between 0 per cent (Chile) and 28.2 per cent (Belgium). In most OECD member countries, at the average wage level, the income tax burden for one-earner married couples with two children is substantially lower than that faced by single persons (compare columns 2 and 5). This difference is clearly illustrated in Figure I.4. In twelve OECD countries, the income tax burden faced by a one-earner married couple with two children is less than half that faced by a single individual (the Czech Republic, Germany, Hungary, Ireland, Korea, Luxembourg, Poland, Portugal, the Slovak Republic, Slovenia, Switzerland and the United States). In contrast, there is no difference in six countries - Chile, Finland, Israel, Mexico, New Zealand and Sweden.

There are only two OECD member countries where a married average worker with two children faces a personal income tax burden less than zero. This result is due to non-wastable tax credits, whereby credit amounts in excess of the taxes otherwise due are paid to the family, resulting in a tax burden of -4.6 in the Czech Republic and -2.6 per cent in the Slovak Republic. Similarly, in six countries - the Czech Republic, Germany, Mexico, the Slovak Republic, the United Kingdom and the United States - single parents with two children earning 67 per cent of the average wage show a negative tax burden as their non-wastable credits exceeding the taxes otherwise due. In nine other countries - Canada, Chile, Hungary, Israel, Korea, Luxembourg, Poland, Portugal and Slovenia - this family-type pays no or almost no income tax.

A comparison of columns 5 and 6 in Table I. 4 demonstrates that if the previously non-employed spouse finds a job which pays 33 per cent of the average wage level, the income tax burden of the family (now expressed as a percentage of $4 / 3$ times the average wage level) will (slightly) rise in seventeen countries, the largest increases being in the Czech Republic ( 7.6 percentage points), Germany ( 5.8 percentage points) and Belgium ( 5.4 percentage points). However, the income tax burden will actually fall in fourteen countries, the largest falls being in Mexico ( -4 percentage points) and Finland ( -4.1 percentage points).

An important consideration in the design of an income tax is progressivity - the rate at which the income tax burden increases with income. A comparison of columns 1 to 3 in Table I. 4 provides an insight into the levels of progressivity in the income tax systems of OECD countries. Comparing the income tax burden of single individuals at the average wage level with their counterparts at 167 per cent of the average wage level (columns 2 and 3), the lower paid worker faces a lower tax burden in all OECD countries. Similarly, single individuals at 67 per cent of the average wage level pay a lower percentage of their income in income tax (columns 1 and 2) than the average except in Chile where these workers do not pay income tax. Finally the burden faced by single individuals at 67 per cent of the average wage level is less than one-quarter of the burden faced by their counterparts at 167 per cent in four OECD countries: In Mexico and Chile (the tax burden is entirely eliminated) and in Korea and the Netherlands, the corresponding figures are 84 and 82 per cent respectively.

The addition of social security contributions to the average tax rate reduces this progressivity as well as the proportional fiscal savings enjoyed by families (compare Table I. 2 and Table I.4). The OECD average tax burden of single individuals at 67 per cent of the average wage level is only 33 per cent lower than their counterparts at 167 per cent compared to the OECD average savings of 52 per cent for personal income taxes alone. The average fiscal savings observed for one-earner married couples with two children at 100 per cent of the average wage level relative to single individuals falls from 40 per cent to 22 per cent. These lower figures are consistent with the observation that there is little variation between social security contribution rates across family types, as shown in Table I. 5.

Table I. 5 shows employee social security contributions as a percentage of gross wage earnings. For a single worker without children at the average wage level (column 2) the rate of contributions varies between zero per cent (Australia and New Zealand) and 22.1 per cent (Slovenia). Only Australia and New Zealand levy no social security contributions at all on employees, though they are very low for employees in some other countries - Iceland ( 0.5 per cent), Mexico (1.4 per cent) and Estonia ( 2.8 per cent). Social security contributions are usually levied at a flat rate on all earnings, i.e. without any exempt threshold. In a number of OECD member countries a ceiling applies. However, this "capping" provision usually applies to wage levels higher than 167 per cent of the average wage. This rate structure is reflected in a roughly constant average burden of employee social security contributions for most countries between 33 and 167 per cent of average wage earnings. Some typical examples of the proportional burden of employee social security contributions for all family-types at all wage levels considered here, are (in decreasing order) Slovenia ( 22.1 per cent), Poland (17.8 per cent), Hungary ( 17.5 per cent), Turkey (15 per cent), the Czech Republic and Portugal (11 per cent), Norway ( 7.8 per cent), Chile ( 7.0 per cent), the United States ( 5.7 per cent) and Estonia (2.8 per cent).

Also, at the 100 per cent average wage level all OECD member countries, except Germany and the Netherlands, impose the same burden of social security contributions on employees; regardless of their family status (see Figure I.5).

## Marginal rates

Assuming a marginal increase in labour costs, Table I. 6 and Figure I. 6 show the percentage of the rise in labour costs that is deducted through the personal income tax and both employee and employer (including payroll taxes) social security contributions.

Therefore, they trace the marginal wedge. In most cases, the marginal tax wedge absorbs $25-55$ per cent of a rise in labour costs for single individuals without children at 100 per cent of the average wage level. However, in six OECD countries these individuals face higher marginal wedges - Belgium ( 66.3 per cent), Hungary ( 63.5 per cent), Austria ( 60.6 per cent), Germany ( 60.4 per cent), Finland (57.2 per cent) and Ireland (56.7 per cent). Mexico (18.7 per cent) and Chile ( 7.0 per cent) have the lowest marginal tax rates.

In nineteen OECD member countries, the marginal tax wedge for one-earner married couples at average earnings with two children is either the same or within 5 percentage points as that for single persons at average wage earnings with no children. The marginal wedge is more than 5 percentage points lower for the one-earner married couples in seven countries: Luxembourg (17.3 percentage points), the United States (9.3 percentage points), Portugal ( 8.5 percentage points), Germany and Poland (7.7 percentage points), Slovenia ( 7.4 percentage points) and Switzerland ( 5.8 percentage points). In contrast, in the Czech Republic ( 5.4 percentage points), Netherlands ( 6.5 percentage points), Iceland (7.1 percentage points), Australia (18.8 percentage points), Ireland (18.4 percentage points), New Zealand (20 percentage points) and Canada ( 27.3 percentage points), the marginal rate for one-earner married couples with two children is more than 5 percentage points higher than it is for single workers with no children.

Table I. 7 and Figure I. 7 show the incremental change to personal income tax and employee social security contributions less cash benefits when gross wage earnings rise marginally. As in the case of the tax wedge, in most cases personal income tax and employee social security contributions absorb $25-55$ per cent of a worker's pay rise for single individuals without children at 100 per cent of the average wage level. The marginal tax rate is lower than 25 per cent only in Chile ( 7.0 per cent), Mexico ( 12.5 per cent), Korea ( 21.6 per cent) and Estonia and Switzerland ( 23.2 per cent) and it exceeds 50 per cent in Ireland ( 52 per cent), Germany (52.5 per cent), Hungary (53.1 per cent) and Belgium (54.9 per cent).

As in the case of the tax wedge, in nineteen OECD member countries, the marginal personal tax rate for one-earner married couples at the average wage level with two children is either the same or within five percentage points as that for single persons with no children. The marginal rate is more than 5 percentage points lower for the one-earner married couples in seven countries: Luxembourg (19.4 percentage points), Portugal (10.5 percentage points), the United States (10 percentage points), Germany ( 9.1 percentage points), Poland ( 8.9 percentage points), Slovenia ( 8.5 percentage points) and Switzerland (6.1 percentage points). By contrast, in the Netherlands (7.2 percentage points), the Czech Republic (7.3 percentage points), Iceland (7.7 percentage points), Australia and New Zealand (20.0 percentage points), Ireland (20.4 percentage points) and Canada (29.9 percentage points), the marginal rate for one-earner married couples with two children is more than 5 percentage points higher than it is for single persons with no children. These higher marginal rates are due to the phase out of income-tested tax reliefs and/or cash transfers. When an income-tested measure is being phased out, the reduction in the relief or benefit compounds the increase in the tax otherwise payable. These programmes are set out in greater detail in the relevant country chapters, in Part III of the Report.

Table I. 8 shows the percentage increase in net income when gross wage earnings increase by 1 currency unit in gross wages, i.e. the elasticity of after-tax income. ${ }^{1}$ Under a proportional tax system, net income would increase by the same percentage as the increase in gross earnings, in which case the elasticity is equal to 1 . The elasticity is
measured as 0.8 when an increase of gross wage by 1 currency unit leads to a corresponding rise of net take-home pay of only 0.8 per cent. The more progressive the system is - at the income level considered - the lower this elasticity will be. In the case, for example, of the one-earner married households at the average wage level, column 5 of Table I. 8 shows that of all OECD member countries Ireland (0.27), Canada (0.39), New Zealand (0.49), Australia and Hungary (0.54), Belgium (0.58) and the Czech Republic (0.59) have, on this measure, the most progressive system of income tax plus employee social security contributions at this income level. In contrast, Chile and Poland (1.00), Mexico (0.93), Korea and Turkey (0.91) and France (0.90) either implement or are close to a proportional system of income tax plus employee social security contributions - at least for this family type.

It is interesting to note that the elasticity exceeds one for a single individual at 167 per cent of the average earnings in Austria (1.01), indicating that the income tax system at this point in the income scale is regressive. In other words, a percentage increase in gross pay leads to an increase in net income in excess of the percentage increase in gross wage earnings.

Table I. 9 provides a different elasticity measure: the percentage increase in net income when labour costs (i.e. gross wage earnings plus employer social security contributions and payroll taxes) rise by 1 currency unit. ${ }^{2}$ In this case taxes and social security contributions paid by employers are also part of the analysis. In most OECD member countries the value of this elasticity lies between 0.5 and 0.97 for the family-types being considered. This elasticity is below 0.5 for single parents earning 67 per cent of the average wage level in Australia (0.40), Canada (0.37), Ireland and the United Kingdom (0.26), for one-earner married households at the average wage level with two children in New Zealand (0.49), Canada (0.39) and Ireland (0.27), and for two-earner married couples with two children where the spouse is earning 33 per cent of the average wage level in Israel (0.45). In contrast, the elasticity is greater than or equal to 0.97 for some family types in Austria, Chile, Estonia, Germany, Hungary, Japan, Korea, Mexico, Poland, the Slovak Republic and Spain. It is interesting to mention that under this elasticity measure the income tax system is regressive for a single individual at 167 per cent of average earnings in Spain (1.10), Germany (1.14) and Austria (1.19).

Table I. 10 sets out figures for gross wage earnings and net income for the eight selected family-types after all amounts have been converted into US dollars with the same purchasing power. Single workers with the average wage take home (see Table I.10, column 4) over USD 36000 in six countries: Switzerland (USD 43 387), the United Kingdom (USD 38 952), Korea (USD 38 529), Luxembourg (USD 38 464), the Netherlands (USD 37 823) and the United States (USD 36 129). The corresponding lowest levels were in Mexico (USD 10 344) and in Hungary (USD 13 141). In the case of a one-earner married couple with two children at the average earnings level, families take home over USD 42000 in five countries - Germany, Luxembourg, the Netherlands, Switzerland and the United Kingdom; with the lowest level again being in Mexico. It is interesting to observe that with the exceptions of Chile and Mexico, the one-earner married couple takes home more over USD 4500 more than the single individual at the average wage due to the favourable tax treatment of this family and/or the cash transfers to which they are entitled.

Table I. 11 shows the corresponding figures to Table I. 10 for Labour costs and net income. So the "net" columns in Tables I. 10 and I. 11 are identical. Usually, labour costs are found to be much higher, because any employer social security contributions (including
payroll taxes) are now taken into account. If measured in US dollars with equal purchasing power, labour costs for single workers earning the average wage level are the highest in Germany (USD 65 789) and Belgium (USD 64 170), and the lowest in Mexico (USD 12 337) and Chile (USD 14 530). It is interesting to note that the annual labour costs are equal to the annual gross wage in Chile, Denmark and New Zealand. In those countries neither employer social security contributions nor payroll taxes are levied on wages. However, employers in Chile and Denmark are subject to non-tax compulsory payments related to notably pension schemes.

## Notes

1. The reported elasticities in Table 1.8 are calculated as $(100-M E T R) /(100-A E T R)$, where METR is the marginal rate of income tax plus employee social security contributions less cash benefits reported in Table I. 7 and AETR is the average rate plus employee social security contributions less cash benefits reported in Table I.3.
2. The reported elasticities in Table I. 9 are calculated as ( 100 - METR)/( 100 - AETR), where METR is the marginal rate of income tax plus employee and employer social security contributions less cash benefits reported in Table I. 6 and AETR is the average rate plus employee and employer social security contributions less cash benefits reported in Table I.1.

Table I.1. Income tax plus employee and employer contributions less cash benefits, 2011
As \% of labour costs, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 20.6 | 26.6 | 32.2 | -6.0 | 15.2 | 17.9 | 24.2 | 22.9 |
| Austria | 43.7 | 48.4 | 51.6 | 26.8 | 37.1 | 37.2 | 40.5 | 44.7 |
| Belgium | 49.7 | 55.5 | 60.7 | 35.5 | 40.3 | 41.4 | 48.2 | 48.0 |
| Canada | 26.1 | 30.8 | 32.9 | -6.3 | 18.9 | 23.8 | 27.0 | 27.7 |
| Chile | 7.0 | 7.0 | 7.8 | 6.0 | 7.0 | 4.9 | 6.6 | 7.0 |
| Czech Republic | 39.5 | 42.5 | 44.9 | 16.4 | 21.7 | 30.7 | 34.7 | 40.3 |
| Denmark | 36.8 | 38.4 | 44.8 | 11.4 | 27.4 | 32.2 | 33.9 | 37.0 |
| Estonia | 38.8 | 40.1 | 41.2 | 24.3 | 31.2 | 34.2 | 35.9 | 38.8 |
| Finland | 37.2 | 42.7 | 48.5 | 26.4 | 37.7 | 35.5 | 37.5 | 39.3 |
| France | 46.5 | 49.4 | 53.5 | 38.4 | 42.3 | 40.0 | 44.9 | 45.6 |
| Germany | 45.6 | 49.8 | 51.3 | 31.2 | 34.0 | 38.9 | 42.5 | 45.6 |
| Greece ${ }^{1}$ | .. | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 45.2 | 49.4 | 51.6 | 20.0 | 32.8 | 34.3 | 37.7 | 46.7 |
| Iceland | 29.2 | 34.0 | 38.2 | 18.5 | 21.0 | 27.6 | 31.4 | 29.5 |
| Ireland | 21.3 | 26.8 | 38.7 | -24.6 | 7.1 | 13.3 | 19.0 | 20.3 |
| Israel | 13.0 | 19.8 | 28.4 | 0.1 | 16.0 | 12.2 | 13.4 | 16.6 |
| Italy | 44.5 | 47.6 | 53.0 | 29.0 | 38.6 | 40.3 | 43.1 | 44.5 |
| Japan | 29.5 | 30.8 | 33.8 | 19.7 | 23.0 | 25.1 | 26.4 | 30.0 |
| Korea | 17.7 | 20.3 | 22.2 | 17.0 | 17.9 | 17.9 | 18.1 | 19.4 |
| Luxembourg | 29.2 | 36.0 | 43.5 | 2.4 | 13.4 | 17.7 | 23.0 | 27.7 |
| Mexico | 13.2 | 16.2 | 21.6 | 13.2 | 16.2 | 14.4 | 15.0 | 14.4 |
| Netherlands | 33.1 | 37.8 | 41.5 | 11.5 | 30.7 | 29.2 | 31.5 | 33.8 |
| New Zealand | 12.9 | 15.9 | 22.0 | -18.7 | -1.2 | 7.0 | 13.1 | 14.8 |
| Norway | 34.2 | 37.5 | 43.1 | 21.4 | 31.0 | 31.9 | 33.6 | 35.0 |
| Poland | 33.4 | 34.3 | 35.0 | 28.4 | 28.4 | 29.6 | 30.9 | 33.4 |
| Portugal | 33.1 | 39.0 | 45.8 | 23.7 | 29.2 | 30.4 | 36.2 | 34.0 |
| Slovak Republic | 36.1 | 38.9 | 40.8 | 23.6 | 25.0 | 29.5 | 32.8 | 35.8 |
| Slovenia | 38.6 | 42.6 | 47.7 | 12.7 | 23.2 | 30.6 | 34.1 | 40.2 |
| Spain | 36.6 | 39.9 | 42.5 | 29.5 | 34.2 | 35.8 | 36.9 | 36.9 |
| Sweden | 40.7 | 42.8 | 50.8 | 32.5 | 37.3 | 36.9 | 38.7 | 41.0 |
| Switzerland | 18.0 | 21.0 | 25.3 | 2.8 | 8.4 | 11.1 | 14.2 | 18.6 |
| Turkey ${ }^{2}$ | 35.4 | 37.7 | 40.9 | 34.2 | 36.3 | 37.3 | 37.9 | 37.9 |
| United Kingdom | 28.5 | 32.5 | 37.9 | 7.1 | 26.4 | 25.0 | 28.1 | 28.5 |
| United States | 27.2 | 29.5 | 34.4 | 8.2 | 18.2 | 22.7 | 24.6 | 27.8 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 31.6 | 35.2 | 39.6 | 15.6 | 25.0 | 27.2 | 30.2 | 32.2 |
| OECD-EU21 | 37.9 | 41.7 | 46.3 | 20.3 | 29.9 | 32.1 | 35.5 | 38.1 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

Figure I.1. Income tax plus employee and employer contributions less cash benefits, 2011
As \% of labour costs, by family-type ${ }^{1}$


1. Corresponds to Table I.1, columns 2 and 5 .
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook, Volume 2011 (No. 90).
StatLink जillst http://dx.doi.org/10.1787/888932587055

Table I.2. Income tax plus employee contributions, 2011
As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.9 | 22.3 | 28.2 | 14.2 | 21.1 | 17.4 | 19.7 | 18.3 |
| Austria | 27.3 | 33.4 | 38.5 | 24.1 | 31.2 | 28.2 | 30.6 | 28.6 |
| Belgium | 35.6 | 42.2 | 49.1 | 30.1 | 30.8 | 33.0 | 38.1 | 34.8 |
| Canada | 18.8 | 22.7 | 26.8 | 8.4 | 16.4 | 18.3 | 20.3 | 19.4 |
| Chile | 7.0 | 7.0 | 7.8 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 18.9 | 23.0 | 26.2 | 6.9 | 6.4 | 14.0 | 16.3 | 20.0 |
| Denmark | 37.3 | 38.7 | 44.8 | 37.3 | 34.6 | 37.5 | 38.2 | 37.5 |
| Estonia | 17.7 | 19.6 | 21.0 | 12.2 | 12.2 | 15.0 | 16.6 | 17.7 |
| Finland | 23.1 | 29.8 | 36.9 | 23.1 | 29.8 | 25.6 | 27.1 | 25.6 |
| France | 26.1 | 28.0 | 33.6 | 21.2 | 22.2 | 21.7 | 25.0 | 26.1 |
| Germany | 34.9 | 39.9 | 43.8 | 17.6 | 21.0 | 26.8 | 31.1 | 34.9 |
| Greece ${ }^{1}$ | .. | .. | .. | .. | . | .. | . | .. |
| Hungary | 29.5 | 35.0 | 37.8 | 17.5 | 25.8 | 24.7 | 27.3 | 31.5 |
| Iceland | 23.1 | 28.3 | 32.9 | 23.1 | 18.8 | 23.4 | 26.2 | 23.4 |
| Ireland | 12.8 | 18.9 | 32.1 | 7.9 | 11.4 | 12.2 | 16.5 | 12.2 |
| Israel | 9.4 | 16.1 | 24.7 | 5.6 | 16.1 | 11.3 | 11.9 | 12.9 |
| Italy | 26.7 | 30.8 | 37.9 | 19.7 | 24.2 | 23.5 | 26.5 | 26.7 |
| Japan | 19.5 | 21.0 | 24.8 | 17.5 | 18.2 | 19.0 | 19.6 | 20.0 |
| Korea | 9.4 | 12.3 | 15.3 | 8.7 | 9.6 | 9.7 | 9.8 | 11.3 |
| Luxembourg | 20.5 | 28.1 | 36.6 | 13.0 | 17.8 | 18.9 | 22.6 | 18.9 |
| Mexico | 1.0 | 6.3 | 13.6 | 1.0 | 6.3 | 2.2 | 4.2 | 2.2 |
| Netherlands | 26.8 | 31.4 | 37.4 | 13.3 | 28.0 | 25.5 | 27.2 | 27.5 |
| New Zealand | 12.9 | 15.9 | 22.0 | 14.5 | 15.9 | 14.8 | 15.3 | 14.8 |
| Norway | 25.6 | 29.3 | 35.7 | 21.8 | 26.8 | 26.5 | 27.8 | 26.5 |
| Poland | 23.6 | 24.6 | 25.4 | 17.8 | 17.8 | 19.2 | 20.7 | 23.6 |
| Portugal | 17.3 | 24.5 | 32.9 | 12.8 | 16.4 | 16.6 | 21.0 | 18.3 |
| Slovak Republic | 19.4 | 22.9 | 25.5 | 11.8 | 10.8 | 15.2 | 18.4 | 19.0 |
| Slovenia | 28.8 | 33.4 | 39.3 | 22.1 | 25.1 | 25.9 | 27.8 | 30.6 |
| Spain | 17.7 | 21.9 | 26.7 | 8.5 | 14.5 | 16.6 | 18.0 | 18.0 |
| Sweden | 22.1 | 24.8 | 35.4 | 22.1 | 24.8 | 22.5 | 23.7 | 22.5 |
| Switzerland | 13.0 | 16.1 | 20.7 | 8.4 | 10.5 | 11.5 | 13.5 | 13.6 |
| Turkey ${ }^{2}$ | 24.8 | 27.4 | 31.2 | 23.4 | 25.8 | 27.0 | 27.7 | 27.7 |
| United Kingdom | 21.7 | 25.1 | 30.4 | 6.0 | 23.5 | 21.7 | 23.7 | 21.7 |
| United States | 19.6 | 22.8 | 28.6 | -1.3 | 10.4 | 14.6 | 17.2 | 20.2 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 20.8 | 25.0 | 30.4 | 15.1 | 19.1 | 19.6 | 21.7 | 21.6 |
| OECD-EU21 | 24.4 | 28.8 | 34.6 | 17.2 | 21.4 | 22.2 | 24.8 | 24.8 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

Figure I.2. Income tax plus employee contributions, 2011


1. Corresponds to Table I.2, columns 2 and 5.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook, Volume 2011 (No. 90).
StatLink nilisk http://dx.doi.org/10.1787/888932587074

Table I.3. Income tax plus employee contributions less cash benefits, 2011
As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.9 | 22.3 | 28.2 | -12.3 | 10.1 | 13.0 | 19.7 | 18.3 |
| Austria | 27.3 | 33.4 | 38.5 | 5.4 | 18.7 | 18.9 | 23.1 | 28.6 |
| Belgium | 35.6 | 42.2 | 49.1 | 17.3 | 22.3 | 26.6 | 33.0 | 34.8 |
| Canada | 17.5 | 22.7 | 26.8 | -18.7 | 9.4 | 15.0 | 18.5 | 19.4 |
| Chile | 7.0 | 7.0 | 7.8 | 6.0 | 7.0 | 4.9 | 6.6 | 7.0 |
| Czech Republic | 18.9 | 23.0 | 26.2 | -12.0 | -4.9 | 7.2 | 12.4 | 20.0 |
| Denmark | 36.8 | 38.4 | 44.8 | 11.4 | 27.4 | 32.2 | 33.9 | 37.0 |
| Estonia | 17.7 | 19.6 | 21.0 | -1.7 | 7.6 | 11.5 | 13.8 | 17.7 |
| Finland | 23.1 | 29.8 | 36.9 | 9.8 | 23.7 | 21.0 | 23.5 | 25.6 |
| France | 26.1 | 28.0 | 33.6 | 14.8 | 17.9 | 18.5 | 22.5 | 26.1 |
| Germany | 34.9 | 39.9 | 43.8 | 17.6 | 21.0 | 26.8 | 31.1 | 34.9 |
| Greece ${ }^{1}$ | .. | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 29.5 | 35.0 | 37.8 | -2.8 | 13.6 | 15.5 | 20.0 | 31.5 |
| Iceland | 23.1 | 28.3 | 32.9 | 11.5 | 14.2 | 21.3 | 25.5 | 23.4 |
| Ireland | 12.8 | 18.9 | 32.1 | -38.0 | -2.9 | 4.5 | 10.3 | 12.2 |
| Israel | 9.4 | 16.1 | 24.7 | -4.0 | 12.1 | 8.3 | 9.5 | 12.9 |
| Italy | 26.7 | 30.8 | 37.9 | 6.3 | 18.9 | 21.1 | 24.8 | 26.7 |
| Japan | 19.5 | 21.0 | 24.8 | 8.3 | 12.1 | 14.4 | 15.9 | 20.0 |
| Korea | 9.4 | 12.3 | 15.3 | 8.7 | 9.6 | 9.7 | 9.8 | 11.3 |
| Luxembourg | 20.5 | 28.1 | 36.6 | -9.6 | 2.7 | 7.5 | 13.5 | 18.9 |
| Mexico | 1.0 | 6.3 | 13.6 | 1.0 | 6.3 | 2.2 | 4.2 | 2.2 |
| Netherlands | 26.8 | 31.4 | 37.4 | 3.1 | 23.6 | 22.4 | 24.7 | 27.5 |
| New Zealand | 12.9 | 15.9 | 22.0 | -18.7 | -1.2 | 7.0 | 13.1 | 14.8 |
| Norway | 25.6 | 29.3 | 35.7 | 11.1 | 22.0 | 22.9 | 24.9 | 26.5 |
| Poland | 23.6 | 24.6 | 25.4 | 17.8 | 17.8 | 19.2 | 20.7 | 23.6 |
| Portugal | 17.3 | 24.5 | 32.9 | 5.6 | 12.4 | 13.8 | 21.0 | 18.3 |
| Slovak Republic | 19.4 | 22.9 | 25.5 | 3.6 | 5.3 | 11.1 | 15.1 | 19.0 |
| Slovenia | 28.8 | 33.4 | 39.3 | -1.4 | 10.8 | 19.4 | 23.5 | 30.6 |
| Spain | 17.7 | 21.9 | 26.7 | 8.5 | 14.5 | 16.6 | 18.0 | 18.0 |
| Sweden | 22.1 | 24.8 | 35.4 | 11.3 | 17.6 | 17.1 | 19.4 | 22.5 |
| Switzerland | 13.0 | 16.1 | 20.7 | -3.2 | 2.8 | 5.7 | 8.9 | 13.6 |
| Turkey ${ }^{2}$ | 24.8 | 27.4 | 31.2 | 23.4 | 25.8 | 27.0 | 27.7 | 27.7 |
| United Kingdom | 21.7 | 25.1 | 30.4 | -1.7 | 18.4 | 17.8 | 20.7 | 21.7 |
| United States | 19.6 | 22.8 | 28.6 | -1.3 | 10.4 | 14.6 | 17.2 | 20.2 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 20.8 | 24.9 | 30.4 | 2.3 | 13.0 | 15.6 | 19.0 | 21.6 |
| OECD-EU21 | 24.4 | 28.8 | 34.6 | 3.3 | 14.3 | 17.4 | 21.3 | 24.7 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

Figure I.3. Income tax plus employee contributions less cash benefits, 2011
As $\%$ of gross wage earnings, by family-type ${ }^{1}$


1. Corresponds to Table I.3, columns 2 and 5.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook, Volume 2011 (No. 90).
StatLink hillst http://dx.doi.org/10.1787/888932587093

Table I.4. Income tax, by family-type and wage level, 2011
As \% of gross wage earnings

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.9 | 22.3 | 28.2 | 14.2 | 21.1 | 17.4 | 19.7 | 18.3 |
| Austria | 9.2 | 15.3 | 22.3 | 6.1 | 13.1 | 10.9 | 12.6 | 11.3 |
| Belgium | 21.7 | 28.2 | 35.0 | 16.2 | 16.8 | 22.2 | 24.1 | 24.1 |
| Canada | 11.7 | 15.5 | 22.0 | 1.2 | 9.2 | 11.5 | 13.1 | 12.5 |
| Chile | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 7.9 | 12.0 | 15.2 | -4.1 | -4.6 | 3.0 | 5.3 | 9.0 |
| Denmark | 25.2 | 28.0 | 35.1 | 25.2 | 23.8 | 25.4 | 26.9 | 25.4 |
| Estonia | 14.9 | 16.8 | 18.2 | 9.4 | 9.4 | 12.2 | 13.8 | 14.9 |
| Finland | 16.0 | 22.7 | 29.7 | 16.0 | 22.7 | 18.6 | 20.0 | 18.6 |
| France | 12.4 | 14.3 | 20.6 | 7.5 | 8.5 | 8.0 | 11.3 | 12.4 |
| Germany | 14.0 | 19.0 | 27.7 | -3.0 | 0.4 | 6.2 | 10.5 | 14.0 |
| Greece ${ }^{1}$ | . | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 12.0 | 17.5 | 20.3 | 0.0 | 8.3 | 7.2 | 9.8 | 14.0 |
| Iceland | 22.4 | 27.8 | 32.6 | 22.4 | 18.3 | 22.7 | 25.6 | 22.7 |
| Ireland | 8.8 | 14.9 | 28.1 | 3.9 | 7.4 | 9.2 | 12.5 | 9.2 |
| Israel | 3.8 | 8.4 | 15.3 | 0.0 | 8.4 | 4.6 | 5.0 | 6.3 |
| Italy | 17.2 | 21.3 | 28.3 | 10.2 | 14.7 | 14.0 | 17.0 | 17.2 |
| Japan | 6.1 | 7.6 | 11.9 | 4.1 | 4.8 | 5.6 | 6.2 | 6.6 |
| Korea | 1.4 | 4.3 | 8.4 | 0.6 | 1.6 | 1.6 | 1.8 | 3.3 |
| Luxembourg | 7.5 | 15.0 | 23.4 | 0.0 | 4.7 | 5.8 | 9.5 | 5.8 |
| Mexico | -0.2 | 4.9 | 12.1 | -0.2 | 4.9 | 0.9 | 2.9 | 0.9 |
| Netherlands | 5.2 | 16.0 | 28.1 | 3.4 | 15.8 | 12.1 | 11.5 | 12.2 |
| New Zealand | 12.9 | 15.9 | 22.0 | 14.5 | 15.9 | 14.8 | 15.3 | 14.8 |
| Norway | 17.8 | 21.5 | 27.9 | 14.0 | 19.0 | 18.7 | 20.0 | 18.7 |
| Poland | 5.7 | 6.8 | 7.6 | 0.0 | 0.0 | 1.4 | 2.9 | 5.7 |
| Portugal | 6.3 | 13.5 | 21.9 | 1.8 | 5.4 | 5.6 | 10.0 | 7.3 |
| Slovak Republic | 6.0 | 9.5 | 12.3 | -1.6 | -2.6 | 1.8 | 5.0 | 5.6 |
| Slovenia | 6.7 | 11.3 | 17.2 | 0.0 | 3.0 | 3.8 | 5.7 | 8.5 |
| Spain | 11.3 | 15.6 | 20.8 | 2.1 | 8.1 | 10.3 | 11.7 | 11.7 |
| Sweden | 15.1 | 17.8 | 30.7 | 15.1 | 17.8 | 15.5 | 16.7 | 15.5 |
| Switzerland | 6.8 | 10.0 | 14.6 | 2.2 | 4.4 | 5.3 | 7.4 | 7.4 |
| Turkey ${ }^{2}$ | 9.8 | 12.4 | 16.2 | 8.4 | 10.8 | 12.0 | 12.7 | 12.7 |
| United Kingdom | 13.5 | 15.6 | 22.5 | -2.2 | 14.0 | 13.5 | 14.8 | 13.5 |
| United States | 14.0 | 17.2 | 23.0 | -7.0 | 4.7 | 9.0 | 11.5 | 14.6 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 10.9 | 15.1 | 21.2 | 5.5 | 9.4 | 10.0 | 11.9 | 12.0 |
| OECD-EU21 | 11.8 | 16.6 | 23.3 | 5.3 | 9.3 | 10.3 | 12.6 | 12.8 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

Figure I.4. Income tax, by family-type, 2011
As $\%$ of gross wage earnings ${ }^{1}$


1. Corresponds to Table I.4, columns 2 and 5.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook, Volume 2011 (No. 90).
StatLink nilisk http://dx.doi.org/10.1787/888932587112

Table I.5. Employee contributions, 2011
As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Austria | 18.1 | 18.1 | 16.2 | 18.1 | 18.1 | 17.3 | 18.1 | 17.3 |
| Belgium | 13.9 | 14.0 | 14.1 | 13.9 | 14.0 | 10.8 | 14.0 | 10.8 |
| Canada | 7.1 | 7.3 | 4.9 | 7.1 | 7.3 | 6.8 | 7.2 | 6.8 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
| Denmark | 12.1 | 10.7 | 9.6 | 12.1 | 10.7 | 12.1 | 11.3 | 12.1 |
| Estonia | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Finland | 7.1 | 7.2 | 7.2 | 7.1 | 7.2 | 7.0 | 7.1 | 7.0 |
| France | 13.7 | 13.7 | 13.1 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 |
| Germany | 20.9 | 20.9 | 16.1 | 20.6 | 20.6 | 20.6 | 20.6 | 20.9 |
| Greece ${ }^{1}$ | .. | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 17.5 | 17.5 | 17.5 | 17.5 | 17.5 | 17.5 | 17.5 | 17.5 |
| Iceland | 0.8 | 0.5 | 0.3 | 0.8 | 0.5 | 0.8 | 0.6 | 0.8 |
| Ireland | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 | 4.0 | 3.0 |
| Israel | 5.6 | 7.7 | 9.4 | 5.6 | 7.7 | 6.7 | 6.9 | 6.7 |
| Italy | 9.5 | 9.5 | 9.6 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 |
| Japan | 13.4 | 13.4 | 12.9 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 |
| Korea | 8.1 | 8.1 | 6.9 | 8.1 | 8.1 | 8.1 | 8.1 | 8.1 |
| Luxembourg | 13.0 | 13.1 | 13.2 | 13.0 | 13.1 | 13.0 | 13.1 | 13.0 |
| Mexico | 1.2 | 1.4 | 1.5 | 1.2 | 1.4 | 1.3 | 1.3 | 1.3 |
| Netherlands | 21.6 | 15.4 | 9.3 | 9.9 | 12.2 | 13.4 | 15.7 | 15.3 |
| New Zealand | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Norway | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 |
| Poland | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 |
| Portugal | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
| Slovak Republic | 13.4 | 13.4 | 13.2 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 |
| Slovenia | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 |
| Spain | 6.4 | 6.4 | 5.9 | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 |
| Sweden | 7.0 | 7.0 | 4.7 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Switzerland | 6.2 | 6.2 | 6.1 | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 |
| Turkey ${ }^{2}$ | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| United Kingdom | 8.2 | 9.5 | 7.9 | 8.2 | 9.5 | 8.2 | 9.0 | 8.2 |
| United States | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 10.0 | 9.8 | 9.2 | 9.6 | 9.7 | 9.6 | 9.8 | 9.6 |
| OECD-EU21 | 12.5 | 12.2 | 11.3 | 12.0 | 12.1 | 11.9 | 12.2 | 12.0 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

Figure I.5. Employee contributions, 2011
As $\%$ of gross wage earnings, by family-type ${ }^{1}$


1. Corresponds to Table I.5, columns 2 and 5 .
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.

Sources: Country submissions, OECD Economic Outlook, Volume 2011 (No. 90).
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Table I.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, $2011^{1}$
As \% of labour costs, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \text { ch } \\ 67(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 39.1 | 35.4 | 42.0 | 58.0 | 54.2 | 35.4 | 35.4 | 35.4 |
| Austria | 56.9 | 60.6 | 42.2 | 56.9 | 60.6 | 60.6 | 60.6 | 60.6 |
| Belgium | 66.3 | 66.3 | 69.4 | 66.3 | 66.3 | 66.3 | 66.3 | 66.3 |
| Canada | 33.5 | 40.8 | 38.3 | 60.5 | 68.1 | 44.5 | 44.5 | 40.8 |
| Chile | 7.0 | 7.0 | 11.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 48.6 | 48.6 | 48.6 | 55.7 | 54.0 | 54.0 | 54.0 | 48.6 |
| Denmark | 40.9 | 42.3 | 56.1 | 40.9 | 42.3 | 42.3 | 42.3 | 42.3 |
| Estonia | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 |
| Finland | 53.1 | 57.2 | 57.2 | 53.1 | 57.2 | 57.2 | 57.2 | 57.2 |
| France | 63.2 | 51.3 | 59.7 | 57.7 | 48.3 | 46.9 | 51.3 | 51.3 |
| Germany | 56.0 | 60.4 | 44.3 | 54.2 | 52.7 | 55.7 | 57.9 | 56.0 |
| Greece ${ }^{2}$ | .. | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 51.6 | 63.5 | 51.6 | 35.8 | 63.5 | 63.5 | 63.5 | 63.5 |
| Iceland | 43.5 | 43.5 | 48.8 | 50.6 | 50.6 | 47.9 | 47.9 | 43.5 |
| Ireland | 37.7 | 56.7 | 56.7 | 67.9 | 75.1 | 37.7 | 37.7 | 37.7 |
| Israel | 30.0 | 38.6 | 45.2 | 16.8 | 38.6 | 60.3 | 38.6 | 38.6 |
| Italy | 54.0 | 54.1 | 62.0 | 54.5 | 55.1 | 55.1 | 54.6 | 54.1 |
| Japan | 31.6 | 35.8 | 34.7 | 31.6 | 32.9 | 35.8 | 35.8 | 35.8 |
| Korea | 19.8 | 28.8 | 22.9 | 18.6 | 25.1 | 25.1 | 25.1 | 28.8 |
| Luxembourg | 42.5 | 54.9 | 54.9 | 42.5 | 37.6 | 40.9 | 47.5 | 40.9 |
| Mexico | 17.5 | 18.7 | 28.4 | 17.5 | 18.7 | 18.7 | 18.7 | 18.7 |
| Netherlands | 48.7 | 47.0 | 49.2 | 51.7 | 53.5 | 47.0 | 47.0 | 47.0 |
| New Zealand | 17.5 | 30.0 | 33.0 | 17.5 | 50.0 | 50.0 | 50.0 | 30.0 |
| Norway | 43.2 | 51.2 | 53.8 | 43.2 | 51.2 | 51.2 | 51.2 | 51.2 |
| Poland | 36.1 | 36.1 | 36.1 | 28.4 | 28.4 | 36.1 | 36.1 | 36.1 |
| Portugal | 50.7 | 50.7 | 59.6 | 50.7 | 42.2 | 50.7 | 50.7 | 50.7 |
| Slovak Republic | 44.4 | 44.4 | 42.8 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 |
| Slovenia | 43.6 | 51.0 | 60.4 | 32.9 | 43.6 | 43.6 | 43.6 | 51.0 |
| Spain | 45.2 | 48.1 | 37.0 | 52.4 | 45.2 | 48.1 | 48.1 | 48.1 |
| Sweden | 45.6 | 47.9 | 66.9 | 45.6 | 47.9 | 47.9 | 47.9 | 47.9 |
| Switzerland | 23.0 | 27.7 | 35.6 | 18.7 | 21.9 | 23.6 | 28.5 | 26.0 |
| Turkey ${ }^{3}$ | 42.2 | 42.2 | 47.3 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 |
| United Kingdom | 40.2 | 40.2 | 49.0 | 76.3 | 40.2 | 40.2 | 40.2 | 40.2 |
| United States | 32.5 | 41.8 | 41.8 | 51.4 | 32.5 | 32.5 | 32.5 | 32.5 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 40.9 | 44.4 | 46.3 | 43.8 | 45.3 | 44.1 | 44.0 | 42.9 |
| OECD-EU21 | 48.4 | 51.2 | 52.3 | 50.5 | 50.1 | 49.1 | 49.7 | 49.3 |

Note: ch = children.

1. Assumes a rise in gross earnings of the principal earner in the household. The outcome may differ if the wage of the spouse goes up, especially if partners are taxed individually.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.
3. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
4. Two-earner family.

Figure I.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, 2011
As \% of labour costs, by family-type ${ }^{1}$


1. Corresponds to Table I.6, columns 2 and 5.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage. Sources: Country submissions, OECD Economic Outlook, Volume 2011 (No. 90).

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Table I.7. Marginal rate of income tax plus employee contributions less cash benefits, 2011 ${ }^{1}$ As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \text { AW }) \end{gathered}$ | Single 2 ch $67(\% \mathrm{AW})$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 35.5 | 31.5 | 38.5 | 55.5 | 51.5 | 31.5 | 31.5 | 31.5 |
| Austria | 44.4 | 49.1 | 37.9 | 44.4 | 49.1 | 49.1 | 49.1 | 49.1 |
| Belgium | 54.9 | 54.9 | 60.9 | 54.9 | 54.9 | 54.9 | 54.9 | 54.9 |
| Canada | 25.4 | 35.1 | 35.4 | 55.7 | 65.0 | 39.1 | 39.1 | 35.1 |
| Chile | 7.0 | 7.0 | 11.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 31.1 | 31.1 | 31.1 | 40.7 | 38.4 | 38.4 | 38.4 | 31.1 |
| Denmark | 40.9 | 42.3 | 56.1 | 40.9 | 42.3 | 42.3 | 42.3 | 42.3 |
| Estonia | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 |
| Finland | 42.6 | 47.5 | 47.5 | 42.6 | 47.5 | 47.5 | 47.5 | 47.5 |
| France | 31.7 | 30.4 | 42.3 | 21.5 | 26.1 | 24.0 | 30.4 | 30.4 |
| Germany | 47.3 | 52.5 | 44.3 | 45.2 | 43.4 | 47.0 | 49.6 | 47.3 |
| Greece ${ }^{2}$ | .. | .. | .. | .. | .. | . | .. | .. |
| Hungary | 37.8 | 53.1 | 37.8 | 17.5 | 53.1 | 53.1 | 53.1 | 53.1 |
| Iceland | 38.6 | 38.6 | 44.4 | 46.3 | 46.3 | 43.4 | 43.4 | 38.6 |
| Ireland | 31.0 | 52.0 | 52.0 | 64.4 | 72.4 | 31.0 | 31.0 | 31.0 |
| Israel | 26.0 | 35.0 | 42.0 | 12.0 | 35.0 | 58.0 | 35.0 | 35.0 |
| Italy | 39.3 | 39.4 | 49.8 | 40.0 | 40.7 | 40.7 | 40.1 | 39.4 |
| Japan | 21.9 | 26.7 | 30.7 | 21.9 | 23.4 | 26.7 | 26.7 | 26.7 |
| Korea | 11.8 | 21.6 | 18.6 | 10.4 | 17.5 | 17.5 | 17.5 | 21.6 |
| Luxembourg | 35.5 | 49.3 | 49.3 | 35.5 | 29.9 | 33.6 | 41.0 | 33.6 |
| Mexico | 12.1 | 12.5 | 22.9 | 12.1 | 12.5 | 12.5 | 12.5 | 12.5 |
| Netherlands | 42.8 | 40.9 | 49.2 | 46.1 | 48.1 | 40.9 | 40.9 | 40.9 |
| New Zealand | 17.5 | 30.0 | 33.0 | 17.5 | 50.0 | 50.0 | 50.0 | 30.0 |
| Norway | 35.8 | 44.8 | 47.8 | 35.8 | 44.8 | 44.8 | 44.8 | 44.8 |
| Poland | 26.7 | 26.7 | 26.7 | 17.8 | 17.8 | 26.7 | 26.7 | 26.7 |
| Portugal | 39.0 | 39.0 | 50.0 | 39.0 | 28.5 | 39.0 | 39.0 | 39.0 |
| Slovak Republic | 29.9 | 29.9 | 28.7 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| Slovenia | 34.6 | 43.1 | 54.0 | 22.1 | 34.6 | 34.6 | 34.6 | 43.1 |
| Spain | 28.8 | 32.6 | 37.0 | 38.2 | 28.8 | 32.6 | 32.6 | 32.6 |
| Sweden | 28.6 | 31.6 | 56.6 | 28.6 | 31.6 | 31.6 | 31.6 | 31.6 |
| Switzerland | 18.2 | 23.2 | 31.7 | 13.7 | 17.1 | 18.9 | 24.1 | 21.4 |
| Turkey ${ }^{3}$ | 32.7 | 32.7 | 38.6 | 32.7 | 32.7 | 32.7 | 32.7 | 32.7 |
| United Kingdom | 32.0 | 32.0 | 42.0 | 73.0 | 32.0 | 32.0 | 32.0 | 32.0 |
| United States | 27.4 | 37.4 | 37.4 | 47.6 | 27.4 | 27.4 | 27.4 | 27.4 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 31.3 | 35.7 | 39.7 | 34.3 | 36.4 | 35.2 | 35.1 | 34.0 |
| OECD-EU21 | 36.1 | 40.0 | 43.8 | 38.3 | 38.6 | 37.6 | 38.4 | 37.9 |

Note: ch = children.

1. Assumes a rise in gross earnings of the principal earner in the household. The outcome may differ if the wage of the spouse goes up, especially if partners are taxed individually.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.
3. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
4. Two-earner family.

Figure I.7. Marginal rate of income tax plus employee contributions less cash benefits, 2011


1. Corresponds to Table I.7, columns 2 and 5
2. The 2011 average earnings figure for Greece was not available at the final compilation stage. Sources: Country submissions, OECD Economic Outlook, Volume 2011 (No. 90).

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Table I.8. Increase in net income after an increase of 1 currency unit in gross wages, 2011 ${ }^{1}$ By family-type and wage level (\%)

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \text { ch } \\ 67(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \text { ch } \\ 100-67(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 0.77 | 0.88 | 0.86 | 0.40 | 0.54 | 0.79 | 0.85 | 0.84 |
| Austria | 0.76 | 0.76 | 1.01 | 0.59 | 0.63 | 0.63 | 0.66 | 0.71 |
| Belgium | 0.70 | 0.78 | 0.77 | 0.54 | 0.58 | 0.61 | 0.67 | 0.69 |
| Canada | 0.90 | 0.84 | 0.88 | 0.37 | 0.39 | 0.72 | 0.75 | 0.80 |
| Chile | 1.00 | 1.00 | 0.96 | 0.99 | 1.00 | 0.98 | 1.00 | 1.00 |
| Czech Republic | 0.85 | 0.89 | 0.93 | 0.53 | 0.59 | 0.66 | 0.70 | 0.86 |
| Denmark | 0.94 | 0.94 | 0.80 | 0.67 | 0.80 | 0.85 | 0.87 | 0.92 |
| Estonia | 0.93 | 0.96 | 0.97 | 0.76 | 0.83 | 0.87 | 0.89 | 0.93 |
| Finland | 0.75 | 0.75 | 0.83 | 0.64 | 0.69 | 0.66 | 0.68 | 0.70 |
| France | 0.92 | 0.97 | 0.87 | 0.92 | 0.90 | 0.93 | 0.90 | 0.94 |
| Germany | 0.81 | 0.79 | 0.99 | 0.66 | 0.72 | 0.72 | 0.73 | 0.81 |
| Greece ${ }^{2}$ | .. | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 0.88 | 0.72 | 1.00 | 0.80 | 0.54 | 0.56 | 0.59 | 0.68 |
| Iceland | 0.80 | 0.86 | 0.83 | 0.61 | 0.63 | 0.72 | 0.76 | 0.80 |
| Ireland | 0.79 | 0.59 | 0.71 | 0.26 | 0.27 | 0.72 | 0.77 | 0.79 |
| Israel | 0.82 | 0.78 | 0.77 | 0.85 | 0.74 | 0.46 | 0.72 | 0.75 |
| Italy | 0.83 | 0.88 | 0.81 | 0.64 | 0.73 | 0.75 | 0.80 | 0.83 |
| Japan | 0.97 | 0.93 | 0.92 | 0.85 | 0.87 | 0.86 | 0.87 | 0.92 |
| Korea | 0.97 | 0.89 | 0.96 | 0.98 | 0.91 | 0.91 | 0.92 | 0.88 |
| Luxembourg | 0.81 | 0.70 | 0.80 | 0.59 | 0.72 | 0.72 | 0.68 | 0.82 |
| Mexico | 0.89 | 0.93 | 0.89 | 0.89 | 0.93 | 0.90 | 0.91 | 0.90 |
| Netherlands | 0.78 | 0.86 | 0.81 | 0.56 | 0.68 | 0.76 | 0.78 | 0.82 |
| New Zealand | 0.95 | 0.83 | 0.86 | 0.70 | 0.49 | 0.54 | 0.58 | 0.82 |
| Norway | 0.86 | 0.78 | 0.81 | 0.72 | 0.71 | 0.72 | 0.74 | 0.75 |
| Poland | 0.96 | 0.97 | 0.98 | 1.00 | 1.00 | 0.91 | 0.92 | 0.96 |
| Portugal | 0.74 | 0.81 | 0.74 | 0.65 | 0.82 | 0.71 | 0.77 | 0.75 |
| Slovak Republic | 0.87 | 0.91 | 0.96 | 0.73 | 0.74 | 0.79 | 0.83 | 0.87 |
| Slovenia | 0.92 | 0.85 | 0.76 | 0.77 | 0.73 | 0.81 | 0.86 | 0.82 |
| Spain | 0.86 | 0.86 | 0.86 | 0.68 | 0.83 | 0.81 | 0.82 | 0.82 |
| Sweden | 0.92 | 0.91 | 0.67 | 0.80 | 0.83 | 0.83 | 0.85 | 0.88 |
| Switzerland | 0.94 | 0.92 | 0.86 | 0.84 | 0.85 | 0.86 | 0.83 | 0.91 |
| Turkey ${ }^{3}$ | 0.90 | 0.93 | 0.89 | 0.88 | 0.91 | 0.92 | 0.93 | 0.93 |
| United Kingdom | 0.87 | 0.91 | 0.83 | 0.26 | 0.83 | 0.83 | 0.86 | 0.87 |
| United States | 0.90 | 0.81 | 0.88 | 0.52 | 0.81 | 0.85 | 0.88 | 0.91 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 0.86 | 0.85 | 0.86 | 0.69 | 0.73 | 0.77 | 0.80 | 0.84 |
| OECD-EU21 | 0.84 | 0.84 | 0.86 | 0.65 | 0.72 | 0.76 | 0.78 | 0.82 |

Note: ch = children.

1. Net income is calculated as gross earnings minus personal income tax and employees' social security contributions plus family benefits. The increase reported in the Table represents a form of elasticity. In a proportional tax system the plus elasticity would equal 1. The more progressive the system at these income levels, the lower is the elasticity.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.
3. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
4. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

Table I.9. Increase in net income after an increase of 1 currency unit in gross labour cost, 2011 ${ }^{1}$ By family-type and wage level (\%)

|  | Single no ch 67 (\% AW) | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | Single 2 ch $67(\%$ AW $)$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{4} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{4} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 0.77 | 0.88 | 0.86 | 0.40 | 0.54 | 0.79 | 0.85 | 0.84 |
| Austria | 0.76 | 0.76 | 1.19 | 0.59 | 0.63 | 0.63 | 0.66 | 0.71 |
| Belgium | 0.67 | 0.76 | 0.78 | 0.52 | 0.56 | 0.58 | 0.65 | 0.65 |
| Canada | 0.90 | 0.86 | 0.92 | 0.37 | 0.39 | 0.73 | 0.76 | 0.82 |
| Chile | 1.00 | 1.00 | 0.96 | 0.99 | 1.00 | 0.98 | 1.00 | 1.00 |
| Czech Republic | 0.85 | 0.89 | 0.93 | 0.53 | 0.59 | 0.66 | 0.70 | 0.86 |
| Denmark | 0.94 | 0.94 | 0.80 | 0.67 | 0.80 | 0.85 | 0.87 | 0.92 |
| Estonia | 0.93 | 0.96 | 0.97 | 0.76 | 0.83 | 0.87 | 0.89 | 0.93 |
| Finland | 0.75 | 0.75 | 0.83 | 0.64 | 0.69 | 0.66 | 0.68 | 0.70 |
| France | 0.69 | 0.96 | 0.87 | 0.69 | 0.90 | 0.88 | 0.88 | 0.89 |
| Germany | 0.81 | 0.79 | 1.14 | 0.66 | 0.72 | 0.72 | 0.73 | 0.81 |
| Greece ${ }^{2}$ | .. | .. | .. | .. | .. | . | . | .. |
| Hungary | 0.88 | 0.72 | 1.00 | 0.80 | 0.54 | 0.56 | 0.59 | 0.68 |
| Iceland | 0.80 | 0.86 | 0.83 | 0.61 | 0.63 | 0.72 | 0.76 | 0.80 |
| Ireland | 0.79 | 0.59 | 0.71 | 0.26 | 0.27 | 0.72 | 0.77 | 0.78 |
| Israel | 0.80 | 0.77 | 0.76 | 0.83 | 0.73 | 0.45 | 0.71 | 0.74 |
| Italy | 0.83 | 0.88 | 0.81 | 0.64 | 0.73 | 0.75 | 0.80 | 0.83 |
| Japan | 0.97 | 0.93 | 0.99 | 0.85 | 0.87 | 0.86 | 0.87 | 0.92 |
| Korea | 0.97 | 0.89 | 0.99 | 0.98 | 0.91 | 0.91 | 0.92 | 0.88 |
| Luxembourg | 0.81 | 0.70 | 0.80 | 0.59 | 0.72 | 0.72 | 0.68 | 0.82 |
| Mexico | 0.95 | 0.97 | 0.91 | 0.95 | 0.97 | 0.95 | 0.96 | 0.95 |
| Netherlands | 0.77 | 0.85 | 0.87 | 0.55 | 0.67 | 0.75 | 0.77 | 0.80 |
| New Zealand | 0.95 | 0.83 | 0.86 | 0.70 | 0.49 | 0.54 | 0.58 | 0.82 |
| Norway | 0.86 | 0.78 | 0.81 | 0.72 | 0.71 | 0.72 | 0.74 | 0.75 |
| Poland | 0.96 | 0.97 | 0.98 | 1.00 | 1.00 | 0.91 | 0.92 | 0.96 |
| Portugal | 0.74 | 0.81 | 0.74 | 0.65 | 0.82 | 0.71 | 0.77 | 0.75 |
| Slovak Republic | 0.87 | 0.91 | 0.97 | 0.73 | 0.74 | 0.79 | 0.83 | 0.87 |
| Slovenia | 0.92 | 0.85 | 0.76 | 0.77 | 0.73 | 0.81 | 0.86 | 0.82 |
| Spain | 0.86 | 0.86 | 1.10 | 0.68 | 0.83 | 0.81 | 0.82 | 0.82 |
| Sweden | 0.92 | 0.91 | 0.67 | 0.80 | 0.83 | 0.83 | 0.85 | 0.88 |
| Switzerland | 0.94 | 0.92 | 0.86 | 0.84 | 0.85 | 0.86 | 0.83 | 0.91 |
| Turkey ${ }^{3}$ | 0.90 | 0.93 | 0.89 | 0.88 | 0.91 | 0.92 | 0.93 | 0.93 |
| United Kingdom | 0.84 | 0.88 | 0.82 | 0.26 | 0.81 | 0.80 | 0.83 | 0.84 |
| United States | 0.93 | 0.82 | 0.89 | 0.53 | 0.82 | 0.87 | 0.90 | 0.93 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 0.86 | 0.85 | 0.89 | 0.68 | 0.73 | 0.77 | 0.80 | 0.84 |
| OECD-EU21 | 0.83 | 0.84 | 0.89 | 0.64 | 0.72 | 0.75 | 0.78 | 0.82 |

Note: ch = children.

1. Net income is calculated as gross earnings minus personal income tax and employees' social security contributions plus family benefits. The increase reported in the Table represents a form of elasticity. In a proportional tax system, the plus elasticity would equal 1. The more progressive the system at these income levels, the lower is the elasticity.
2. The 2011 average earnings figure for Greece was not available at the final compilation stage.
3. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
4. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

Table I.10. Annual gross wage and net income, 2011
In US dollars using PPP, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ 2 \text { ch } \\ 67(\% \text { AW }) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes |
| Australia | 29902 | 25158 | 44853 | 34863 | 74755 | 53706 | 29902 | 33589 |
| Austria | 30807 | 22399 | 46210 | 30785 | 77017 | 47349 | 30807 | 29139 |
| Belgium | 32901 | 21189 | 49351 | 28525 | 82252 | 41886 | 32901 | 27195 |
| Canada | 25033 | 20646 | 37549 | 29015 | 62581 | 45779 | 25033 | 29712 |
| Chile | 9687 | 9009 | 14530 | 13513 | 24217 | 22330 | 9687 | 9102 |
| Czech Republic | 13912 | 11284 | 20868 | 16077 | 34780 | 25662 | 13912 | 15585 |
| Denmark | 32662 | 20643 | 48994 | 30182 | 81656 | 45110 | 32662 | 28955 |
| Estonia | 12426 | 10224 | 18639 | 14995 | 31065 | 24536 | 12426 | 12636 |
| Finland | 29199 | 22466 | 43798 | 30729 | 72996 | 46048 | 29199 | 26333 |
| France | 27574 | 20375 | 41361 | 29798 | 68935 | 45739 | 27574 | 23481 |
| Germany | 36633 | 23844 | 54950 | 33019 | 91583 | 51506 | 36633 | 30179 |
| Greece ${ }^{1}$ | . | . | .. | .. | . | .. | .. | .. |
| Hungary | 13468 | 9492 | 20202 | 13141 | 33670 | 20936 | 13468 | 13846 |
| Iceland | 27004 | 20759 | 40507 | 29049 | 67511 | 45300 | 27004 | 23908 |
| Ireland | 26150 | 22799 | 39225 | 31810 | 65376 | 44362 | 26150 | 36082 |
| Israel | 21399 | 19384 | 32098 | 26935 | 53496 | 40287 | 21399 | 22264 |
| Italy | 24240 | 17768 | 36360 | 25159 | 60601 | 37622 | 24240 | 22722 |
| Japan | 29825 | 24017 | 44738 | 35350 | 74563 | 56082 | 29825 | 27362 |
| Korea | 29295 | 26532 | 43943 | 38529 | 73238 | 62048 | 29295 | 26749 |
| Luxembourg | 35653 | 28344 | 53480 | 38464 | 89133 | 56545 | 35653 | 39071 |
| Mexico | 7357 | 7280 | 11035 | 10344 | 18392 | 15887 | 7357 | 7280 |
| Netherlands | 36777 | 26929 | 55165 | 37823 | 91942 | 57519 | 36777 | 35639 |
| New Zealand | 21617 | 18819 | 32426 | 27280 | 54043 | 42170 | 21617 | 25661 |
| Norway | 33763 | 25131 | 50644 | 35818 | 84407 | 54310 | 33763 | 30029 |
| Poland | 13712 | 10479 | 20567 | 15507 | 34279 | 25561 | 13712 | 11267 |
| Portugal | 18557 | 15353 | 27836 | 21013 | 46393 | 31143 | 18557 | 17511 |
| Slovak Republic | 12393 | 9995 | 18589 | 14341 | 30982 | 23093 | 12393 | 11948 |
| Slovenia | 18385 | 13099 | 27577 | 18363 | 45962 | 27897 | 18385 | 18644 |
| Spain | 23686 | 19496 | 35528 | 27741 | 59214 | 43426 | 23686 | 21682 |
| Sweden | 28079 | 21886 | 42118 | 31661 | 70197 | 45354 | 28079 | 24915 |
| Switzerland | 34492 | 30015 | 51738 | 43387 | 86229 | 68371 | 34492 | 35605 |
| Turkey ${ }^{2}$ | 14491 | 10898 | 21736 | 15777 | 36227 | 24926 | 14491 | 11104 |
| United Kingdom | 34675 | 27163 | 52013 | 38952 | 86689 | 60306 | 34675 | 35269 |
| United States | 31200 | 25079 | 46800 | 36129 | 77999 | 55668 | 31200 | 31620 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 24756 | 19332 | 37134 | 27396 | 61890 | 42075 | 24756 | 24124 |
| OECD-EU21 | 25094 | 18761 | 37642 | 26404 | 62736 | 40080 | 25094 | 24105 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table I.10. Annual gross wage and net income, 2011 (cont.)
In US dollars using PPP, by family-type and wage level

|  | $\begin{gathered} \text { Married } \\ 2 \text { ch } \\ 100-0(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes |
| Australia | 44853 | 40304 | 59804 | 52043 | 74755 | 60021 | 59804 | 48887 |
| Austria | 46210 | 37560 | 61614 | 49986 | 77017 | 59195 | 61614 | 43999 |
| Belgium | 49351 | 38331 | 65802 | 48302 | 82252 | 55081 | 65802 | 42875 |
| Canada | 37549 | 34028 | 50065 | 42561 | 62581 | 51031 | 50065 | 40368 |
| Chile | 14530 | 13513 | 19374 | 18429 | 24217 | 22615 | 19374 | 18018 |
| Czech Republic | 20868 | 21884 | 27824 | 25822 | 34780 | 30450 | 27824 | 22267 |
| Denmark | 48994 | 35549 | 65325 | 44323 | 81656 | 53978 | 65325 | 41170 |
| Estonia | 18639 | 17224 | 24852 | 21995 | 31065 | 26766 | 24852 | 20448 |
| Finland | 43798 | 33409 | 58397 | 46134 | 72996 | 55875 | 58397 | 43454 |
| France | 41361 | 33938 | 55148 | 44941 | 68935 | 53458 | 55148 | 40758 |
| Germany | 54950 | 43388 | 73266 | 53610 | 91583 | 63082 | 73266 | 47688 |
| Greece ${ }^{1}$ | . | . | . | . | . | . | . | . |
| Hungary | 20202 | 17446 | 26936 | 22752 | 33670 | 26939 | 26936 | 18446 |
| Iceland | 40507 | 34750 | 54009 | 42503 | 67511 | 50298 | 54009 | 41365 |
| Ireland | 39225 | 40350 | 52301 | 49952 | 65376 | 58633 | 52301 | 45939 |
| Israel | 32098 | 28205 | 42797 | 39241 | 53496 | 48407 | 42797 | 37260 |
| Italy | 36360 | 29478 | 48481 | 38237 | 60601 | 45573 | 48481 | 35557 |
| Japan | 44738 | 39329 | 59650 | 51055 | 74563 | 62712 | 59650 | 47710 |
| Korea | 43943 | 39703 | 58590 | 52925 | 73238 | 66053 | 58590 | 51961 |
| Luxembourg | 53480 | 52036 | 71307 | 65926 | 89133 | 77064 | 71307 | 57864 |
| Mexico | 11035 | 10344 | 14714 | 14383 | 18392 | 17623 | 14714 | 14383 |
| Netherlands | 55165 | 42139 | 73554 | 57083 | 91942 | 69211 | 73554 | 53338 |
| New Zealand | 32426 | 32813 | 43235 | 40212 | 54043 | 46967 | 43235 | 36841 |
| Norway | 50644 | 39506 | 67525 | 52045 | 84407 | 63368 | 67525 | 49626 |
| Poland | 20567 | 16901 | 27423 | 22145 | 34279 | 27172 | 27423 | 20959 |
| Portugal | 27836 | 24378 | 37114 | 31978 | 46393 | 36630 | 37114 | 30330 |
| Slovak Republic | 18589 | 17596 | 24786 | 22039 | 30982 | 26289 | 24786 | 20086 |
| Slovenia | 27577 | 24592 | 36770 | 29636 | 45962 | 35160 | 36770 | 25524 |
| Spain | 35528 | 30385 | 47371 | 39487 | 59214 | 48547 | 47371 | 38832 |
| Sweden | 42118 | 34690 | 56157 | 46544 | 70197 | 56576 | 56157 | 43515 |
| Switzerland | 51738 | 50300 | 68984 | 65069 | 86229 | 78561 | 68984 | 59612 |
| Turkey ${ }^{2}$ | 21736 | 16121 | 28982 | 21170 | 36227 | 26193 | 28982 | 20964 |
| United Kingdom | 52013 | 42449 | 69351 | 56991 | 86689 | 68780 | 69351 | 54325 |
| United States | 46800 | 41947 | 62399 | 53276 | 77999 | 64605 | 62399 | 49763 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 37134 | 31957 | 49512 | 41297 | 61890 | 49482 | 49512 | 38307 |
| OECD-EU21 | 37642 | 31686 | 50189 | 40894 | 62736 | 48723 | 50189 | 37369 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

Table I.11. Annual labour costs and net income, 2011
In US dollars using PPP, by family-type and wage level

|  |  |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67(\% \mathrm{AW}) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes |
| Australia | 31686 | 25158 | 47530 | 34863 | 79216 | 53706 | 31686 | 33589 |
| Austria | 39781 | 22399 | 59671 | 30785 | 97762 | 47349 | 39781 | 29139 |
| Belgium | 42164 | 21189 | 64170 | 28525 | 106572 | 41886 | 42164 | 27195 |
| Canada | 27939 | 20646 | 41939 | 29015 | 68241 | 45779 | 27939 | 29712 |
| Chile | 9687 | 9009 | 14530 | 13513 | 24217 | 22330 | 9687 | 9102 |
| Czech Republic | 18642 | 11284 | 27963 | 16077 | 46606 | 25662 | 18642 | 15585 |
| Denmark | 32662 | 20643 | 48994 | 30182 | 81656 | 45110 | 32662 | 28955 |
| Estonia | 16701 | 10224 | 25051 | 14995 | 41752 | 24536 | 16701 | 12636 |
| Finland | 35768 | 22466 | 53652 | 30729 | 89421 | 46048 | 35768 | 26333 |
| France | 38087 | 20375 | 58862 | 29798 | 98320 | 45739 | 38087 | 23481 |
| Germany | 43859 | 23844 | 65789 | 33019 | 105671 | 51506 | 43859 | 30179 |
| Greece ${ }^{1}$ | .. | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 17306 | 9492 | 25960 | 13141 | 43266 | 20936 | 17306 | 13846 |
| Iceland | 29340 | 20759 | 44011 | 29049 | 73351 | 45300 | 29340 | 23908 |
| Ireland | 28961 | 22799 | 43442 | 31810 | 72404 | 44362 | 28961 | 36082 |
| Israel | 22276 | 19384 | 33594 | 26935 | 56230 | 40287 | 22276 | 22264 |
| Italy | 32017 | 17768 | 48025 | 25159 | 80041 | 37622 | 32017 | 22722 |
| Japan | 34060 | 24017 | 51089 | 35350 | 84749 | 56082 | 34060 | 27362 |
| Korea | 32246 | 26532 | 48370 | 38529 | 79782 | 62048 | 32246 | 26749 |
| Luxembourg | 40042 | 28344 | 60063 | 38464 | 100106 | 56545 | 40042 | 39071 |
| Mexico | 8385 | 7280 | 12337 | 10344 | 20256 | 15887 | 8385 | 7280 |
| Netherlands | 40260 | 26929 | 60765 | 37823 | 98290 | 57519 | 40260 | 35639 |
| New Zealand | 21617 | 18819 | 32426 | 27280 | 54043 | 42170 | 21617 | 25661 |
| Norway | 38186 | 25131 | 57278 | 35818 | 95464 | 54310 | 38186 | 30029 |
| Poland | 15738 | 10479 | 23607 | 15507 | 39345 | 25561 | 15738 | 11267 |
| Portugal | 22964 | 15353 | 34447 | 21013 | 57411 | 31143 | 22964 | 17511 |
| Slovak Republic | 15640 | 9995 | 23460 | 14341 | 39014 | 23093 | 15640 | 11948 |
| Slovenia | 21345 | 13099 | 32017 | 18363 | 53362 | 27897 | 21345 | 18644 |
| Spain | 30768 | 19496 | 46151 | 27741 | 75539 | 43426 | 30768 | 21682 |
| Sweden | 36901 | 21886 | 55351 | 31661 | 92252 | 45354 | 36901 | 24915 |
| Switzerland | 36613 | 30015 | 54920 | 43387 | 91531 | 68371 | 36613 | 35605 |
| Turkey ${ }^{2}$ | 16882 | 10898 | 25323 | 15777 | 42205 | 24926 | 16882 | 11104 |
| United Kingdom | 37980 | 27163 | 57710 | 38952 | 97171 | 60306 | 37980 | 35269 |
| United States | 34461 | 25079 | 51255 | 36129 | 84841 | 55668 | 34461 | 31620 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 28817 | 19332 | 43326 | 27396 | 71821 | 42075 | 28817 | 24124 |
| OECD-EU21 | 30379 | 18761 | 45757 | 26404 | 75798 | 40080 | 30379 | 24105 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

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Table I.11. Annual labour costs and net income, 2011 (cont.)
In US dollars using PPP, by family-type and wage level

|  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% A W)^{3} \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes |
| Australia | 47530 | 40304 | 63373 | 52043 | 79216 | 60021 | 63373 | 48887 |
| Austria | 59671 | 37560 | 79561 | 49986 | 99451 | 59195 | 79561 | 43999 |
| Belgium | 64170 | 38331 | 82481 | 48302 | 106334 | 55081 | 82481 | 42875 |
| Canada | 41939 | 34028 | 55837 | 42561 | 69877 | 51031 | 55837 | 40368 |
| Chile | 14530 | 13513 | 19374 | 18429 | 24217 | 22615 | 19374 | 18018 |
| Czech Republic | 27963 | 21884 | 37285 | 25822 | 46606 | 30450 | 37285 | 22267 |
| Denmark | 48994 | 35549 | 65325 | 44323 | 81656 | 53978 | 65325 | 41170 |
| Estonia | 25051 | 17224 | 33421 | 21995 | 41752 | 26766 | 33421 | 20448 |
| Finland | 53652 | 33409 | 71536 | 46134 | 89421 | 55875 | 71536 | 43454 |
| France | 58862 | 33938 | 74896 | 44941 | 96949 | 53458 | 74896 | 40758 |
| Germany | 65789 | 43388 | 87718 | 53610 | 109648 | 63082 | 87718 | 47688 |
| Greece ${ }^{1}$ | . | . | . | . | . | . | . | . |
| Hungary | 25960 | 17446 | 34613 | 22752 | 43266 | 26939 | 34613 | 18446 |
| Iceland | 44011 | 34750 | 58681 | 42503 | 73351 | 50298 | 58681 | 41365 |
| Ireland | 43442 | 40350 | 57629 | 49952 | 72404 | 58633 | 57629 | 45939 |
| Israel | 33594 | 28205 | 44673 | 39241 | 55870 | 48407 | 44673 | 37260 |
| Italy | 48025 | 29478 | 64033 | 38237 | 80041 | 45573 | 64033 | 35557 |
| Japan | 51089 | 39329 | 68119 | 51055 | 85149 | 62712 | 68119 | 47710 |
| Korea | 48370 | 39703 | 64493 | 52925 | 80616 | 66053 | 64493 | 51961 |
| Luxembourg | 60063 | 52036 | 80085 | 65926 | 100106 | 77064 | 80085 | 57864 |
| Mexico | 12337 | 10344 | 16802 | 14383 | 20721 | 17623 | 16802 | 14383 |
| Netherlands | 60765 | 42139 | 80608 | 57083 | 101025 | 69211 | 80608 | 53338 |
| New Zealand | 32426 | 32813 | 43235 | 40212 | 54043 | 46967 | 43235 | 36841 |
| Norway | 57278 | 39506 | 76371 | 52045 | 95464 | 63368 | 76371 | 49626 |
| Poland | 23607 | 16901 | 31476 | 22145 | 39345 | 27172 | 31476 | 20959 |
| Portugal | 34447 | 24378 | 45929 | 31978 | 57411 | 36630 | 45929 | 30330 |
| Slovak Republic | 23460 | 17596 | 31279 | 22039 | 39099 | 26289 | 31279 | 20086 |
| Slovenia | 32017 | 24592 | 42690 | 29636 | 53362 | 35160 | 42690 | 25524 |
| Spain | 46151 | 30385 | 61535 | 39487 | 76919 | 48547 | 61535 | 38832 |
| Sweden | 55351 | 34690 | 73802 | 46544 | 92252 | 56576 | 73802 | 43515 |
| Switzerland | 54920 | 50300 | 73226 | 65069 | 91533 | 78561 | 73226 | 59612 |
| Turkey ${ }^{2}$ | 25323 | 16121 | 33764 | 21170 | 42205 | 26193 | 33764 | 20964 |
| United Kingdom | 57710 | 42449 | 75960 | 56991 | 95691 | 68780 | 75960 | 54325 |
| United States | 51255 | 41947 | 68923 | 53276 | 85716 | 64605 | 68923 | 49763 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 43326 | 31957 | 57537 | 41297 | 72143 | 49482 | 57537 | 38307 |
| OECD-EU21 | 45757 | 31686 | 60593 | 40894 | 76137 | 48723 | 60593 | 37369 |

Note: ch = children.

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

# Graphical exposition of the 2011 estimated tax burden 

Thhe graphs in this section show the estimated tax burden on labour income in 2011 for gross wage earnings between 50 per cent and 250 per cent of the average wage (AW). For each OECD member country (with the exception of Greece, for which the 2011 average earnings figure was not available at the time of compilation), there are separate graphs for four family types: single taxpayers without children, single parents with two children, one-earner married couples without children and one-earner married couples with two children. The net personal average and marginal tax rates ([the change in] personal income taxes and employee social security contributions net of cash benefits as a percentage of [the change in] gross wage earnings) are included in the graphs that show respectively the average and the marginal tax wedge.*

The different components of the tax wedges are also presented; central income taxes, local income taxes, employee social security contributions, employer social security contributions and family benefits as a percentage of total labour costs (TLC). It should be noted that a decreasing share in total labour costs does not necessarily imply that the corresponding taxes or cash benefits are decreasing in cash terms income. A decreasing share in the tax wedge only implies that the corresponding taxes and benefits are not increasing as rapidly as total labour costs.

The zigzag movement in the marginal tax burdens arises when the taxes, social security contributions, and/or cash benefits, and/or the changes in these amounts vary over (small changes in) the income range in a non-continuous way. This is the case in Germany and Sweden because of the rounding rules; in Italy, because of the discrete characteristics of the PAYE (Pay As You Earn) tax credit, the spouse tax credit and the child transfers; in Luxembourg and Switzerland because of the rounding of taxable income; and in the United States because of the truncation of gross earnings in the calculation of the child tax credit.

[^2]There are large differences in cash benefits across OECD countries. The most generous cash benefits as a share of total labour costs for low-income single parents and one-earner married couples with two children can be found in Australia, Canada, Denmark (but not especially for low-income one-earner married couples with 2 children), Ireland, Luxembourg, New Zealand and Slovenia.

Negative central government income taxes are observed in the Czech Republic, Germany, the Slovak Republic and the United Kingdom because of the non-wastable child tax credits, in Canada because of the non-wastable working income tax benefit, in Mexico because of the non-wastable employment subsidy credit, in Israel because of the non-wastable earned income tax credit for families with children, in Sweden because of the non-wastable earned income tax credit and in the United States because of the non-wastable earned income credit and the child tax credit.

Low-income families with children are treated favourably by the tax-benefit system in many OECD countries. When cash benefits are also taken into account, single parents and one-earner married couples with two children do not pay income taxes and employee social security contributions on earnings below 85 per cent of the AW in thirteen OECD member countries. The net personal average tax rate for single parents is not positive on earnings below 86 per cent of the AW in the Czech Republic, 87 per cent of the AW in Canada, 90 per cent of the AW in Israel and 103 per cent of the AW in Ireland and New Zealand. The net personal average tax rate for one-earner married couples with two children is not positive on earnings below 87 per cent of the AW in Canada, 91 per cent of the AW in Luxembourg and Iceland, 103 per cent of the AW in New Zealand, 107 per cent of the AW in Ireland and 113 per cent of the AW in the Czech Republic.

Social security contributions are levied at flat rates in many OECD countries. In addition, some countries have an earnings ceiling above which no social security contributions have to be paid. Employer social security ceilings can be found in Germany, Luxembourg, Mexico, the Netherlands and Spain and to a large extent in the United States (the rate drops from 18.75 per cent to 1.45 per cent on earnings above USD 106 800). Employee social security ceilings are implemented in Austria, Canada, Germany, Mexico, the Netherlands, Spain and Sweden and to a large extent in Luxembourg (employee social security contributions drop to 1.4 per cent on earnings above EUR 105453.60 ), the United Kingdom (employee national insurance contributions drop to 2 per cent of earnings above GBP 42475 ) and the United States (the rate drops from 4.2 per cent to 1.45 per cent on earnings above USD 106 800).

Taxpayers in some OECD countries face marginal social security contribution rates as percentage of total labour costs that decrease as income increases (for gross earnings between 50 per cent and 250 per cent of the AW). For single taxpayers without children, this can be observed in Austria, Belgium, Canada, France, Germany, Japan, Korea and Switzerland. In Poland, both employee and employer marginal social security contribution rates are substantially lower on earnings above 261 per cent of the AW.

The tax wedge is relatively flat across the earnings distribution in some countries because of the flat social security contribution and personal income tax rates. single taxpayers without children face a flat marginal tax wedge of 36.1 per cent in Poland (over the $50-250 \%$ income range), 42.9 per cent in Estonia and 48.6 per cent in the Czech Republic. The tax wedge is also relatively flat in Iceland, the Slovak Republic and Turkey. In Iceland, it is 43.5 per cent on earnings below 152 per cent of the AW and 48.8 per cent on earnings
between 153 and 250 per cent of the AW. In the Slovak Republic; it is 44.4 per cent on earnings below 138 per cent of the AW, 42.8 per cent on earnings between 139 and 220 per cent of the AW and 46.1 per cent on earnings between 221 and 250 per cent of the AW. In Turkey, it is 42.2 per cent on earnings below 119 per cent of the AW and then 47.3 per cent on earnings between 120 and 250 per cent of the AW.

In Belgium, the reduction in social security contribution rates offsets the impact of the progressivity of the personal income tax system for single taxpayers without children. The marginal tax wedge is about 69 per cent for single taxpayers with above average earnings in 2011. It is 66.3 per cent for earnings between 64 and 101 per cent of the AW. In Denmark, single taxpayers without children face a constant marginal tax wedge of 56 per cent on earnings exceeding 110 per cent of the AW. In France, the marginal tax wedge is 59.7 per cent on earnings exceeding the AW.

Taxpayers face marginal tax rates and wedges of about 80 per cent or more in several of OECD countries. This is the case for low-income taxpayers without children in Austria, Ireland, Mexico and Slovenia. Families with children face very high marginal tax rates and wedges (at particular income levels) in Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Ireland, Italy, Mexico, New Zealand, Poland, Portugal, the Slovak Republic, Slovenia and Spain. In many countries, high marginal tax rates for low-income taxpayers are partly the result of a reduction in benefits, allowances or tax credits that are targeted at low-income taxpayers and that are decreasing in income.

Australia, 2011
Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square Z \quad$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)

Single person, 0 children



Employee SSC as \% of total labour costs
Average central income tax as \% of total labour costs
------- Net personal average tax rate as $\%$ of gross wage earnings



Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Austria, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Belgium, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Canada, 2011
Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Chile, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Czech Republic, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage

Employer SSC as \% of total labour costs
Average local income tax as \% of total labour costs Family benefits as \% of total labour costs Average tax wedge (sum of the components)
$\square$ Employee SSC as \% of total labour costs
$\square$ Average central income tax as \% of total labour costs
----- - Net personal average tax rate as \% of gross wage earnings





Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Denmark, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Estonia, 2011
Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$Z \quad$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)



Employee SSC as \% of total labour costs
Average central income tax as \% of total labour costs
--=-=- Net personal average tax rate as $\%$ of gross wage earnings



StatLink ailist http://dx.doi.org/10.1787/888932587568

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage
$\square$ Marginal employer SSC
$\square$ Marginal central income tax $\quad \square$ Marginal employee SSC
$\square$



StatLink ailist http://dx.doi.org/10.1787/888932587587

Finland, 2011
Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


France, 2011
Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$Z \square \Delta \quad$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)



Employee SSC as \% of total labour costs
Average central income tax as \% of total labour costs
-=-=-=- Net personal average tax rate as \% of gross wage earnings



StatLink ailist http://dx.doi.org/10.1787/888932587644

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Germany, 2011
Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)



Employee SSC as \% of total labour costs
Average central income tax as \% of total labour costs
--=-=- Net personal average tax rate as $\%$ of gross wage earnings



StatLink ailist http://dx.doi.org/10.1787/888932587454

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Hungary, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage


StatLink http://dx.doi.org/10.1787/888932587720

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | Marginal employer SSC | $\square$ |
| :--- | :--- | :--- |
| $\square$ | Marginal employee SSC |  |
| $\square$ | Marginal central income tax | Marginal tax wedge (sum of the components) |

Marginal local income tax
------- Net personal marginal tax rate


## Iceland, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)
$\square$ Employee SSC as \% of total labour costs
$\square$ Average central income tax as \% of total labour costs
$\mathbf{- - - - - - -} \quad$ Net personal average tax rate as \% of gross wage earnings





StatLink har http://dx.doi.org/10.1787/888932587796

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Ireland, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


StatLink http://dx.doi.org/10.1787/888932587758

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## Israel, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)
$\square$ Employee SSC as \% of total labour costs
$\square$ Average central income tax as \% of total labour costs
$-=-=-\quad$ Net personal average tax rate as \% of gross wage earnings





StatLink http://dx.doi.org/10.1787/888932587834

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage
$\square$ Marginal employer SSC
$\square$ Marginal central income tax Marginal employee SSC
$\square$ Marginal tax wedge (sum of the components)



StatLink http://dx.doi.org/10.1787/888932587853

## Italy, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square \quad$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)



Employee SSC as \% of total labour costs
$\square$ Average central income tax as \% of total labour costs
------- Net personal average tax rate as \% of gross wage earnings



StatLink har http://dx.doi.org/10.1787/888932587872

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


StatLink http://dx.doi.org/10.1787/888932587891

## Japan, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)






StatLink http://dx.doi.org/10.1787/888932587910

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ Marginal employer SSC |  |
| :--- | :---: | :--- |
| $\square$ Marginal central income tax |  |
| $\square$ | Marginal employee SSC |
| $\square$ | Marginal family benefits |

$\square$ Marginal local income tax
------- Net personal marginal tax rate





## Korea, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)
$\square$ Employee SSC as \% of total labour costs
$\square$ Average central income tax as \% of total labour costs
$-\mathbf{- - - - -} \quad$ Net personal average tax rate as \% of gross wage earnings




StatLink har htp://dx.doi.org/10.1787/888932587948

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ Marginal employer SSC |  |
| :--- | :--- |
| $\square$ Marginal central income tax |  |
| $\square$ | $\square$ Marginal employee SSC |
| $\square$ |  |

$\square$ Marginal local income tax
------- Net personal marginal tax rate


## Luxembourg, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)




StatLink .

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | Marginal employer SSC | $\square$ Marginal employee SSC |
| :--- | :--- | :--- |
| $\square$ | Marginal central income tax |  |
| $\square$ | Marginal tax wedge (sum of the components) |  |

Marginal local income tax
------. Net personal marginal tax rate





StatLink http://dx.doi.org/10.1787/888932588005

## Mexico, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)






StatLink .

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | Marginal employer SSC | $\square$ Marginal employee SSC |
| :--- | :---: | :--- |
| $\square$ | Marginal central income tax |  |
| $\square$ | Marginal tax wedge (sum of the components) |  |





StatLink hisk http://dx.doi.org/10.1787/888932588043

## Netherlands, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


## New Zealand, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage






StatLink
http://dx.doi.org/10.1787/888932588157

## Norway, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$Z \quad$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)






StatLink http://dx.doi.org/10.1787/888932588100

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage






StatLink http://dx.doi.org/10.1787/888932588119

## Poland, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


StatLink http://dx.doi.org/10.1787/888932588176

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ Marginal employer SSC |
| :--- |
| $\square$ Marginal central income tax Marginal employee SSC |
| $\square$ |






StatLink http://dx.doi.org/10.1787/888932588195

## Portugal, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$Z \square \Delta \quad$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)






StatLink har http://dx.doi.org/10.1787/888932588214

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | Marginal employer SSC | $\square$ Marginal employee SSC |
| :--- | :---: | :--- |
| $\square$ | Marginal central income tax |  |
| $\square$ | Marginal tax wedge (sum of the components) |  |




StatLink http://dx.doi.org/10.1787/888932588233

## Slovak Republic, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage


StatLink http://dx.doi.org/10.1787/888932588252

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | Marginal employer SSC | $\square$ Marginal employee SSC |
| :--- | :---: | :--- |
| $\square$ | Marginal central income tax |  |
| $\square$ | Marginal tax wedge (sum of the components) |  |

Marginal local income tax
------- Net personal marginal tax rate


StatLink http://dx.doi.org/10.1787/888932588271

## Slovenia, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage


StatLink http://dx.doi.org/10.1787/888932588290

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ Marginal employer SSC $\quad \square$ Marginal employee SSC |
| :--- |
| $\square$ Marginal central income tax Marginal family benefits |
| $\square$ |





## Spain, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)






StatLink http://dx.doi.org/10.1787/888932587530

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | $\square$ Marginal employer SSC | $\square$ Marginal employee SSC |
| :--- | :--- | :--- |
| $\square$ | $\square$ | Marginal central income tax |
| $\square$ | Marginal tax wedge (sum of the components) |  |






StatLink http://dx.doi.org/10.1787/888932587549

## Sweden, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage


StatLink http://dx.doi.org/10.1787/888932588328

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage






StatLink hern htp://dx.doi.org/10.1787/888932588347

## Switzerland, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage


StatLink http://dx.doi.org/10.1787/888932587340

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ Marginal employer SSC $\quad \square$ Marginal employee SSC |
| :--- |
| $\square$ Marginal central income tax Marginal family benefits |
| $\square$ |






## Turkey, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
$\square$ Average tax wedge (sum of the components)
Employee SSC as \% of total labour costs
$\square$ Average central income tax as \% of total labour costs
------- Net personal average tax rate as \% of gross wage earnings




StatLink http://dx.doi.org/10.1787/888932588366

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | Marginal employer SSC |  |
| :--- | :---: | :--- |
| $\square$ | Marginal central income tax | $\square \square \Delta$ |
| Marginal family benefits |  |  |

Marginal local income tax
------- Net personal marginal tax rate



Single parent, 2 children



StatLink http://dx.doi.org/10.1787/888932588385

## United Kingdom, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage


StatLink http://dx.doi.org/10.1787/888932588404

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | Marginal employer SSC | Marginal employee SSC |
| :--- | :--- | :--- |
| $\square$ | Marginal central income tax |  |
| $\square$ | Marginal tax wedge (sum of the components) |  |





StatLink http://dx.doi.org/10.1787/888932588423

## United States, 2011

Average tax wedge decomposition, by level of gross earnings expressed as a $\%$ of the average wage
$\square$ Employer SSC as \% of total labour costs
$\square$ Average local income tax as \% of total labour costs
$\square$ Family benefits as \% of total labour costs
Average tax wedge (sum of the components)
$\square$ Employee SSC as \% of total labour costs
$\square$ Average central income tax as \% of total labour costs
$\mathbf{- - - - - - -} \quad$ Net personal average tax rate as \% of gross wage earnings





StatLink har http://dx.doi.org/10.1787/888932588442

Marginal tax wedge decomposition, by level of gross earnings expressed as a \% of the average wage

| $\square$ | $\square$ Marginal employer SSC | $\square$ Marginal employee SSC |
| :--- | :--- | :--- |
| $\square$ | $\square$ | Marginal central income tax |
| $\square$ | Marginal tax wedge (sum of the components) |  |





StatLink http://dx.doi.org/10.1787/888932588461

# Tax burdens, 2010 definitive results (and changes to 2011) 

## Th

 his Section briefly reviews the definitive results for 2010 reported in Tables I.12-I. 22 and what they show about changes between 2010 and 2011. The comparable 2011 data is shown in Tables I.1-I. 11 and the formats of the two sets of tables are identical, meaning that the changes for each family-type between the two years can be traced by comparing the corresponding columns in the two sets of tables.The following commentary focuses on changes in tax burdens and marginal tax rates for two of the eight family types - single employees without children at the average wage level (column 2 of the tables) and one-earner married families with two children at the average wage level (column 5 of the tables). Comparing the columns 1, 3-4 and 6-8 of the tables gives corresponding results for the six other family types. Generally, only those changes exceeding 1 percentage point for average effective rates and 5 percentage points for marginal effective rates are flagged.

Table I. 12 presents the total tax wedge, income tax plus employee and employer's social security contributions less cash benefits by family type as a percentage of total labour costs [gross wage plus employers' social security contributions (including payroll taxes)]. In the majority of countries, changes in the gap between total labour costs and the corresponding net take-home pay in 2011 as compared to 2010 were within plus or minus one percentage point. Comparing column 2 in Tables I. 1 and I.12, the wedge increased by more than one percentage point in Hungary ( 2.8 percentage points), Luxembourg (1.7 percentage points) and Portugal (1.4 percentage points) between 2010 and 2011, and it fell by more than one percentage point in New Zealand ( -1.1 percentage points).

For one-earner married couples with two children (comparing column 5 of Tables I. 1 and I.12), the wedge increased by more than one percentage point in five countries: Iceland (1.8 percentage points), Ireland (2.4 percentage points), Luxembourg (1.8 percentage points), Portugal ( 2.3 percentage points) and the Slovak Republic ( 2.1 percentage points). For this family type, the wedge decreased by more than one percentage point only in Hungary (-3.9 percentage points).

Table I. 13 shows the combined burden of income tax and employee social security contributions in the form of personal average tax rates as a percentage of gross wage earnings. For single persons on average earnings, this increased by more than one percentage point between 2010 and 2011 in Hungary ( 3.6 percentage points), Ireland (1.1 percentage points), Luxembourg (1.3 percentage points), Portugal (1.7 percentage points) and the Slovak Republic (1.2 percentage points). For this family type, the rate decreased by more than one percentage point in New Zealand ( -1.1 percentage points). For one-earner married couples with two children it increased by more than 1 percentage point in

Iceland (1.3 percentage points), Ireland (2 percentage points), Japan (1.4 percentage points), Luxembourg ( 1.1 percentage points), Portugal (1.6 percentage points) and the Slovak Republic (2.5 percentage points). It fell by more than one percentage point in Hungary ( -5.6 percentage points) and New Zealand (-1.1 percentage points).

Table I. 14 provides the combined burden of income tax and employee social security contributions less the amount of cash family benefits (net personal average tax rate). Comparing column 2 of Tables I. 3 and I.14, for single persons at average earnings, there were increases of more than one percentage point between 2010 and 2011 in Hungary (3.6 percentage points), Luxembourg (1.4 percentage points), Portugal (1.7 percentage points), and the Slovak Republic (1.2 percentage points); in contrast the burden decreased more than one percentage point in New Zealand ( -1.1 percentage points). Comparing column 5 of Tables I. 3 and I.14, increases in the net personal average tax rate of one-earner married couples exceeding one percentage point are noted for Iceland (2 percentage points), Ireland ( 2.6 percentage points), Italy (1.1 percentage points), Japan (1.4 percentage points), Luxembourg (1.3 percentage points), Portugal ( 2.9 percentage points), and the Slovak Republic ( 2.7 percentage points). On the other hand, the net personal average tax rate decreased more than one percentage point in Hungary ( -5.1 percentage points).

Table I. 15 presents information on income tax due as a percentage of gross wage earnings. In most OECD member countries, the income tax for single persons at average earnings has changed only slightly between 2010 and 2011. Comparing column 2 of Tables I. 4 and I.15, the income tax rate increased by more than one percentage point in Hungary (3.1 percentage points), Ireland (4.2 percentage points), Portugal (1.7 percentage points), the Slovak Republic (1.2 percentage points) and the United States (1.1 percentage points); there was only one country where the income tax rate decreased by more than one percentage point - New Zealand, by 1.1 percentage points.

For the one earner married couple with two children, increases by greater than one percentage point were observed in five countries, Iceland ( 1.3 percentage points), Ireland (5.2 percentage points), Portugal (1.6 percentage points), Slovak Republic ( 2.5 percentage points) and the United States (1.9 percentage points). There were decreases of more than one percentage point in Hungary ( -6.1 percentage points) and New Zealand ( -1.1 percentage points).

Table I. 16 shows information on employee social security contributions as a percentage of gross wage earnings. Comparing columns 2 and 5 of Tables I. 5 and I.16, there were only two countries - Ireland ( -3.2 percentage points) and the United States ( -2 percentage points) where there was a change in the average burden of employee social security contributions of more than one percentage point between 2010 and 2011 for either the average single person or the average one-earner married couple with two children.

Table I. 17 shows the marginal tax wedge (rate of income tax plus employee and employer social security contributions minus benefits) in 2010. Comparing columns 2 and 5 respectively in Tables I. 6 and I.17, changes between 2010 and 2011 in the marginal wedge were generally within the range of plus or minus five percentage points. For a single worker at the average earnings, a change of more than five percentage points was noted only for Ireland (+19.9 percentage points). For a one-earner married couple with two children, there were no changes of more than five percentage points.

Table I. 18 presents the marginal rate of income tax plus employee social security contributions minus benefits by family-type and wage level. Comparing columns 2 and 5
respectively in Tables I. 7 and I.18, the pattern of changes in the marginal rate between 2010 and 2011 was similar to that for the tax wedge discussed above. For the two family types being focused on, the only example of a change outside the range of plus or minus five percentage points was for the single worker on the average earnings in Ireland, (+22 percentage points).

Table I. 19 shows the increase in net income (in per cent) after an increase of one currency unit in gross wage earnings for $2010 .{ }^{1}$ Table I. 20 provides the percentage increase in net income given an increase in one currency unit of gross labour costs for the same year. ${ }^{2}$ The results shown in these two tables are directly dependent upon the marginal and average tax rates that have been discussed in the paragraphs above. Tables I. 21 and I. 22 report background information on levels of labour costs plus gross and net wages in 2010.

## Notes

1. The reported elasticities in Table I. 19 are calculated as $(100-\mathrm{METR}) /(100-\operatorname{AETR})$, where METR is the marginal rate of income tax plus employee social security contributions less cash benefits reported in Table I. 18 and AETR is the average rate plus employee social security contributions less cash benefits reported in Table I. 14.
2. The reported elasticities in Table I. 20 are calculated as ( 100 - METR)/( 100 - AETR), where METR is the marginal rate of income tax plus employee and employer social security contributions less cash benefits reported in Table I. 17 and AETR is the average rate plus employee and employer social security contributions less cash benefits reported in Table I.12.

Table I.12. Income tax plus employee and employer contributions less cash benefits, 2010
As \% of labour costs, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 20.9 | 26.8 | 32.4 | -6.9 | 14.6 | 18.0 | 23.7 | 23.1 |
| Austria | 43.4 | 48.2 | 51.4 | 25.9 | 36.4 | 36.7 | 40.0 | 44.5 |
| Belgium | 49.5 | 55.4 | 60.6 | 35.2 | 39.8 | 41.1 | 48.0 | 47.7 |
| Canada | 25.8 | 30.5 | 32.7 | -7.2 | 18.1 | 23.4 | 26.6 | 27.3 |
| Chile | 7.0 | 7.0 | 7.6 | 6.0 | 6.3 | 4.8 | 6.6 | 7.0 |
| Czech Republic | 38.9 | 42.1 | 44.7 | 15.6 | 21.1 | 30.3 | 34.3 | 40.0 |
| Denmark | 36.7 | 38.3 | 44.5 | 11.1 | 27.2 | 31.9 | 33.7 | 36.8 |
| Estonia | 38.6 | 40.1 | 41.2 | 23.7 | 30.8 | 34.0 | 35.7 | 38.8 |
| Finland | 37.0 | 42.5 | 48.3 | 25.8 | 37.3 | 35.2 | 37.2 | 39.1 |
| France | 46.2 | 49.3 | 53.4 | 38.0 | 42.2 | 39.8 | 44.7 | 45.5 |
| Germany | 45.0 | 49.2 | 51.4 | 30.1 | 33.0 | 38.0 | 41.7 | 45.0 |
| Greece | 34.4 | 38.2 | 43.7 | 34.4 | 38.5 | 37.5 | 37.5 | 38.1 |
| Hungary | 43.8 | 46.6 | 53.1 | 27.3 | 36.7 | 36.4 | 39.5 | 43.8 |
| Iceland | 28.3 | 33.4 | 37.8 | 16.5 | 19.2 | 26.3 | 30.4 | 28.6 |
| Ireland | 16.7 | 25.8 | 36.4 | -28.2 | 4.7 | 10.6 | 16.2 | 18.2 |
| Israel | 12.8 | 19.4 | 28.3 | 0.4 | 15.9 | 13.7 | 13.3 | 16.3 |
| Italy | 44.0 | 47.2 | 52.5 | 27.9 | 37.8 | 39.6 | 42.4 | 43.9 |
| Japan | 28.9 | 30.2 | 33.3 | 18.6 | 22.1 | 24.0 | 25.4 | 29.4 |
| Korea | 17.3 | 20.1 | 21.7 | 16.7 | 17.8 | 17.8 | 17.9 | 19.2 |
| Luxembourg | 27.7 | 34.3 | 41.6 | 0.7 | 11.6 | 16.0 | 21.3 | 26.2 |
| Mexico | 12.3 | 15.5 | 21.3 | 12.3 | 15.5 | 13.8 | 14.2 | 13.8 |
| Netherlands | 33.5 | 38.1 | 41.8 | 12.0 | 30.8 | 29.5 | 31.8 | 34.2 |
| New Zealand | 14.2 | 17.0 | 23.3 | -17.9 | -0.9 | 7.5 | 13.8 | 15.9 |
| Norway | 34.0 | 37.2 | 42.9 | 20.7 | 30.6 | 31.5 | 33.3 | 34.8 |
| Poland | 33.2 | 34.2 | 35.0 | 28.4 | 28.4 | 29.2 | 30.6 | 33.2 |
| Portugal | 32.7 | 37.6 | 43.6 | 21.5 | 26.9 | 28.9 | 33.2 | 32.7 |
| Slovak Republic | 34.7 | 37.9 | 40.3 | 21.8 | 22.9 | 27.2 | 31.5 | 33.7 |
| Slovenia | 38.6 | 42.5 | 47.6 | 12.3 | 22.9 | 30.4 | 34.0 | 40.1 |
| Spain | 36.5 | 39.7 | 42.4 | 29.1 | 34.0 | 35.7 | 36.7 | 36.8 |
| Sweden | 40.6 | 42.8 | 50.9 | 32.3 | 37.2 | 36.8 | 38.6 | 41.0 |
| Switzerland | 17.8 | 20.7 | 25.1 | 2.2 | 8.2 | 11.0 | 14.1 | 18.3 |
| Turkey ${ }^{1}$ | 35.7 | 37.9 | 41.0 | 34.5 | 36.6 | 37.4 | 38.1 | 38.0 |
| United Kingdom | 29.4 | 32.6 | 37.2 | 9.0 | 26.5 | 24.8 | 28.4 | 29.4 |
| United States | 27.8 | 30.4 | 35.7 | 8.4 | 18.2 | 23.2 | 25.4 | 28.4 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 31.3 | 35.0 | 39.5 | 15.8 | 25.0 | 27.1 | 30.0 | 32.0 |
| OECD-EU21 | 37.2 | 41.1 | 45.8 | 20.7 | 29.8 | 31.9 | 35.1 | 37.6 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
2. Two-earner family.

Table I.13. Income tax plus employee contributions, 2010
As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.9 | 22.3 | 28.2 | 14.2 | 21.1 | 17.4 | 19.0 | 18.3 |
| Austria | 27.0 | 33.1 | 38.3 | 23.7 | 30.8 | 28.0 | 30.3 | 28.4 |
| Belgium | 35.4 | 42.1 | 49.0 | 29.8 | 30.4 | 32.8 | 38.0 | 34.7 |
| Canada | 18.7 | 22.5 | 26.7 | 8.1 | 16.0 | 18.0 | 20.1 | 19.1 |
| Chile | 7.0 | 7.0 | 7.6 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 18.1 | 22.5 | 25.9 | 6.0 | 5.7 | 13.5 | 15.9 | 19.6 |
| Denmark | 37.2 | 38.6 | 44.5 | 37.2 | 34.4 | 37.4 | 38.1 | 37.4 |
| Estonia | 17.5 | 19.4 | 20.9 | 11.9 | 11.9 | 14.7 | 16.4 | 17.5 |
| Finland | 22.9 | 29.7 | 36.8 | 22.9 | 29.7 | 25.5 | 27.0 | 25.5 |
| France | 26.0 | 27.9 | 33.5 | 21.2 | 22.1 | 21.5 | 24.9 | 26.0 |
| Germany | 34.4 | 39.4 | 43.8 | 16.5 | 20.0 | 26.0 | 30.4 | 34.4 |
| Greece | 16.0 | 20.9 | 27.9 | 16.0 | 21.3 | 19.9 | 19.9 | 20.7 |
| Hungary | 27.8 | 31.4 | 39.7 | 27.8 | 31.4 | 27.8 | 29.9 | 27.8 |
| Iceland | 22.1 | 27.6 | 32.4 | 22.1 | 17.5 | 22.4 | 25.4 | 22.4 |
| Ireland | 7.8 | 17.9 | 29.5 | 4.8 | 9.4 | 9.9 | 13.8 | 9.9 |
| Israel | 9.1 | 15.7 | 24.8 | 5.5 | 15.7 | 12.6 | 11.6 | 12.6 |
| Italy | 26.0 | 30.2 | 37.2 | 18.7 | 23.4 | 22.7 | 25.8 | 26.0 |
| Japan | 19.1 | 20.6 | 24.5 | 15.7 | 16.9 | 17.7 | 18.4 | 19.7 |
| Korea | 9.2 | 12.3 | 15.0 | 8.5 | 9.7 | 9.7 | 9.8 | 11.2 |
| Luxembourg | 19.3 | 26.7 | 34.8 | 12.1 | 16.7 | 17.7 | 21.4 | 17.7 |
| Mexico | 0.1 | 5.6 | 13.4 | 0.1 | 5.6 | 1.6 | 3.4 | 1.6 |
| Netherlands | 27.0 | 31.7 | 37.7 | 13.5 | 27.8 | 25.7 | 27.4 | 27.7 |
| New Zealand | 14.2 | 17.0 | 23.3 | 15.9 | 17.0 | 15.9 | 16.5 | 15.9 |
| Norway | 25.5 | 29.2 | 35.6 | 21.7 | 26.7 | 26.4 | 27.7 | 26.4 |
| Poland | 23.4 | 24.5 | 25.3 | 17.8 | 17.8 | 18.7 | 20.3 | 23.4 |
| Portugal | 16.7 | 22.8 | 30.3 | 12.4 | 14.8 | 15.0 | 19.0 | 16.7 |
| Slovak Republic | 17.6 | 21.7 | 24.8 | 9.8 | 8.3 | 12.4 | 16.9 | 16.3 |
| Slovenia | 28.7 | 33.3 | 39.1 | 22.1 | 25.0 | 25.9 | 27.7 | 30.5 |
| Spain | 17.5 | 21.7 | 26.4 | 7.9 | 14.2 | 16.5 | 17.8 | 17.9 |
| Sweden | 22.0 | 24.8 | 35.5 | 22.0 | 24.8 | 22.4 | 23.7 | 22.4 |
| Switzerland | 12.8 | 15.9 | 20.6 | 8.3 | 10.6 | 11.6 | 13.7 | 13.4 |
| Turkey ${ }^{1}$ | 25.1 | 27.6 | 31.3 | 23.7 | 26.1 | 27.1 | 27.9 | 27.8 |
| United Kingdom | 22.6 | 25.4 | 30.0 | 8.0 | 23.8 | 21.4 | 24.1 | 22.6 |
| United States | 20.2 | 23.8 | 30.1 | -1.2 | 10.4 | 15.1 | 18.0 | 20.9 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 20.3 | 24.5 | 30.1 | 15.1 | 18.9 | 19.4 | 21.4 | 21.2 |
| OECD-EU21 | 23.4 | 27.9 | 33.9 | 17.2 | 21.1 | 21.7 | 24.2 | 24.0 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
2. Two-earner family.

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Table I.14. Income tax plus employee contributions less cash benefits, 2010
As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.9 | 22.3 | 28.2 | -13.5 | 9.3 | 12.9 | 18.9 | 18.3 |
| Austria | 27.0 | 33.1 | 38.3 | 4.4 | 17.9 | 18.3 | 22.6 | 28.4 |
| Belgium | 35.4 | 42.1 | 49.0 | 17.1 | 21.9 | 26.4 | 32.9 | 34.7 |
| Canada | 17.4 | 22.5 | 26.7 | -19.5 | 8.6 | 14.7 | 18.2 | 19.1 |
| Chile | 7.0 | 7.0 | 7.6 | 6.0 | 6.3 | 4.8 | 6.6 | 7.0 |
| Czech Republic | 18.1 | 22.5 | 25.9 | -13.1 | -5.7 | 6.6 | 11.9 | 19.6 |
| Denmark | 36.7 | 38.3 | 44.5 | 11.1 | 27.2 | 31.9 | 33.7 | 36.8 |
| Estonia | 17.5 | 19.4 | 20.9 | -2.5 | 7.1 | 11.1 | 13.5 | 17.5 |
| Finland | 22.9 | 29.7 | 36.8 | 9.2 | 23.3 | 20.7 | 23.2 | 25.5 |
| France | 26.0 | 27.9 | 33.5 | 14.8 | 17.8 | 18.3 | 22.3 | 26.0 |
| Germany | 34.4 | 39.4 | 43.8 | 16.5 | 20.0 | 26.0 | 30.4 | 34.4 |
| Greece | 16.0 | 20.9 | 27.9 | 16.0 | 21.3 | 19.9 | 19.9 | 20.7 |
| Hungary | 27.8 | 31.4 | 39.7 | 6.6 | 18.7 | 18.3 | 22.3 | 27.8 |
| Iceland | 22.1 | 27.6 | 32.4 | 9.3 | 12.2 | 19.9 | 24.4 | 22.4 |
| Ireland | 7.8 | 17.9 | 29.5 | -42.0 | -5.5 | 1.5 | 7.1 | 9.9 |
| Israel | 9.1 | 15.7 | 24.8 | -3.8 | 12.0 | 9.9 | 9.4 | 12.6 |
| Italy | 26.0 | 30.2 | 37.2 | 4.8 | 17.8 | 20.2 | 24.0 | 26.0 |
| Japan | 19.1 | 20.6 | 24.5 | 7.4 | 11.3 | 13.5 | 15.1 | 19.7 |
| Korea | 9.2 | 12.3 | 15.0 | 8.5 | 9.7 | 9.7 | 9.8 | 11.2 |
| Luxembourg | 19.3 | 26.7 | 34.8 | -10.7 | 1.4 | 6.3 | 12.2 | 17.7 |
| Mexico | 0.1 | 5.6 | 13.4 | 0.1 | 5.6 | 1.6 | 3.4 | 1.6 |
| Netherlands | 27.0 | 31.7 | 37.7 | 3.4 | 23.6 | 22.6 | 24.9 | 27.7 |
| New Zealand | 14.2 | 17.0 | 23.3 | -17.9 | -0.9 | 7.5 | 13.8 | 15.9 |
| Norway | 25.5 | 29.2 | 35.6 | 10.6 | 21.7 | 22.7 | 24.7 | 26.4 |
| Poland | 23.4 | 24.5 | 25.3 | 17.8 | 17.8 | 18.7 | 20.3 | 23.4 |
| Portugal | 16.7 | 22.8 | 30.3 | 2.9 | 9.5 | 12.0 | 17.3 | 16.7 |
| Slovak Republic | 17.6 | 21.7 | 24.8 | 1.3 | 2.6 | 8.2 | 13.5 | 16.3 |
| Slovenia | 28.7 | 33.3 | 39.1 | -1.8 | 10.4 | 19.2 | 23.3 | 30.5 |
| Spain | 17.5 | 21.7 | 26.4 | 7.9 | 14.2 | 16.5 | 17.8 | 17.9 |
| Sweden | 22.0 | 24.8 | 35.5 | 11.0 | 17.4 | 16.9 | 19.3 | 22.4 |
| Switzerland | 12.8 | 15.9 | 20.6 | -3.7 | 2.6 | 5.6 | 8.9 | 13.4 |
| Turkey ${ }^{1}$ | 25.1 | 27.6 | 31.3 | 23.7 | 26.1 | 27.1 | 27.9 | 27.8 |
| United Kingdom | 22.6 | 25.4 | 30.0 | 0.3 | 18.7 | 17.5 | 21.1 | 22.6 |
| United States | 20.2 | 23.8 | 30.1 | -1.2 | 10.4 | 15.1 | 18.0 | 20.9 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 20.2 | 24.5 | 30.1 | 2.4 | 12.7 | 15.4 | 18.6 | 21.1 |
| OECD-EU21 | 23.4 | 27.9 | 33.9 | 3.6 | 14.2 | 17.0 | 20.6 | 23.9 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
2. Two-earner family.

Table I.15. Income tax, by family-type and wage level, 2010
As \% of gross wage earnings

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.9 | 22.3 | 28.2 | 14.2 | 21.1 | 17.4 | 19.0 | 18.3 |
| Austria | 8.9 | 15.0 | 22.1 | 5.7 | 12.8 | 10.7 | 12.2 | 11.0 |
| Belgium | 21.5 | 28.1 | 34.9 | 15.9 | 16.4 | 22.0 | 24.0 | 23.9 |
| Canada | 11.6 | 15.2 | 21.8 | 1.0 | 8.7 | 11.2 | 12.9 | 12.3 |
| Chile | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 7.1 | 11.5 | 14.9 | -5.0 | -5.3 | 2.5 | 4.9 | 8.6 |
| Denmark | 25.1 | 27.9 | 34.9 | 25.1 | 23.7 | 25.3 | 26.8 | 25.3 |
| Estonia | 14.7 | 16.6 | 18.1 | 9.1 | 9.1 | 11.9 | 13.6 | 14.7 |
| Finland | 15.9 | 22.6 | 29.6 | 15.9 | 22.6 | 18.6 | 19.9 | 18.6 |
| France | 12.3 | 14.2 | 20.5 | 7.4 | 8.4 | 7.8 | 11.2 | 12.3 |
| Germany | 13.9 | 18.9 | 27.4 | -3.7 | -0.2 | 5.8 | 10.2 | 13.9 |
| Greece | 0.0 | 4.9 | 11.9 | 0.0 | 5.3 | 3.9 | 3.9 | 4.7 |
| Hungary | 10.8 | 14.4 | 22.7 | 10.8 | 14.4 | 10.8 | 12.9 | 10.8 |
| Iceland | 21.4 | 27.1 | 32.1 | 21.4 | 17.0 | 21.7 | 24.8 | 21.7 |
| Ireland | 5.0 | 10.7 | 22.0 | 2.0 | 2.2 | 4.5 | 8.4 | 4.5 |
| Israel | 3.6 | 8.0 | 15.4 | 0.0 | 8.0 | 6.0 | 4.8 | 6.0 |
| Italy | 16.6 | 20.7 | 27.6 | 9.2 | 13.9 | 13.2 | 16.3 | 16.5 |
| Japan | 6.1 | 7.6 | 12.0 | 2.7 | 3.9 | 4.7 | 5.5 | 6.7 |
| Korea | 1.4 | 4.5 | 8.6 | 0.7 | 1.9 | 1.9 | 2.0 | 3.4 |
| Luxembourg | 7.2 | 14.5 | 22.6 | 0.0 | 4.5 | 5.6 | 9.2 | 5.6 |
| Mexico | -1.1 | 4.2 | 11.9 | -1.1 | 4.2 | 0.3 | 2.1 | 0.3 |
| Netherlands | 5.3 | 16.2 | 28.4 | 3.5 | 15.9 | 12.3 | 11.7 | 12.4 |
| New Zealand | 14.2 | 17.0 | 23.3 | 15.9 | 17.0 | 15.9 | 16.5 | 15.9 |
| Norway | 17.7 | 21.4 | 27.8 | 13.9 | 18.9 | 18.6 | 19.9 | 18.6 |
| Poland | 5.5 | 6.6 | 7.5 | 0.0 | 0.0 | 0.9 | 2.5 | 5.5 |
| Portugal | 5.7 | 11.8 | 19.3 | 1.4 | 3.8 | 4.0 | 8.0 | 5.7 |
| Slovak Republic | 4.2 | 8.3 | 11.6 | -3.6 | -5.1 | -1.0 | 3.5 | 2.9 |
| Slovenia | 6.6 | 11.2 | 17.0 | 0.0 | 2.9 | 3.8 | 5.6 | 8.4 |
| Spain | 11.1 | 15.4 | 20.5 | 1.6 | 7.9 | 10.1 | 11.4 | 11.5 |
| Sweden | 15.0 | 17.8 | 30.8 | 15.0 | 17.8 | 15.4 | 16.7 | 15.4 |
| Switzerland | 6.7 | 9.9 | 14.6 | 2.2 | 4.5 | 5.6 | 7.7 | 7.3 |
| Turkey ${ }^{1}$ | 10.1 | 12.6 | 16.3 | 8.7 | 11.1 | 12.1 | 12.9 | 12.8 |
| United Kingdom | 14.3 | 16.2 | 22.4 | -0.3 | 14.6 | 13.1 | 15.3 | 14.3 |
| United States | 12.6 | 16.1 | 22.4 | -8.9 | 2.8 | 7.5 | 10.3 | 13.2 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 10.2 | 14.4 | 20.6 | 5.3 | 9.0 | 9.5 | 11.4 | 11.3 |
| OECD-EU21 | 10.8 | 15.4 | 22.2 | 5.2 | 8.8 | 9.6 | 11.8 | 11.7 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
2. Two-earner family.

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Table I.16. Employee contributions, 2010
As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{2} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Austria | 18.1 | 18.1 | 16.2 | 18.1 | 18.1 | 17.3 | 18.1 | 17.3 |
| Belgium | 13.9 | 14.0 | 14.1 | 13.9 | 14.0 | 10.8 | 14.0 | 10.8 |
| Canada | 7.1 | 7.2 | 4.9 | 7.1 | 7.2 | 6.8 | 7.2 | 6.8 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
| Denmark | 12.1 | 10.7 | 9.6 | 12.1 | 10.7 | 12.1 | 11.3 | 12.1 |
| Estonia | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Finland | 7.0 | 7.1 | 7.2 | 7.0 | 7.1 | 6.9 | 7.1 | 6.9 |
| France | 13.7 | 13.7 | 13.1 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 |
| Germany | 20.5 | 20.5 | 16.4 | 20.2 | 20.2 | 20.2 | 20.2 | 20.5 |
| Greece | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 |
| Hungary | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 |
| Iceland | 0.8 | 0.5 | 0.3 | 0.8 | 0.5 | 0.8 | 0.6 | 0.8 |
| Ireland | 2.8 | 7.2 | 7.5 | 2.8 | 7.2 | 5.4 | 5.4 | 5.4 |
| Israel | 5.5 | 7.7 | 9.4 | 5.5 | 7.7 | 6.6 | 6.8 | 6.6 |
| Italy | 9.5 | 9.5 | 9.6 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 |
| Japan | 13.0 | 13.0 | 12.5 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| Korea | 7.8 | 7.8 | 6.4 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 |
| Luxembourg | 12.1 | 12.2 | 12.3 | 12.1 | 12.2 | 12.1 | 12.2 | 12.1 |
| Mexico | 1.2 | 1.4 | 1.5 | 1.2 | 1.4 | 1.3 | 1.3 | 1.3 |
| Netherlands | 21.7 | 15.5 | 9.3 | 10.0 | 11.9 | 13.4 | 15.8 | 15.3 |
| New Zealand | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Norway | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 |
| Poland | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 |
| Portugal | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
| Slovak Republic | 13.4 | 13.4 | 13.2 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 |
| Slovenia | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 |
| Spain | 6.4 | 6.4 | 5.9 | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 |
| Sweden | 7.0 | 7.0 | 4.7 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Switzerland | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Turkey ${ }^{1}$ | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| United Kingdom | 8.3 | 9.2 | 7.6 | 8.3 | 9.2 | 8.3 | 8.8 | 8.3 |
| United States | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 10.1 | 10.1 | 9.5 | 9.7 | 10.0 | 9.8 | 10.0 | 9.9 |
| OECD-EU21 | 12.6 | 12.5 | 11.6 | 12.0 | 12.3 | 12.1 | 12.4 | 12.2 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
2. Two-earner family.

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Table I.17. Marginal rate of income tax plus employee and employer contributions less cash benefits, $2010^{1}$
As \% of labour costs, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% A W)^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 39.3 | 35.5 | 43.0 | 58.1 | 54.3 | 35.5 | 63.8 | 35.5 |
| Austria | 56.9 | 60.6 | 42.2 | 56.9 | 60.6 | 60.6 | 60.6 | 60.6 |
| Belgium | 66.3 | 66.3 | 69.4 | 66.3 | 66.3 | 66.3 | 66.3 | 66.3 |
| Canada | 33.4 | 40.8 | 38.2 | 60.4 | 68.1 | 44.4 | 44.4 | 40.8 |
| Chile | 7.0 | 7.0 | 11.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 48.6 | 48.6 | 48.6 | 55.7 | 54.0 | 54.0 | 54.0 | 48.6 |
| Denmark | 40.9 | 42.3 | 56.1 | 40.9 | 42.3 | 42.3 | 42.3 | 42.3 |
| Estonia | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 | 42.9 |
| Finland | 53.0 | 57.0 | 57.0 | 53.0 | 57.0 | 57.0 | 57.0 | 57.0 |
| France | 63.2 | 51.3 | 59.7 | 57.7 | 48.3 | 46.9 | 51.3 | 51.3 |
| Germany | 55.4 | 59.8 | 44.3 | 53.7 | 54.1 | 55.2 | 57.4 | 55.4 |
| Greece | 34.4 | 50.1 | 55.4 | 34.4 | 50.1 | 50.1 | 50.1 | 50.1 |
| Hungary | 52.2 | 64.1 | 67.0 | 52.2 | 64.1 | 64.1 | 64.1 | 64.1 |
| Iceland | 43.4 | 43.4 | 48.7 | 50.5 | 50.5 | 47.8 | 47.8 | 43.4 |
| Ireland | 33.2 | 36.8 | 55.8 | 66.0 | 74.7 | 36.8 | 36.8 | 36.8 |
| Israel | 29.8 | 38.3 | 45.0 | 16.5 | 38.3 | 38.3 | 38.3 | 38.3 |
| Italy | 53.8 | 53.8 | 61.7 | 54.3 | 54.8 | 54.8 | 54.3 | 53.8 |
| Japan | 31.0 | 35.3 | 34.4 | 31.0 | 32.3 | 32.3 | 32.3 | 35.3 |
| Korea | 19.4 | 28.4 | 22.6 | 18.2 | 24.7 | 28.4 | 28.4 | 28.4 |
| Luxembourg | 41.0 | 52.5 | 52.5 | 41.0 | 36.1 | 39.4 | 46.0 | 39.4 |
| Mexico | 17.5 | 18.7 | 28.4 | 17.5 | 18.7 | 18.7 | 18.7 | 18.7 |
| Netherlands | 48.7 | 47.3 | 49.5 | 51.7 | 53.8 | 47.3 | 47.3 | 47.3 |
| New Zealand | 19.2 | 31.5 | 35.5 | 19.2 | 51.5 | 51.5 | 51.5 | 31.5 |
| Norway | 43.1 | 51.1 | 53.7 | 43.1 | 51.1 | 51.1 | 51.1 | 51.1 |
| Poland | 36.1 | 36.1 | 36.1 | 28.4 | 28.4 | 36.1 | 36.1 | 36.1 |
| Portugal | 47.5 | 47.5 | 56.3 | 47.5 | 39.1 | 47.5 | 47.5 | 47.5 |
| Slovak Republic | 44.4 | 44.4 | 42.8 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 |
| Slovenia | 43.6 | 51.0 | 60.4 | 32.9 | 43.6 | 43.6 | 43.6 | 51.0 |
| Spain | 45.2 | 48.1 | 37.0 | 52.4 | 45.2 | 48.1 | 48.1 | 48.1 |
| Sweden | 45.6 | 47.9 | 66.9 | 45.6 | 47.9 | 47.9 | 47.9 | 47.9 |
| Switzerland | 24.3 | 27.5 | 35.6 | 19.4 | 23.3 | 25.8 | 26.6 | 25.8 |
| Turkey ${ }^{2}$ | 42.2 | 42.2 | 47.3 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 |
| United Kingdom | 38.8 | 38.8 | 47.7 | 73.4 | 38.8 | 38.8 | 44.7 | 38.8 |
| United States | 34.4 | 43.7 | 45.5 | 53.2 | 34.4 | 34.4 | 34.4 | 34.4 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 40.5 | 43.8 | 47.0 | 43.8 | 45.4 | 43.6 | 45.0 | 43.0 |
| OECD-EU21 | 47.2 | 49.9 | 52.8 | 50.1 | 49.8 | 48.8 | 49.7 | 49.0 |

Note: ch = children.

1. Assumes a rise in gross earnings of the principal earner in the household. The outcome may differ if the wage of the spouse goes up, especially if partners are taxed individually.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

Table I.18. Marginal rate of income tax plus employee contributions less cash benefits, 2010 ${ }^{1}$ As \% of gross wage earnings, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 35.5 | 31.5 | 39.5 | 55.5 | 51.5 | 31.5 | 61.5 | 31.5 |
| Austria | 44.4 | 49.1 | 37.9 | 44.4 | 49.1 | 49.1 | 49.1 | 49.1 |
| Belgium | 54.9 | 54.9 | 60.9 | 54.9 | 54.9 | 54.9 | 54.9 | 54.9 |
| Canada | 25.4 | 35.1 | 35.4 | 55.7 | 65.0 | 39.1 | 39.1 | 35.1 |
| Chile | 7.0 | 7.0 | 11.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 31.1 | 31.1 | 31.1 | 40.7 | 38.4 | 38.4 | 38.4 | 31.1 |
| Denmark | 40.9 | 42.3 | 56.1 | 40.9 | 42.3 | 42.3 | 42.3 | 42.3 |
| Estonia | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 |
| Finland | 42.5 | 47.5 | 47.5 | 42.5 | 47.5 | 47.5 | 47.5 | 47.5 |
| France | 31.7 | 30.4 | 42.3 | 21.5 | 26.1 | 24.0 | 30.4 | 30.4 |
| Germany | 46.8 | 52.0 | 44.3 | 44.8 | 45.2 | 46.5 | 49.1 | 46.8 |
| Greece | 16.0 | 36.2 | 42.9 | 16.0 | 36.2 | 36.2 | 36.2 | 36.2 |
| Hungary | 38.6 | 53.8 | 57.6 | 38.6 | 53.8 | 53.8 | 53.8 | 53.8 |
| Iceland | 38.5 | 38.5 | 44.3 | 46.2 | 46.2 | 43.3 | 43.3 | 38.5 |
| Ireland | 26.0 | 30.0 | 51.0 | 62.4 | 72.0 | 30.0 | 30.0 | 30.0 |
| Israel | 26.0 | 35.0 | 42.0 | 12.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| Italy | 38.9 | 39.0 | 49.5 | 39.6 | 40.3 | 40.3 | 39.7 | 39.0 |
| Japan | 21.5 | 26.4 | 30.6 | 21.5 | 23.0 | 23.0 | 23.0 | 26.4 |
| Korea | 11.5 | 21.4 | 18.4 | 10.2 | 17.3 | 21.4 | 21.4 | 21.4 |
| Luxembourg | 34.3 | 47.0 | 47.0 | 34.3 | 28.8 | 32.4 | 39.7 | 32.4 |
| Mexico | 12.1 | 12.5 | 22.9 | 12.1 | 12.5 | 12.5 | 12.5 | 12.5 |
| Netherlands | 42.7 | 41.1 | 49.5 | 46.1 | 48.4 | 41.1 | 41.1 | 41.1 |
| New Zealand | 19.2 | 31.5 | 35.5 | 19.2 | 51.5 | 51.5 | 51.5 | 31.5 |
| Norway | 35.8 | 44.8 | 47.8 | 35.8 | 44.8 | 44.8 | 44.8 | 44.8 |
| Poland | 26.7 | 26.7 | 26.7 | 17.8 | 17.8 | 26.7 | 26.7 | 26.7 |
| Portugal | 35.1 | 35.1 | 45.9 | 35.1 | 24.6 | 35.1 | 35.1 | 35.1 |
| Slovak Republic | 29.9 | 29.9 | 28.7 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| Slovenia | 34.6 | 43.1 | 54.0 | 22.1 | 34.6 | 34.6 | 34.6 | 43.1 |
| Spain | 28.8 | 32.6 | 37.0 | 38.2 | 28.8 | 32.6 | 32.6 | 32.6 |
| Sweden | 28.6 | 31.6 | 56.6 | 28.6 | 31.6 | 31.6 | 31.6 | 31.6 |
| Switzerland | 19.7 | 23.2 | 31.7 | 14.5 | 18.7 | 21.4 | 22.2 | 21.4 |
| Turkey ${ }^{2}$ | 32.7 | 32.7 | 38.6 | 32.7 | 32.7 | 32.7 | 32.7 | 32.7 |
| United Kingdom | 31.0 | 31.0 | 41.0 | 70.0 | 31.0 | 31.0 | 37.7 | 31.0 |
| United States | 29.4 | 39.4 | 41.4 | 49.6 | 29.4 | 29.4 | 29.4 | 29.4 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 30.6 | 34.9 | 40.3 | 34.2 | 36.4 | 34.5 | 36.1 | 34.0 |
| OECD-EU21 | 34.6 | 38.5 | 44.3 | 37.7 | 38.3 | 37.2 | 38.3 | 37.5 |

Note: ch = children.

1. Assumes a rise in gross earnings of the principal earner in the household. The outcome may differ if the wage of the spouse goes up, especially if partners are taxed individually.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family.

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Table I.19. Increase in net income after an increase of 1 currency unit in gross wages, 2010 ${ }^{1}$ By family-type and wage level (\%)

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 0.77 | 0.88 | 0.84 | 0.39 | 0.54 | 0.79 | 0.48 | 0.84 |
| Austria | 0.76 | 0.76 | 1.01 | 0.58 | 0.62 | 0.62 | 0.66 | 0.71 |
| Belgium | 0.70 | 0.78 | 0.77 | 0.54 | 0.58 | 0.61 | 0.67 | 0.69 |
| Canada | 0.90 | 0.84 | 0.88 | 0.37 | 0.38 | 0.71 | 0.74 | 0.80 |
| Chile | 1.00 | 1.00 | 0.96 | 0.99 | 0.99 | 0.98 | 1.00 | 1.00 |
| Czech Republic | 0.84 | 0.89 | 0.93 | 0.52 | 0.58 | 0.66 | 0.70 | 0.86 |
| Denmark | 0.93 | 0.94 | 0.79 | 0.66 | 0.79 | 0.85 | 0.87 | 0.91 |
| Estonia | 0.93 | 0.95 | 0.97 | 0.75 | 0.83 | 0.86 | 0.89 | 0.93 |
| Finland | 0.75 | 0.75 | 0.83 | 0.63 | 0.68 | 0.66 | 0.68 | 0.70 |
| France | 0.92 | 0.97 | 0.87 | 0.92 | 0.90 | 0.93 | 0.90 | 0.94 |
| Germany | 0.81 | 0.79 | 0.99 | 0.66 | 0.68 | 0.72 | 0.73 | 0.81 |
| Greece | 1.00 | 0.81 | 0.79 | 1.00 | 0.81 | 0.80 | 0.80 | 0.80 |
| Hungary | 0.85 | 0.67 | 0.70 | 0.66 | 0.57 | 0.56 | 0.59 | 0.64 |
| Iceland | 0.79 | 0.85 | 0.82 | 0.59 | 0.61 | 0.71 | 0.75 | 0.79 |
| Ireland | 0.80 | 0.85 | 0.70 | 0.26 | 0.26 | 0.71 | 0.75 | 0.78 |
| Israel | 0.81 | 0.77 | 0.77 | 0.85 | 0.74 | 0.72 | 0.72 | 0.74 |
| Italy | 0.83 | 0.87 | 0.80 | 0.63 | 0.73 | 0.75 | 0.79 | 0.82 |
| Japan | 0.97 | 0.93 | 0.92 | 0.85 | 0.87 | 0.89 | 0.91 | 0.92 |
| Korea | 0.98 | 0.90 | 0.96 | 0.98 | 0.92 | 0.87 | 0.87 | 0.89 |
| Luxembourg | 0.82 | 0.72 | 0.81 | 0.59 | 0.72 | 0.72 | 0.69 | 0.82 |
| Mexico | 0.88 | 0.93 | 0.89 | 0.88 | 0.93 | 0.89 | 0.91 | 0.89 |
| Netherlands | 0.78 | 0.86 | 0.81 | 0.56 | 0.68 | 0.76 | 0.78 | 0.81 |
| New Zealand | 0.94 | 0.82 | 0.84 | 0.68 | 0.48 | 0.52 | 0.56 | 0.81 |
| Norway | 0.86 | 0.78 | 0.81 | 0.72 | 0.70 | 0.71 | 0.73 | 0.75 |
| Poland | 0.96 | 0.97 | 0.98 | 1.00 | 1.00 | 0.90 | 0.92 | 0.96 |
| Portugal | 0.78 | 0.84 | 0.78 | 0.67 | 0.83 | 0.74 | 0.78 | 0.78 |
| Slovak Republic | 0.85 | 0.90 | 0.95 | 0.71 | 0.72 | 0.76 | 0.81 | 0.84 |
| Slovenia | 0.92 | 0.85 | 0.76 | 0.76 | 0.73 | 0.81 | 0.85 | 0.82 |
| Spain | 0.86 | 0.86 | 0.86 | 0.67 | 0.83 | 0.81 | 0.82 | 0.82 |
| Sweden | 0.92 | 0.91 | 0.67 | 0.80 | 0.83 | 0.82 | 0.85 | 0.88 |
| Switzerland | 0.92 | 0.91 | 0.86 | 0.82 | 0.84 | 0.83 | 0.86 | 0.91 |
| Turkey ${ }^{2}$ | 0.90 | 0.93 | 0.89 | 0.88 | 0.91 | 0.92 | 0.93 | 0.93 |
| United Kingdom | 0.89 | 0.92 | 0.84 | 0.30 | 0.85 | 0.84 | 0.79 | 0.89 |
| United States | 0.88 | 0.80 | 0.84 | 0.50 | 0.79 | 0.83 | 0.86 | 0.89 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 0.87 | 0.86 | 0.85 | 0.69 | 0.73 | 0.77 | 0.78 | 0.84 |
| OECD-EU21 | 0.85 | 0.85 | 0.84 | 0.66 | 0.72 | 0.76 | 0.78 | 0.82 |

Note: ch = children.

1. Net income is calculated as gross earnings minus personal income tax and employees' social security contributions plus family benefits. The increase reported in the Table represents a form of elasticity. In a proportional tax system, the plus elasticity would equal 1. The more progressive the system at these income levels, the lower is the elasticity.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

Table I.20. Increase in net income after an increase of $\mathbf{1}$ currency unit in gross labour cost, $\mathbf{2 0 1 0}^{1}$ By family-type and wage level (\%)

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Single } \\ 2 \mathrm{ch} \\ 67 \text { (\% AW) } \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{3} \end{gathered}$ | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 0.77 | 0.88 | 0.84 | 0.39 | 0.54 | 0.79 | 0.48 | 0.84 |
| Austria | 0.76 | 0.76 | 1.19 | 0.58 | 0.62 | 0.62 | 0.66 | 0.71 |
| Belgium | 0.67 | 0.76 | 0.78 | 0.52 | 0.56 | 0.57 | 0.65 | 0.64 |
| Canada | 0.90 | 0.85 | 0.92 | 0.37 | 0.39 | 0.72 | 0.76 | 0.82 |
| Chile | 1.00 | 1.00 | 0.96 | 0.99 | 0.99 | 0.98 | 1.00 | 1.00 |
| Czech Republic | 0.84 | 0.89 | 0.93 | 0.52 | 0.58 | 0.66 | 0.70 | 0.86 |
| Denmark | 0.93 | 0.94 | 0.79 | 0.66 | 0.79 | 0.85 | 0.87 | 0.91 |
| Estonia | 0.93 | 0.95 | 0.97 | 0.75 | 0.83 | 0.87 | 0.89 | 0.93 |
| Finland | 0.75 | 0.75 | 0.83 | 0.63 | 0.68 | 0.66 | 0.68 | 0.70 |
| France | 0.68 | 0.96 | 0.86 | 0.68 | 0.90 | 0.88 | 0.88 | 0.89 |
| Germany | 0.81 | 0.79 | 1.15 | 0.66 | 0.68 | 0.72 | 0.73 | 0.81 |
| Greece | 1.00 | 0.81 | 0.79 | 1.00 | 0.81 | 0.80 | 0.80 | 0.80 |
| Hungary | 0.85 | 0.67 | 0.70 | 0.66 | 0.57 | 0.56 | 0.59 | 0.64 |
| Iceland | 0.79 | 0.85 | 0.82 | 0.59 | 0.61 | 0.71 | 0.75 | 0.79 |
| Ireland | 0.80 | 0.85 | 0.70 | 0.26 | 0.26 | 0.71 | 0.75 | 0.77 |
| Israel | 0.80 | 0.76 | 0.77 | 0.84 | 0.73 | 0.72 | 0.71 | 0.74 |
| Italy | 0.83 | 0.87 | 0.80 | 0.63 | 0.73 | 0.75 | 0.79 | 0.82 |
| Japan | 0.97 | 0.93 | 0.98 | 0.85 | 0.87 | 0.89 | 0.91 | 0.92 |
| Korea | 0.98 | 0.90 | 0.99 | 0.98 | 0.92 | 0.87 | 0.87 | 0.89 |
| Luxembourg | 0.82 | 0.72 | 0.81 | 0.59 | 0.72 | 0.72 | 0.69 | 0.82 |
| Mexico | 0.94 | 0.96 | 0.91 | 0.94 | 0.96 | 0.94 | 0.95 | 0.94 |
| Netherlands | 0.77 | 0.85 | 0.87 | 0.55 | 0.67 | 0.75 | 0.77 | 0.80 |
| New Zealand | 0.94 | 0.82 | 0.84 | 0.68 | 0.48 | 0.52 | 0.56 | 0.81 |
| Norway | 0.86 | 0.78 | 0.81 | 0.72 | 0.70 | 0.71 | 0.73 | 0.75 |
| Poland | 0.96 | 0.97 | 0.98 | 1.00 | 1.00 | 0.90 | 0.92 | 0.96 |
| Portugal | 0.78 | 0.84 | 0.78 | 0.67 | 0.83 | 0.74 | 0.78 | 0.78 |
| Slovak Republic | 0.85 | 0.90 | 0.96 | 0.71 | 0.72 | 0.76 | 0.81 | 0.84 |
| Slovenia | 0.92 | 0.85 | 0.76 | 0.76 | 0.73 | 0.81 | 0.85 | 0.82 |
| Spain | 0.86 | 0.86 | 1.09 | 0.67 | 0.83 | 0.81 | 0.82 | 0.82 |
| Sweden | 0.92 | 0.91 | 0.67 | 0.80 | 0.83 | 0.82 | 0.85 | 0.88 |
| Switzerland | 0.92 | 0.91 | 0.86 | 0.82 | 0.84 | 0.83 | 0.86 | 0.91 |
| Turkey ${ }^{2}$ | 0.90 | 0.93 | 0.89 | 0.88 | 0.91 | 0.92 | 0.93 | 0.93 |
| United Kingdom | 0.87 | 0.91 | 0.83 | 0.29 | 0.83 | 0.81 | 0.77 | 0.87 |
| United States | 0.91 | 0.81 | 0.85 | 0.51 | 0.80 | 0.86 | 0.88 | 0.92 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 0.86 | 0.86 | 0.87 | 0.68 | 0.73 | 0.77 | 0.78 | 0.83 |
| OECD-EU21 | 0.84 | 0.85 | 0.87 | 0.65 | 0.72 | 0.75 | 0.78 | 0.81 |

Note: ch = children.

1. Net income is calculated as gross earnings minus personal income tax and employees' social security contributions plus family benefits. The increase reported in the Table represents a form of elasticity. In a proportional tax system, the plus elasticity would equal 1. The more progressive the system at these income levels, the lower is the elasticity.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
3. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

Table I.21. Annual gross wage and net income, 2010
In US dollars using PPP, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ 2 \text { ch } \\ 67(\% \mathrm{AW}) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes |
| Australia | 29461 | 24765 | 44192 | 34345 | 73653 | 52872 | 29461 | 33439 |
| Austria | 30105 | 21990 | 45157 | 30223 | 75262 | 46426 | 30105 | 28793 |
| Belgium | 32010 | 20669 | 48015 | 27804 | 80025 | 40830 | 32010 | 26541 |
| Canada | 24454 | 20206 | 36680 | 28435 | 61134 | 44824 | 24454 | 29214 |
| Chile | 9135 | 8496 | 13702 | 12743 | 22837 | 21093 | 9135 | 8587 |
| Czech Republic | 13471 | 11029 | 20207 | 15670 | 33678 | 24951 | 13471 | 15242 |
| Denmark | 31833 | 20154 | 47749 | 29459 | 79581 | 44135 | 31833 | 28303 |
| Estonia | 12195 | 10057 | 18293 | 14739 | 30489 | 24104 | 12195 | 12506 |
| Finland | 29016 | 22365 | 43523 | 30616 | 72539 | 45862 | 29016 | 26332 |
| France | 26618 | 19689 | 39927 | 28781 | 66546 | 44235 | 26618 | 22692 |
| Germany | 34907 | 22903 | 52361 | 31729 | 87268 | 49056 | 34907 | 29130 |
| Greece | 19287 | 16201 | 28930 | 22881 | 48217 | 34782 | 21215 | 17821 |
| Hungary | 12863 | 9291 | 19294 | 13238 | 32157 | 19382 | 12863 | 12019 |
| Iceland | 25838 | 20117 | 38756 | 28060 | 64594 | 43677 | 25838 | 23436 |
| Ireland | 25003 | 23057 | 37504 | 30808 | 62506 | 44057 | 25003 | 35506 |
| Israel | 20245 | 18394 | 30368 | 25604 | 50613 | 38085 | 20245 | 21011 |
| Italy | 23488 | 17370 | 35056 | 24461 | 58427 | 36678 | 23371 | 22249 |
| Japan | 28550 | 23096 | 42825 | 33991 | 71375 | 53901 | 28550 | 26442 |
| Korea | 29857 | 27106 | 44786 | 39281 | 74643 | 63433 | 29857 | 27313 |
| Luxembourg | 35652 | 28755 | 53479 | 39174 | 89131 | 58069 | 35652 | 39483 |
| Mexico | 7347 | 7338 | 11020 | 10402 | 18367 | 15914 | 7347 | 7338 |
| Netherlands | 35890 | 26190 | 53836 | 36793 | 89726 | 55903 | 35890 | 34656 |
| New Zealand | 21252 | 18227 | 31878 | 26462 | 53131 | 40754 | 21252 | 25055 |
| Norway | 34690 | 25842 | 52035 | 36849 | 86725 | 55864 | 34690 | 31025 |
| Poland | 12918 | 9900 | 19377 | 14636 | 32295 | 24109 | 12918 | 10615 |
| Portugal | 18124 | 15104 | 27185 | 20987 | 45309 | 31596 | 18124 | 17603 |
| Slovak Republic | 11939 | 9843 | 17908 | 14031 | 29846 | 22456 | 11939 | 11779 |
| Slovenia | 17566 | 12528 | 26349 | 17578 | 43916 | 26738 | 17566 | 17890 |
| Spain | 23091 | 19052 | 34637 | 27110 | 57728 | 42463 | 23091 | 21258 |
| Sweden | 27181 | 21202 | 40772 | 30673 | 67953 | 43828 | 27181 | 24192 |
| Switzerland | 33112 | 28874 | 49667 | 41756 | 82779 | 65720 | 33112 | 34328 |
| Turkey ${ }^{1}$ | 14931 | 11188 | 22397 | 16215 | 37328 | 25641 | 14931 | 11392 |
| United Kingdom | 34691 | 26855 | 52036 | 38824 | 86727 | 60744 | 34691 | 34599 |
| United States | 30459 | 24299 | 45688 | 34821 | 76147 | 53264 | 30459 | 30833 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 24035 | 18887 | 36047 | 26741 | 60078 | 41042 | 24088 | 23489 |
| OECD-EU21 | 24183 | 18295 | 36266 | 25725 | 60444 | 39067 | 24269 | 23296 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table I.21. Annual gross wage and net income, 2010 (cont.)
In US dollars using PPP, by family-type and wage level

|  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{2} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes | Total gross earnings before taxes | Net income after taxes |
| Australia | 44192 | 40073 | 58923 | 51325 | 73653 | 59698 | 58923 | 48135 |
| Austria | 45157 | 37061 | 60210 | 49192 | 75262 | 58291 | 60210 | 43138 |
| Belgium | 48015 | 37502 | 64020 | 47108 | 80025 | 53717 | 64020 | 41806 |
| Canada | 36680 | 33518 | 48907 | 41739 | 61134 | 50002 | 48907 | 39573 |
| Chile | 13702 | 12835 | 18270 | 17386 | 22837 | 21331 | 18270 | 16991 |
| Czech Republic | 20207 | 21362 | 26943 | 25158 | 33678 | 29657 | 26943 | 21664 |
| Denmark | 47749 | 34784 | 63665 | 43333 | 79581 | 52740 | 63665 | 40206 |
| Estonia | 18293 | 17002 | 24391 | 21684 | 30489 | 26366 | 24391 | 20113 |
| Finland | 43523 | 33366 | 58031 | 45995 | 72539 | 55731 | 58031 | 43245 |
| France | 39927 | 32817 | 53236 | 43487 | 66546 | 51686 | 53236 | 39382 |
| Germany | 52361 | 41889 | 69814 | 51639 | 87268 | 60743 | 69814 | 45806 |
| Greece | 34716 | 27339 | 46288 | 37059 | 57860 | 46335 | 42431 | 33639 |
| Hungary | 19294 | 15690 | 25725 | 21028 | 32157 | 24981 | 25725 | 18576 |
| Iceland | 38756 | 34030 | 51675 | 41388 | 64594 | 48864 | 51675 | 40080 |
| Ireland | 37504 | 39573 | 50005 | 49236 | 62506 | 58044 | 50005 | 45057 |
| Israel | 30368 | 26714 | 40491 | 36482 | 50613 | 45845 | 40491 | 35372 |
| Italy | 35056 | 28805 | 46741 | 37287 | 58427 | 44414 | 46741 | 34611 |
| Japan | 42825 | 37974 | 57100 | 49370 | 71375 | 60580 | 57100 | 45876 |
| Korea | 44786 | 40426 | 59714 | 53908 | 74643 | 67316 | 59714 | 53007 |
| Luxembourg | 53479 | 52711 | 71305 | 66826 | 89131 | 78240 | 71305 | 58669 |
| Mexico | 11020 | 10402 | 14694 | 14455 | 18367 | 17740 | 14694 | 14455 |
| Netherlands | 53836 | 41125 | 71781 | 55581 | 89726 | 67368 | 71781 | 51889 |
| New Zealand | 31878 | 32151 | 42505 | 39326 | 53131 | 45782 | 42505 | 35763 |
| Norway | 52035 | 40741 | 69380 | 53625 | 86725 | 65273 | 69380 | 51044 |
| Poland | 19377 | 15923 | 25836 | 20993 | 32295 | 25729 | 25836 | 19800 |
| Portugal | 27185 | 24598 | 36247 | 31884 | 45309 | 37465 | 36247 | 30208 |
| Slovak Republic | 17908 | 17435 | 23877 | 21924 | 29846 | 25810 | 23877 | 19988 |
| Slovenia | 26349 | 23599 | 35133 | 28384 | 43916 | 33668 | 35133 | 24420 |
| Spain | 34637 | 29709 | 46182 | 38572 | 57728 | 47461 | 46182 | 37922 |
| Sweden | 40772 | 33662 | 54363 | 45154 | 67953 | 54864 | 54363 | 42165 |
| Switzerland | 49667 | 48371 | 66223 | 62483 | 82779 | 75379 | 66223 | 57366 |
| Turkey ${ }^{1}$ | 22397 | 16555 | 29863 | 21764 | 37328 | 26929 | 29863 | 21560 |
| United Kingdom | 52036 | 42320 | 69381 | 57207 | 86727 | 68451 | 69381 | 53710 |
| United States | 45688 | 40936 | 60917 | 51691 | 76147 | 62447 | 60917 | 48203 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 36217 | 31265 | 48289 | 40402 | 60362 | 48498 | 48176 | 37454 |
| OECD-EU21 | 36542 | 30870 | 48723 | 39940 | 60903 | 47703 | 48539 | 36477 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
2. Two-earner family.

Table I.22. Annual labour costs and net income, 2010
In US dollars using PPP, by family-type and wage level

|  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 67(\% \text { AW }) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 100(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ \text { no ch } \\ 167 \text { (\% AW) } \end{gathered}$ |  | $\begin{gathered} \text { Single } \\ 2 \text { ch } \\ 67(\% \mathrm{AW}) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes |
| Australia | 31292 | 24765 | 46938 | 34345 | 78229 | 52872 | 31292 | 33439 |
| Austria | 38874 | 21990 | 58311 | 30223 | 95502 | 46426 | 38874 | 28793 |
| Belgium | 40937 | 20669 | 62331 | 27804 | 103649 | 40830 | 40937 | 26541 |
| Canada | 27244 | 20206 | 40907 | 28435 | 66591 | 44824 | 27244 | 29214 |
| Chile | 9135 | 8496 | 13702 | 12743 | 22837 | 21093 | 9135 | 8587 |
| Czech Republic | 18052 | 11029 | 27077 | 15670 | 45129 | 24951 | 18052 | 15242 |
| Denmark | 31833 | 20154 | 47749 | 29459 | 79581 | 44135 | 31833 | 28303 |
| Estonia | 16391 | 10057 | 24586 | 14739 | 40977 | 24104 | 16391 | 12506 |
| Finland | 35486 | 22365 | 53229 | 30616 | 88715 | 45862 | 35486 | 26332 |
| France | 36603 | 19689 | 56819 | 28781 | 94909 | 44235 | 36603 | 22692 |
| Germany | 41653 | 22903 | 62479 | 31729 | 100950 | 49056 | 41653 | 29130 |
| Greece | 24699 | 16201 | 37048 | 22881 | 61746 | 34782 | 27168 | 17821 |
| Hungary | 16529 | 9291 | 24793 | 13238 | 41321 | 19382 | 16529 | 12019 |
| Iceland | 28073 | 20117 | 42109 | 28060 | 70181 | 43677 | 28073 | 23436 |
| Ireland | 27690 | 23057 | 41535 | 30808 | 69226 | 44057 | 27690 | 35506 |
| Israel | 21100 | 18394 | 31773 | 25604 | 53117 | 38085 | 21100 | 21011 |
| Italy | 31022 | 17370 | 46302 | 24461 | 77170 | 36678 | 30868 | 22249 |
| Japan | 32478 | 23096 | 48716 | 33991 | 80828 | 53901 | 32478 | 26442 |
| Korea | 32795 | 27106 | 49192 | 39281 | 80986 | 63433 | 32795 | 27313 |
| Luxembourg | 39756 | 28755 | 59634 | 39174 | 99390 | 58069 | 39756 | 39483 |
| Mexico | 8368 | 7338 | 12315 | 10402 | 20224 | 15914 | 8368 | 7338 |
| Netherlands | 39379 | 26190 | 59437 | 36793 | 96072 | 55903 | 39379 | 34656 |
| New Zealand | 21252 | 18227 | 31878 | 26462 | 53131 | 40754 | 21252 | 25055 |
| Norway | 39130 | 25842 | 58696 | 36849 | 97826 | 55864 | 39130 | 31025 |
| Poland | 14827 | 9900 | 22241 | 14636 | 37068 | 24109 | 14827 | 10615 |
| Portugal | 22428 | 15104 | 33642 | 20987 | 56070 | 31596 | 22428 | 17603 |
| Slovak Republic | 15066 | 9843 | 22600 | 14031 | 37592 | 22456 | 15066 | 11779 |
| Slovenia | 20394 | 12528 | 30592 | 17578 | 50986 | 26738 | 20394 | 17890 |
| Spain | 29995 | 19052 | 44993 | 27110 | 73762 | 42463 | 29995 | 21258 |
| Sweden | 35722 | 21202 | 53583 | 30673 | 89304 | 43828 | 35722 | 24192 |
| Switzerland | 35115 | 28874 | 52672 | 41756 | 87787 | 65720 | 35115 | 34328 |
| Turkey ${ }^{1}$ | 17395 | 11188 | 26092 | 16215 | 43487 | 25641 | 17395 | 11392 |
| United Kingdom | 38021 | 26855 | 57587 | 38824 | 96718 | 60744 | 38021 | 34599 |
| United States | 33664 | 24299 | 50058 | 34821 | 82847 | 53264 | 33664 | 30833 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 28012 | 18887 | 42106 | 26741 | 69821 | 41042 | 28080 | 23489 |
| OECD-EU21 | 29303 | 18295 | 44122 | 25725 | 73135 | 39067 | 29413 | 23296 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table I.22. Annual labour costs and net income, 2010 (cont.)
In US dollars using PPP, by family-type and wage level

|  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-0(\% \mathrm{AW}) \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ 2 \mathrm{ch} \\ 100-67(\% \mathrm{AW})^{2} \end{gathered}$ |  | $\begin{gathered} \text { Married } \\ \text { no ch } \\ 100-33(\% \mathrm{AW})^{2} \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes | Total gross labour costs before taxes | Net income after taxes |
| Australia | 46938 | 40073 | 62583 | 51325 | 78229 | 59698 | 62583 | 48135 |
| Austria | 58311 | 37061 | 77748 | 49192 | 97185 | 58291 | 77748 | 43138 |
| Belgium | 62331 | 37502 | 79945 | 47108 | 103267 | 53717 | 79945 | 41806 |
| Canada | 40907 | 33518 | 54458 | 41739 | 68151 | 50002 | 54458 | 39573 |
| Chile | 13702 | 12835 | 18270 | 17386 | 22837 | 21331 | 18270 | 16991 |
| Czech Republic | 27077 | 21362 | 36103 | 25158 | 45129 | 29657 | 36103 | 21664 |
| Denmark | 47749 | 34784 | 63665 | 43333 | 79581 | 52740 | 63665 | 40206 |
| Estonia | 24586 | 17002 | 32872 | 21684 | 40977 | 26366 | 32872 | 20113 |
| Finland | 53229 | 33366 | 70972 | 45995 | 88715 | 55731 | 70972 | 43245 |
| France | 56819 | 32817 | 72297 | 43487 | 93422 | 51686 | 72297 | 39382 |
| Germany | 62479 | 41889 | 83306 | 51639 | 104132 | 60743 | 83306 | 45806 |
| Greece | 44457 | 27339 | 59276 | 37059 | 74096 | 46335 | 54337 | 33639 |
| Hungary | 24793 | 15690 | 33057 | 21028 | 41321 | 24981 | 33057 | 18576 |
| Iceland | 42109 | 34030 | 56145 | 41388 | 70181 | 48864 | 56145 | 40080 |
| Ireland | 41535 | 39573 | 55099 | 49236 | 69226 | 58044 | 55099 | 45057 |
| Israel | 31773 | 26714 | 42285 | 36482 | 52873 | 45845 | 42285 | 35372 |
| Italy | 46302 | 28805 | 61736 | 37287 | 77170 | 44414 | 61736 | 34611 |
| Japan | 48716 | 37974 | 64955 | 49370 | 81194 | 60580 | 64955 | 45876 |
| Korea | 49192 | 40426 | 65590 | 53908 | 81987 | 67316 | 65590 | 53007 |
| Luxembourg | 59634 | 52711 | 79512 | 66826 | 99390 | 78240 | 79512 | 58669 |
| Mexico | 12315 | 10402 | 16769 | 14455 | 20683 | 17740 | 16769 | 14455 |
| Netherlands | 59437 | 41125 | 78843 | 55581 | 98815 | 67368 | 78843 | 51889 |
| New Zealand | 31878 | 32151 | 42505 | 39326 | 53131 | 45782 | 42505 | 35763 |
| Norway | 58696 | 40741 | 78261 | 53625 | 97826 | 65273 | 78261 | 51044 |
| Poland | 22241 | 15923 | 29655 | 20993 | 37068 | 25729 | 29655 | 19800 |
| Portugal | 33642 | 24598 | 44856 | 31884 | 56070 | 37465 | 44856 | 30208 |
| Slovak Republic | 22600 | 17435 | 30133 | 21924 | 37666 | 25810 | 30133 | 19988 |
| Slovenia | 30592 | 23599 | 40789 | 28384 | 50986 | 33668 | 40789 | 24420 |
| Spain | 44993 | 29709 | 59990 | 38572 | 74988 | 47461 | 59990 | 37922 |
| Sweden | 53583 | 33662 | 71443 | 45154 | 89304 | 54864 | 71443 | 42165 |
| Switzerland | 52672 | 48371 | 70230 | 62483 | 87787 | 75379 | 70230 | 57366 |
| Turkey ${ }^{1}$ | 26092 | 16555 | 34790 | 21764 | 43487 | 26929 | 34790 | 21560 |
| United Kingdom | 57587 | 42320 | 76043 | 57207 | 95608 | 68451 | 76043 | 53710 |
| United States | 50058 | 40936 | 67328 | 51691 | 83722 | 62447 | 67328 | 48203 |
| Unweighted average |  |  |  |  |  |  |  |  |
| OECD-average | 42324 | 31265 | 56221 | 40402 | 70477 | 48498 | 56076 | 37454 |
| OECD-EU21 | 44475 | 30870 | 58921 | 39940 | 74006 | 47703 | 58686 | 36477 |

Note: ch = children.

1. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).
2. Two-earner family.

## PART II

## Tax burden trends 2000-11

This Section presents detailed results of the evolution of the tax burden between 2000 and 2011. It provides information for each of the OECD countries on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers over this period.

## 1. Historical trends

The evolution of the tax burden for the eight family types over the period 2000 to 2011 is presented in Tables II. 1 to II.8. Each of the Tables II. 1 to II. 8 corresponds to a particular family type and each is divided into three parts:

- part a.-tables containing the (average) tax wedge comprising income taxes plus employee and employer social security contributions (including any applicable payroll taxes) less cash benefits;
- part b.-tables providing the (average) burden of personal income taxes; and the
- part c.-tables depicting the (average) burden of income taxes plus employee social security contributions less cash benefits (net personal average tax rates).

The discussion will focus on the main observable trends over the period and highlights selected important year-to-year changes.

The OECD average tax wedge, the income tax burden and the net tax burden (personal income tax plus social security contributions less cash benefits) have all declined between 2000 and 2011 for each of the selected family types.

## 2. Tax wedge

Focusing on the overall (average) tax wedge (a.-tables), there are thirteen OECD member countries with a reduction of more than five percentage points between 2000 and 2011 for at least one of the family types - Australia, Canada, Denmark, Finland, Hungary, Ireland, Israel, the Netherlands, New Zealand, Poland, the Slovak Republic, Sweden and the United Kingdom. The largest decline is observed in Ireland where single parents have benefited from a reduction in the wedge of 23.7 percentage points. Married couple with two children on average earnings and 133 per cent of the average wage in Ireland also enjoyed reductions of 8.4 and 7 percentage points respectively. In New Zealand, married couples with two children earning the average wage level and single parents at 67 per cent of the average wage level enjoyed a reduction of more than 14 percentage points in the wedge.

A reduction of seven percentage points or more in the tax wedge for at least one family-type was observed in six other countries - Australia, Hungary, Israel, the Netherlands, Sweden and the United Kingdom. In Australia, the largest decreases were for the single parents earning 67 per cent of the average wage level and the one-earner married couples with children at the average earnings ( -9.5 and -8.2 percentage points respectively). In Hungary, all the family types saw reductions of 5.3 percentage points or more. The largest decreases were for single parents earning 67 per cent of the average wage level ( -13.8 percentage points), the one-earner married couples with 2 children at average earnings ( -11.1 percentage points), the two-earning married couples with children where the spouse is earning 33 per cent of the average wage level ( -10.5 percentage points), the two-earning married couples with children where the spouse is earning 67 per cent of the average wage level ( -9.2 percentage points) and the single workers earning 167 per cent of the average wage level ( -7.5 percentage points). In Israel, the tax wedge decreased with
more than 7 percentage points for all the household types except for the single parents earning 67 per cent of the average wage level ( -1.62 percentage points). In the Netherlands, single parents earning 67 per cent of the average wage level ( -14.8 percentage points) and single workers earning 67 per cent of the average wage ( -9.1 percentage points) benefited most from the reduction in the tax wedge. In Sweden, all but one of the families enjoyed a reduction in the tax wedge of 7 to 8 percentage points, the exception being the single workers earning 167 per cent of the average wage level ( -4.9 percentage points). In the United Kingdom, only the single parents earning 67 per cent of the average wage benefit from a reduction of more than 7 percentage points of the tax wedge ( -7.9 percentage points). It is interesting to note that in Iceland the single worker earning 167 per cent of the average wage level enjoyed a reduction in the tax wedge ( -1.3 percentage points), while the tax burden increased by more than 5 percentage points for all the other family types and notably by 12.8 percentage points for the single parents earning 67 per cent of the average wage.

The tax wedge has decreased for all family types in sixteen of the OECD member countries (Australia, Belgium, Canada, Denmark, Finland, Germany, Hungary, Israel, Luxembourg, New Zealand, Poland, the Slovak Republic, Slovenia, Sweden, Switzerland and the United States) while it has increased across all family types in four countries (Austria, Korea, Mexico and Spain).

## 3. Average income tax rate

Between 2000 and 2011, the average income tax burden (b.-tables) has decreased for all family types in fourteen of the OECD member countries: Australia, Belgium, Canada, Denmark, Estonia, Finland, Germany, Hungary, New Zealand, Slovenia, Sweden, Turkey, the United Kingdom and the United States. The most significant reductions affecting all of the family types are noted in Sweden where all the family types enjoyed decreases of around $9-10$ percentage points except the single taxpayer earning 167 per cent of the average wage level where the decrease was -5.6 percentage points. In Estonia, the average income tax burden has decreased by at least five percentage points for all family types with single parents at 67 per cent of the average wage enjoying an income tax reduction of 10.5 percentage points. In Hungary, all families also enjoyed an average income tax rate reduction of more than 5 percentage points with a significant decrease of at least 10 percentage points for the single parents earning 67 per cent of the average wage level and the one-earner married couples with children earning the average wage. The income tax burden diminished by between 4 and 7 percentage points in all but one of the family types in Australia, the exception being the single worker with two children where the decrease was -1.2 per cent. Other decreases of more than 5 percentage points were observed in Canada (from -5 to -6.5 percentage points for families with children except where the earnings are 167 per cent of the average wage), Denmark ( -5.6 percentage points for the single workers earning 167 per cent of the average wage), Finland (where the decrease was between -4.5 and -5.2 percentage points for all the eight family types) and New Zealand ( -5.6 percentage points for the single workers earnings 67 per cent of the average wage without children). In the United Kingdom, a notable reduction of the average income tax burden is observed for the single parents earning 67 per cent of the average wage level ( -10.6 percentage points). The decrease is less significant for the other family types ranging from -3.4 to -0.5 percentage points. Reductions of less than 5 percentage points in average income tax rates are observed for all family types in Belgium, Germany, Slovenia, Turkey and the United States.

There are thirteen other OECD member countries with reductions in the personal income tax in some family types: Chile, the Czech Republic, France, Iceland, Ireland, Israel, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic and Switzerland. In three of those countries the reductions in average income tax rates exceeded six percentage points: the Czech Republic ( -8.6 percentage points for the one-earner married couples with children at the average wage level and -6.3 percentage points for the single parents earning 67 per cent of the average), the Slovak Republic ( -7.3 percentage points for the one-earner married couples at the average wage level with children). The average income tax rate decreased by 6 to 10 percentage points in Israel for all family types except for single parents at 67 per cent of the average wage who do not have to pay income taxes. In the Netherlands, there was a small reduction for the single person on 67 per cent of average earnings but increases for all the other family types including one of 11 percentage points for the one-earner married couple with two children.

At the other extreme, the personal income tax burden has increased across all family types in five OECD member countries: Austria, Japan, Korea, Mexico and Spain. In Mexico the increases were in the range 4 to 6 percentage points for each family type. In contrast, in Chile the average income tax burden slightly increased only for the single worker earning 167 per cent of the average wage level ( 0.3 percentage points). The average income tax rates stayed constant for the other family types since they do not pay income taxes.

## 4. Net personal average tax rate

The net tax burden takes into account personal income taxes and employee social security contributions as well as cash benefits (c.-tables). It decreased between 2000 and 2011 for all family types in twelve OECD countries: Australia, Canada, Denmark, Finland, Germany, Hungary, Israel, New Zealand, Poland, Sweden, Switzerland and the United States. Of these, the most significant reductions were observed in Sweden, ranging from -9.8 percentage points (the two-earning married couples without children where the spouse is earning 33 per cent of the average wage) to -5.7 percentage points (single taxpayer earning 167 per cent of the average wage level). In Australia, the net personal average tax burden has significantly decreased for most family types, notably by 9.7 percentage points for single parents earning 67 per cent of the average wage and 8.3 percentage points for one-earner married couples at average earnings with children. Significant reductions were also observed in Israel for all but one family type (reductions ranging between 7.3 and 9.5 percentage points), the exception being single parents earning 67 per cent of the average wage where the reduction was only 0.9 percentage points. The net personal average tax rate also decreased strongly in Ireland for most families with children and especially for single parents at 67 per cent of the average wage ( -28.5 percentage points), in the Netherlands and the United Kingdom for the single parents earning 67 per cent of the average wage level ( -11.3 percentage points and -9.1 percentage points respectively) and in New Zealand for families with children and especially if these families have low earnings (single parents at 67 per cent of the average wage enjoyed a reduction of 15.4 percentage points).

There are six other OECD member countries with reductions in the net personal average tax rate exceeding five percentage points in some family types: Canada, Denmark, Finland, Germany, Hungary and Poland. In both Canada and Hungary, there were reductions of over 7 percentage points for the single parents at 67 per cent of the average wage and between 5 and 7 percentage points for one-earner married couples with two
children. In Denmark, there were reductions for single workers at the average wage level and at 167 per cent of it of -5.8 and -6.7 percentage points respectively. In Poland, the reduction for the tow-earning married couples with children at 167 per cent of the average wage was -6.5 percentage points.

Between 2000 and 2011, an increase of five or more percentage points in the net tax burden for one or more family types is only observed in six countries. In all of these, the Czech Republic, Estonia, Iceland, Mexico, Norway and the Slovak Republic, the single parents earning 67 per cent of the average wage saw increases of between 5 and 10 percentage points. There were increases of similar size for other family types in two countries. In Iceland, one-earner married couples with children at the average wage also saw an increase of 5.3 percentage points. In Mexico there were increases for the single workers earning 67 per cent of the average wage of 5.9 percentage points and for two-earner married couples with 133 per cent of the average wage with and without children of 5.2 percentage points.

## 5. Progressivity

In the discussion of the results for 2011, attention was paid to how they can be used to assess the progressivity of personal income taxes and the results presented in Part II can also be used to look at the evolution of this measure.

The degree of progressivity of the personal income tax system can be assessed by comparing the burden faced by single persons earning 67 per cent of the average wage with that faced by their counterparts earning 167 per cent of the average wage. Hence Table II.1b is compared with Table II.3b. For all OECD countries and for all years the lower paid worker always pays a lower percentage of income in personal income tax than the higher paid worker.

On average, the progressivity of the personal income taxes has not changed drastically in OECD countries. Comparing the situation in each OECD country, personal income taxes have become more progressive in nineteen countries. The most significant reductions were in Israel, where the burden of the lower paid worker was about 44 per cent of the higher paid worker in 2000 and 25 per cent in 2011; in New Zealand where the corresponding reduction was from 77 per cent to 59 per cent; and in Sweden, where it was from about 68 per cent to about 49 per cent.

Personal income taxes have become slightly less progressive (using this measure) in eleven OECD countries: Austria, Denmark, France, Hungary, Iceland, Italy, Japan, Korea, Norway, Poland and Spain. The most significant change occurred in Iceland where the burden of the lower paid worker was about 54 per cent the higher paid worker in 2000 and about 69 per cent in 2011.

## 6. Families

The results presented in Tables II. 5 and II. 2 can be used to compare the tax burdens faced by a one-earner married couple with two children at the average wage and the single worker without children at the same income level. Focusing on the net tax burden (personal income tax plus employee social security contributions less cash benefits which can be found in Part c. of the Tables), one observes that the OECD average fiscal savings for the married couple compared with the single worker increased slightly between 2000 and 2011 (about 1 percentage point).

The savings for the one-earner married couple have increased in eighteen countries and declined in fourteen others. There were three countries where the fiscal savings have increased by more than 5 percentage points; in New Zealand increasing by 11.3 percentage points from 5.8 to 17.1 per cent of income and in Ireland and Hungary where the increases were between 6 and 7 percentage points.

Table II.1a. Income tax plus employee and employer contributions less cash benefits, single persons, $67 \%$ of average earnings
Tax burden as a \% of labour costs, single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 25.8 | 24.7 | 24.6 | 25.1 | 24.7 | 23.7 | 21.9 | 20.7 | 20.9 | 20.6 |
| Austria | 43.2 | 43.5 | 44.0 | 43.3 | 43.7 | 44.2 | 44.5 | 43.2 | 43.4 | 43.7 |
| Belgium | 51.3 | 49.6 | 49.0 | 49.3 | 49.4 | 49.6 | 50.2 | 49.4 | 49.5 | 49.7 |
| Canada | 27.8 | 27.2 | 27.5 | 27.4 | 27.4 | 26.5 | 26.6 | 26.1 | 25.8 | 26.1 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 41.3 | 41.7 | 41.9 | 42.0 | 40.0 | 40.5 | 40.1 | 38.7 | 38.9 | 39.5 |
| Denmark | 40.8 | 39.4 | 38.9 | 38.9 | 38.9 | 38.9 | 38.5 | 38.0 | 36.7 | 36.8 |
| Estonia | 39.8 | 40.9 | 39.6 | 38.1 | 37.3 | 37.6 | 37.0 | 37.7 | 38.6 | 38.8 |
| Finland | 43.0 | 40.0 | 39.4 | 39.5 | 38.8 | 38.6 | 38.6 | 37.1 | 37.0 | 37.2 |
| France | 47.4 | 45.0 | 42.4 | 41.8 | 45.8 | 45.8 | 46.0 | 45.9 | 46.2 | 46.5 |
| Germany | 47.5 | 47.9 | 46.9 | 47.3 | 47.4 | 47.0 | 46.6 | 46.0 | 45.0 | 45.6 |
| Greece ${ }^{1}$ | 34.3 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | .. |
| Hungary | 51.4 | 44.5 | 44.8 | 43.1 | 43.3 | 46.0 | 46.7 | 46.2 | 43.8 | 45.2 |
| Iceland | 23.8 | 27.1 | 27.7 | 28.2 | 28.2 | 27.0 | 27.6 | 26.1 | 28.3 | 29.2 |
| Ireland | 18.1 | 16.5 | 19.5 | 16.8 | 16.1 | 14.9 | 15.0 | 16.2 | 16.7 | 21.3 |
| Israel | 22.3 | 20.3 | 18.1 | 17.5 | 15.4 | 16.0 | 14.3 | 13.3 | 12.8 | 13.0 |
| Italy | 43.6 | 41.9 | 42.2 | 42.5 | 42.7 | 42.8 | 43.2 | 43.5 | 44.0 | 44.5 |
| Japan | 23.4 | 26.1 | 26.1 | 26.5 | 27.4 | 27.8 | 28.0 | 27.8 | 28.9 | 29.5 |
| Korea | 15.0 | 15.1 | 15.5 | 15.6 | 16.0 | 16.8 | 17.3 | 16.9 | 17.3 | 17.7 |
| Luxembourg | 31.1 | 27.8 | 28.1 | 28.7 | 29.1 | 29.9 | 28.2 | 27.4 | 27.7 | 29.2 |
| Mexico | 7.5 | 12.0 | 10.5 | 10.0 | 10.6 | 11.1 | 10.9 | 11.9 | 12.3 | 13.2 |
| Netherlands | 42.2 | 40.1 | 40.8 | 41.6 | 33.2 | 33.4 | 34.0 | 33.3 | 33.5 | 33.1 |
| New Zealand | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 18.0 | 15.5 | 14.2 | 12.9 |
| Norway | 35.1 | 34.9 | 35.0 | 34.2 | 34.3 | 34.2 | 34.1 | 33.9 | 34.0 | 34.2 |
| Poland | 37.0 | 37.0 | 37.2 | 37.5 | 37.8 | 37.1 | 33.6 | 33.1 | 33.2 | 33.4 |
| Portugal | 33.2 | 32.8 | 32.8 | 32.1 | 32.3 | 32.9 | 32.9 | 32.7 | 32.7 | 33.1 |
| Slovak Republic | 40.6 | 40.8 | 39.2 | 34.8 | 35.2 | 35.5 | 36.0 | 34.4 | 34.7 | 36.1 |
| Slovenia | 42.6 | 43.5 | 43.6 | 41.8 | 41.3 | 40.9 | 40.3 | 39.7 | 38.6 | 38.6 |
| Spain | 34.8 | 34.8 | 35.3 | 35.7 | 35.9 | 35.7 | 34.0 | 34.3 | 36.5 | 36.6 |
| Sweden | 48.6 | 47.0 | 47.2 | 46.6 | 45.9 | 43.3 | 42.5 | 41.3 | 40.6 | 40.7 |
| Switzerland | 18.9 | 18.4 | 18.1 | 18.1 | 18.1 | 18.3 | 17.7 | 17.7 | 17.8 | 18.0 |
| Turkey ${ }^{2}$ | 39.1 | 41.0 | 41.9 | 41.9 | 41.8 | 41.8 | 37.8 | 35.0 | 35.7 | 35.4 |
| United Kingdom | 29.1 | 30.3 | 30.5 | 30.5 | 30.6 | 30.8 | 29.7 | 29.1 | 29.4 | 28.5 |
| United States | 28.3 | 27.8 | 27.7 | 27.6 | 27.7 | 27.8 | 27.0 | 27.6 | 27.8 | 27.2 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 33.3 | 32.9 | 32.8 | 32.5 | 32.3 | 32.3 | 31.8 | 31.2 | 31.3 | 31.6 |
| OECD-EU21 | 40.0 | 39.0 | 38.9 | 38.4 | 38.1 | 38.1 | 37.7 | 37.2 | 37.2 | 37.9 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.1b. Income tax, single persons, $67 \%$ of average earnings
Tax burden as a \% of gross wage earnings of single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 21.1 | 20.2 | 20.1 | 20.6 | 20.2 | 19.1 | 17.2 | 15.7 | 15.9 | 15.9 |
| Austria | 7.5 | 9.0 | 9.7 | 8.7 | 9.3 | 9.8 | 10.3 | 8.6 | 8.9 | 9.2 |
| Belgium | 22.7 | 21.7 | 21.6 | 21.7 | 21.6 | 21.8 | 22.1 | 21.3 | 21.5 | 21.7 |
| Canada | 15.1 | 13.9 | 13.9 | 13.0 | 13.0 | 12.2 | 12.4 | 11.9 | 11.6 | 11.7 |
| Chile | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 8.2 | 8.8 | 9.0 | 9.2 | 6.6 | 7.2 | 6.6 | 6.9 | 7.1 | 7.9 |
| Denmark | 27.6 | 27.2 | 26.7 | 26.6 | 26.7 | 26.8 | 26.5 | 25.9 | 25.1 | 25.2 |
| Estonia | 19.9 | 20.1 | 18.4 | 16.3 | 15.8 | 16.2 | 15.5 | 14.9 | 14.7 | 14.9 |
| Finland | 21.2 | 19.6 | 18.8 | 18.8 | 17.5 | 17.2 | 17.7 | 16.4 | 15.9 | 16.0 |
| France | 12.3 | 12.2 | 12.1 | 12.4 | 12.4 | 12.2 | 12.3 | 12.2 | 12.3 | 12.4 |
| Germany | 16.3 | 15.9 | 15.0 | 14.9 | 14.9 | 15.2 | 15.5 | 14.9 | 13.9 | 14.0 |
| Greece ${ }^{1}$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | . |
| Hungary | 17.5 | 11.2 | 10.8 | 8.7 | 9.0 | 10.1 | 11.0 | 11.7 | 10.8 | 12.0 |
| Iceland | 19.9 | 22.6 | 23.3 | 23.9 | 23.9 | 22.9 | 23.0 | 20.7 | 21.4 | 22.4 |
| Ireland | 11.1 | 6.9 | 6.3 | 5.2 | 4.4 | 3.1 | 3.1 | 4.4 | 5.0 | 8.8 |
| Israel | 11.2 | 9.0 | 6.7 | 6.1 | 5.8 | 6.6 | 4.9 | 4.3 | 3.6 | 3.8 |
| Italy | 15.2 | 13.5 | 13.9 | 14.3 | 15.2 | 15.0 | 15.6 | 15.8 | 16.6 | 17.2 |
| Japan | 5.5 | 5.2 | 5.3 | 5.2 | 5.7 | 6.4 | 6.3 | 6.3 | 6.1 | 6.1 |
| Korea | 0.7 | 0.9 | 1.0 | 1.0 | 1.1 | 1.5 | 1.7 | 1.3 | 1.4 | 1.4 |
| Luxembourg | 10.2 | 6.5 | 6.8 | 7.2 | 7.8 | 8.3 | 8.1 | 6.8 | 7.2 | 7.5 |
| Mexico | -6.1 | -3.3 | -2.7 | -3.3 | -2.8 | -2.3 | -2.6 | -1.5 | -1.1 | -0.2 |
| Netherlands | 5.3 | 3.3 | 3.5 | 4.2 | 4.4 | 4.8 | 5.2 | 5.4 | 5.3 | 5.2 |
| New Zealand | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 18.0 | 15.5 | 14.2 | 12.9 |
| Norway | 18.9 | 18.8 | 18.8 | 17.8 | 17.8 | 17.9 | 17.9 | 17.7 | 17.7 | 17.8 |
| Poland | 5.3 | 4.8 | 4.9 | 5.0 | 5.2 | 5.5 | 6.0 | 5.4 | 5.5 | 5.7 |
| Portugal | 6.3 | 5.8 | 5.8 | 4.9 | 5.2 | 6.0 | 6.0 | 5.7 | 5.7 | 6.3 |
| Slovak Republic | 6.0 | 5.4 | 4.4 | 4.3 | 4.9 | 5.1 | 5.9 | 3.8 | 4.2 | 6.0 |
| Slovenia | 10.2 | 10.2 | 10.2 | 8.1 | 8.0 | 7.9 | 8.0 | 7.9 | 6.6 | 6.7 |
| Spain | 8.5 | 8.5 | 9.2 | 9.6 | 10.0 | 10.0 | 7.8 | 8.4 | 11.1 | 11.3 |
| Sweden | 24.7 | 22.6 | 22.9 | 22.2 | 21.5 | 17.9 | 16.9 | 15.8 | 15.0 | 15.1 |
| Switzerland | 7.0 | 6.9 | 7.1 | 7.1 | 7.1 | 7.4 | 6.7 | 6.7 | 6.7 | 6.8 |
| Turkey ${ }^{2}$ | 13.2 | 13.4 | 14.4 | 14.5 | 14.2 | 14.3 | 10.2 | 9.3 | 10.1 | 9.8 |
| United Kingdom | 15.1 | 15.3 | 15.4 | 15.4 | 15.5 | 15.6 | 14.6 | 14.2 | 14.3 | 13.5 |
| United States | 14.9 | 14.4 | 14.4 | 14.3 | 14.4 | 14.5 | 13.6 | 12.3 | 12.6 | 14.0 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 12.1 | 11.5 | 11.4 | 11.1 | 11.0 | 11.0 | 10.7 | 10.2 | 10.2 | 10.9 |
| OECD-EU21 | 12.9 | 11.8 | 11.7 | 11.3 | 11.2 | 11.2 | 11.2 | 10.8 | 10.8 | 11.8 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

StatLink nilisk http://dx.doi.org/10.1787/888932589164

## Table II.1c. Income tax plus employee contributions less cash benefits, single persons, 67\% of average earnings

Tax burden as a \% of gross wage earnings, single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 21.1 | 20.2 | 20.1 | 20.6 | 20.2 | 19.1 | 17.2 | 15.7 | 15.9 | 15.9 |
| Austria | 25.6 | 27.0 | 27.7 | 26.7 | 27.3 | 27.9 | 28.4 | 26.6 | 27.0 | 27.3 |
| Belgium | 35.8 | 34.8 | 34.7 | 35.0 | 35.1 | 35.3 | 36.0 | 35.2 | 35.4 | 35.6 |
| Canada | 19.6 | 19.0 | 19.1 | 19.0 | 18.9 | 18.0 | 18.2 | 17.7 | 17.4 | 17.5 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 20.7 | 21.3 | 21.5 | 21.7 | 19.1 | 19.7 | 19.1 | 17.9 | 18.1 | 18.9 |
| Denmark | 40.9 | 39.4 | 38.9 | 38.9 | 38.9 | 38.9 | 38.5 | 38.0 | 36.7 | 36.8 |
| Estonia | 19.9 | 21.1 | 19.4 | 17.3 | 16.4 | 16.8 | 16.1 | 16.7 | 17.5 | 17.7 |
| Finland | 28.1 | 25.7 | 24.8 | 25.0 | 24.2 | 23.8 | 23.8 | 22.6 | 22.9 | 23.1 |
| France | 25.7 | 25.8 | 25.7 | 26.0 | 26.0 | 25.9 | 26.0 | 25.9 | 26.0 | 26.1 |
| Germany | 36.8 | 36.9 | 35.8 | 36.3 | 36.6 | 36.4 | 36.2 | 35.5 | 34.4 | 34.9 |
| Greece ${ }^{1}$ | 15.9 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | .. |
| Hungary | 30.0 | 23.7 | 24.3 | 22.2 | 23.3 | 27.1 | 28.0 | 28.7 | 27.8 | 29.5 |
| Iceland | 20.1 | 22.9 | 23.5 | 24.1 | 24.1 | 23.1 | 23.7 | 21.5 | 22.1 | 23.1 |
| Ireland | 11.1 | 9.4 | 10.9 | 7.9 | 7.0 | 5.8 | 5.9 | 7.2 | 7.8 | 12.8 |
| Israel | 18.5 | 15.5 | 13.3 | 12.8 | 11.1 | 12.2 | 10.6 | 9.8 | 9.1 | 9.4 |
| Italy | 24.4 | 22.7 | 23.0 | 23.5 | 24.3 | 24.5 | 25.0 | 25.3 | 26.0 | 26.7 |
| Japan | 15.5 | 16.8 | 16.8 | 17.1 | 17.9 | 18.4 | 18.5 | 18.4 | 19.1 | 19.5 |
| Korea | 7.4 | 7.8 | 8.1 | 8.1 | 8.3 | 8.9 | 9.2 | 8.9 | 9.2 | 9.4 |
| Luxembourg | 21.8 | 18.0 | 18.3 | 18.9 | 19.4 | 20.3 | 20.1 | 19.0 | 19.3 | 20.5 |
| Mexico | -4.8 | -2.1 | -1.4 | -2.1 | -1.6 | -1.1 | -1.4 | -0.2 | 0.1 | 1.0 |
| Netherlands | 32.9 | 30.5 | 30.9 | 31.9 | 27.1 | 27.1 | 27.6 | 27.0 | 27.0 | 26.8 |
| New Zealand | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 18.0 | 15.5 | 14.2 | 12.9 |
| Norway | 26.7 | 26.6 | 26.6 | 25.6 | 25.6 | 25.7 | 25.7 | 25.5 | 25.5 | 25.6 |
| Poland | 26.5 | 26.4 | 26.7 | 27.0 | 27.4 | 26.5 | 23.8 | 23.2 | 23.4 | 23.6 |
| Portugal | 17.3 | 16.8 | 16.8 | 15.9 | 16.2 | 17.0 | 17.0 | 16.7 | 16.7 | 17.3 |
| Slovak Republic | 18.0 | 18.2 | 17.8 | 17.7 | 18.3 | 18.5 | 19.3 | 17.2 | 17.6 | 19.4 |
| Slovenia | 32.3 | 32.3 | 32.3 | 30.2 | 30.1 | 30.0 | 30.1 | 30.0 | 28.7 | 28.8 |
| Spain | 14.9 | 14.9 | 15.5 | 16.0 | 16.3 | 16.3 | 14.2 | 14.7 | 17.5 | 17.7 |
| Sweden | 31.7 | 29.6 | 29.9 | 29.2 | 28.5 | 24.9 | 23.9 | 22.8 | 22.0 | 22.1 |
| Switzerland | 13.6 | 13.2 | 13.1 | 13.1 | 13.2 | 13.4 | 12.7 | 12.8 | 12.8 | 13.0 |
| Turkey ${ }^{2}$ | 27.2 | 28.4 | 29.4 | 29.5 | 29.2 | 29.3 | 25.2 | 24.3 | 25.1 | 24.8 |
| United Kingdom | 22.7 | 23.6 | 23.7 | 23.8 | 23.8 | 24.0 | 22.9 | 22.4 | 22.6 | 21.7 |
| United States | 22.6 | 22.1 | 22.0 | 21.9 | 22.0 | 22.2 | 19.1 | 20.0 | 20.2 | 19.6 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 21.9 | 21.5 | 21.5 | 21.3 | 21.1 | 21.1 | 20.6 | 20.2 | 20.2 | 20.8 |
| OECD-EU21 | 25.4 | 24.5 | 24.5 | 24.1 | 23.9 | 23.9 | 23.7 | 23.3 | 23.4 | 24.4 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.2a. Income tax plus employee and employer contributions less cash benefits, single persons, $100 \%$ of average earnings
Tax burden as a \% of labour costs, single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 31.0 | 28.2 | 28.2 | 28.5 | 28.3 | 27.7 | 26.9 | 26.7 | 26.8 | 26.6 |
| Austria | 47.3 | 47.4 | 48.3 | 48.1 | 48.5 | 48.8 | 49.0 | 47.9 | 48.2 | 48.4 |
| Belgium | 57.1 | 55.7 | 55.4 | 55.5 | 55.5 | 55.6 | 55.9 | 55.3 | 55.4 | 55.5 |
| Canada | 33.2 | 32.0 | 32.0 | 31.9 | 31.9 | 31.2 | 31.3 | 30.6 | 30.5 | 30.8 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 42.6 | 43.2 | 43.5 | 43.7 | 42.5 | 42.9 | 43.4 | 42.0 | 42.1 | 42.5 |
| Denmark | 44.1 | 42.4 | 41.0 | 40.9 | 41.0 | 41.1 | 40.9 | 39.5 | 38.3 | 38.4 |
| Estonia | 41.3 | 42.3 | 41.5 | 39.9 | 39.0 | 39.0 | 38.4 | 39.2 | 40.1 | 40.1 |
| Finland | 47.8 | 45.0 | 44.5 | 44.6 | 44.0 | 43.9 | 43.8 | 42.5 | 42.5 | 42.7 |
| France | 49.6 | 49.8 | 49.9 | 50.1 | 50.2 | 49.3 | 49.3 | 49.3 | 49.3 | 49.4 |
| Germany | 52.9 | 53.2 | 52.2 | 52.1 | 52.3 | 51.9 | 51.5 | 50.9 | 49.2 | 49.8 |
| Greece ${ }^{1}$ | 35.2 | 35.2 | 35.8 | 35.2 | 35.8 | 37.0 | 37.0 | 38.2 | 38.2 | .. |
| Hungary | 54.6 | 50.8 | 51.8 | 51.1 | 52.0 | 54.5 | 54.1 | 53.1 | 46.6 | 49.4 |
| Iceland | 28.8 | 31.5 | 31.9 | 32.1 | 31.8 | 30.5 | 30.9 | 30.5 | 33.4 | 34.0 |
| Ireland | 28.9 | 24.4 | 24.1 | 23.5 | 23.0 | 22.2 | 22.3 | 24.7 | 25.8 | 26.8 |
| Israel | 29.0 | 27.1 | 25.3 | 24.9 | 23.5 | 24.1 | 21.7 | 20.2 | 19.4 | 19.8 |
| Italy | 47.1 | 46.0 | 46.3 | 45.9 | 46.1 | 46.4 | 46.6 | 46.8 | 47.2 | 47.6 |
| Japan | 24.7 | 27.4 | 27.3 | 27.7 | 28.8 | 29.3 | 29.5 | 29.2 | 30.2 | 30.8 |
| Korea | 16.3 | 16.3 | 17.0 | 17.3 | 18.1 | 19.7 | 19.9 | 19.5 | 20.1 | 20.3 |
| Luxembourg | 37.1 | 33.5 | 33.9 | 34.7 | 35.3 | 36.3 | 34.7 | 33.9 | 34.3 | 36.0 |
| Mexico | 12.4 | 16.7 | 15.2 | 14.7 | 15.0 | 15.9 | 15.1 | 15.3 | 15.5 | 16.2 |
| Netherlands | 40.0 | 37.2 | 38.8 | 38.9 | 38.4 | 38.8 | 39.2 | 38.0 | 38.1 | 37.8 |
| New Zealand | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 20.5 | 18.1 | 17.0 | 15.9 |
| Norway | 38.6 | 38.1 | 38.1 | 37.2 | 37.4 | 37.5 | 37.5 | 37.2 | 37.2 | 37.5 |
| Poland | 38.2 | 38.2 | 38.4 | 38.7 | 39.0 | 38.2 | 34.7 | 34.1 | 34.2 | 34.3 |
| Portugal | 37.3 | 37.4 | 37.4 | 36.8 | 37.1 | 37.7 | 37.6 | 37.5 | 37.6 | 39.0 |
| Slovak Republic | 41.9 | 42.5 | 42.2 | 38.0 | 38.3 | 38.4 | 38.8 | 37.7 | 37.9 | 38.9 |
| Slovenia | 46.3 | 46.2 | 46.3 | 45.6 | 45.3 | 43.3 | 42.9 | 42.2 | 42.5 | 42.6 |
| Spain | 38.6 | 38.6 | 38.8 | 39.0 | 39.1 | 39.0 | 38.0 | 38.3 | 39.7 | 39.9 |
| Sweden | 50.1 | 48.2 | 48.4 | 48.1 | 47.8 | 45.3 | 44.8 | 43.2 | 42.8 | 42.8 |
| Switzerland | 21.6 | 21.2 | 20.9 | 20.9 | 20.9 | 21.1 | 20.6 | 20.7 | 20.7 | 21.0 |
| Turkey ${ }^{2}$ | 40.4 | 42.2 | 42.8 | 42.8 | 42.7 | 42.7 | 39.9 | 37.4 | 37.9 | 37.7 |
| United Kingdom | 32.6 | 33.8 | 33.9 | 33.9 | 34.0 | 34.1 | 32.8 | 32.4 | 32.6 | 32.5 |
| United States | 30.4 | 29.9 | 29.8 | 29.8 | 29.9 | 30.0 | 29.6 | 30.1 | 30.4 | 29.5 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 36.6 | 36.1 | 36.1 | 35.9 | 35.9 | 35.9 | 35.5 | 35.0 | 35.0 | 35.2 |
| OECD-EU21 | 43.4 | 42.4 | 42.5 | 42.1 | 42.1 | 42.1 | 41.7 | 41.3 | 41.1 | 41.7 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.2b. Income tax, single persons, $\mathbf{1 0 0 \%}$ of average earnings
Tax burden as a \% of gross wage earnings, single persons without children at $100 \%$ of average earnings

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 26.6 | 23.9 | 23.9 | 24.2 | 24.0 | 23.4 | 22.5 | 22.1 | 22.3 | 22.3 |
| Austria | 12.9 | 13.9 | 15.2 | 15.0 | 15.4 | 15.8 | 16.2 | 14.7 | 15.0 | 15.3 |
| Belgium | 29.0 | 28.0 | 27.9 | 28.0 | 27.9 | 28.1 | 28.5 | 28.0 | 28.1 | 28.2 |
| Canada | 19.5 | 17.5 | 17.1 | 16.4 | 16.4 | 15.8 | 16.2 | 15.3 | 15.2 | 15.5 |
| Chile | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 10.0 | 10.8 | 11.2 | 11.5 | 9.9 | 10.4 | 11.1 | 11.3 | 11.5 | 12.0 |
| Denmark | 32.3 | 31.5 | 30.2 | 30.1 | 30.2 | 30.4 | 30.2 | 28.8 | 27.9 | 28.0 |
| Estonia | 21.9 | 22.0 | 20.9 | 18.8 | 18.1 | 18.1 | 17.3 | 16.8 | 16.6 | 16.8 |
| Finland | 27.2 | 25.8 | 25.0 | 25.0 | 23.8 | 23.7 | 24.2 | 23.0 | 22.6 | 22.7 |
| France | 15.4 | 15.3 | 15.2 | 15.4 | 15.5 | 14.1 | 14.2 | 14.2 | 14.2 | 14.3 |
| Germany | 22.7 | 22.4 | 21.4 | 20.8 | 20.8 | 21.1 | 21.3 | 20.8 | 18.9 | 19.0 |
| Greece ${ }^{1}$ | 1.1 | 1.0 | 1.7 | 1.0 | 1.8 | 3.3 | 3.3 | 4.8 | 4.9 | .. |
| Hungary | 23.2 | 20.5 | 20.9 | 20.2 | 21.0 | 21.8 | 21.3 | 20.8 | 14.4 | 17.5 |
| Iceland | 25.3 | 27.4 | 27.9 | 28.0 | 27.7 | 26.7 | 26.8 | 25.7 | 27.1 | 27.8 |
| Ireland | 15.2 | 11.3 | 10.8 | 10.2 | 9.6 | 8.7 | 8.8 | 10.2 | 10.7 | 14.9 |
| Israel | 17.5 | 15.0 | 13.0 | 12.7 | 11.9 | 12.7 | 10.2 | 8.9 | 8.0 | 8.4 |
| Italy | 19.9 | 18.9 | 19.3 | 18.8 | 19.6 | 19.7 | 20.0 | 20.2 | 20.7 | 21.3 |
| Japan | 7.0 | 6.6 | 6.6 | 6.7 | 7.2 | 8.1 | 8.0 | 7.9 | 7.6 | 7.6 |
| Korea | 2.1 | 2.3 | 2.7 | 2.7 | 3.4 | 4.7 | 4.5 | 4.1 | 4.5 | 4.3 |
| Luxembourg | 17.0 | 13.0 | 13.5 | 14.2 | 14.9 | 15.6 | 15.3 | 14.0 | 14.5 | 15.0 |
| Mexico | 0.7 | 3.1 | 3.7 | 3.1 | 3.5 | 4.6 | 3.8 | 4.1 | 4.2 | 4.9 |
| Netherlands | 9.6 | 10.3 | 10.8 | 11.2 | 13.2 | 14.6 | 15.5 | 16.6 | 16.2 | 16.0 |
| New Zealand | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 20.5 | 18.1 | 17.0 | 15.9 |
| Norway | 22.9 | 22.4 | 22.3 | 21.2 | 21.3 | 21.7 | 21.7 | 21.3 | 21.4 | 21.5 |
| Poland | 6.6 | 6.3 | 6.3 | 6.4 | 6.5 | 6.8 | 7.2 | 6.6 | 6.6 | 6.8 |
| Portugal | 11.4 | 11.5 | 11.5 | 10.8 | 11.2 | 11.8 | 11.8 | 11.6 | 11.8 | 13.5 |
| Slovak Republic | 7.8 | 7.7 | 8.4 | 8.4 | 8.7 | 8.9 | 9.4 | 8.0 | 8.3 | 9.5 |
| Slovenia | 13.5 | 13.3 | 13.5 | 12.6 | 12.7 | 10.7 | 11.0 | 10.8 | 11.2 | 11.3 |
| Spain | 13.5 | 13.4 | 13.7 | 13.9 | 14.1 | 14.2 | 12.9 | 13.4 | 15.4 | 15.6 |
| Sweden | 26.7 | 24.2 | 24.5 | 24.2 | 23.9 | 20.6 | 19.9 | 18.4 | 17.8 | 17.8 |
| Switzerland | 9.9 | 9.9 | 10.1 | 10.1 | 10.1 | 10.3 | 9.8 | 9.9 | 9.9 | 10.0 |
| Turkey ${ }^{2}$ | 14.7 | 14.8 | 15.5 | 15.5 | 15.4 | 15.4 | 12.7 | 12.1 | 12.6 | 12.4 |
| United Kingdom | 17.4 | 17.5 | 17.6 | 17.6 | 17.7 | 17.7 | 16.4 | 16.1 | 16.2 | 15.6 |
| United States | 17.3 | 16.8 | 16.7 | 16.6 | 16.8 | 16.9 | 16.5 | 15.7 | 16.1 | 17.2 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 15.8 | 15.2 | 15.3 | 15.0 | 15.1 | 15.2 | 15.0 | 14.5 | 14.4 | 15.1 |
| OECD-EU21 | 16.9 | 16.1 | 16.2 | 15.9 | 16.0 | 16.0 | 16.0 | 15.7 | 15.4 | 16.6 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.2c. Income tax plus employee contributions less cash benefits, single persons,
$100 \%$ of average earnings
Tax burden as a \% of gross wage earnings, single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 26.6 | 23.9 | 23.9 | 24.2 | 24.0 | 23.4 | 22.5 | 22.1 | 22.3 | 22.3 |
| Austria | 31.0 | 32.0 | 33.2 | 33.0 | 33.4 | 33.8 | 34.3 | 32.8 | 33.1 | 33.4 |
| Belgium | 43.0 | 42.0 | 41.9 | 42.0 | 41.9 | 42.1 | 42.5 | 41.9 | 42.1 | 42.2 |
| Canada | 25.4 | 24.1 | 23.9 | 23.9 | 23.9 | 23.2 | 23.5 | 22.6 | 22.5 | 22.7 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 22.5 | 23.3 | 23.8 | 24.0 | 22.4 | 22.9 | 23.6 | 22.3 | 22.5 | 23.0 |
| Denmark | 44.2 | 42.4 | 41.0 | 40.9 | 41.0 | 41.1 | 40.9 | 39.5 | 38.3 | 38.4 |
| Estonia | 21.9 | 23.0 | 21.9 | 19.8 | 18.7 | 18.7 | 17.9 | 18.6 | 19.4 | 19.6 |
| Finland | 34.2 | 31.9 | 31.1 | 31.3 | 30.6 | 30.4 | 30.4 | 29.3 | 29.7 | 29.8 |
| France | 28.8 | 28.9 | 28.8 | 29.0 | 29.1 | 27.8 | 27.9 | 27.9 | 27.9 | 28.0 |
| Germany | 43.2 | 43.4 | 42.3 | 42.2 | 42.5 | 42.2 | 42.0 | 41.4 | 39.4 | 39.9 |
| Greece ${ }^{1}$ | 17.0 | 17.0 | 17.7 | 17.0 | 17.8 | 19.3 | 19.3 | 20.8 | 20.9 | .. |
| Hungary | 35.7 | 33.0 | 34.4 | 33.7 | 35.3 | 38.8 | 38.3 | 37.8 | 31.4 | 35.0 |
| Iceland | 25.4 | 27.6 | 28.0 | 28.2 | 27.8 | 26.8 | 27.2 | 26.2 | 27.6 | 28.3 |
| Ireland | 20.3 | 16.3 | 15.9 | 15.2 | 14.7 | 13.9 | 13.9 | 16.7 | 17.9 | 18.9 |
| Israel | 25.5 | 22.8 | 20.9 | 20.6 | 19.4 | 20.4 | 18.1 | 16.6 | 15.7 | 16.1 |
| Italy | 29.0 | 28.1 | 28.5 | 28.0 | 28.7 | 29.2 | 29.5 | 29.7 | 30.2 | 30.8 |
| Japan | 17.0 | 18.2 | 18.2 | 18.5 | 19.4 | 20.2 | 20.2 | 20.0 | 20.6 | 21.0 |
| Korea | 8.8 | 9.2 | 9.7 | 9.9 | 10.6 | 12.0 | 12.1 | 11.7 | 12.3 | 12.3 |
| Luxembourg | 28.7 | 24.6 | 25.0 | 25.9 | 26.6 | 27.7 | 27.4 | 26.2 | 26.7 | 28.1 |
| Mexico | 2.2 | 4.6 | 5.2 | 4.6 | 5.0 | 6.0 | 5.1 | 5.4 | 5.6 | 6.3 |
| Netherlands | 33.6 | 31.1 | 32.6 | 32.5 | 32.5 | 32.5 | 32.8 | 31.8 | 31.7 | 31.4 |
| New Zealand | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 20.5 | 18.1 | 17.0 | 15.9 |
| Norway | 30.7 | 30.2 | 30.1 | 29.0 | 29.1 | 29.5 | 29.5 | 29.1 | 29.2 | 29.3 |
| Poland | 27.8 | 27.8 | 28.1 | 28.4 | 28.7 | 27.8 | 25.0 | 24.4 | 24.5 | 24.6 |
| Portugal | 22.4 | 22.5 | 22.5 | 21.8 | 22.2 | 22.8 | 22.8 | 22.6 | 22.8 | 24.5 |
| Slovak Republic | 19.8 | 20.5 | 21.8 | 21.8 | 22.1 | 22.3 | 22.8 | 21.4 | 21.7 | 22.9 |
| Slovenia | 35.6 | 35.4 | 35.6 | 34.7 | 34.8 | 32.8 | 33.1 | 32.9 | 33.3 | 33.4 |
| Spain | 19.8 | 19.8 | 20.1 | 20.3 | 20.5 | 20.6 | 19.3 | 19.8 | 21.7 | 21.9 |
| Sweden | 33.7 | 31.2 | 31.5 | 31.2 | 30.9 | 27.6 | 26.9 | 25.4 | 24.8 | 24.8 |
| Switzerland | 16.5 | 16.2 | 16.1 | 16.2 | 16.1 | 16.4 | 15.8 | 15.9 | 15.9 | 16.1 |
| Turkey ${ }^{2}$ | 28.7 | 29.8 | 30.5 | 30.5 | 30.4 | 30.4 | 27.7 | 27.1 | 27.6 | 27.4 |
| United Kingdom | 25.8 | 26.7 | 26.8 | 26.9 | 26.9 | 27.0 | 25.6 | 25.2 | 25.4 | 25.1 |
| United States | 24.9 | 24.4 | 24.4 | 24.3 | 24.4 | 24.6 | 22.7 | 23.3 | 23.8 | 22.8 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 25.8 | 25.2 | 25.4 | 25.2 | 25.3 | 25.4 | 24.9 | 24.5 | 24.5 | 24.9 |
| OECD-EU21 | 29.4 | 28.6 | 28.8 | 28.6 | 28.6 | 28.6 | 28.4 | 28.0 | 27.9 | 28.8 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.3a. Income tax plus employee and employer contributions less cash benefits, single persons, $167 \%$ of average earnings
Tax burden as a \% of labour costs, single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 38.8 | 36.5 | 36.6 | 36.0 | 34.7 | 32.8 | 32.7 | 32.6 | 32.4 | 32.2 |
| Austria | 50.4 | 50.6 | 51.4 | 51.4 | 51.6 | 51.7 | 51.8 | 51.2 | 51.4 | 51.6 |
| Belgium | 62.6 | 61.3 | 61.3 | 60.9 | 60.8 | 60.9 | 61.1 | 60.6 | 60.6 | 60.7 |
| Canada | 35.3 | 33.0 | 33.2 | 33.2 | 33.2 | 32.9 | 32.9 | 32.6 | 32.7 | 32.9 |
| Chile | 7.4 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.6 | 7.8 |
| Czech Republic | 44.8 | 45.5 | 45.9 | 46.1 | 46.0 | 46.7 | 46.1 | 44.6 | 44.7 | 44.9 |
| Denmark | 51.4 | 50.0 | 49.4 | 49.2 | 49.4 | 49.6 | 49.6 | 48.5 | 44.5 | 44.8 |
| Estonia | 42.5 | 43.4 | 42.9 | 41.4 | 40.5 | 40.1 | 39.5 | 40.3 | 41.2 | 41.2 |
| Finland | 53.5 | 50.9 | 50.3 | 50.4 | 49.8 | 49.7 | 49.5 | 48.3 | 48.3 | 48.5 |
| France | 51.7 | 52.1 | 52.5 | 53.1 | 53.2 | 53.2 | 53.4 | 53.3 | 53.4 | 53.5 |
| Germany | 56.3 | 57.7 | 56.2 | 54.9 | 55.0 | 53.8 | 53.0 | 53.0 | 51.4 | 51.3 |
| Greece ${ }^{1}$ | 39.2 | 41.4 | 42.2 | 42.2 | 43.1 | 43.6 | 43.0 | 43.2 | 43.7 | .. |
| Hungary | 59.1 | 57.6 | 57.7 | 56.7 | 56.7 | 58.6 | 59.1 | 58.3 | 53.1 | 51.6 |
| Iceland | 39.6 | 39.8 | 39.1 | 37.0 | 34.6 | 33.4 | 33.6 | 34.1 | 37.8 | 38.2 |
| Ireland | 39.4 | 34.9 | 35.3 | 34.9 | 34.0 | 33.0 | 33.0 | 35.1 | 36.4 | 38.7 |
| Israel | 37.3 | 35.3 | 34.9 | 34.1 | 33.0 | 33.6 | 31.2 | 29.0 | 28.3 | 28.4 |
| Italy | 51.1 | 50.7 | 50.9 | 50.6 | 50.9 | 51.4 | 51.8 | 52.0 | 52.5 | 53.0 |
| Japan | 28.5 | 30.0 | 30.0 | 30.3 | 31.6 | 32.4 | 32.5 | 32.3 | 33.3 | 33.8 |
| Korea | 20.2 | 21.3 | 21.7 | 21.4 | 21.7 | 22.5 | 22.6 | 21.8 | 21.7 | 22.2 |
| Luxembourg | 45.1 | 41.1 | 41.4 | 41.9 | 42.3 | 43.0 | 41.7 | 41.3 | 41.6 | 43.5 |
| Mexico | 19.2 | 22.6 | 21.3 | 21.8 | 21.9 | 22.0 | 20.6 | 20.9 | 21.3 | 21.6 |
| Netherlands | 44.9 | 41.5 | 42.5 | 42.4 | 41.3 | 42.1 | 42.5 | 41.8 | 41.8 | 41.5 |
| New Zealand | 24.2 | 24.8 | 25.4 | 25.8 | 26.2 | 26.8 | 26.3 | 24.6 | 23.3 | 22.0 |
| Norway | 45.2 | 44.9 | 44.9 | 43.8 | 43.0 | 43.1 | 43.1 | 42.9 | 42.9 | 43.1 |
| Poland | 39.1 | 39.2 | 39.4 | 39.6 | 40.1 | 39.0 | 36.0 | 34.9 | 35.0 | 35.0 |
| Portugal | 42.3 | 42.7 | 42.7 | 42.3 | 42.7 | 43.4 | 43.5 | 43.3 | 43.6 | 45.8 |
| Slovak Republic | 45.2 | 46.0 | 44.2 | 40.2 | 40.4 | 40.5 | 40.7 | 40.1 | 40.3 | 40.8 |
| Slovenia | 51.0 | 50.9 | 52.6 | 52.3 | 51.6 | 49.0 | 48.3 | 47.1 | 47.6 | 47.7 |
| Spain | 41.0 | 42.1 | 42.2 | 42.4 | 42.6 | 42.3 | 41.4 | 41.6 | 42.4 | 42.5 |
| Sweden | 55.7 | 54.4 | 54.7 | 54.7 | 54.5 | 53.0 | 52.7 | 51.1 | 50.9 | 50.8 |
| Switzerland | 26.0 | 25.4 | 25.2 | 25.2 | 25.1 | 25.4 | 25.0 | 25.1 | 25.1 | 25.3 |
| Turkey ${ }^{2}$ | 35.0 | 44.2 | 44.5 | 44.6 | 44.3 | 44.5 | 42.8 | 40.2 | 41.0 | 40.9 |
| United Kingdom | 35.8 | 37.5 | 37.7 | 37.7 | 37.8 | 37.9 | 37.5 | 36.9 | 37.2 | 37.9 |
| United States | 36.8 | 35.3 | 35.2 | 35.1 | 35.2 | 35.3 | 35.2 | 35.5 | 35.7 | 34.4 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 41.0 | 40.9 | 41.0 | 40.6 | 40.5 | 40.4 | 40.0 | 39.6 | 39.5 | 39.6 |
| OECD-EU21 | 47.7 | 47.2 | 47.3 | 46.9 | 46.9 | 46.8 | 46.4 | 46.0 | 45.8 | 46.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.3b. Income tax, single persons at $\mathbf{1 6 7 \%}$ of average earnings
Tax burden as a \% of gross wage earnings, single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 34.9 | 32.7 | 32.8 | 32.2 | 30.7 | 28.7 | 28.7 | 28.3 | 28.2 | 28.2 |
| Austria | 20.3 | 21.8 | 22.7 | 22.1 | 22.4 | 22.8 | 23.0 | 22.0 | 22.1 | 22.3 |
| Belgium | 36.0 | 34.7 | 34.7 | 34.7 | 34.7 | 34.9 | 35.2 | 34.8 | 34.9 | 35.0 |
| Canada | 25.9 | 23.1 | 22.8 | 22.4 | 22.4 | 22.1 | 22.3 | 21.7 | 21.8 | 22.0 |
| Chile | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.8 |
| Czech Republic | 13.0 | 14.0 | 14.4 | 14.8 | 14.6 | 15.6 | 14.8 | 14.8 | 14.9 | 15.2 |
| Denmark | 40.7 | 40.3 | 39.7 | 39.5 | 39.7 | 40.0 | 40.0 | 38.9 | 34.9 | 35.1 |
| Estonia | 23.6 | 23.5 | 22.8 | 20.8 | 20.0 | 19.6 | 18.7 | 18.3 | 18.1 | 18.2 |
| Finland | 34.3 | 32.9 | 32.2 | 32.1 | 31.0 | 30.9 | 31.2 | 30.0 | 29.6 | 29.7 |
| France | 20.7 | 20.4 | 20.0 | 20.2 | 20.2 | 20.2 | 20.4 | 20.3 | 20.5 | 20.6 |
| Germany | 31.6 | 31.8 | 30.6 | 28.8 | 28.8 | 29.1 | 29.3 | 28.8 | 27.4 | 27.7 |
| Greece ${ }^{1}$ | 6.3 | 9.0 | 10.0 | 10.0 | 11.1 | 11.7 | 11.0 | 11.3 | 11.9 | .. |
| Hungary | 30.3 | 30.2 | 29.4 | 28.1 | 27.6 | 27.5 | 28.1 | 27.6 | 22.7 | 20.3 |
| Iceland | 36.6 | 36.3 | 35.5 | 33.3 | 30.7 | 29.7 | 29.8 | 29.7 | 32.1 | 32.6 |
| Ireland | 26.7 | 22.8 | 23.3 | 22.7 | 21.6 | 20.5 | 20.6 | 21.3 | 22.0 | 28.1 |
| Israel | 25.5 | 22.6 | 22.2 | 21.4 | 20.0 | 20.6 | 18.3 | 16.1 | 15.4 | 15.3 |
| Italy | 25.2 | 25.2 | 25.5 | 25.1 | 25.9 | 26.3 | 26.8 | 27.0 | 27.6 | 28.3 |
| Japan | 11.1 | 10.7 | 10.7 | 10.8 | 11.6 | 12.8 | 12.8 | 12.4 | 12.0 | 11.9 |
| Korea | 6.4 | 7.7 | 8.0 | 8.0 | 8.5 | 9.3 | 9.2 | 8.6 | 8.6 | 8.4 |
| Luxembourg | 26.2 | 21.7 | 22.0 | 22.4 | 22.8 | 23.3 | 23.1 | 22.3 | 22.6 | 23.4 |
| Mexico | 7.8 | 10.0 | 10.8 | 11.7 | 12.0 | 12.3 | 11.1 | 11.4 | 11.9 | 12.1 |
| Netherlands | 25.4 | 24.4 | 24.8 | 25.0 | 25.6 | 27.2 | 27.9 | 28.8 | 28.4 | 28.1 |
| New Zealand | 24.2 | 24.8 | 25.4 | 25.8 | 26.2 | 26.8 | 26.3 | 24.6 | 23.3 | 22.0 |
| Norway | 30.3 | 30.0 | 30.0 | 28.7 | 27.6 | 28.1 | 28.0 | 27.7 | 27.8 | 27.9 |
| Poland | 7.7 | 7.4 | 7.4 | 7.5 | 7.9 | 7.8 | 8.7 | 7.5 | 7.5 | 7.6 |
| Portugal | 17.6 | 18.1 | 18.1 | 17.6 | 18.1 | 19.0 | 19.0 | 18.9 | 19.3 | 21.9 |
| Slovak Republic | 12.4 | 12.5 | 11.7 | 11.7 | 11.9 | 12.0 | 12.3 | 11.4 | 11.6 | 12.3 |
| Slovenia | 19.1 | 19.0 | 19.1 | 18.8 | 18.7 | 16.3 | 16.7 | 16.5 | 17.0 | 17.2 |
| Spain | 18.5 | 18.4 | 18.7 | 18.8 | 19.1 | 19.1 | 18.5 | 19.1 | 20.5 | 20.8 |
| Sweden | 36.3 | 34.7 | 35.3 | 35.3 | 35.2 | 33.2 | 32.8 | 31.0 | 30.8 | 30.7 |
| Switzerland | 14.6 | 14.5 | 14.8 | 14.8 | 14.7 | 15.1 | 14.4 | 14.5 | 14.6 | 14.6 |
| Turkey ${ }^{2}$ | 18.0 | 17.2 | 17.6 | 17.7 | 17.4 | 17.6 | 16.2 | 15.3 | 16.3 | 16.2 |
| United Kingdom | 23.0 | 23.8 | 24.0 | 24.1 | 24.2 | 24.5 | 23.2 | 21.9 | 22.4 | 22.5 |
| United States | 24.2 | 22.6 | 22.5 | 22.4 | 22.6 | 22.7 | 22.6 | 22.1 | 22.4 | 23.0 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 22.2 | 21.7 | 21.8 | 21.5 | 21.3 | 21.4 | 21.2 | 20.7 | 20.6 | 21.2 |
| OECD-EU21 | 23.6 | 23.2 | 23.2 | 22.9 | 22.9 | 22.9 | 22.9 | 22.5 | 22.2 | 23.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.3c. Income tax plus employee contributions less cash benefits,
single persons at $167 \%$ of average earnings
Tax burden as a \% of gross wage earnings, single persons without children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 34.9 | 32.7 | 32.8 | 32.2 | 30.7 | 28.7 | 28.7 | 28.3 | 28.2 | 28.2 |
| Austria | 36.3 | 37.6 | 38.6 | 38.3 | 38.6 | 38.8 | 39.0 | 38.1 | 38.3 | 38.5 |
| Belgium | 50.0 | 48.7 | 48.7 | 48.8 | 48.7 | 48.9 | 49.3 | 48.9 | 49.0 | 49.1 |
| Canada | 29.6 | 27.2 | 27.1 | 27.3 | 27.2 | 26.8 | 27.0 | 26.5 | 26.7 | 26.8 |
| Chile | 7.4 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.6 | 7.8 |
| Czech Republic | 25.5 | 26.5 | 26.9 | 27.3 | 27.2 | 28.1 | 27.3 | 25.8 | 25.9 | 26.2 |
| Denmark | 51.5 | 50.0 | 49.4 | 49.2 | 49.4 | 49.6 | 49.6 | 48.5 | 44.5 | 44.8 |
| Estonia | 23.6 | 24.5 | 23.8 | 21.8 | 20.6 | 20.2 | 19.3 | 20.1 | 20.9 | 21.0 |
| Finland | 41.4 | 39.1 | 38.4 | 38.6 | 37.8 | 37.6 | 37.4 | 36.4 | 36.8 | 36.9 |
| France | 32.5 | 32.6 | 32.6 | 33.2 | 33.3 | 33.3 | 33.5 | 33.4 | 33.5 | 33.6 |
| Germany | 48.8 | 50.0 | 48.4 | 46.9 | 47.1 | 46.2 | 45.7 | 45.5 | 43.8 | 43.8 |
| Greece ${ }^{1}$ | 22.2 | 25.0 | 26.0 | 26.0 | 27.1 | 27.7 | 27.0 | 27.3 | 27.9 | .. |
| Hungary | 42.8 | 42.7 | 42.9 | 41.6 | 41.9 | 44.5 | 45.1 | 44.6 | 39.7 | 37.8 |
| Iceland | 36.7 | 36.4 | 35.6 | 33.4 | 30.8 | 29.8 | 30.1 | 30.0 | 32.4 | 32.9 |
| Ireland | 32.1 | 27.9 | 28.4 | 27.9 | 26.9 | 25.8 | 25.8 | 28.2 | 29.5 | 32.1 |
| Israel | 34.2 | 31.4 | 31.0 | 30.3 | 29.4 | 30.1 | 27.8 | 25.5 | 24.8 | 24.7 |
| Italy | 34.5 | 34.4 | 34.7 | 34.3 | 35.1 | 35.8 | 36.3 | 36.6 | 37.2 | 37.9 |
| Japan | 21.1 | 21.7 | 21.7 | 21.9 | 23.1 | 24.1 | 24.2 | 24.0 | 24.5 | 24.8 |
| Korea | 13.1 | 14.6 | 14.9 | 14.7 | 15.1 | 15.8 | 15.8 | 15.1 | 15.0 | 15.3 |
| Luxembourg | 37.9 | 33.3 | 33.6 | 34.1 | 34.6 | 35.4 | 35.2 | 34.6 | 34.8 | 36.6 |
| Mexico | 9.8 | 11.9 | 12.6 | 13.4 | 13.7 | 13.9 | 12.6 | 12.9 | 13.4 | 13.6 |
| Netherlands | 40.6 | 37.5 | 38.4 | 38.3 | 37.5 | 38.1 | 38.5 | 37.9 | 37.7 | 37.4 |
| New Zealand | 24.2 | 24.8 | 25.4 | 25.8 | 26.2 | 26.8 | 26.3 | 24.6 | 23.3 | 22.0 |
| Norway | 38.1 | 37.8 | 37.8 | 36.5 | 35.4 | 35.9 | 35.8 | 35.5 | 35.6 | 35.7 |
| Poland | 28.9 | 29.0 | 29.2 | 29.5 | 30.1 | 28.8 | 26.6 | 25.3 | 25.3 | 25.4 |
| Portugal | 28.6 | 29.1 | 29.1 | 28.6 | 29.1 | 30.0 | 30.0 | 29.9 | 30.3 | 32.9 |
| Slovak Republic | 24.4 | 25.3 | 24.8 | 24.8 | 25.0 | 25.1 | 25.4 | 24.6 | 24.8 | 25.5 |
| Slovenia | 41.2 | 41.1 | 41.2 | 40.9 | 40.8 | 38.4 | 38.8 | 38.6 | 39.1 | 39.3 |
| Spain | 24.4 | 24.7 | 24.9 | 25.1 | 25.3 | 25.3 | 24.6 | 25.1 | 26.4 | 26.7 |
| Sweden | 41.1 | 39.4 | 39.9 | 40.0 | 39.8 | 37.8 | 37.4 | 35.8 | 35.5 | 35.4 |
| Switzerland | 21.1 | 20.8 | 20.8 | 20.8 | 20.6 | 21.0 | 20.5 | 20.6 | 20.6 | 20.7 |
| Turkey ${ }^{2}$ | 26.9 | 32.2 | 32.6 | 32.7 | 32.4 | 32.6 | 31.2 | 30.3 | 31.3 | 31.2 |
| United Kingdom | 28.8 | 30.3 | 30.5 | 30.5 | 30.6 | 30.8 | 30.3 | 29.7 | 30.0 | 30.4 |
| United States | 31.9 | 30.3 | 30.2 | 30.1 | 30.2 | 30.3 | 29.4 | 29.8 | 30.1 | 28.6 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 31.3 | 31.1 | 31.2 | 30.9 | 30.8 | 30.9 | 30.5 | 30.1 | 30.1 | 30.4 |
| OECD-EU21 | 35.1 | 34.7 | 34.8 | 34.5 | 34.6 | 34.6 | 34.4 | 34.0 | 33.9 | 34.6 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.4a. Income tax plus employee and employer contributions less cash benefits,
single parent at $67 \%$ of average earnings
Tax burden as a \% of labour costs, single parent with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 3.5 | -1.7 | -7.7 | -3.5 | -3.5 | -4.6 | -5.2 | -7.4 | -6.9 | -6.0 |
| Austria | 25.1 | 26.0 | 25.7 | 25.6 | 26.6 | 27.5 | 28.3 | 25.4 | 25.9 | 26.8 |
| Belgium | 36.3 | 35.4 | 34.9 | 35.2 | 35.4 | 35.4 | 35.8 | 34.7 | 35.2 | 35.5 |
| Canada | 0.5 | -1.4 | -0.8 | -0.7 | 0.2 | -3.2 | -6.0 | -9.5 | -7.2 | -6.3 |
| Chile | 2.8 | 2.9 | 2.9 | 3.0 | 3.0 | 3.1 | 3.1 | 3.2 | 6.0 | 6.0 |
| Czech Republic | 12.5 | 16.6 | 18.2 | 17.6 | 19.0 | 16.4 | 14.9 | 15.4 | 15.6 | 16.4 |
| Denmark | 14.7 | 13.6 | 12.8 | 12.5 | 12.9 | 13.6 | 13.5 | 12.9 | 11.1 | 11.4 |
| Estonia | 18.3 | 24.0 | 21.6 | 21.7 | 18.0 | 21.8 | 18.6 | 22.6 | 23.7 | 24.3 |
| Finland | 28.8 | 27.3 | 26.2 | 27.0 | 26.6 | 27.0 | 26.8 | 25.5 | 25.8 | 26.4 |
| France | 39.1 | 36.2 | 33.3 | 32.6 | 37.3 | 37.5 | 37.9 | 37.7 | 38.0 | 38.4 |
| Germany | 31.7 | 32.6 | 33.0 | 33.3 | 33.7 | 33.5 | 33.3 | 31.4 | 30.1 | 31.2 |
| Greece ${ }^{1}$ | 34.3 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | .. |
| Hungary | 33.8 | 25.9 | 27.1 | 26.0 | 25.9 | 29.0 | 29.8 | 29.6 | 27.3 | 20.0 |
| Iceland | 5.7 | 12.2 | 13.6 | 14.6 | 15.4 | 15.2 | 14.8 | 12.1 | 16.5 | 18.5 |
| Ireland | -0.9 | -16.4 | -15.0 | -19.6 | -31.0 | -26.1 | -25.5 | -29.9 | -28.2 | -24.6 |
| Israel | 1.7 | 3.1 | 4.0 | 4.2 | 1.5 | 1.7 | 1.5 | 0.8 | 0.4 | 0.1 |
| Italy | 29.4 | 27.1 | 27.7 | 27.4 | 27.9 | 24.9 | 26.3 | 26.7 | 27.9 | 29.0 |
| Japan | 21.0 | 23.7 | 22.1 | 22.5 | 21.6 | 21.7 | 21.9 | 21.5 | 18.6 | 19.7 |
| Korea | 14.3 | 14.7 | 14.9 | 15.3 | 15.7 | 16.1 | 16.6 | 16.3 | 16.7 | 17.0 |
| Luxembourg | 6.2 | 4.3 | 4.4 | 4.9 | 5.1 | 6.0 | 2.0 | 0.2 | 0.7 | 2.4 |
| Mexico | 7.5 | 12.0 | 10.5 | 10.0 | 10.6 | 11.1 | 10.9 | 11.9 | 12.3 | 13.2 |
| Netherlands | 26.3 | 22.6 | 22.5 | 22.7 | 12.8 | 12.9 | 13.6 | 11.2 | 12.0 | 11.5 |
| New Zealand | -3.3 | -0.9 | 0.5 | -6.4 | -15.3 | -17.1 | -17.5 | -17.3 | -17.9 | -18.7 |
| Norway | 16.2 | 18.4 | 19.0 | 18.6 | 19.4 | 19.9 | 20.3 | 20.3 | 20.7 | 21.4 |
| Poland | 29.7 | 29.5 | 28.2 | 35.1 | 35.5 | 32.4 | 28.4 | 28.4 | 28.4 | 28.4 |
| Portugal | 26.5 | 23.2 | 24.2 | 23.5 | 24.0 | 24.8 | 24.1 | 21.3 | 21.5 | 23.7 |
| Slovak Republic | 25.2 | 26.2 | 25.8 | 20.9 | 21.5 | 22.7 | 24.1 | 21.5 | 21.8 | 23.6 |
| Slovenia | 13.3 | 16.2 | 16.7 | 14.8 | 15.0 | 15.4 | 13.5 | 12.4 | 12.3 | 12.7 |
| Spain | 28.5 | 29.2 | 29.6 | 30.0 | 30.2 | 28.2 | 28.3 | 27.9 | 29.1 | 29.5 |
| Sweden | 39.9 | 38.2 | 38.7 | 38.4 | 36.7 | 34.4 | 34.1 | 33.0 | 32.3 | 32.5 |
| Switzerland | 4.3 | 4.1 | 3.8 | 3.9 | 3.6 | 4.0 | 0.8 | 2.2 | 2.2 | 2.8 |
| Turkey ${ }^{2}$ | 39.1 | 41.0 | 41.9 | 41.9 | 41.8 | 41.8 | 36.7 | 33.8 | 34.5 | 34.2 |
| United Kingdom | 15.0 | 13.1 | 13.2 | 13.4 | 14.1 | 15.6 | 11.3 | 8.2 | 9.0 | 7.1 |
| United States | 9.6 | 6.0 | 6.0 | 6.2 | 7.0 | 7.7 | 6.6 | 7.2 | 8.4 | 8.2 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 18.7 | 18.2 | 18.1 | 17.9 | 17.1 | 17.2 | 16.4 | 15.5 | 15.8 | 15.6 |
| OECD-EU21 | 24.5 | 23.1 | 23.0 | 22.7 | 22.0 | 22.3 | 21.6 | 20.5 | 20.7 | 20.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.4b. Income tax, single parent at 67\% of average earnings
Tax burden as a \% of gross wage earnings, single parent with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.3 | 20.0 | 20.2 | 20.5 | 20.2 | 18.8 | 17.1 | 13.9 | 14.2 | 14.2 |
| Austria | 5.7 | 7.3 | 6.6 | 5.7 | 6.4 | 7.1 | 7.6 | 5.3 | 5.7 | 6.1 |
| Belgium | 16.5 | 16.1 | 16.1 | 16.2 | 16.1 | 16.3 | 16.7 | 15.6 | 15.9 | 16.2 |
| Canada | 6.7 | 6.0 | 5.9 | 5.0 | 5.0 | 1.0 | 1.4 | 0.5 | 1.0 | 1.2 |
| Chile | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 2.2 | 3.4 | 3.5 | 1.0 | -1.2 | 0.1 | -5.2 | -4.5 | -5.0 | -4.1 |
| Denmark | 27.6 | 27.2 | 26.7 | 26.6 | 26.7 | 26.8 | 26.5 | 25.9 | 25.1 | 25.2 |
| Estonia | 19.9 | 20.1 | 18.4 | 16.3 | 8.7 | 10.5 | 4.6 | 9.2 | 9.1 | 9.4 |
| Finland | 21.2 | 19.6 | 18.8 | 18.8 | 17.5 | 17.2 | 17.7 | 16.4 | 15.9 | 16.0 |
| France | 7.6 | 7.3 | 7.3 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 7.5 |
| Germany | -2.8 | -2.6 | -1.9 | -1.6 | -1.4 | -0.7 | -0.1 | -2.3 | -3.7 | -3.0 |
| Greece ${ }^{1}$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | .. |
| Hungary | 10.2 | 2.0 | 2.3 | 0.8 | 9.0 | 10.1 | 11.0 | 11.7 | 10.8 | 0.0 |
| Iceland | 19.9 | 22.6 | 23.3 | 23.9 | 23.9 | 22.9 | 23.0 | 20.7 | 21.4 | 22.4 |
| Ireland | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 2.0 | 3.9 |
| Israel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Italy | 9.9 | 6.6 | 7.1 | 6.3 | 7.3 | 7.0 | 7.9 | 8.3 | 9.2 | 10.2 |
| Japan | 2.8 | 2.5 | 2.5 | 2.6 | 2.7 | 3.1 | 3.1 | 2.9 | 2.7 | 4.1 |
| Korea | 0.0 | 0.5 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 | 0.7 | 0.6 |
| Luxembourg | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 |
| Mexico | -6.1 | -3.3 | -2.7 | -3.3 | -2.8 | -2.3 | -2.6 | -1.5 | -1.1 | -0.2 |
| Netherlands | 3.0 | 2.2 | 2.2 | 2.5 | 2.2 | 2.4 | 3.5 | 3.5 | 3.5 | 3.4 |
| New Zealand | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 18.0 | 17.2 | 15.9 | 14.5 |
| Norway | 13.2 | 15.1 | 15.0 | 14.0 | 14.1 | 14.2 | 14.2 | 13.9 | 13.9 | 14.0 |
| Poland | 2.5 | 1.8 | 2.0 | 2.2 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Portugal | 3.3 | 1.8 | 1.8 | 0.9 | 1.3 | 2.1 | 1.9 | 1.5 | 1.4 | 1.8 |
| Slovak Republic | 3.3 | 2.4 | -3.0 | -2.8 | -3.8 | -2.9 | -1.8 | -4.1 | -3.6 | -1.6 |
| Slovenia | 3.3 | 3.2 | 3.4 | 0.5 | 0.6 | 0.8 | 1.0 | 0.9 | 0.0 | 0.0 |
| Spain | 0.3 | 1.2 | 1.7 | 2.2 | 2.5 | 0.2 | 0.4 | 0.0 | 1.6 | 2.1 |
| Sweden | 24.7 | 22.6 | 22.9 | 22.2 | 21.5 | 17.9 | 16.9 | 15.8 | 15.0 | 15.1 |
| Switzerland | 3.0 | 3.0 | 3.1 | 3.1 | 2.6 | 2.8 | 2.3 | 2.2 | 2.2 | 2.2 |
| Turkey ${ }^{2}$ | 13.2 | 13.4 | 14.4 | 14.5 | 14.2 | 14.3 | 8.9 | 7.9 | 8.7 | 8.4 |
| United Kingdom | 8.4 | 4.3 | 4.1 | 4.3 | 4.7 | 6.0 | 1.7 | -1.0 | -0.3 | -2.2 |
| United States | -5.2 | -9.1 | -9.1 | -8.9 | -8.0 | -7.2 | -8.0 | -10.3 | -8.9 | -7.0 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 7.4 | 6.9 | 6.8 | 6.5 | 6.5 | 6.3 | 5.9 | 5.3 | 5.3 | 5.5 |
| OECD-EU21 | 8.0 | 7.0 | 6.7 | 6.2 | 6.1 | 6.1 | 5.8 | 5.3 | 5.2 | 5.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

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Table II.4c. Income tax plus employee contributions less cash benefits,
single parent at $67 \%$ of average earnings
Tax burden as a \% of gross wage earnings, single parent with two children

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.5a. Income tax plus employee and employer contributions less cash benefits, married couple at $100 \%$ of average earnings
Tax burden as a \% of labour costs, one-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 23.4 | 20.2 | 15.8 | 17.0 | 17.1 | 14.9 | 14.9 | 14.2 | 14.6 | 15.2 |
| Austria | 35.2 | 35.7 | 36.1 | 36.3 | 37.0 | 37.7 | 38.2 | 36.0 | 36.4 | 37.1 |
| Belgium | 42.6 | 41.6 | 42.7 | 40.3 | 40.3 | 40.3 | 40.6 | 39.5 | 39.8 | 40.3 |
| Canada | 23.9 | 21.5 | 21.5 | 21.5 | 21.9 | 19.4 | 19.3 | 17.1 | 18.1 | 18.9 |
| Chile | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.2 | 6.2 | 6.3 | 7.0 |
| Czech Republic | 22.0 | 27.2 | 28.9 | 27.0 | 26.0 | 21.3 | 20.8 | 20.9 | 21.1 | 21.7 |
| Denmark | 30.7 | 29.6 | 29.1 | 28.9 | 29.1 | 29.4 | 29.3 | 28.7 | 27.2 | 27.4 |
| Estonia | 32.8 | 34.7 | 31.8 | 30.7 | 27.3 | 29.5 | 26.8 | 29.8 | 30.8 | 31.2 |
| Finland | 40.7 | 38.7 | 38.0 | 38.4 | 37.9 | 38.2 | 38.4 | 37.2 | 37.3 | 37.7 |
| France | 40.7 | 41.1 | 41.4 | 41.7 | 41.9 | 42.0 | 42.2 | 41.9 | 42.2 | 42.3 |
| Germany | 35.3 | 35.9 | 35.0 | 35.4 | 35.8 | 35.6 | 35.3 | 33.8 | 33.0 | 34.0 |
| Greece ${ }^{1}$ | 35.3 | 35.2 | 36.1 | 36.2 | 37.5 | 37.5 | 37.4 | 38.5 | 38.5 | .. |
| Hungary | 43.9 | 39.4 | 41.0 | 40.7 | 41.2 | 44.0 | 43.9 | 43.2 | 36.7 | 32.8 |
| Iceland | 13.1 | 17.3 | 18.6 | 19.6 | 19.8 | 19.1 | 18.4 | 15.0 | 19.2 | 21.0 |
| Ireland | 15.5 | 7.0 | 6.6 | 5.7 | 1.9 | 4.0 | 3.8 | 2.8 | 4.7 | 7.1 |
| Israel | 24.8 | 23.7 | 22.5 | 22.2 | 20.2 | 21.0 | 18.6 | 17.0 | 15.9 | 16.0 |
| Italy | 39.3 | 36.6 | 37.2 | 36.3 | 36.6 | 35.7 | 36.6 | 36.9 | 37.8 | 38.6 |
| Japan | 21.0 | 23.8 | 23.5 | 23.9 | 23.6 | 23.8 | 24.0 | 23.6 | 22.1 | 23.0 |
| Korea | 15.6 | 15.8 | 16.0 | 16.2 | 16.8 | 17.4 | 17.8 | 17.1 | 17.8 | 17.9 |
| Luxembourg | 13.5 | 10.1 | 10.2 | 10.8 | 11.4 | 12.7 | 11.2 | 11.0 | 11.6 | 13.4 |
| Mexico | 12.4 | 16.7 | 15.2 | 14.7 | 15.0 | 15.9 | 15.1 | 15.3 | 15.5 | 16.2 |
| Netherlands | 29.9 | 27.9 | 29.6 | 29.7 | 29.1 | 29.7 | 30.3 | 29.7 | 30.8 | 30.7 |
| New Zealand | 13.6 | 15.6 | 17.0 | 12.8 | 0.5 | 0.8 | 0.7 | -0.3 | -0.9 | -1.2 |
| Norway | 28.4 | 29.6 | 29.9 | 29.6 | 30.0 | 30.5 | 30.6 | 30.4 | 30.6 | 31.0 |
| Poland | 33.3 | 36.5 | 36.8 | 37.1 | 37.4 | 32.4 | 28.4 | 28.4 | 28.4 | 28.4 |
| Portugal | 30.2 | 27.7 | 28.4 | 27.5 | 27.8 | 28.0 | 27.1 | 26.6 | 26.9 | 29.2 |
| Slovak Republic | 30.8 | 31.3 | 27.1 | 22.1 | 23.0 | 23.9 | 25.3 | 22.8 | 22.9 | 25.0 |
| Slovenia | 25.0 | 25.9 | 26.2 | 24.2 | 24.2 | 24.5 | 23.1 | 22.1 | 22.9 | 23.2 |
| Spain | 32.3 | 32.6 | 33.0 | 33.4 | 33.6 | 32.9 | 32.0 | 32.4 | 34.0 | 34.2 |
| Sweden | 44.3 | 42.4 | 42.8 | 42.6 | 41.6 | 39.4 | 39.2 | 37.7 | 37.2 | 37.3 |
| Switzerland | 9.8 | 9.7 | 9.5 | 9.6 | 9.2 | 9.6 | 7.2 | 8.1 | 8.2 | 8.4 |
| Turkey ${ }^{2}$ | 40.4 | 42.2 | 42.8 | 42.8 | 42.7 | 42.7 | 38.7 | 36.0 | 36.6 | 36.3 |
| United Kingdom | 27.8 | 27.5 | 27.8 | 27.9 | 28.0 | 28.4 | 26.9 | 26.2 | 26.5 | 26.4 |
| United States | 20.6 | 17.3 | 17.3 | 17.4 | 17.8 | 18.2 | 16.6 | 17.3 | 18.2 | 18.2 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 27.5 | 27.2 | 27.1 | 26.7 | 26.2 | 26.1 | 25.4 | 24.8 | 25.0 | 25.0 |
| OECD-EU21 | 32.4 | 31.6 | 31.7 | 31.1 | 30.9 | 30.8 | 30.3 | 29.8 | 29.8 | 29.9 |

[^3]2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.5b. Income tax, married couple at $100 \%$ of average earnings
Tax burden as a \% of gross wage earnings, one-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 25.6 | 23.9 | 23.9 | 24.2 | 24.0 | 23.4 | 22.5 | 20.9 | 21.1 | 21.1 |
| Austria | 11.7 | 12.8 | 13.2 | 13.0 | 13.5 | 13.9 | 14.4 | 12.5 | 12.8 | 13.1 |
| Belgium | 18.9 | 17.9 | 16.4 | 16.5 | 16.5 | 16.7 | 17.3 | 16.1 | 16.4 | 16.8 |
| Canada | 15.5 | 13.1 | 12.6 | 11.9 | 11.9 | 9.2 | 10.0 | 8.5 | 8.7 | 9.2 |
| Chile | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 4.0 | 5.0 | 5.2 | 1.0 | -2.6 | -1.7 | -5.8 | -5.1 | -5.3 | -4.6 |
| Denmark | 25.6 | 25.5 | 25.0 | 24.9 | 25.0 | 25.2 | 24.9 | 24.3 | 23.7 | 23.8 |
| Estonia | 17.9 | 18.3 | 16.0 | 13.8 | 8.7 | 10.5 | 6.4 | 9.2 | 9.1 | 9.4 |
| Finland | 27.2 | 25.8 | 25.0 | 25.0 | 23.8 | 23.7 | 24.2 | 23.0 | 22.6 | 22.7 |
| France | 7.6 | 7.8 | 7.8 | 8.0 | 8.1 | 8.2 | 8.4 | 7.9 | 8.4 | 8.5 |
| Germany | 1.5 | 1.4 | 0.6 | 0.9 | 1.1 | 1.8 | 2.3 | 0.5 | -0.2 | 0.4 |
| Greece ${ }^{1}$ | 1.3 | 1.0 | 2.2 | 2.3 | 4.0 | 3.9 | 3.8 | 5.3 | 5.3 | . |
| Hungary | 18.3 | 14.3 | 15.3 | 14.9 | 21.0 | 21.8 | 21.3 | 20.8 | 14.4 | 8.3 |
| Iceland | 16.1 | 17.8 | 18.7 | 19.8 | 20.1 | 19.1 | 19.3 | 15.8 | 17.0 | 18.3 |
| Ireland | 5.0 | 2.6 | 2.7 | 5.2 | 1.6 | 0.6 | 0.4 | 1.7 | 2.2 | 7.4 |
| Israel | 17.5 | 15.0 | 13.0 | 12.7 | 11.9 | 12.7 | 10.2 | 8.9 | 8.0 | 8.4 |
| Italy | 15.6 | 12.3 | 12.9 | 11.4 | 12.4 | 12.1 | 12.8 | 13.2 | 13.9 | 14.7 |
| Japan | 2.9 | 2.6 | 3.5 | 3.5 | 3.8 | 4.3 | 4.3 | 4.1 | 3.9 | 4.8 |
| Korea | 1.4 | 1.7 | 1.6 | 1.5 | 1.9 | 2.2 | 2.1 | 1.4 | 1.9 | 1.6 |
| Luxembourg | 2.3 | 0.0 | 0.0 | 0.2 | 0.8 | 1.4 | 5.3 | 4.2 | 4.5 | 4.7 |
| Mexico | 0.7 | 3.1 | 3.7 | 3.1 | 3.5 | 4.6 | 3.8 | 4.1 | 4.2 | 4.9 |
| Netherlands | 4.8 | 10.1 | 10.6 | 10.9 | 12.8 | 14.2 | 15.1 | 16.3 | 15.9 | 15.8 |
| New Zealand | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 20.5 | 18.4 | 17.0 | 15.9 |
| Norway | 18.1 | 19.4 | 19.3 | 18.7 | 18.8 | 19.3 | 19.2 | 18.8 | 18.9 | 19.0 |
| Poland | 4.8 | 4.3 | 4.4 | 4.5 | 4.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Portugal | 6.2 | 4.7 | 4.7 | 3.6 | 3.9 | 4.0 | 3.9 | 3.7 | 3.8 | 5.4 |
| Slovak Republic | 4.8 | 3.8 | -4.5 | -4.4 | -4.8 | -4.0 | -2.8 | -5.2 | -5.1 | -2.6 |
| Slovenia | 4.8 | 4.7 | 4.8 | 2.0 | 2.2 | 2.4 | 2.6 | 2.5 | 2.9 | 3.0 |
| Spain | 5.2 | 5.6 | 6.2 | 6.6 | 7.0 | 6.3 | 5.2 | 5.8 | 7.9 | 8.1 |
| Sweden | 26.7 | 24.2 | 24.5 | 24.2 | 23.9 | 20.6 | 19.9 | 18.4 | 17.8 | 17.8 |
| Switzerland | 5.0 | 5.2 | 5.4 | 5.4 | 4.9 | 5.1 | 4.6 | 4.5 | 4.5 | 4.4 |
| Turkey ${ }^{2}$ | 14.7 | 14.8 | 15.5 | 15.5 | 15.4 | 15.4 | 11.2 | 10.5 | 11.1 | 10.8 |
| United Kingdom | 17.4 | 15.6 | 15.7 | 15.8 | 15.9 | 16.1 | 14.7 | 14.5 | 14.6 | 14.0 |
| United States | 6.8 | 3.2 | 3.2 | 3.3 | 3.7 | 4.2 | 3.7 | 1.7 | 2.8 | 4.7 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 11.0 | 10.5 | 10.3 | 10.0 | 10.0 | 9.9 | 9.6 | 9.0 | 9.0 | 9.4 |
| OECD-EU21 | 11.0 | 10.4 | 9.9 | 9.5 | 9.5 | 9.4 | 9.3 | 9.0 | 8.8 | 9.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

StatLink .inst http://dx.doi.org/10.1787/888932589392

Table II.5c. Income tax plus employee contributions less cash benefits,
married couple at $100 \%$ of average earnings
Tax burden as a \% of gross wage earnings, one-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 18.4 | 15.4 | 10.7 | 12.0 | 12.1 | 9.8 | 9.8 | 8.7 | 9.3 | 10.1 |
| Austria | 15.1 | 16.9 | 17.5 | 17.8 | 18.7 | 19.5 | 20.3 | 17.4 | 17.9 | 18.7 |
| Belgium | 23.7 | 23.4 | 22.0 | 22.1 | 22.1 | 22.1 | 22.6 | 21.3 | 21.9 | 22.3 |
| Canada | 15.0 | 12.5 | 12.2 | 12.3 | 12.8 | 10.1 | 10.0 | 7.5 | 8.6 | 9.4 |
| Chile | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.2 | 6.2 | 6.3 | 7.0 |
| Czech Republic | -5.3 | 1.7 | 4.1 | 1.4 | 0.0 | -6.2 | -6.9 | -6.0 | -5.7 | -4.9 |
| Denmark | 30.8 | 29.6 | 29.1 | 28.9 | 29.1 | 29.4 | 29.3 | 28.7 | 27.2 | 27.4 |
| Estonia | 10.6 | 12.8 | 8.9 | 7.5 | 3.1 | 6.0 | 2.5 | 6.1 | 7.1 | 7.6 |
| Finland | 25.3 | 23.9 | 23.1 | 23.6 | 23.1 | 23.3 | 23.6 | 22.7 | 23.3 | 23.7 |
| France | 16.3 | 16.7 | 16.8 | 17.0 | 17.3 | 17.5 | 17.8 | 17.3 | 17.8 | 17.9 |
| Germany | 22.0 | 22.4 | 21.5 | 22.0 | 22.6 | 22.7 | 22.7 | 20.9 | 20.0 | 21.0 |
| Greece ${ }^{1}$ | 17.2 | 17.0 | 18.2 | 18.3 | 20.0 | 19.9 | 19.8 | 21.3 | 21.3 | .. |
| Hungary | 20.4 | 17.5 | 19.7 | 19.6 | 20.8 | 24.7 | 24.6 | 24.7 | 18.7 | 13.6 |
| Iceland | 8.9 | 12.6 | 13.9 | 15.0 | 15.2 | 14.8 | 14.0 | 9.7 | 12.2 | 14.2 |
| Ireland | 5.4 | -3.0 | -3.5 | -4.4 | -8.7 | -6.4 | -6.6 | -7.6 | -5.5 | -2.9 |
| Israel | 21.1 | 19.2 | 17.9 | 17.8 | 15.9 | 17.1 | 14.8 | 13.2 | 12.0 | 12.1 |
| Italy | 18.6 | 15.7 | 16.4 | 15.2 | 16.2 | 15.1 | 16.3 | 16.7 | 17.8 | 18.9 |
| Japan | 12.9 | 14.2 | 13.9 | 14.2 | 13.6 | 13.9 | 14.0 | 13.8 | 11.3 | 12.1 |
| Korea | 8.1 | 8.6 | 8.6 | 8.6 | 9.1 | 9.6 | 9.7 | 9.0 | 9.7 | 9.6 |
| Luxembourg | 1.9 | -1.9 | -1.9 | -1.2 | -0.6 | 0.9 | 1.3 | 0.8 | 1.4 | 2.7 |
| Mexico | 2.2 | 4.6 | 5.2 | 4.6 | 5.0 | 6.0 | 5.1 | 5.4 | 5.6 | 6.3 |
| Netherlands | 22.4 | 20.9 | 22.3 | 22.3 | 22.3 | 22.4 | 23.0 | 22.6 | 23.6 | 23.6 |
| New Zealand | 13.6 | 15.6 | 17.0 | 12.8 | 0.5 | 0.8 | 0.7 | -0.3 | -0.9 | -1.2 |
| Norway | 19.3 | 20.6 | 20.8 | 20.3 | 20.7 | 21.6 | 21.8 | 21.5 | 21.7 | 22.0 |
| Poland | 22.1 | 25.8 | 26.1 | 26.5 | 26.9 | 21.0 | 17.8 | 17.8 | 17.8 | 17.8 |
| Portugal | 13.6 | 10.5 | 11.3 | 10.3 | 10.7 | 11.0 | 9.8 | 9.2 | 9.5 | 12.4 |
| Slovak Republic | 4.4 | 5.1 | 1.5 | 1.7 | 2.8 | 4.0 | 5.8 | 2.5 | 2.6 | 5.3 |
| Slovenia | 10.1 | 11.2 | 11.6 | 9.1 | 9.8 | 10.6 | 9.9 | 9.6 | 10.4 | 10.8 |
| Spain | 11.5 | 12.0 | 12.5 | 13.0 | 13.3 | 12.6 | 11.5 | 12.2 | 14.2 | 14.5 |
| Sweden | 26.0 | 23.5 | 24.1 | 24.0 | 22.8 | 19.8 | 19.4 | 18.1 | 17.4 | 17.6 |
| Switzerland | 3.9 | 4.1 | 4.0 | 4.1 | 3.7 | 4.1 | 1.6 | 2.6 | 2.6 | 2.8 |
| Turkey ${ }^{2}$ | 28.7 | 29.8 | 30.5 | 30.5 | 30.4 | 30.4 | 26.2 | 25.5 | 26.1 | 25.8 |
| United Kingdom | 20.6 | 19.8 | 20.1 | 20.2 | 20.3 | 20.6 | 19.0 | 18.4 | 18.7 | 18.4 |
| United States | 14.4 | 10.8 | 10.9 | 10.9 | 11.4 | 11.8 | 8.6 | 9.4 | 10.4 | 10.4 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 14.9 | 14.6 | 14.5 | 14.2 | 13.8 | 13.7 | 13.1 | 12.5 | 12.7 | 13.0 |
| OECD-EU21 | 15.8 | 15.3 | 15.3 | 15.0 | 14.9 | 14.8 | 14.5 | 14.0 | 14.2 | 14.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.6a. Income tax plus employee and employer contributions less cash benefits, married couple at $100 \%$ and $33 \%$ of average earnings
Tax burden as a \% of labour costs, two-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 24.6 | 22.0 | 18.7 | 20.8 | 20.5 | 19.6 | 19.1 | 18.0 | 18.0 | 17.9 |
| Austria | 36.3 | 36.4 | 37.2 | 37.3 | 37.8 | 38.3 | 38.7 | 36.4 | 36.7 | 37.2 |
| Belgium | 44.3 | 42.3 | 43.6 | 41.4 | 41.3 | 41.2 | 41.7 | 40.8 | 41.1 | 41.4 |
| Canada | 27.4 | 25.6 | 25.6 | 25.4 | 25.7 | 23.9 | 24.1 | 23.2 | 23.4 | 23.8 |
| Chile | 4.8 | 4.9 | 4.9 | 5.0 | 4.9 | 4.5 | 4.5 | 4.5 | 4.8 | 4.9 |
| Czech Republic | 31.1 | 34.3 | 35.6 | 35.1 | 33.5 | 29.5 | 30.5 | 30.3 | 30.3 | 30.7 |
| Denmark | 35.7 | 34.4 | 33.9 | 33.8 | 34.0 | 34.1 | 33.9 | 33.4 | 31.9 | 32.2 |
| Estonia | 35.7 | 37.3 | 35.1 | 34.0 | 31.1 | 32.6 | 30.4 | 33.1 | 34.0 | 34.2 |
| Finland | 39.7 | 37.3 | 36.5 | 36.9 | 36.4 | 36.4 | 36.4 | 35.2 | 35.2 | 35.5 |
| France | 41.0 | 41.0 | 40.1 | 40.1 | 39.7 | 39.5 | 39.7 | 38.8 | 39.8 | 40.0 |
| Germany | 41.2 | 41.4 | 40.6 | 40.8 | 41.1 | 40.8 | 40.5 | 39.2 | 38.0 | 38.9 |
| Greece ${ }^{1}$ | 35.0 | 35.0 | 35.7 | 35.8 | 36.7 | 36.7 | 36.6 | 37.5 | 37.5 | .. |
| Hungary | 44.7 | 39.1 | 40.4 | 40.0 | 40.3 | 42.8 | 42.8 | 42.1 | 36.4 | 34.3 |
| Iceland | 20.2 | 24.8 | 25.8 | 26.3 | 26.0 | 25.2 | 24.6 | 22.6 | 26.3 | 27.6 |
| Ireland | 20.3 | 11.7 | 10.8 | 9.6 | 8.6 | 7.3 | 7.4 | 8.8 | 10.6 | 13.3 |
| Israel | 21.1 | 20.2 | 19.3 | 19.1 | 17.1 | 17.6 | 15.7 | 14.5 | 13.7 | 12.2 |
| Italy | 41.2 | 38.2 | 38.6 | 38.2 | 39.2 | 37.8 | 38.6 | 39.0 | 39.6 | 40.3 |
| Japan | 22.4 | 25.1 | 24.3 | 24.7 | 24.8 | 25.1 | 25.2 | 24.9 | 24.0 | 25.1 |
| Korea | 15.3 | 15.6 | 15.8 | 16.0 | 16.6 | 17.2 | 17.6 | 17.1 | 17.8 | 17.9 |
| Luxembourg | 17.5 | 14.2 | 14.6 | 15.5 | 16.1 | 17.3 | 15.8 | 15.4 | 16.0 | 17.7 |
| Mexico | 9.5 | 14.2 | 12.9 | 12.2 | 12.7 | 13.7 | 13.1 | 13.5 | 13.8 | 14.4 |
| Netherlands | 34.4 | 31.5 | 32.2 | 32.2 | 29.6 | 29.7 | 30.2 | 29.2 | 29.5 | 29.2 |
| New Zealand | 18.6 | 18.7 | 18.9 | 19.2 | 9.6 | 9.8 | 9.3 | 8.1 | 7.5 | 7.0 |
| Norway | 30.8 | 31.6 | 31.9 | 31.3 | 31.3 | 31.4 | 31.5 | 31.3 | 31.5 | 31.9 |
| Poland | 34.6 | 37.0 | 37.2 | 37.5 | 37.8 | 32.5 | 29.1 | 29.0 | 29.2 | 29.6 |
| Portugal | 30.6 | 28.6 | 29.4 | 28.7 | 29.0 | 29.5 | 29.4 | 29.0 | 28.9 | 30.4 |
| Slovak Republic | 35.1 | 35.3 | 32.8 | 28.2 | 28.9 | 29.1 | 30.1 | 26.7 | 27.2 | 29.5 |
| Slovenia | 33.7 | 34.1 | 34.3 | 32.3 | 32.2 | 32.1 | 30.7 | 30.0 | 30.4 | 30.6 |
| Spain | 35.0 | 35.0 | 35.2 | 35.3 | 35.5 | 35.1 | 34.4 | 34.6 | 35.7 | 35.8 |
| Sweden | 44.7 | 42.6 | 43.0 | 42.5 | 41.6 | 39.1 | 38.8 | 37.3 | 36.8 | 36.9 |
| Switzerland | 12.4 | 12.2 | 12.0 | 12.1 | 11.7 | 12.1 | 10.3 | 11.0 | 11.0 | 11.1 |
| Turkey ${ }^{2}$ | 39.7 | 41.4 | 42.2 | 42.4 | 42.3 | 42.3 | 39.5 | 37.1 | 37.4 | 37.3 |
| United Kingdom | 25.5 | 25.5 | 25.9 | 25.9 | 26.1 | 26.4 | 25.2 | 24.4 | 24.8 | 25.0 |
| United States | 24.2 | 21.6 | 21.6 | 21.6 | 21.9 | 22.2 | 21.2 | 22.9 | 23.2 | 22.7 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 29.7 | 29.1 | 29.0 | 28.7 | 28.3 | 28.0 | 27.5 | 27.0 | 27.1 | 27.2 |
| OECD-EU21 | 35.1 | 33.9 | 33.9 | 33.4 | 33.2 | 32.7 | 32.4 | 31.9 | 31.9 | 32.1 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.6b. Income tax, married couple at $\mathbf{1 0 0 \%}$ and $33 \%$ of average earnings
Tax burden as a \% of gross wage earnings, two-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 22.1 | 20.7 | 20.7 | 21.0 | 20.6 | 19.6 | 19.0 | 17.3 | 17.4 | 17.4 |
| Austria | 9.4 | 10.2 | 11.2 | 11.0 | 11.3 | 11.6 | 11.9 | 10.5 | 10.7 | 10.9 |
| Belgium | 24.0 | 22.3 | 20.5 | 21.9 | 22.0 | 22.1 | 22.6 | 21.8 | 22.0 | 22.2 |
| Canada | 16.6 | 14.8 | 14.4 | 13.7 | 13.6 | 11.8 | 12.2 | 11.2 | 11.2 | 11.5 |
| Chile | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 5.2 | 6.1 | 6.3 | 5.1 | 2.7 | 3.7 | 2.5 | 2.8 | 2.5 | 3.0 |
| Denmark | 27.6 | 27.2 | 26.8 | 26.7 | 26.8 | 26.9 | 26.7 | 26.1 | 25.3 | 25.4 |
| Estonia | 19.9 | 20.1 | 18.4 | 16.3 | 12.2 | 13.4 | 10.1 | 12.0 | 11.9 | 12.2 |
| Finland | 23.7 | 22.1 | 21.3 | 21.2 | 20.1 | 19.8 | 20.2 | 19.1 | 18.6 | 18.6 |
| France | 9.5 | 8.4 | 8.3 | 8.2 | 7.9 | 7.4 | 7.6 | 6.4 | 7.8 | 8.0 |
| Germany | 8.7 | 8.1 | 7.3 | 7.4 | 7.5 | 8.0 | 8.5 | 7.0 | 5.8 | 6.2 |
| Greece ${ }^{1}$ | 0.9 | 0.8 | 1.7 | 1.7 | 3.0 | 2.9 | 2.9 | 4.0 | 3.9 | .. |
| Hungary | 15.7 | 10.7 | 11.5 | 11.2 | 15.7 | 16.4 | 16.1 | 15.9 | 10.8 | 7.2 |
| Iceland | 19.9 | 22.6 | 23.3 | 23.9 | 23.9 | 22.9 | 23.0 | 20.7 | 21.7 | 22.7 |
| Ireland | 11.1 | 6.9 | 6.3 | 5.2 | 4.4 | 3.1 | 3.1 | 4.0 | 4.5 | 9.2 |
| Israel | 13.1 | 11.2 | 9.8 | 9.5 | 8.9 | 9.5 | 7.7 | 6.7 | 6.0 | 4.6 |
| Italy | 14.4 | 10.8 | 11.2 | 10.7 | 11.8 | 11.1 | 12.1 | 12.4 | 13.2 | 14.0 |
| Japan | 4.4 | 4.1 | 4.1 | 4.2 | 4.5 | 5.1 | 5.0 | 4.9 | 4.7 | 5.6 |
| Korea | 1.0 | 1.5 | 1.4 | 1.4 | 1.8 | 2.0 | 1.9 | 1.5 | 1.9 | 1.6 |
| Luxembourg | 3.9 | 1.3 | 1.7 | 2.2 | 2.8 | 3.4 | 6.4 | 5.2 | 5.6 | 5.8 |
| Mexico | -4.3 | -1.5 | -0.7 | -1.5 | -0.9 | 0.2 | -0.4 | 0.0 | 0.3 | 0.9 |
| Netherlands | 7.8 | 7.9 | 8.1 | 8.5 | 10.1 | 11.1 | 11.7 | 12.5 | 12.3 | 12.1 |
| New Zealand | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 19.2 | 17.2 | 15.9 | 14.8 |
| Norway | 19.2 | 20.0 | 20.0 | 19.1 | 18.7 | 18.9 | 18.9 | 18.6 | 18.6 | 18.7 |
| Poland | 5.3 | 4.8 | 4.9 | 5.0 | 5.2 | 0.2 | 0.7 | 0.6 | 0.9 | 1.4 |
| Portugal | 5.7 | 4.6 | 4.6 | 3.7 | 4.0 | 4.5 | 4.4 | 4.1 | 4.0 | 5.6 |
| Slovak Republic | 4.6 | 3.9 | 1.4 | 1.5 | 1.2 | 1.1 | 2.0 | -1.6 | -1.0 | 1.8 |
| Slovenia | 6.8 | 6.7 | 6.8 | 4.3 | 4.3 | 4.3 | 3.6 | 3.6 | 3.8 | 3.8 |
| Spain | 8.7 | 8.7 | 9.0 | 9.2 | 9.4 | 9.1 | 8.2 | 8.6 | 10.1 | 10.3 |
| Sweden | 25.3 | 22.6 | 22.9 | 22.3 | 21.8 | 18.2 | 17.5 | 16.1 | 15.4 | 15.5 |
| Switzerland | 5.8 | 6.0 | 6.2 | 6.2 | 5.7 | 6.1 | 5.6 | 5.5 | 5.6 | 5.3 |
| Turkey ${ }^{2}$ | 14.0 | 13.8 | 14.8 | 15.0 | 14.9 | 14.9 | 12.2 | 11.7 | 12.1 | 12.0 |
| United Kingdom | 15.1 | 13.8 | 14.0 | 14.1 | 14.2 | 14.4 | 13.3 | 13.0 | 13.1 | 13.5 |
| United States | 10.5 | 7.7 | 7.8 | 7.8 | 8.1 | 8.5 | 8.2 | 7.1 | 7.5 | 9.0 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 11.6 | 10.8 | 10.7 | 10.5 | 10.5 | 10.4 | 10.1 | 9.6 | 9.5 | 10.0 |
| OECD-EU21 | 12.1 | 10.9 | 10.7 | 10.4 | 10.4 | 10.1 | 10.1 | 9.7 | 9.6 | 10.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.6c. Income tax plus employee contributions less cash benefits,
married couple at $100 \%$ and $33 \%$ of average earnings
Tax burden as a \% of gross wage earnings, two-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 19.8 | 17.3 | 13.8 | 16.1 | 15.7 | 14.8 | 14.3 | 12.7 | 12.9 | 13.0 |
| Austria | 16.5 | 17.8 | 18.9 | 19.1 | 19.7 | 20.3 | 20.9 | 17.9 | 18.3 | 18.9 |
| Belgium | 29.3 | 27.5 | 25.8 | 26.8 | 26.5 | 26.5 | 26.8 | 26.0 | 26.4 | 26.6 |
| Canada | 19.1 | 17.2 | 17.0 | 16.8 | 17.1 | 15.2 | 15.5 | 14.5 | 14.7 | 15.0 |
| Chile | 4.8 | 4.9 | 4.9 | 5.0 | 4.9 | 4.5 | 4.5 | 4.5 | 4.8 | 4.9 |
| Czech Republic | 7.0 | 11.3 | 13.1 | 12.4 | 10.2 | 4.8 | 6.2 | 6.5 | 6.6 | 7.2 |
| Denmark | 35.9 | 34.4 | 33.9 | 33.8 | 34.0 | 34.1 | 33.9 | 33.4 | 31.9 | 32.2 |
| Estonia | 14.4 | 16.3 | 13.4 | 11.8 | 8.2 | 10.1 | 7.2 | 10.2 | 11.1 | 11.5 |
| Finland | 24.0 | 22.2 | 21.3 | 21.7 | 21.1 | 21.1 | 21.2 | 20.3 | 20.7 | 21.0 |
| France | 19.4 | 18.5 | 18.5 | 18.4 | 18.2 | 17.8 | 18.1 | 16.9 | 18.3 | 18.5 |
| Germany | 29.2 | 29.1 | 28.2 | 28.6 | 29.0 | 28.9 | 28.9 | 27.4 | 26.0 | 26.8 |
| Greece ${ }^{1}$ | 16.8 | 16.8 | 17.7 | 17.7 | 19.0 | 18.9 | 18.9 | 20.0 | 19.9 | .. |
| Hungary | 20.4 | 16.2 | 18.2 | 18.0 | 19.2 | 22.8 | 22.8 | 23.1 | 18.3 | 15.5 |
| Iceland | 16.4 | 20.5 | 21.5 | 22.1 | 21.8 | 21.2 | 20.6 | 17.8 | 19.9 | 21.3 |
| Ireland | 11.4 | 2.7 | 1.7 | 0.4 | -0.7 | -2.2 | -2.1 | -0.5 | 1.5 | 4.5 |
| Israel | 17.2 | 15.5 | 14.5 | 14.5 | 12.8 | 13.7 | 12.0 | 10.8 | 9.9 | 8.3 |
| Italy | 21.2 | 17.8 | 18.2 | 17.8 | 19.7 | 17.9 | 19.0 | 19.4 | 20.2 | 21.1 |
| Japan | 14.4 | 15.7 | 14.8 | 15.1 | 14.9 | 15.3 | 15.4 | 15.2 | 13.5 | 14.4 |
| Korea | 7.7 | 8.4 | 8.4 | 8.5 | 8.9 | 9.3 | 9.5 | 9.1 | 9.7 | 9.7 |
| Luxembourg | 6.4 | 2.7 | 3.1 | 4.0 | 4.6 | 6.0 | 6.4 | 5.7 | 6.3 | 7.5 |
| Mexico | -2.9 | 0.0 | 0.7 | -0.1 | 0.5 | 1.5 | 0.9 | 1.3 | 1.6 | 2.2 |
| Netherlands | 26.7 | 23.9 | 24.3 | 24.2 | 23.2 | 22.9 | 23.3 | 22.5 | 22.6 | 22.4 |
| New Zealand | 18.6 | 18.7 | 18.9 | 19.2 | 9.6 | 9.8 | 9.3 | 8.1 | 7.5 | 7.0 |
| Norway | 22.0 | 22.9 | 23.0 | 22.3 | 22.1 | 22.6 | 22.7 | 22.5 | 22.7 | 22.9 |
| Poland | 23.6 | 26.4 | 26.7 | 27.0 | 27.4 | 21.2 | 18.6 | 18.5 | 18.7 | 19.2 |
| Portugal | 14.1 | 11.7 | 12.6 | 11.7 | 12.1 | 12.7 | 12.6 | 12.1 | 12.0 | 13.8 |
| Slovak Republic | 10.5 | 10.6 | 9.2 | 9.4 | 10.2 | 10.5 | 11.8 | 7.5 | 8.2 | 11.1 |
| Slovenia | 21.2 | 21.6 | 21.9 | 19.5 | 19.8 | 20.0 | 18.9 | 18.8 | 19.2 | 19.4 |
| Spain | 15.1 | 15.1 | 15.4 | 15.5 | 15.7 | 15.5 | 14.6 | 15.0 | 16.5 | 16.6 |
| Sweden | 26.5 | 23.8 | 24.3 | 23.9 | 22.7 | 19.4 | 18.9 | 17.6 | 16.9 | 17.1 |
| Switzerland | 6.6 | 6.7 | 6.7 | 6.8 | 6.4 | 6.8 | 4.9 | 5.6 | 5.6 | 5.7 |
| Turkey ${ }^{2}$ | 28.0 | 28.8 | 29.8 | 30.0 | 29.9 | 29.9 | 27.2 | 26.7 | 27.1 | 27.0 |
| United Kingdom | 18.8 | 18.4 | 18.7 | 18.8 | 18.9 | 19.2 | 18.0 | 17.2 | 17.5 | 17.8 |
| United States | 18.2 | 15.4 | 15.4 | 15.4 | 15.8 | 16.1 | 12.7 | 14.8 | 15.1 | 14.6 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 17.6 | 17.0 | 16.9 | 16.8 | 16.4 | 16.2 | 15.7 | 15.3 | 15.4 | 15.6 |
| OECD-EU21 | 19.4 | 18.3 | 18.3 | 18.1 | 18.0 | 17.5 | 17.4 | 16.9 | 17.0 | 17.4 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.7a. Income tax plus employee and employer contributions less cash benefits, married couple at $100 \%$ and $67 \%$ of average earnings
Tax burden as a \% of labour costs, two-earner married couple with two children, one at $100 \%$ average earnings and the other at 67\%

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 26.7 | 24.3 | 21.6 | 23.5 | 23.9 | 23.4 | 22.9 | 22.3 | 23.7 | 24.2 |
| Austria | 39.0 | 39.4 | 40.2 | 40.0 | 40.6 | 41.1 | 41.6 | 39.7 | 40.0 | 40.5 |
| Belgium | 50.9 | 49.2 | 48.1 | 48.2 | 48.2 | 48.2 | 48.5 | 47.8 | 48.0 | 48.2 |
| Canada | 30.0 | 28.4 | 28.6 | 28.5 | 28.8 | 27.3 | 27.4 | 26.7 | 26.6 | 27.0 |
| Chile | 5.3 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.5 | 5.5 | 6.6 | 6.6 |
| Czech Republic | 36.3 | 39.0 | 39.3 | 38.9 | 37.8 | 34.1 | 34.5 | 34.2 | 34.3 | 34.7 |
| Denmark | 38.7 | 37.0 | 35.7 | 35.6 | 35.7 | 35.9 | 35.6 | 35.1 | 33.7 | 33.9 |
| Estonia | 37.4 | 38.9 | 37.1 | 35.9 | 33.4 | 34.4 | 32.5 | 34.7 | 35.7 | 35.9 |
| Finland | 41.6 | 39.2 | 38.5 | 38.9 | 38.3 | 38.3 | 38.5 | 37.1 | 37.2 | 37.5 |
| France | 44.2 | 43.5 | 42.7 | 42.7 | 44.3 | 44.4 | 44.6 | 44.5 | 44.7 | 44.9 |
| Germany | 45.4 | 45.6 | 44.7 | 44.7 | 45.0 | 44.6 | 44.3 | 43.2 | 41.7 | 42.5 |
| Greece ${ }^{1}$ | 35.0 | 34.9 | 35.4 | 35.5 | 36.3 | 36.2 | 36.2 | 37.1 | 37.5 | .. |
| Hungary | 46.9 | 41.4 | 42.5 | 41.6 | 42.0 | 44.8 | 45.0 | 44.4 | 39.5 | 37.7 |
| Iceland | 25.4 | 29.2 | 30.0 | 30.3 | 29.7 | 28.8 | 28.1 | 26.9 | 30.4 | 31.4 |
| Ireland | 21.8 | 15.5 | 16.2 | 14.6 | 13.8 | 12.7 | 12.8 | 14.5 | 16.2 | 19.0 |
| Israel | 20.7 | 19.1 | 18.2 | 18.0 | 16.1 | 16.5 | 15.0 | 13.9 | 13.3 | 13.4 |
| Italy | 44.2 | 41.7 | 42.1 | 41.7 | 41.9 | 41.1 | 41.6 | 41.9 | 42.4 | 43.1 |
| Japan | 22.9 | 25.6 | 25.0 | 25.4 | 25.7 | 26.0 | 26.2 | 25.9 | 25.4 | 26.4 |
| Korea | 15.4 | 15.6 | 15.9 | 16.1 | 16.7 | 17.4 | 17.8 | 17.2 | 17.9 | 18.1 |
| Luxembourg | 22.9 | 19.4 | 19.8 | 20.7 | 21.4 | 22.6 | 21.2 | 20.7 | 21.3 | 23.0 |
| Mexico | 10.4 | 14.8 | 13.3 | 12.8 | 13.2 | 14.0 | 13.4 | 13.9 | 14.2 | 15.0 |
| Netherlands | 38.0 | 35.3 | 36.2 | 36.5 | 32.7 | 33.0 | 33.5 | 31.6 | 31.8 | 31.5 |
| New Zealand | 19.0 | 19.2 | 19.3 | 19.6 | 15.9 | 16.1 | 15.6 | 14.7 | 13.8 | 13.1 |
| Norway | 33.0 | 33.3 | 33.5 | 32.8 | 33.1 | 33.2 | 33.4 | 33.1 | 33.3 | 33.6 |
| Poland | 37.7 | 37.7 | 38.0 | 38.2 | 38.5 | 34.1 | 30.6 | 30.4 | 30.6 | 30.9 |
| Portugal | 32.9 | 32.0 | 32.7 | 32.0 | 32.7 | 33.2 | 33.2 | 32.9 | 33.2 | 36.2 |
| Slovak Republic | 36.9 | 36.9 | 35.5 | 31.1 | 31.6 | 32.1 | 33.0 | 31.2 | 31.5 | 32.8 |
| Slovenia | 37.1 | 37.8 | 37.9 | 36.2 | 35.9 | 35.7 | 34.9 | 34.2 | 34.0 | 34.1 |
| Spain | 35.4 | 35.4 | 35.8 | 36.1 | 36.3 | 35.8 | 34.6 | 34.9 | 36.7 | 36.9 |
| Sweden | 46.0 | 44.2 | 44.6 | 44.2 | 43.3 | 41.0 | 40.5 | 39.1 | 38.6 | 38.7 |
| Switzerland | 15.6 | 15.2 | 15.0 | 15.1 | 14.7 | 15.1 | 13.5 | 14.1 | 14.1 | 14.2 |
| Turkey ${ }^{2}$ | 39.8 | 41.5 | 42.2 | 42.5 | 42.3 | 42.4 | 40.0 | 37.6 | 38.1 | 37.9 |
| United Kingdom | 28.3 | 28.6 | 28.9 | 29.9 | 29.3 | 29.9 | 28.6 | 28.0 | 28.4 | 28.1 |
| United States | 26.3 | 24.1 | 24.1 | 24.1 | 24.3 | 24.6 | 23.8 | 25.2 | 25.4 | 24.6 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 32.0 | 31.4 | 31.3 | 31.1 | 30.8 | 30.7 | 30.2 | 29.8 | 30.0 | 30.2 |
| OECD-EU21 | 37.9 | 36.8 | 36.8 | 36.3 | 36.1 | 35.9 | 35.5 | 35.1 | 35.1 | 35.5 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.7b. Income tax, married couple at $100 \%$ and $67 \%$ of average earnings
Tax burden as a \% of gross wage earnings, two-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 23.8 | 22.4 | 22.4 | 22.8 | 22.5 | 21.6 | 20.4 | 18.8 | 19.0 | 19.7 |
| Austria | 10.7 | 12.0 | 13.0 | 12.5 | 12.9 | 13.4 | 13.9 | 11.9 | 12.2 | 12.6 |
| Belgium | 26.4 | 24.9 | 23.9 | 24.0 | 23.9 | 24.0 | 24.5 | 23.7 | 24.0 | 24.1 |
| Canada | 17.7 | 16.1 | 15.8 | 15.0 | 15.1 | 13.5 | 13.8 | 13.1 | 12.9 | 13.1 |
| Chile | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 6.8 | 7.5 | 7.6 | 7.1 | 5.5 | 6.2 | 4.6 | 5.0 | 4.9 | 5.3 |
| Denmark | 30.4 | 29.7 | 28.4 | 28.3 | 28.4 | 28.5 | 28.2 | 27.7 | 26.8 | 26.9 |
| Estonia | 21.1 | 21.3 | 19.9 | 17.8 | 14.3 | 15.1 | 12.2 | 13.8 | 13.6 | 13.8 |
| Finland | 24.8 | 23.3 | 22.5 | 22.5 | 21.3 | 21.1 | 21.6 | 20.3 | 19.9 | 20.0 |
| France | 10.7 | 10.8 | 10.7 | 11.1 | 11.1 | 11.0 | 11.2 | 11.1 | 11.2 | 11.3 |
| Germany | 13.7 | 13.1 | 12.3 | 12.1 | 12.2 | 12.6 | 13.0 | 11.8 | 10.2 | 10.5 |
| Greece ${ }^{1}$ | 0.9 | 0.6 | 1.3 | 1.4 | 2.4 | 2.3 | 2.3 | 3.5 | 3.9 | .. |
| Hungary | 18.0 | 13.1 | 13.5 | 12.4 | 16.2 | 17.1 | 17.2 | 17.1 | 12.9 | 9.8 |
| Iceland | 23.1 | 25.5 | 26.0 | 26.4 | 26.2 | 25.2 | 25.3 | 23.7 | 24.8 | 25.6 |
| Ireland | 13.3 | 9.5 | 9.0 | 8.2 | 7.5 | 6.5 | 6.5 | 7.8 | 8.4 | 12.5 |
| Israel | 11.7 | 9.2 | 7.8 | 7.6 | 7.1 | 7.6 | 6.1 | 5.3 | 4.8 | 5.0 |
| Italy | 16.8 | 14.1 | 14.5 | 14.0 | 14.8 | 14.8 | 15.3 | 15.6 | 16.3 | 17.0 |
| Japan | 4.9 | 4.7 | 4.7 | 4.7 | 5.2 | 5.8 | 5.7 | 5.6 | 5.5 | 6.2 |
| Korea | 1.3 | 1.5 | 1.5 | 1.4 | 1.8 | 2.1 | 2.1 | 1.6 | 2.0 | 1.8 |
| Luxembourg | 8.2 | 5.1 | 5.5 | 6.2 | 6.8 | 7.6 | 9.9 | 8.8 | 9.2 | 9.5 |
| Mexico | -2.0 | 0.6 | 1.1 | 0.5 | 1.0 | 1.8 | 1.2 | 1.8 | 2.1 | 2.9 |
| Netherlands | 7.9 | 7.5 | 7.8 | 8.3 | 9.6 | 10.6 | 11.2 | 11.9 | 11.7 | 11.5 |
| New Zealand | 19.0 | 19.2 | 19.3 | 19.6 | 19.8 | 20.3 | 19.5 | 17.9 | 16.5 | 15.3 |
| Norway | 20.6 | 20.9 | 20.9 | 19.9 | 19.9 | 20.2 | 20.2 | 19.9 | 19.9 | 20.0 |
| Poland | 6.1 | 5.7 | 5.8 | 5.9 | 6.0 | 2.0 | 2.5 | 2.3 | 2.5 | 2.9 |
| Portugal | 8.1 | 8.0 | 8.1 | 7.3 | 7.8 | 8.3 | 8.2 | 8.0 | 8.0 | 10.0 |
| Slovak Republic | 5.8 | 4.9 | 3.9 | 4.0 | 3.7 | 4.2 | 4.9 | 3.2 | 3.5 | 5.0 |
| Slovenia | 8.1 | 8.0 | 8.1 | 5.9 | 6.0 | 6.0 | 6.1 | 6.0 | 5.6 | 5.7 |
| Spain | 9.3 | 9.3 | 9.8 | 10.2 | 10.5 | 10.0 | 8.5 | 9.1 | 11.4 | 11.7 |
| Sweden | 25.9 | 23.6 | 23.9 | 23.4 | 22.9 | 19.5 | 18.7 | 17.4 | 16.7 | 16.7 |
| Switzerland | 8.1 | 8.1 | 8.3 | 8.3 | 7.9 | 8.2 | 7.7 | 7.6 | 7.7 | 7.4 |
| Turkey ${ }^{2}$ | 14.1 | 14.0 | 14.8 | 15.1 | 14.9 | 15.0 | 12.9 | 12.3 | 12.9 | 12.7 |
| United Kingdom | 16.5 | 15.5 | 15.6 | 16.7 | 16.0 | 16.5 | 15.4 | 15.0 | 15.3 | 14.8 |
| United States | 12.8 | 10.5 | 10.5 | 10.5 | 10.7 | 11.0 | 10.9 | 10.0 | 10.3 | 11.5 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 13.1 | 12.3 | 12.3 | 12.1 | 12.1 | 12.1 | 11.8 | 11.4 | 11.4 | 11.9 |
| OECD-EU21 | 13.8 | 12.7 | 12.6 | 12.3 | 12.4 | 12.3 | 12.2 | 12.0 | 11.8 | 12.6 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.7c. Income tax plus employee contributions less cash benefits,
married couple at $100 \%$ and $67 \%$ of average earnings
Tax burden as a \% of gross wage earnings, two-earner married couple with two children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 22.0 | 19.8 | 16.9 | 18.9 | 19.3 | 18.8 | 18.3 | 17.3 | 18.9 | 19.7 |
| Austria | 20.0 | 21.6 | 22.8 | 22.6 | 23.3 | 24.0 | 24.6 | 22.1 | 22.6 | 23.1 |
| Belgium | 34.9 | 33.8 | 32.8 | 32.9 | 32.9 | 32.9 | 33.3 | 32.5 | 32.9 | 33.0 |
| Canada | 22.0 | 20.2 | 20.2 | 20.2 | 20.5 | 18.8 | 19.0 | 18.2 | 18.2 | 18.5 |
| Chile | 5.3 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.5 | 5.5 | 6.6 | 6.6 |
| Czech Republic | 14.0 | 17.7 | 18.0 | 17.5 | 16.0 | 11.0 | 11.6 | 11.8 | 11.9 | 12.4 |
| Denmark | 38.8 | 37.0 | 35.7 | 35.6 | 35.7 | 35.9 | 35.6 | 35.1 | 33.7 | 33.9 |
| Estonia | 16.7 | 18.4 | 16.1 | 14.4 | 11.2 | 12.6 | 10.1 | 12.6 | 13.5 | 13.8 |
| Finland | 26.5 | 24.6 | 23.8 | 24.2 | 23.5 | 23.5 | 23.7 | 22.7 | 23.2 | 23.5 |
| France | 21.3 | 21.5 | 21.6 | 21.9 | 22.1 | 22.1 | 22.3 | 22.2 | 22.3 | 22.5 |
| Germany | 34.2 | 34.1 | 33.2 | 33.3 | 33.7 | 33.5 | 33.5 | 32.2 | 30.4 | 31.1 |
| Greece ${ }^{1}$ | 16.8 | 16.6 | 17.3 | 17.4 | 18.4 | 18.3 | 18.3 | 19.5 | 19.9 | . |
| Hungary | 24.2 | 20.0 | 21.6 | 20.6 | 21.8 | 25.6 | 26.0 | 26.3 | 22.3 | 20.0 |
| Iceland | 21.8 | 25.2 | 26.0 | 26.3 | 25.6 | 25.0 | 24.3 | 22.3 | 24.4 | 25.5 |
| Ireland | 13.5 | 7.1 | 7.2 | 5.4 | 4.5 | 3.4 | 3.5 | 5.3 | 7.1 | 10.3 |
| Israel | 16.8 | 14.3 | 13.3 | 13.3 | 11.7 | 12.5 | 11.2 | 10.2 | 9.4 | 9.5 |
| Italy | 25.1 | 22.4 | 22.9 | 22.4 | 23.3 | 22.2 | 22.9 | 23.2 | 24.0 | 24.8 |
| Japan | 14.9 | 16.3 | 15.6 | 15.8 | 15.9 | 16.4 | 16.5 | 16.3 | 15.1 | 15.9 |
| Korea | 8.0 | 8.4 | 8.5 | 8.6 | 9.0 | 9.5 | 9.7 | 9.3 | 9.8 | 9.8 |
| Luxembourg | 12.6 | 8.5 | 9.0 | 10.0 | 10.7 | 12.1 | 12.4 | 11.6 | 12.2 | 13.5 |
| Mexico | -0.6 | 2.0 | 2.5 | 1.9 | 2.3 | 3.2 | 2.5 | 3.2 | 3.4 | 4.2 |
| Netherlands | 30.0 | 27.4 | 28.0 | 28.3 | 26.4 | 26.3 | 26.8 | 24.9 | 24.9 | 24.7 |
| New Zealand | 19.0 | 19.2 | 19.3 | 19.6 | 15.9 | 16.1 | 15.6 | 14.7 | 13.8 | 13.1 |
| Norway | 24.4 | 24.8 | 24.9 | 24.0 | 24.2 | 24.7 | 24.8 | 24.6 | 24.7 | 24.9 |
| Poland | 27.3 | 27.3 | 27.5 | 27.8 | 28.2 | 23.0 | 20.4 | 20.1 | 20.3 | 20.7 |
| Portugal | 17.0 | 15.9 | 16.7 | 15.9 | 16.8 | 17.4 | 17.3 | 16.9 | 17.3 | 21.0 |
| Slovak Republic | 12.9 | 12.7 | 12.8 | 13.0 | 13.6 | 14.4 | 15.4 | 13.2 | 13.5 | 15.1 |
| Slovenia | 25.1 | 25.4 | 25.5 | 23.5 | 23.6 | 23.8 | 23.7 | 23.6 | 23.3 | 23.5 |
| Spain | 15.6 | 15.7 | 16.2 | 16.5 | 16.8 | 16.4 | 14.8 | 15.5 | 17.8 | 18.0 |
| Sweden | 28.3 | 25.9 | 26.4 | 26.1 | 25.0 | 21.8 | 21.2 | 20.0 | 19.3 | 19.4 |
| Switzerland | 10.0 | 9.9 | 9.9 | 10.0 | 9.6 | 10.0 | 8.3 | 8.9 | 8.9 | 8.9 |
| Turkey ${ }^{2}$ | 28.1 | 29.0 | 29.8 | 30.1 | 29.9 | 30.0 | 27.9 | 27.3 | 27.9 | 27.7 |
| United Kingdom | 21.4 | 21.3 | 21.5 | 22.7 | 22.0 | 22.6 | 21.3 | 20.7 | 21.1 | 20.7 |
| United States | 20.5 | 18.1 | 18.1 | 18.1 | 18.4 | 18.7 | 16.0 | 17.7 | 18.0 | 17.2 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 20.3 | 19.6 | 19.6 | 19.5 | 19.3 | 19.2 | 18.8 | 18.4 | 18.6 | 19.0 |
| OECD-EU21 | 22.7 | 21.7 | 21.7 | 21.5 | 21.4 | 21.1 | 20.9 | 20.6 | 20.6 | 21.3 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.8a. Income tax plus employee and employer contributions less cash benefits, married couple at $100 \%$ and $33 \%$ of average earnings
Tax burden as a \% of labour costs, two-earner married couple with no children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 27.4 | 25.1 | 25.1 | 25.5 | 25.1 | 24.2 | 23.5 | 23.1 | 23.1 | 22.9 |
| Austria | 44.6 | 44.5 | 45.1 | 45.1 | 45.3 | 45.5 | 45.7 | 44.3 | 44.5 | 44.7 |
| Belgium | 51.2 | 48.8 | 49.9 | 48.0 | 47.8 | 47.9 | 48.4 | 47.7 | 47.7 | 48.0 |
| Canada | 30.3 | 29.1 | 29.2 | 28.9 | 28.8 | 28.0 | 28.2 | 27.4 | 27.3 | 27.7 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 41.4 | 42.0 | 42.3 | 42.6 | 40.9 | 41.3 | 41.4 | 39.9 | 40.0 | 40.3 |
| Denmark | 40.8 | 39.4 | 39.0 | 38.9 | 38.9 | 39.0 | 38.7 | 38.1 | 36.8 | 37.0 |
| Estonia | 39.8 | 40.9 | 39.6 | 38.1 | 37.3 | 37.6 | 37.0 | 38.0 | 38.8 | 38.8 |
| Finland | 45.0 | 42.1 | 41.4 | 41.5 | 40.9 | 40.7 | 40.5 | 39.2 | 39.1 | 39.3 |
| France | 45.6 | 45.7 | 44.8 | 44.8 | 44.4 | 43.9 | 45.5 | 45.5 | 45.5 | 45.6 |
| Germany | 47.5 | 47.9 | 46.9 | 47.3 | 47.4 | 47.0 | 46.6 | 46.0 | 45.0 | 45.6 |
| Greece ${ }^{1}$ | 35.6 | 35.6 | 36.0 | 35.7 | 36.6 | 37.5 | 37.4 | 38.1 | 38.1 | .. |
| Hungary | 52.7 | 47.5 | 48.4 | 47.8 | 48.3 | 50.7 | 50.4 | 49.5 | 43.8 | 46.7 |
| Iceland | 23.8 | 27.1 | 27.7 | 28.2 | 28.2 | 27.0 | 27.6 | 26.1 | 28.6 | 29.5 |
| Ireland | 23.5 | 18.9 | 18.4 | 17.5 | 16.7 | 15.5 | 15.6 | 17.3 | 18.2 | 20.3 |
| Israel | 24.3 | 22.8 | 21.4 | 21.1 | 19.6 | 20.0 | 18.1 | 16.9 | 16.3 | 16.6 |
| Italy | 44.1 | 42.4 | 42.7 | 42.4 | 42.7 | 42.7 | 43.2 | 43.5 | 43.9 | 44.5 |
| Japan | 24.0 | 26.6 | 26.6 | 27.0 | 28.0 | 28.4 | 28.6 | 28.3 | 29.4 | 30.0 |
| Korea | 15.8 | 15.8 | 16.4 | 16.6 | 17.4 | 18.6 | 18.9 | 18.6 | 19.2 | 19.4 |
| Luxembourg | 28.9 | 26.2 | 26.5 | 27.1 | 27.5 | 28.3 | 26.6 | 25.9 | 26.2 | 27.7 |
| Mexico | 9.5 | 14.2 | 12.9 | 12.2 | 12.7 | 13.7 | 13.1 | 13.5 | 13.8 | 14.4 |
| Netherlands | 38.0 | 35.5 | 36.8 | 36.9 | 34.1 | 34.3 | 34.7 | 33.9 | 34.2 | 33.8 |
| New Zealand | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 19.2 | 16.9 | 15.9 | 14.8 |
| Norway | 36.1 | 36.0 | 36.1 | 35.4 | 35.1 | 35.1 | 35.0 | 34.7 | 34.8 | 35.0 |
| Poland | 37.0 | 37.0 | 37.2 | 37.5 | 37.8 | 37.1 | 33.6 | 33.1 | 33.2 | 33.4 |
| Portugal | 33.8 | 33.1 | 33.1 | 32.4 | 32.6 | 32.9 | 32.9 | 32.7 | 32.7 | 34.0 |
| Slovak Republic | 40.7 | 41.5 | 39.7 | 35.3 | 35.7 | 35.5 | 36.0 | 33.2 | 33.7 | 35.8 |
| Slovenia | 44.5 | 44.4 | 44.5 | 43.3 | 43.0 | 41.4 | 40.4 | 39.9 | 40.1 | 40.2 |
| Spain | 36.0 | 36.0 | 36.2 | 36.3 | 36.4 | 36.3 | 35.5 | 35.7 | 36.8 | 36.9 |
| Sweden | 49.1 | 47.0 | 47.2 | 46.6 | 46.2 | 43.6 | 43.0 | 41.5 | 41.0 | 41.0 |
| Switzerland | 19.3 | 18.9 | 18.7 | 18.7 | 18.7 | 18.9 | 18.3 | 18.3 | 18.3 | 18.6 |
| Turkey ${ }^{2}$ | 39.7 | 41.4 | 42.2 | 42.4 | 42.3 | 42.3 | 40.0 | 37.7 | 38.0 | 37.9 |
| United Kingdom | 29.1 | 30.3 | 30.5 | 30.5 | 30.6 | 30.8 | 29.7 | 29.1 | 29.4 | 28.5 |
| United States | 28.8 | 27.8 | 27.8 | 27.7 | 27.8 | 27.9 | 27.6 | 28.3 | 28.4 | 27.8 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 33.9 | 33.4 | 33.4 | 33.1 | 33.0 | 32.9 | 32.6 | 32.0 | 32.0 | 32.2 |
| OECD-EU21 | 40.4 | 39.4 | 39.3 | 38.8 | 38.6 | 38.5 | 38.2 | 37.7 | 37.6 | 38.1 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II. 8 b . Income tax, married couple at $100 \%$ and $33 \%$ of average earnings
Tax burden as a \% of gross wage earnings, two-earner married couple with no children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 22.8 | 20.7 | 20.7 | 21.0 | 20.6 | 19.6 | 19.0 | 18.2 | 18.3 | 18.3 |
| Austria | 9.4 | 10.2 | 11.2 | 11.0 | 11.3 | 11.6 | 11.9 | 10.8 | 11.0 | 11.3 |
| Belgium | 25.9 | 24.1 | 22.4 | 23.8 | 23.9 | 24.0 | 24.5 | 23.7 | 23.9 | 24.1 |
| Canada | 16.6 | 14.8 | 14.4 | 13.7 | 13.6 | 12.8 | 13.3 | 12.3 | 12.3 | 12.5 |
| Chile | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Czech Republic | 8.3 | 9.2 | 9.7 | 10.0 | 7.7 | 8.3 | 8.4 | 8.5 | 8.6 | 9.0 |
| Denmark | 27.6 | 27.2 | 26.8 | 26.7 | 26.8 | 26.9 | 26.7 | 26.1 | 25.3 | 25.4 |
| Estonia | 19.9 | 20.1 | 18.4 | 16.3 | 15.8 | 16.2 | 15.5 | 14.9 | 14.7 | 14.9 |
| Finland | 23.7 | 22.1 | 21.3 | 21.2 | 20.1 | 19.8 | 20.2 | 19.1 | 18.6 | 18.6 |
| France | 12.3 | 11.3 | 11.2 | 11.3 | 11.0 | 10.1 | 12.3 | 12.2 | 12.3 | 12.4 |
| Germany | 16.3 | 15.9 | 15.0 | 14.9 | 14.9 | 15.2 | 15.5 | 14.9 | 13.9 | 14.0 |
| Greece ${ }^{1}$ | 1.6 | 1.6 | 2.0 | 1.6 | 2.9 | 3.9 | 3.8 | 4.7 | 4.7 | . |
| Hungary | 19.4 | 15.4 | 15.7 | 15.1 | 15.7 | 16.4 | 16.1 | 15.9 | 10.8 | 14.0 |
| Iceland | 19.9 | 22.6 | 23.3 | 23.9 | 23.9 | 22.9 | 23.0 | 20.7 | 21.7 | 22.7 |
| Ireland | 11.1 | 6.9 | 6.3 | 5.2 | 4.4 | 3.1 | 3.1 | 4.0 | 4.5 | 9.2 |
| Israel | 13.1 | 11.2 | 9.8 | 9.5 | 8.9 | 9.5 | 7.7 | 6.7 | 6.0 | 6.3 |
| Italy | 15.9 | 14.2 | 14.5 | 14.1 | 15.2 | 14.8 | 15.5 | 15.8 | 16.5 | 17.2 |
| Japan | 6.1 | 5.8 | 5.8 | 5.8 | 6.3 | 7.1 | 7.1 | 6.9 | 6.7 | 6.6 |
| Korea | 1.6 | 1.7 | 2.0 | 2.1 | 2.6 | 3.5 | 3.4 | 3.1 | 3.4 | 3.3 |
| Luxembourg | 7.7 | 4.8 | 5.1 | 5.5 | 5.9 | 6.5 | 6.4 | 5.2 | 5.6 | 5.8 |
| Mexico | -4.3 | -1.5 | -0.7 | -1.5 | -0.9 | 0.2 | -0.4 | 0.0 | 0.3 | 0.9 |
| Netherlands | 7.8 | 7.9 | 8.2 | 8.6 | 10.2 | 11.2 | 11.9 | 12.7 | 12.4 | 12.2 |
| New Zealand | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 19.2 | 16.9 | 15.9 | 14.8 |
| Norway | 20.1 | 20.0 | 20.0 | 19.1 | 18.7 | 18.9 | 18.9 | 18.6 | 18.6 | 18.7 |
| Poland | 5.3 | 4.8 | 4.9 | 5.0 | 5.2 | 5.5 | 6.0 | 5.4 | 5.5 | 5.7 |
| Portugal | 7.1 | 6.2 | 6.2 | 5.3 | 5.6 | 6.0 | 6.0 | 5.7 | 5.7 | 7.3 |
| Slovak Republic | 6.2 | 6.3 | 5.0 | 5.0 | 5.5 | 5.1 | 5.9 | 2.3 | 2.9 | 5.6 |
| Slovenia | 11.9 | 11.8 | 11.9 | 10.4 | 10.5 | 8.9 | 8.2 | 8.1 | 8.4 | 8.5 |
| Spain | 10.1 | 10.1 | 10.3 | 10.5 | 10.6 | 10.7 | 9.7 | 10.1 | 11.5 | 11.7 |
| Sweden | 25.3 | 22.6 | 22.9 | 22.3 | 21.8 | 18.2 | 17.5 | 16.1 | 15.4 | 15.5 |
| Switzerland | 7.4 | 7.5 | 7.7 | 7.8 | 7.7 | 8.0 | 7.3 | 7.3 | 7.3 | 7.4 |
| Turkey ${ }^{2}$ | 14.0 | 13.8 | 14.8 | 15.0 | 14.9 | 14.9 | 12.9 | 12.4 | 12.8 | 12.7 |
| United Kingdom | 15.1 | 15.3 | 15.4 | 15.4 | 15.5 | 15.6 | 14.6 | 14.2 | 14.3 | 13.5 |
| United States | 15.5 | 14.5 | 14.4 | 14.3 | 14.4 | 14.5 | 14.3 | 13.0 | 13.2 | 14.6 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 12.9 | 12.3 | 12.2 | 12.0 | 12.1 | 12.1 | 11.9 | 11.4 | 11.3 | 12.0 |
| OECD-EU21 | 13.7 | 12.8 | 12.6 | 12.3 | 12.4 | 12.3 | 12.4 | 11.9 | 11.7 | 12.8 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.8c. Income tax plus employee contributions less cash benefits,
married couple at $100 \%$ and $33 \%$ of average earnings
Tax burden as a \% of gross wage earnings, two-earner married couple with no children

|  | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 22.8 | 20.7 | 20.7 | 21.0 | 20.6 | 19.6 | 19.0 | 18.2 | 18.3 | 18.3 |
| Austria | 27.5 | 28.3 | 29.2 | 29.0 | 29.4 | 29.7 | 30.0 | 28.1 | 28.4 | 28.6 |
| Belgium | 38.1 | 35.7 | 34.1 | 35.0 | 34.7 | 34.8 | 35.2 | 34.5 | 34.7 | 34.8 |
| Canada | 22.4 | 21.1 | 20.9 | 20.7 | 20.6 | 19.7 | 20.1 | 19.1 | 19.1 | 19.4 |
| Chile | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Czech Republic | 20.8 | 21.7 | 22.2 | 22.5 | 20.2 | 20.8 | 20.9 | 19.5 | 19.6 | 20.0 |
| Denmark | 40.9 | 39.4 | 39.0 | 38.9 | 38.9 | 39.0 | 38.7 | 38.1 | 36.8 | 37.0 |
| Estonia | 19.9 | 21.1 | 19.4 | 17.3 | 16.4 | 16.8 | 16.1 | 16.7 | 17.5 | 17.7 |
| Finland | 30.7 | 28.1 | 27.3 | 27.5 | 26.8 | 26.4 | 26.3 | 25.2 | 25.5 | 25.6 |
| France | 25.7 | 24.9 | 24.8 | 24.9 | 24.6 | 23.8 | 26.0 | 25.9 | 26.0 | 26.1 |
| Germany | 36.8 | 36.9 | 35.8 | 36.3 | 36.6 | 36.4 | 36.2 | 35.5 | 34.4 | 34.9 |
| Greece ${ }^{1}$ | 17.5 | 17.6 | 18.0 | 17.6 | 18.9 | 19.9 | 19.8 | 20.7 | 20.7 | .. |
| Hungary | 31.9 | 27.9 | 29.2 | 28.6 | 30.1 | 33.4 | 33.1 | 32.9 | 27.8 | 31.5 |
| Iceland | 20.1 | 22.9 | 23.5 | 24.1 | 24.1 | 23.1 | 23.7 | 21.5 | 22.4 | 23.4 |
| Ireland | 15.0 | 10.6 | 10.1 | 9.1 | 8.2 | 6.9 | 7.0 | 8.9 | 9.9 | 12.2 |
| Israel | 20.6 | 18.2 | 16.8 | 16.6 | 15.4 | 16.2 | 14.4 | 13.3 | 12.6 | 12.9 |
| Italy | 25.1 | 23.4 | 23.7 | 23.3 | 24.3 | 24.3 | 25.0 | 25.3 | 26.0 | 26.7 |
| Japan | 16.1 | 17.4 | 17.4 | 17.7 | 18.6 | 19.2 | 19.3 | 19.1 | 19.7 | 20.0 |
| Korea | 8.3 | 8.6 | 9.1 | 9.2 | 9.7 | 10.8 | 11.0 | 10.7 | 11.2 | 11.3 |
| Luxembourg | 19.3 | 16.2 | 16.6 | 17.1 | 17.6 | 18.5 | 18.4 | 17.4 | 17.7 | 18.9 |
| Mexico | -2.9 | 0.0 | 0.7 | -0.1 | 0.5 | 1.5 | 0.9 | 1.3 | 1.6 | 2.2 |
| Netherlands | 30.8 | 28.3 | 29.4 | 29.4 | 28.0 | 27.9 | 28.3 | 27.7 | 27.7 | 27.5 |
| New Zealand | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 19.2 | 16.9 | 15.9 | 14.8 |
| Norway | 27.9 | 27.8 | 27.8 | 26.9 | 26.5 | 26.7 | 26.7 | 26.4 | 26.4 | 26.5 |
| Poland | 26.5 | 26.4 | 26.7 | 27.0 | 27.4 | 26.5 | 23.8 | 23.2 | 23.4 | 23.6 |
| Portugal | 18.1 | 17.2 | 17.2 | 16.3 | 16.6 | 17.0 | 17.0 | 16.7 | 16.7 | 18.3 |
| Slovak Republic | 18.2 | 19.1 | 18.4 | 18.4 | 18.9 | 18.5 | 19.3 | 15.7 | 16.3 | 19.0 |
| Slovenia | 34.0 | 33.9 | 34.0 | 32.5 | 32.6 | 31.0 | 30.3 | 30.2 | 30.5 | 30.6 |
| Spain | 16.5 | 16.4 | 16.7 | 16.8 | 16.9 | 17.0 | 16.1 | 16.4 | 17.9 | 18.0 |
| Sweden | 32.3 | 29.6 | 29.9 | 29.3 | 28.8 | 25.2 | 24.5 | 23.1 | 22.4 | 22.5 |
| Switzerland | 14.0 | 13.8 | 13.8 | 13.8 | 13.7 | 14.0 | 13.3 | 13.3 | 13.4 | 13.6 |
| Turkey ${ }^{2}$ | 28.0 | 28.8 | 29.8 | 30.0 | 29.9 | 29.9 | 27.9 | 27.4 | 27.8 | 27.7 |
| United Kingdom | 22.7 | 23.6 | 23.7 | 23.8 | 23.8 | 24.0 | 22.9 | 22.4 | 22.6 | 21.7 |
| United States | 23.1 | 22.1 | 22.1 | 22.0 | 22.1 | 22.2 | 19.8 | 20.6 | 20.9 | 20.2 |
| Unweighted average |  |  |  |  |  |  |  |  |  |  |
| OECD-average | 22.8 | 22.2 | 22.2 | 22.0 | 22.0 | 22.0 | 21.7 | 21.1 | 21.1 | 21.6 |
| OECD-EU21 | 26.1 | 25.1 | 25.0 | 24.8 | 24.7 | 24.7 | 24.5 | 24.0 | 23.9 | 24.7 |

1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
2. Wage figures are based on the old definition of average worker (ISIC D, Rev. 3).

Table II.9. Annual average gross wage earnings, single individual no children, 2000-11
In US dollars using PPP

|  | 2000 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net |
| Australia | 31505 | 23125 | 35540 | 27031 | 36812 | 28020 | 37866 | 28695 | 39048 | 29685 | 40012 | 30666 | 40783 | 31587 | 43820 | 34154 | 44192 | 34345 | 44853 | 34863 |
| Austria | 33031 | 22804 | 36486 | 24812 | 37684 | 25165 | 38385 | 25704 | 41039 | 27316 | 41784 | 27646 | 43705 | 28730 | 44709 | 30050 | 45157 | 30223 | 46211 | 30785 |
| Belgium | 35522 | 20245 | 39418 | 22868 | 39825 | 23133 | 40766 | 23648 | 42673 | 24784 | 43614 | 25268 | 46592 | 26795 | 47692 | 27691 | 48015 | 27804 | 49351 | 28524 |
| Canada | 29849 | 22272 | 31166 | 23647 | 31642 | 24078 | 32807 | 24952 | 33638 | 25607 | 34301 | 26345 | 34988 | 26782 | 35796 | 27708 | 36680 | 28435 | 37549 | 29015 |
| Chile | 9754 | 9071 | 10317 | 9595 | 10155 | 9444 | 10363 | 9638 | 9890 | 9197 | 10354 | 9629 | 11550 | 10742 | 12047 | 11204 | 13702 | 12743 | 14530 | 13513 |
| Czech Republic | 11324 | 8777 | 13970 | 10710 | 14630 | 11156 | 15301 | 11623 | 16643 | 12913 | 17988 | 13870 | 19117 | 14598 | 20259 | 15743 | 20207 | 15670 | 20868 | 16077 |
| Denmark | 33504 | 18702 | 36452 | 21012 | 37660 | 22207 | 37287 | 22029 | 39748 | 23455 | 42086 | 24778 | 44844 | 26502 | 46543 | 28147 | 47749 | 29459 | 48994 | 30182 |
| Estonia | 8637 | 6742 | 11088 | 8538 | 11776 | 9201 | 12559 | 10073 | 14335 | 11650 | 16117 | 13104 | 18302 | 15032 | 18191 | 14814 | 18293 | 14739 | 18639 | 14995 |
| Finland | 27180 | 17875 | 30086 | 20501 | 32213 | 22186 | 33552 | 23042 | 35316 | 24513 | 37823 | 26320 | 40727 | 28362 | 42465 | 30035 | 43523 | 30616 | 43798 | 30729 |
| France | 28470 | 20273 | 30748 | 21852 | 31499 | 22433 | 33055 | 23459 | 34755 | 24635 | 36316 | 26216 | 38062 | 27445 | 39296 | 28348 | 39927 | 28781 | 41361 | 29798 |
| Germany | 35582 | 20210 | 40530 | 22953 | 42495 | 24530 | 44643 | 25797 | 46756 | 26878 | 48542 | 28042 | 51007 | 29588 | 51086 | 29943 | 52361 | 31729 | 54949 | 33019 |
| Greece ${ }^{1}$ | 14009 | 11621 | 18810 | 15608 | 19868 | 16342 | 19891 | 16513 | 21887 | 17988 | 23026 | 18578 | 23823 | 19230 | 26534 | 21010 | 28930 | 22881 |  |  |
| Hungary | 10051 | 6466 | 12914 | 8654 | 13438 | 8809 | 14140 | 9375 | 15480 | 10016 | 16426 | 10051 | 18049 | 11144 | 19208 | 11955 | 19294 | 13238 | 20202 | 13141 |
| Iceland | 32172 | 23988 | 35548 | 25739 | 38198 | 27490 | 41785 | 30019 | 42887 | 30960 | 44901 | 32854 | 46397 | 33754 | 39730 | 29305 | 38756 | 28060 | 40507 | 29049 |
| Ireland | 22884 | 18230 | 26167 | 21911 | 27796 | 23376 | 28670 | 24298 | 30417 | 25947 | 32553 | 28040 | 34208 | 29438 | 35170 | 29314 | 37504 | 30808 | 39226 | 31810 |
| Israel | 26703 | 19882 | 26540 | 20489 | 27421 | 21697 | 26964 | 21397 | 27451 | 22122 | 30116 | 23971 | 31197 | 25565 | 30282 | 25250 | 30368 | 25604 | 32098 | 26935 |
| Italy | 26377 | 18716 | 27059 | 19455 | 27181 | 19431 | 28212 | 20310 | 30291 | 21583 | 31602 | 22378 | 34030 | 23981 | 35021 | 24612 | 35056 | 24461 | 36361 | 25160 |
| Japan | 32226 | 26759 | 35105 | 28710 | 36619 | 29942 | 38431 | 31322 | 39923 | 32162 | 41462 | 33107 | 42654 | 34021 | 41912 | 33511 | 42825 | 33991 | 44738 | 35350 |
| Korea | 25993 | 23693 | 31619 | 28712 | 33689 | 30414 | 36406 | 32820 | 39287 | 35125 | 41935 | 36895 | 42595 | 37448 | 42794 | 37791 | 44786 | 39281 | 43943 | 38529 |
| Luxembourg | 38178 | 27234 | 42015 | 31691 | 43974 | 32968 | 44142 | 32714 | 47615 | 34962 | 48977 | 35411 | 51902 | 37683 | 53161 | 39210 | 53479 | 39174 | 53480 | 38464 |
| Mexico | 7783 | 7614 | 9035 | 8615 | 9061 | 8591 | 9734 | 9287 | 10186 | 9680 | 10460 | 9832 | 10885 | 10325 | 11033 | 10435 | 11020 | 10402 | 11035 | 10344 |
| Netherlands | 35746 | 23728 | 39470 | 27184 | 41691 | 28120 | 43185 | 29145 | 47006 | 31733 | 49007 | 33094 | 51222 | 34401 | 52801 | 36014 | 53836 | 36793 | 55165 | 37823 |
| New Zealand | 24182 | 19498 | 24689 | 19885 | 25514 | 20484 | 25771 | 20609 | 27468 | 21854 | 28630 | 22596 | 29866 | 23740 | 31428 | 25748 | 31878 | 26462 | 32426 | 27280 |
| Norway | 32692 | 22656 | 38774 | 27079 | 40740 | 28482 | 42545 | 30197 | 45776 | 32459 | 47986 | 33810 | 50381 | 35516 | 50646 | 35892 | 52035 | 36849 | 50644 | 35818 |
| Poland | 12528 | 9044 | 14361 | 10363 | 14505 | 10432 | 14921 | 10687 | 15875 | 11317 | 17529 | 12659 | 18158 | 13611 | 18732 | 14164 | 19377 | 14636 | 20567 | 15507 |
| Portugal | 15612 | 12107 | 18902 | 14650 | 19130 | 14820 | 20519 | 16049 | 22506 | 17512 | 24398 | 18824 | 25709 | 19846 | 26951 | 20855 | 27186 | 20987 | 27836 | 21013 |
| Slovak Republic | 9604 | 7706 | 10332 | 8209 | 11062 | 8650 | 12114 | 9477 | 13366 | 10407 | 14662 | 11390 | 16559 | 12781 | 17618 | 13848 | 17908 | 14031 | 18589 | 14341 |
| Slovenia | 16730 | 10781 | 18927 | 12219 | 20362 | 13116 | 21225 | 13857 | 22519 | 14672 | 23252 | 15614 | 24858 | 16642 | 25241 | 16927 | 26349 | 17578 | 27578 | 18363 |
| Spain | 23596 | 18913 | 25740 | 20647 | 26403 | 21100 | 26953 | 21483 | 28779 | 22885 | 30201 | 23982 | 32288 | 26058 | 34049 | 27309 | 34636 | 27110 | 35528 | 27741 |
| Sweden | 28858 | 19126 | 31457 | 21631 | 33578 | 22994 | 33640 | 23149 | 35743 | 24704 | 37927 | 27460 | 40175 | 29361 | 40499 | 30213 | 40772 | 30673 | 42118 | 31661 |
| Switzerland | 35314 | 29503 | 39107 | 32772 | 40280 | 33790 | 40962 | 34346 | 43646 | 36606 | 46824 | 39159 | 48103 | 40480 | 48960 | 41172 | 49667 | 41756 | 51738 | 43387 |
| Turkey ${ }^{2}$ | 19611 | 13976 | 16333 | 11471 | 17188 | 11954 | 18946 | 13167 | 18466 | 12860 | 19957 | 13885 | 21431 | 15498 | 20394 | 14873 | 22397 | 16215 | 21736 | 15777 |
| United Kingdom | 39173 | 29063 | 43705 | 32027 | 46342 | 33908 | 47682 | 34879 | 50143 | 36661 | 51494 | 37585 | 51290 | 38168 | 51045 | 38163 | 52036 | 38824 | 52013 | 38952 |
| United States | 33129 | 24877 | 36084 | 27273 | 36739 | 27785 | 37637 | 28502 | 39377 | 29765 | 41312 | 31156 | 42337 | 32714 | 44375 | 34014 | 45688 | 34821 | 46800 | 36129 |
| OECD Average | 24927 | 18096 | 27603 | 20250 | 28740 | 21066 | 29737 | 21831 | 31469 | 23077 | 33046 | 24242 | 34641 | 25517 | 35279 | 26159 | 36047 | 26741 | 36696 | 27111 |

[^4]Table II.10. Annual average gross wage earnings, single individual no children, 2000-11 (national currency) ${ }^{1}$

|  | 2000 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net | Gross | Net |
| Australia | 41322 | 30332 | 47892 | 36426 | 50265 | 38259 | 52572 | 39840 | 55042 | 41844 | 57120 | 43777 | 60321 | 46720 | 63546 | 49529 | 66724 | 51856 | 69903 | 54334 |
| Austria | 29732 | 20526 | 32288 | 21957 | 32952 | 22004 | 34025 | 22784 | 35143 | 23391 | 36228 | 23970 | 37258 | 24492 | 37832 | 25428 | 38504 | 25770 | 39263 | 26157 |
| Belgium | 31644 | 18035 | 34643 | 20098 | 35704 | 20739 | 36673 | 21273 | 37674 | 21880 | 38659 | 22397 | 40698 | 23405 | 40998 | 23805 | 41499 | 24030 | 42740 | 24703 |
| Canada | 36764 | 27431 | 38220 | 29000 | 38945 | 29636 | 39816 | 30283 | 40628 | 30928 | 41546 | 31909 | 43189 | 33060 | 42879 | 33191 | 44717 | 34665 | 46163 | 35671 |
| Chile | 2770353 | 2576428 | 3163503 | 2942058 | 3255122 | 3027263 | 3458172 | 3216100 | 3594042 | 3342459 | 3856095 | 3586168 | 4218584 | 3923283 | 4478647 | 4165142 | 5508104 | 5122537 | 5907326 | 5493813 |
| Czech Republic | 160922 | 124729 | 196133 | 150361 | 209080 | 159424 | 219050 | 166403 | 233580 | 181234 | 250710 | 193316 | 272651 | 208198 | 281887 | 219060 | 287320 | 222803 | 290481 | 223781 |
| Denmark | 281700 | 157242 | 311300 | 179444 | 316500 | 186627 | 320300 | 189227 | 330900 | 195259 | 346400 | 203947 | 359300 | 212344 | 367051 | 221974 | 376073 | 232025 | 382850 | 235854 |
| Estonia | 3931 | 3068 | 5332 | 4106 | 5722 | 4471 | 6304 | 5056 | 7456 | 6059 | 8939 | 7268 | 10045 | 8250 | 9492 | 7729 | 9580 | 7719 | 9916 | 7977 |
| Finland | 27037 | 17781 | 30414 | 20724 | 31416 | 21638 | 32788 | 22517 | 33543 | 23283 | 35559 | 24744 | 37372 | 26026 | 38444 | 27191 | 39982 | 28125 | 41445 | 29078 |
| France | 26731 | 19035 | 28847 | 20500 | 29608 | 21086 | 30521 | 21661 | 31369 | 22235 | 32413 | 23399 | 33580 | 24213 | 34132 | 24623 | 34849 | 25121 | 35859 | 25834 |
| Germany | 34400 | 19539 | 37200 | 21067 | 38100 | 21993 | 38700 | 22363 | 39149 | 22505 | 40300 | 23281 | 41400 | 24015 | 41100 | 24090 | 42400 | 25693 | 43855 | 26352 |
| Greece ${ }^{2}$ | 9496 | 7877 | 12960 | 10753 | 13819 | 11367 | 14203 | 11791 | 15301 | 12575 | 16539 | 13344 | 16700 | 13480 | 18541 | 14681 | 20457 | 16180 |  |  |
| Hungary | 1084214 | 697527 | 1556892 | 1043367 | 1697268 | 1112667 | 1818360 | 1205600 | 1988652 | 1286740 | 2156184 | 1319406 | 2336124 | 1442307 | 2436408 | 1516415 | 2511852 | 1723482 | 2624088 | 1706947 |
| Iceland | 2712000 | 2022102 | 3360000 | 2432855 | 3600000 | 2590885 | 4140000 | 2974230 | 4596000 | 3317884 | 5076000 | 3714076 | 5448000 | 3963490 | 5076000 | 3744125 | 5256000 | 3805407 | 5577213 | 3999675 |
| Ireland | 22008 | 17532 | 26546 | 22228 | 27963 | 23517 | 28963 | 24547 | 29931 | 25533 | 31185 | 26861 | 32550 | 28011 | 31802 | 26507 | 32308 | 26540 | 32841 | 26633 |
| Israel | 91884 | 68412 | 96324 | 74362 | 96912 | 76682 | 100224 | 79531 | 101388 | 81708 | 108516 | 86375 | 111936 | 91726 | 112908 | 94149 | 113280 | 95509 | 119016 | 99874 |
| Italy | 21550 | 15291 | 23113 | 16618 | 23723 | 16959 | 24450 | 17602 | 25241 | 17985 | 25805 | 18273 | 26845 | 18918 | 27419 | 19270 | 28224 | 19694 | 29030 | 20088 |
| Japan | 4987116 | 4140942 | 4903985 | 4010618 | 4921998 | 4024511 | 4978855 | 4057883 | 4979155 | 4011225 | 4988400 | 3983177 | 4983948 | 3975163 | 4828001 | 3860274 | 4773076 | 3788423 | 4781406 | 3778126 |
| Korea | 19395847 | 17679599 | 25114192 | 22805660 | 26816239 | 24209198 | 28721809 | 25892253 | 30440171 | 27215346 | 32233620 | 28359362 | 33467499 | 29423684 | 34410564 | 30387885 | 36929183 | 32390144 | 36154826 | 31700925 |
| Luxembourg | 35875 | 25591 | 39587 | 29859 | 40575 | 30420 | 42063 | 31173 | 43532 | 31963 | 45258 | 32722 | 47035 | 34150 | 48175 | 35532 | 49317 | 36126 | 49890 | 35882 |
| Mexico | 47469 | 46441 | 61574 | 58713 | 65394 | 62005 | 69370 | 66184 | 73208 | 69572 | 77145 | 72518 | 81306 | 77124 | 84727 | 80135 | 87324 | 82428 | 89944 | 84307 |
| Netherlands | 31901 | 21176 | 36600 | 25207 | 37900 | 25563 | 38700 | 26118 | 40800 | 27543 | 42000 | 28362 | 43146 | 28977 | 44412 | 30292 | 45215 | 30901 | 45904 | 31473 |
| New Zealand | 34923 | 28159 | 36993 | 29794 | 38611 | 30999 | 39559 | 31635 | 40843 | 32495 | 43022 | 33955 | 44521 | 35389 | 46653 | 38221 | 48007 | 39850 | 49395 | 41557 |
| Norway | 298385 | 206788 | 353448 | 246837 | 366161 | 255986 | 378498 | 268644 | 397765 | 282046 | 420917 | 296570 | 440936 | 310835 | 451967 | 320298 | 469247 | 332303 | 487324 | 344661 |
| Poland | 23061 | 16649 | 26450 | 19086 | 26999 | 19416 | 27889 | 19975 | 29271 | 20867 | 32292 | 23320 | 33711 | 25270 | 34878 | 26372 | 36121 | 27284 | 38557 | 29070 |
| Portugal | 10922 | 8470 | 13350 | 10347 | 13700 | 10613 | 14042 | 10983 | 14893 | 11588 | 16091 | 12415 | 16691 | 12884 | 17129 | 13255 | 17352 | 13395 | 17588 | 13278 |
| Slovak Republic | 5048 | 4050 | 5736 | 4557 | 6334 | 4953 | 6856 | 5364 | 7418 | 5776 | 7997 | 6213 | 8820 | 6808 | 9043 | 7108 | 9325 | 7306 | 9658 | 7451 |
| Slovenia | 8894 | 5732 | 11644 | 7517 | 12437 | 8011 | 12981 | 8475 | 13684 | 8916 | 14625 | 9821 | 15769 | 10557 | 16079 | 10783 | 16915 | 11284 | 17373 | 11568 |
| Spain | 17319 | 13882 | 19385 | 15549 | 20045 | 16019 | 20616 | 16433 | 21168 | 16833 | 21989 | 17461 | 23252 | 18765 | 24164 | 19380 | 24786 | 19400 | 25223 | 19694 |
| Sweden | 263581 | 174686 | 293776 | 202004 | 305732 | 209363 | 315492 | 217096 | 324618 | 224362 | 336818 | 243870 | 352470 | 257589 | 362291 | 270277 | 368208 | 277001 | 375436 | 282221 |
| Switzerland | 65370 | 54613 | 69487 | 58230 | 70649 | 59267 | 71386 | 59856 | 72378 | 60703 | 74923 | 62659 | 74495 | 62690 | 75085 | 63142 | 75331 | 63332 | 77414 | 64920 |
| Turkey ${ }^{3}$ | 5545 | 3952 | 12636 | 8874 | 13959 | 9708 | 15737 | 10937 | 15645 | 10895 | 17238 | 11993 | 19074 | 13794 | 18709 | 13644 | 21661 | 15683 | 22636 | 16430 |
| United Kingdom | 24910 | 18481 | 28019 | 20532 | 29312 | 21447 | 30334 | 22189 | 31419 | 22971 | 33216 | 24244 | 33382 | 24841 | 33391 | 24964 | 34297 | 25589 | 34286 | 25677 |
| United States | 33129 | 24877 | 36084 | 27273 | 36739 | 27785 | 37637 | 28502 | 39377 | 29765 | 41312 | 31156 | 42337 | 32714 | 44375 | 34014 | 45688 | 34821 | 46800 | 36129 |

1. The annual average gross wage earnings in euro area countries are expressed in euros for all years.
2. The 2011 earnings figure for Greece was not available at the final compilation stage.
3. Turkey wage figures are based on the old definition of average worker (ISIC D, Rev. 3.1).

## PART III

## Country details, 2011

This part of the publication provides the individual country details for 2008 that lie behind the comparative analysis. For each country, a table of detailed country results is followed by a description of the tax/benefit system.
All thirty country tables in this part of the report have a similar format. The left hand page of each table specifies the tax-benefit position of single persons in four cases, which differ by wage level and the presence of children (0/2). The right hand page of the table specifies the tax-benefit position of married couples, again discerning between four cases, which now differ by wage level, the presence of children (0/2) and one-/two earner situations.
All tables start with gross wage earnings (line 1) and derive taxable income for the personal income tax levied by central government (line 4), taking into account a number of standard tax allowances (line 2) and taxable cash transfers (line 3). Taxable income allows one to determine central government income tax paid (line 7); including reductions in the form of tax credits (line 6). Total payments to general government (line 10) also include state and local income taxes (line 8) and employees' compulsory social security contributions (line 9). Take-home pay (line 12) is calculated as gross wage earnings less all payments to general government, plus universal cash transfers received from general government (line 11).
Line 13 reports employers' compulsory social security contributions (including payroll taxes).
Average tax rate (line 14) are then calculated as:

- the share of income tax in gross wage earnings;
- the share of employees' social security contributions in gross wage earnings;
- the share of income tax and employees' social security contributions minus benefits in gross wage earnings; and
- the share of income tax and all social security contributions minus benefits in gross labour costs. Marginal tax rates (line 15) are calculated similarly as:
- the increase in income tax and employees' contributions minus benefits as a share of the related increase in gross wage earnings (both for the principal earner and the spouse); and
- the increase in tax and all social security contributions minus benefits as a share of the related increase in gross labour costs (both for the principal earner and the spouse).


## Australia

## (2010-11 income tax year)

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Australia 2011

## The tax/benefit position of single persons



## Australia 2011

The tax/benefit position of married couples

| Wage level (per cent of average wage) |  | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 69903 | 93204 | 116505 | 93204 |
|  | Principal Gross wage earnings | 69903 | 69903 | 69903 | 69903 |
|  | Spouse Gross wage earnings | 0 | 23301 | 46602 | 23301 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
| Deduction for social security contributions and income taxes |  |  |  |  |  |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 69903 | 93204 | 116505 | 93204 |
| 5. Central government income tax liability (exclusive of tax credits) |  |  |  |  |  |
|  | Income tax | 14521 | 17116 | 22052 | 17116 |
|  | Medicare Levy | 1049 | 1398 | 1748 | 1398 |
|  | Total | 15569 | 18514 | 23799 | 18514 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 0 | 1500 | 836 | 1500 |
|  | Married or head of family | 794 | 794 | 0 | 0 |
| Children |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 794 | 2294 | 836 | 1500 |
| 7. | Central government income tax finally paid (5-6) | 14775 | 16220 | 22963 | 17014 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions | 0 | 0 | 0 | 0 |
| 10. | Total payments to general government (7+8+9) | 14775 | 16220 | 22963 | 17014 |
| 11. Cash transfers from general government |  |  |  |  |  |
|  | For head of family | 0 | 0 | 0 | 0 |
|  | For two children | 7686 | 4125 | 0 | 0 |
|  | Total | 7686 | 4125 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 62813 | 81108 | 93542 | 76190 |
| 13. | Employers' payroll tax | 4172 | 5562 | 6953 | 5562 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 21.14\% | 17.40\% | 19.71\% | 18.25\% |
|  | Employees' social security contributions | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Total payments less cash transfers | 10.14\% | 12.98\% | 19.71\% | 18.25\% |
|  | Total tax wedge including employer payroll taxes | 15.20\% | 17.88\% | 24.23\% | 22.86\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 51.50\% | 31.50\% | 31.50\% | 31.50\% |
|  | Total payments less cash transfers: Spouse | 21.48\% | 16.50\% | 35.50\% | 16.50\% |
|  | Total tax wedge: Principal earner | 54.23\% | 35.36\% | 35.36\% | 35.36\% |
|  | Total tax wedge: Spouse | 25.91\% | 21.20\% | 39.13\% | 21.20\% |

Thhe national currency is the Australian dollar (AUD). For the 2010-11 income tax year AUD 0.97 was equal to USD 1. The average worker earned AUD 69903 in 2010-11.

## 1. Personal income tax system

### 1.1. Federal government income tax

### 1.1.1. Tax unit

Members of the family are taxed separately.

### 1.1.2. Tax allowances and credits

### 1.1.2.1. Standard tax reliefs

- Basic reliefs: income earned up to AUD 6000 by resident taxpayers is subject to tax at a zero rate.
- Standard marital status reliefs: Aa taxpayer may claim a tax credit where he or she contributes to the maintenance of a dependent spouse (legal or de facto). During 2010-11, this credit amount was AUD 2286 for a dependent spouse without dependent children. The credit reduces by AUD 1 for every AUD 4 by which the spouse's adjusted taxable income exceeds AUD 282. From 1 July 2008, an income test was introduced so that the offset is not available where the primary earner's adjusted taxable income exceeds AUD 150000.
- Relief(s) for children: a refundable tax offset called the First Child Tax Offset, is available for families with a child born between 1 July 2001 and 30 June 2004. Families with a child born on or after 1 July 2004 are eligible for a payment called the Baby Bonus which replaces the First Child Tax Offset. See Section 4.2 for more detail.
- Relief for social security contributions and other taxes: no such contributions are levied.
- Reliefs for low income earners: an AUD 1500 tax credit is available for taxpayers whose taxable income was less than AUD 30000 . This credit is reduced by AUD 0.04 for every AUD 1 by which the taxpayer's taxable income exceeds AUD 30000 , and no tax credit is available once the taxpayer's taxable income exceeds AUD 67500.
- Relief for mature age workers: taxpayers aged 55 or above who have net income from working may be eligible for the Mature Age Worker Tax Offset. It is worth a maximum of AUD 500, and part payment is possible when earned income is less than AUD 63000.
- There are also tax rebates to ensure that those receiving certain social security pensions or benefits pay less tax. The Pensioner Tax Offset is designed to ensure that eligible persons can have certain (low) levels of income in addition to their pension without being liable for tax. In 2010-11 for single people it was worth at most AUD 2 732, with this amount reduced by AUD 0.125 for every dollar of private income over AUD 24 214. The Beneficiary Tax Offset is calculated so as to ensure that a person who receives a full rate rebatable benefit for a whole year, and has no other private income, will pay no tax.
- Other: no other standard relief available.


### 1.1.2.2. Main non-standard tax reliefs applicable to an average worker include:

- Relief for school education expenses: the Education Tax Refund is available to eligible families and independent students to help meet the cost of primary and secondary school education. Eligible families include those in receipt of Family Tax Benefit Part A [FTB(A)], or those with children in receipt of a government payment which prevented the family from receiving FTB(A). See Section 4.2 for $\operatorname{FTB}(A)$ eligibility requirements. The maximum refund available in 2010-11 is 50 per cent of eligible school education expenses up to AUD 794 for each eligible child in primary school (a refund of up to AUD 397) and up to AUD 1588 for each eligible child in secondary school (a refund of up to AUD 794). The calculations in Table 1 and Table 2 assume dependents are of primary school age and are eligible for the maximum refund.
- Relief for superannuation: contributions to a low income spouse's superannuation attract an 18 per cent rebate up to a maximum rebate of AUD 540.
- Relief for private health insurance: there is a 30 per cent rebate on the cost of cover for eligible private health care.
- Relief for medical expenses: annual net medical expenses over AUD 2000 attract a 20 per cent rebate on the excess.
- Other non-standard reliefs provided as deductions are:
* subscriptions paid in respect of membership of a trade, business or professional association or union;
* charitable contributions of AUD 2 or more to specified funds, authorities and institutions, including public benevolent institutions, approved research institutes for scientific research, building funds for schools conducted by non-profit organisations, etc.; and
* work-related expenses including cost of replacement of tools of trade, cost of provision and of cleaning protective clothing and footwear, travelling between jobs or travelling in the course of employment.


### 1.1.3. Tax schedule

General rates of tax - resident individuals

| Taxable income (AUD) |  | Tax at general rates on total taxable income |
| :---: | :---: | :--- |
| Not less than | Not more than |  |
| 0 | 6000 | NIL |
| 6000 | 37000 | NIL +15 c for each AUD in excess of AUD 6000 |
| 37000 | 180000 | AUD $4650+30 \mathrm{c}$ for each AUD in excess of AUD 37000 |
| 80000 |  | AUD $17550+37 \mathrm{c}$ for each AUD in excess of AUD 80000 |
| 180000 and over |  |  |

To contribute towards the cost of basic medical and hospital care a Medicare Levy is imposed on the taxable incomes of resident taxpayers. In 2010-11 the levy applies at the rate of 1.5 per cent of the taxable income of an individual.

Certain thresholds are applied before the levy is imposed. In 2010-11, an individual taxpayer does not pay the levy where their taxable income does not exceed AUD 18839. A taxpayer in a couple or sole parent family does not pay the levy if the taxable family income does not exceed AUD 31 789. The threshold is increased by AUD 2919 for each
dependent child. Where an individual's taxable income exceeds AUD 18 839, or a family's income exceeds AUD 31789 (plus AUD 2919 for each dependent child), the levy shades in at a rate of 10 per cent of the excess of taxable income over the threshold, until the levy is equal to 1.5 per cent of the individual's or family's taxable income.

For 2010-11, individual pensioners under Age Pension age do not pay the levy where their taxable income does not exceed AUD 29 669. Where taxable income exceeds AUD 29669 but does not exceed AUD 34905 shading in provisions apply under which the levy payable is 10 per cent of the excess of taxable income over AUD 29669.

High income taxpayers without adequate private health care cover face a Medicare levy surcharge of 1 per cent of income. This is typically not imposed as the cost of such cover is generally less than the surcharge. It is not included in this publication.

### 1.2. State and local income taxes

In Australia no states or territories levy a tax based on a resident's income.

## 2. Social security contributions

### 2.1. Employees' contributions

None. There is, however, a Medicare Levy which is based upon taxable income. See Section 1.1.3.

### 2.2. Employers' contributions

No contributions are collected from employers or employees specifically for pensions, sickness, unemployment or work injury benefits, family allowances or other benefits.

Part of Australia's retirement income system is the provision of compulsory employer contributions (the Superannuation Guarantee system). The Superannuation Guarantee requires employers to pay 9 per cent on top of employees' gross ordinary time earnings to an approved superannuation fund, provided they earn more than AUD 450 per month. However, they may choose to make contributions for workers earning less than this threshold. This threshold is not indexed. There is also a limit to the Guarantee. In each quarter any earnings beyond a threshold are not covered by the Superannuation Guarantee. This threshold is indexed to a measure of average earnings. In the 2010-11 tax year this threshold was AUD 42220 per quarter.

These contributions are not reflected in the Taxing Wages calculations because they are not a form of taxation (they are not an unrequited transfer to general government). While the Superannuation Guarantee scheme is mandated by the Australian Government, superannuation is provided through private superannuation funds subject to Government regulation. Employers' contributions are generally made to individual accounts and form part of employees' personal superannuation assets. Some defined benefit schemes for government employees and private defined benefit schemes also exist. The employee may take superannuation benefits as either a lump sum payment or pension on retirement. Accordingly, superannuation contributions are reflected in the Non-Tax Compulsory Payment calculations.

## 3. Other taxes

### 3.1. Pay-roll tax

Australian State Governments levy pay-roll taxes on wages, cash or in kind, provided by larger employers to their employees. The rates of pay-roll tax, thresholds and deductions differ across States. In New South Wales, the State with the largest population, the pay-roll tax rate was 5.5 per cent from 1 July 2010 to 31 December 2010 and 5.45 per cent from 1 January 2011 to 30 June 2011 for employers with total Australian wages in excess of AUD 658000 in 2010-11. The employer is entitled to an exemption from tax, or a pro-rated pay-roll tax threshold, on wages paid in New South Wales up to a maximum of AUD 658000 . The exempt amount is reduced based on the proportion of the employer's New South Wales pay-roll to total Australian pay-roll.

Pay-roll tax revenue is not used to fund social security payments. It forms part of the consolidated revenue of State Governments, which do not deliver social security.

## 4. Universal cash transfers

### 4.1. Transfers related to marital status

There are no cash transfers made on a universal basis to married couples.

### 4.2. Transfers related to dependent children

- For 2010-11, the base rate of $\operatorname{FTB}(\mathrm{A})$ is payable where the combined "adjusted" taxable income of parents does not exceed AUD 94316 plus AUD 3796 for each child after the first. The payment shades out at the rate of AUD 0.30 per AUD 1 of income over the ceiling. The base rate of payment is AUD 2062.25 for a dependent child aged under 18, and AUD 2518.50 for a dependent child aged 18 to 20 or a dependent full-time student aged 21 to 24 . The base rate of payment is increased by a Large Family Supplement (LFS) for families with three or more children. The LFS is payable at a rate of AUD 288.35 for the third and each subsequent child. A higher benefit is available for lower income earners, and the value of this benefit is dependent on the age and number of children. Families may receive a maximum payment of AUD 4905.60 for each child aged under 13 years and AUD 6161.20 for each child aged 13 to 15 years for 2010-11. The higher benefit is also boosted by the LFS for families with three or more children. For 2010-11, the higher benefit tapers out at the rate of AUD 0.20 for each dollar of income over AUD 45114 until the base payment is reached. However, people receiving any social security allowances or pensions automatically qualify for the maximum higher benefit. The attached calculations assume each dependant is less than 13 years of age.
- Family Tax Benefit Part B (FTB(B)) is targeted at single income couple and sole parent families. Eligibility for $\mathrm{FTB}(\mathrm{B})$ is contingent upon the existence of at least one dependent child under the age of 16 or a qualifying dependent full-time student up to and including the age of 18 . There are two separate income tests applied to the parent(s). The parent earning the higher amount (or the sole parent, in the case of single parent families) must earn AUD 150000 or less for the financial year for the family to be eligible. A secondary earner income threshold is also applied to the parent earning the lower amount. For 2010-11, this threshold is AUD 4745 , above which the entitlement is reduced by AUD 0.20 for each dollar of income. There is no secondary earner income test applied to sole parents. For 2010-11, the maximum payment is AUD 2832.40 per year if the youngest dependent child is aged between 5 and 18 years, and AUD 3909.15 per year if there is a
child under 5 years. The attached calculations assume each dependant is between 5 and 12 years of age.
- Recipients of the Family Tax Benefit may elect to receive the benefit in fortnightly instalments or as an end of year lump sum payment.
- From 1 July 2004, a one-off Baby Bonus is paid to families for each baby born. The average value of the payment in 2010-11 is AUD 5 294. This payment replaces the First Child Tax Offset for new births. However, claims for First Child Tax Offset are still being paid with respect to children aged under 5, born between 1 July 2001 and 30 June 2004.
- Parenting Payment is a taxable payment payable to partnered and sole parents for low income families with a qualifying child under six and eight years of age respectively; or to parents with a qualifying child under 16, provided the parent has been in continuous receipt of Parenting Payment prior to 1 July 2006. In 2010-11, the maximum annual amount of Parenting Payment (Partnered) [PP(P)] was AUD 11 019.06. Only one parent in a couple can be entitled to $\operatorname{PP}(\mathrm{P})$. The maximum annual amount of Parenting Payment (Single) [PP(S)] was AUD 15 943.72. These payments are subject to income and assets tests. The Parenting Payment (Partnered) tapers out at a rate of AUD 0.50 per AUD 1 of income over AUD 1612 up to AUD 6500 and reduces at a rate of AUD 0.60 per AUD 1 for income over AUD 6 500. Under the $\operatorname{PP}(\mathrm{P})$ income test, a spouse receives a reduced Parenting Payment, tapering at a rate of AUD 0.60, when the higher earning partner's income exceeds AUD 20 800. If the spouse has little or no income (less than AUD 1612 per annum), he or she would not receive any Parenting Payment when the higher earning partner's income exceeds AUD 39165.10 per year. PP(S) reduces by AUD 0.40 for each AUD 1 of income above AUD 4435.60 plus AUD 639.60 for each child other than the first. A sole parent with two qualifying dependants may be entitled to some taxable $\mathrm{PP}(\mathrm{S})$ in 2010-11 where private income does not exceed AUD 44934.50 . The attached calculations assume dependants are aged six and seven.
- The Newstart allowance is a taxable payment payable to single persons and partnered individuals who are unemployed. It is also payable to a member of a couple if their youngest child is aged six years or more and to single parents if their youngest child is aged eight years or more. It is conditional on recipients fulfilling a personal Activity Agreement, which typically involves taking part in activities such as job seeking and training. In 2010-11, the Newstart allowance for singles without dependants was AUD 12207.26 and for partnered individuals was AUD 11 019.06. These payments taper out at a rate of AUD 0.50 per AUD 1 for incomes over AUD 1612 and reduces at a rate of AUD 0.60 for incomes over AUD 6500 . The Newstart allowance for partnered individuals also reduces by AUD 0.60 for each AUD 1 of their partner's income above AUD 20800.
- A non-taxable supplementary payment called Pharmaceutical Allowance (PA) is payable with $\operatorname{PP}(S)$. This payment is added to the maximum basic rate of $\mathrm{PP}(\mathrm{S})$ before a person's entitlement is calculated. Anyone with a $\operatorname{PP}(\mathrm{S})$ entitlement, after PA has been added, receives the full amount of PA. For 2010-11, the payment is AUD 156.
- A Telephone Allowance is available on a quarterly basis to eligible individuals, including individuals who receive $\mathrm{PP}(\mathrm{S})$ or PA if their $\mathrm{PP}(\mathrm{S})$ entitlement is reduced to 0 . The basic rate of the Telephone Allowance is AUD 24.02 per quarter for 2010-11, with a higher rate of AUD 36.12 available for recipients of Disability Support Pension who are under the age of 21 and where a home internet service is connected in the individual's or partner's name. The attached calculations assume the standard rate is applicable.


## 5. Recent changes in the tax/benefit system

### 5.1. Education tax refund

- From 1 July 2008, eligible parents of primary and secondary school students and independent secondary school students have been able to claim the Education Tax Refund (ETR). The ETR is a fully refundable tax offset of up to 50 per cent of expenditure on eligible education items. Eligible items include computers, education software, textbooks and stationery. See Section 1.1.2.1.


### 5.2. General rates of tax - resident individuals

- As part of tax reform, the personal income tax rates and thresholds have changed from those which applied in the 2009-10 income year. See Section 1.1.3.


### 5.3. Welfare to work changes

- There was a major reform of the welfare system from 1 July 2006 which aimed to move more working age Australians from welfare to work. Partnered parents on welfare were generally required to seek part-time work once their youngest child turned six. People with disabilities who could work part-time were required to seek part-time work if they applied for welfare after 1 July 2006. Existing recipients of the Disability Support Pension were not affected by these changes to participation requirements.


## 6. Memorandum items

### 6.1. Identification of an average worker

The source of the information used in replying to the questionnaire was the Australian Bureau of Statistics publication Average Weekly Earnings - Australia, catalogue number 6302.0. The survey is conducted on a quarterly basis and is based on a representative sample of employers in each industry.

In August 2009, the Australian Bureau of Statistics replaced the 1993 edition of the Australian and New Zealand Standard Industrial Classification (ANZSIC), which had been in use since 1994, with the 2006 edition of ANZSIC. The latter was developed to provide a more contemporary industrial classification system, taking into account issues such as changes in the structure and composition of the economy, changing user demands and compatibility with major international classification standards.

All wage and salary earners who received pay for the reference period are represented in the Survey of Average Weekly Earnings (AWE), except:

- members of the Australian permanent defence forces;
- employees of enterprises primarily engaged in agriculture, forestry and fishing;
- employees in private households employing staff;
- employees of overseas embassies, consulates, etc.;
- employees based outside Australia; and
- employees on workers' compensation who are not paid through the payroll.

Also excluded are the following persons who are not regarded as employees for the purposes of this survey:

- casual employees who did not receive pay during the reference period;
- employees on leave without pay who did not receive pay during the reference period;
- employees on strike, or stood down, who did not receive pay during the reference period;
- directors who are not paid a salary;
- proprietors/partners of unincorporated businesses;
- self-employed persons such as subcontractors, owner/drivers, consultants; and
- persons paid solely by commission without a retainer.

The sample for the AWE survey, like most ABS business surveys, is selected from the ABS Business Register which is primarily based on registrations to the Australian Taxation Office's (ATO) Pay As You Go Withholding (PAYGW) scheme (and prior to 1 June 2000 the Group Employer (GE) scheme). The population is updated quarterly to take account of:

- new businesses;
- businesses which have ceased employing;
- changes in employment levels;
- changes in industry; and
- other general business changes.

The survey data used in identifying the average production worker relates to that applying to full-time employees in the manufacturing sector being adult males and females without regard to marital status.

Earnings comprise weekly ordinary time earnings and weekly overtime earnings.
Weekly ordinary time earnings refers to one week's earnings of employees for the reference period attributable to award, standard or agreed hours of work. It is calculated before taxation and any other deductions (e.g. superannuation, board and lodging) have been made. Included in ordinary time earnings are award, workplace and enterprise bargaining payments, and other agreed base rates of pay, over award and over agreed payments, penalty payments, shift and other allowances; commissions and retainers; bonuses and similar payments related to the reference period; payments under incentive or piecework; payments under profit sharing schemes normally paid each pay period; payment for leave taken during the reference period; all workers' compensation payments made through the payroll; and salary payments made to directors. Excluded are overtime payments, retrospective pay, pay in advance, leave loadings, severance, termination and redundancy payments, and other payments not related to the reference period.

Weekly overtime earnings refers to payment for hours in excess of award, standard or agreed hours of work.

### 6.2. Employers' contribution to private health and pension scheme

In Australia, very few employers make any contributions towards health schemes for their employees, especially where the employee is at a wage level comparable to that of an average production worker.

From a survey of employment benefits conducted by the Australian Bureau of Statistics, the findings of which were published in 2001 as Superannuation, Australia 2000 (ABS Catalogue No. 6360.0), it was estimated that 98 per cent of all employed persons with leave entitlements were covered by a superannuation scheme.

## 2011 Parameter values

|  | Year | 2011 |  |
| :---: | :---: | :---: | :---: |
| Average earnings/yr | Ave_earn | 69903 |  |
| Spouse | spouse_cr | 2286 |  |
| income limit | sp_lim | 282 |  |
| withdrawal rate | sp_redn | 0.25 |  |
| income limit (primary earner) | sp_lim_p | 150000 |  |
| Low income credit | low_inc_cr | 1500 |  |
|  | low_inc_lim | 30000 |  |
|  | low_inc_redn | 0.04 |  |
| Tax schedule | tax_sch | 0 | 6000 |
|  |  | 0.15 | 37000 |
|  |  | 0.30 | 80000 |
|  |  | 0.37 | 180000 |
|  |  | 0.45 |  |
| Medicare levy | medic_rate | 0.015 |  |
| exemption limits | sing_lim | 18839 |  |
| married/sole parent | m_lim | 31789 |  |
| + per child | ch_lim | 2919 |  |
| shading-in rate | shade_rate | 0.1 |  |
| Part A FTB max | FTB_A_max | 4905.6 |  |
| Part A FTB basic | FTB_A_base | 2062.25 |  |
| part A income limit 1 | FTB_A_lim1 | 45114 |  |
| part A income limit 2 | FTB_A_lim2 | 94316 |  |
| reduction rate 1 | FTB_A_taper1 | 0.2 |  |
| reduction rate 2 | FTB_A_taper2 | 0.3 |  |
| additional limit2 per extra child | FTB_A_child | 3796 |  |
| Large family supplement | FTB_A_large | 288.35 |  |
| Part B FTB | FTB_B | 2832.4 |  |
| part B partner income limit | FTB_B_lim | 4745 |  |
| reduction rate | FTB_B_taper | 0.2 |  |
| income limit (primary earner) | FTB_B_lim_p | 150000 |  |
| Parenting payment single | PPS | 15943.72 |  |
| reduction rate | PPS_taper | 0.4 |  |
| income limit | PPS_lim | 4435.6 |  |
| additional limit per child | PPS_ch_lim | 639.6 |  |
| Pharmaceutical allowance | PA | 156 |  |
| State pay-roll tax rate (NSW) | Pay_roll_rate | 0.05475 |  |
| Newstart allowance single | NSAS | 12207.26 |  |
| Newstart allowance partnered | NSAP | 11019.06 |  |
| reduction rate 1 | NSA_taper1 | 0.5 |  |
| reduction rate 2 | NSA_taper2 | 0.6 |  |
| income limit 1 | NSA_lim1 | 1612 |  |
| income limit 2 | NSA_lim2 | 6500 |  |
| Pensioner tax offset single | PTOS | 2732 |  |
| Pensioner tax offset threshold single | PTOS_thresh | 24214 |  |
| Pensioner tax offset taper rate | PTOS_taper | 0.125 |  |
| Education tax refund | Edu_TR | 397 |  |
| Telephone allowance | Tele_A | 96.08 |  |

## 2011 Tax Equations

The equations for the Australian system in 2011 are mostly repeated for each individual of a married couple. But the spouse credit is relevant only to the calculation for the principal earner and the calculation of employee social security contributions (Medicare levy) uses shading-in rules which depend on the levels of earnings of the spouses. The basis of calculation is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Where the calculation for one earner takes into account variables for the other earner, the affix "_oth" is used. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances | tax_al | B | 0 |
| 3. Credits in taxable income: |  |  |  |
| Credits in taxable income of principal | taxbl_cr_princ | P | IF(AND(Children>0,Married=0),Taper(PPS,earn_princ,PPS_lim+ PPS_ch_lim*(Children-1),PPS_taper),IF(AND(Children=0,Married=0), taper2(NSAS,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1, NSA_taper2),IF(Married>0,taper3(NSAP, earn_princ,earn_spouse,NSA_lim1,NSA_lim2,NSA_taper1, NSA_taper2),0))) |
| Credits in taxable income of spouse | $\begin{aligned} & \text { taxbl_cr_spous } \\ & \text { e } \end{aligned}$ | S | IF(AND(Children>0,Married=0),0,IF(AND(Children=0,Married=0), 0,IF(Married>0,taper3(NSAP,earn_spouse, earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2),0))) |
| 4. CG taxable income | tax_inc | B | earn+taxbl_cr |
| 5. CG tax before credits |  |  |  |
| Medicare Levy | med_levy | B | medicare(tax_inc,sing_lim,m_lim,ch_lim,shade_rate,medic_rate, Married,tax_inc_oth,Children) |
| Tax liability | liab | P | Tax(tax_inc, tax_sch) |
|  | CG_tax_excl | B | liab + med_levy |
| 6. Tax credits: |  |  |  |
| Spouse credit | spouse_cr | P | Taper(IF(Children>0.0,spouse_cr*Married),earn_spouse+ taxbl_cr_spouse,sp_lim,sp_redn) |
| Low income credit | low_cr | B | Taper(low_inc_cr,tax_inc,low_inc_lim,low_inc_redn) |
| Pensioner tax offset | pen_cr | P | IF(AND(taxbl_cr_princ>0,NOT(AND(Children>0,Married=0))), Tax(taxbl_cr_princ,tax_sch),IF(taxbl_cr_princ>0,Taper(PTOS, tax_inc,PTOS_thresh,PTOS_taper),0) |
| Beneficiary tax offset | ben_cr | B | IF(AND(taxbl_cr>0, NOT(AND(Children>0, Married=0))), Tax(taxbl_cr, tax_sch), 0) |
| Total | tax_cr | B | spouse_cr+low_cr+pen_cr+ben_cr+Edu_TR |
| 7. $\mathrm{CG} \operatorname{tax}$ | CG_tax | B | Positive(liab-tax_cr) + med_levy |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | 0 |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 11. Cash transfers: |  |  |  |
| Family Tax Benefit (Part A) | ftbA | P | IF(PA>0,(FTB_A_max*Children+IF(Children>2,(Children-2)* FTB_A_large,0)),MAX((FTB_A_max*Children+IF(Children>2, (Children-2)*FTB_A_large,0)-Positive((princ_earn+taxbl_cr+ spouse_earn+taxbl_cr_spouse)-FTB_A_lim1)*FTB_A_taper1), Positive(FTB_A_base*Children+IF(Children>2,(Children-2)* FTB_A_large,0)-Positive((princ_earn+taxbl_cr+spouse_earn+ taxbl_cr_spouse)-(FTB_A_lim2+(Positive(Children-1))* FTB_A_child)) *FTB_A_taper2))) |
| Family Tax Benefit (Part B) | ftbB | J | IF(earn_princ<FTB_B_lim_p,IF(Children>0,Taper(FTB_B, earn_spouse+taxbl_cr_spouse,FTB_B_lim,FTB_B_taper),0),0) |
| Pharmaceutical Allowance | PA | J | AND(Children $>0$,Married $=0)^{*}$ IF(Taper(PPS + PA,earn_princ, PPS_lim+PPS_ch_lim*(Children-1),PPS_taper)>0,PA,0) |
|  | cash_trans | J | ftbA+ftbB+taxbl_cr_princ+PA+taxbl_cr_spouse+Tele_A |
| 13. Employer's State pay-roll tax | tax_empr | B | earn*Pay_roll_rate |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis. Key refers to an optimisation of benefits, i.e. Parenting Payment for principal and Newstart allowance for spouse versus Parenting Payment for spouse and Newstart allowance for principal.

## Austria

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

|  | Austria 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | The tax/benefit position of single persons |  |  |  |  |
|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 26175 | 39263 | 65438 | 26175 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance | 60 | 60 | 60 | 60 |
|  | Married or head of family |  |  |  |  |
|  | Dependent children | 0 | 0 | 0 | 440 |
|  | Deduction for social security contributions and income taxes | 4726 | 7090 | 10618 | 4726 |
|  | Work-related expenses | 132 | 132 | 132 | 132 |
|  | Other | 620 | 620 | 620 | 620 |
|  | Total | 5538 | 7902 | 11430 | 5978 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 20637 | 31361 | 54008 | 20197 |
| 5. | Central government income tax liability (exclusive of tax credits) | 2762 | 6361 | 14935 | 2602 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family | 0 | 0 | 0 | 669 |
|  | Children |  |  |  |  |
|  | Other | 345 | 345 | 345 | 345 |
|  | Total | 345 | 345 | 345 | 1014 |
| 7. | Central government income tax finally paid (5-6) | 2417 | 6016 | 14590 | 1588 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 4726 | 7090 | 10618 | 4726 |
|  | Taxable income |  |  |  |  |
|  | Total | 4726 | 7090 | 10618 | 4726 |
| 10. | Total payments to general government (7+8+9) | 7144 | 13106 | 25208 | 6314 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 4897 |
|  | Total | 0 | 0 | 0 | 4897 |
| 12. | Take-home pay (1-10+11) | 19031 | 26157 | 40230 | 24758 |
| 13. | Employer's wage dependent contributions and taxes |  |  |  |  |
|  | Employer's compulsory social security contributions | 5661 | 8492 | 12718 | 5661 |
|  | payroll taxes | 1963 | 2945 | 4908 | 1963 |
|  | Total | 7624 | 11437 | 17625 | 7624 |
| 14. | Average rates |  |  |  |  |
|  | Income tax | 9.2\% | 15.3\% | 22.3\% | 6.1\% |
|  | Employees' social security contributions | 18.1\% | 18.1\% | 16.2\% | 18.1\% |
|  | Total payments less cash transfers | 27.3\% | 33.4\% | 38.5\% | 5.4\% |
|  | Total tax wedge including employer's social security contributions | 43.7\% | 48.4\% | 51.6\% | 26.8\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 44.4\% | 49.1\% | 37.9\% | 44.4\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 56.9\% | 60.6\% | 42.2\% | 56.9\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |


|  | Austria 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | The tax/benefit position of married couples |  |  |  |  |
|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 39263 | 52350 | 65438 | 52350 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance | 60 | 120 | 120 | 120 |
|  | Married or head of family |  |  |  |  |
|  | Dependent children | 440 | 440 | 528 | 0 |
|  | Deduction for social security contributions and income taxes | 7090 | 9060 | 11816 | 9060 |
|  | Work-related expenses | 132 | 264 | 264 | 264 |
|  | Other | 620 | 1240 | 1240 | 1240 |
|  | Total | 8342 | 11124 | 13968 | 10684 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 30921 | 41226 | 51470 | 41666 |
| 5. | Central government income tax liability (exclusive of tax credits) | 6171 | 6171 | 8913 | 6361 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family | 669 | 0 | 0 | 0 |
|  | Children |  |  |  |  |
|  | Other | 345 | 690 | 690 | 690 |
|  | Total | 1014 | 690 | 690 | 690 |
|  | Central government income tax finally paid (5-6) | 5157 | 5716 | 8223 | 5906 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 7090 | 9060 | 11816 | 9060 |
|  | Taxable income |  |  |  |  |
|  | Total | 7090 | 9060 | 11816 | 9060 |
| 10. | Total payments to general government (7+8+9) | 12247 | 14776 | 20039 | 14967 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 4897 | 4897 | 4897 | 0 |
|  | Total | 4897 | 4897 | 4897 | 0 |
| 12. | Take-home pay (1-10+11) | 31913 | 42471 | 50295 | 37384 |
| 13. | Employer's wage dependent contributions and taxes |  |  |  |  |
|  | Employer's compulsory social security contributions | 8492 | 11323 | 14153 | 11323 |
|  | Payroll taxes | 2945 | 3926 | 4908 | 3926 |
|  | Total | 11437 | 15249 | 19061 | 15249 |
| 14. | Average rates |  |  |  |  |
|  | Income tax | 13.1\% | 10.9\% | 12.6\% | 11.3\% |
|  | Employees' social security contributions | 18.1\% | 17.3\% | 18.1\% | 17.3\% |
|  | Total payments less cash transfers | 18.7\% | 18.9\% | 23.1\% | 28.6\% |
|  | Total tax wedge including employer's social security contributions | 37.1\% | 37.2\% | 40.5\% | 44.7\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 49.1\% | 49.1\% | 49.1\% | 49.1\% |
|  | Total payments less cash transfers: Spouse | 19.3\% | 15.1\% | 44.4\% | 15.1\% |
|  | Total tax wedge: Principal earner | 60.6\% | 60.6\% | 60.6\% | 60.6\% |
|  | Total tax wedge: Spouse | 37.5\% | 34.2\% | 56.9\% | 34.2\% |

The Austrian currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year, the average worker in Austria earned EUR 39263 (Secretariat estimate).

## 1. Personal income tax

### 1.1. Central government income tax

### 1.1.1. Tax unit

Each person is taxed separately.

### 1.1.2. Tax allowances

### 1.1.2.1. Standard tax reliefs

- Work related expenses: a minimum allowance of EUR 132 is available to all employees.
- Minimum allowance for special expenses of EUR 60.
- Social security contributions and connected contributions (see Section 2).
- Children allowance of EUR 220 for one or EUR 132 for both parents per child. The parents have the choice between these opportunities.


### 1.1.2.2. Non-standard tax reliefs

- Mainly work-related expenses (Werbungskosten).
- Traffic relief according to the distance between home/address and working place.

The following allowances are deductible from income (EUR per year):

|  | Public transport |  |
| :--- | ---: | :---: |
|  | Available | Not available |
| More than 2 km | 0 | 372 |
| More than 20 km | 696 | 1476 |
| More than 40 km | 1356 | 2568 |
| More than 60 km | 2016 | 3672 |

- Special expenses allowance (Sonderausgaben): some personal expenses (for example, life insurance premiums, and expenses for the purchase of residence including repayments of housing loans) are partly deductible from income. The allowance is limited to EUR 2920 per taxpayer or EUR 5840 for sole earners or parents. A quarter of Sonderausgaben can be deducted up to a taxable income of EUR 36 400, whereas between EUR 36400 and EUR 60000 the deductible amount is (linearly) reduced to EUR 60. Unless higher special expenses can be proved, a standard deduction for Sonderausgaben of EUR 60 is granted (see Section 1.1.2.1). Grants to non-profit charitable organisations up to $10 \%$ of taxable income are deductible. Additionally, contributions to the church are deductible up to an amount of EUR 200.
- Tax-free supplements exist for dirty, hard, dangerous, night, weekend and holiday work and overtime. The supplement for 10 hours of overtime up to EUR 86 per month is tax free, the other supplements are tax free up to EUR 360 (EUR 540 for night workers) per month.


### 1.1.3. Rate schedule

The new tax schedule has a zero-zone up to EUR 11000 and shows tax formulas for three tax brackets. The effective marginal tax rates resulting from these formulas are:

| Income (EUR) up to | Marginal rate \% |
| :---: | :---: |
| 11000 | 0 |
| 25000 | 36.5 |
| 60000 | 43.21429 |
| Above | 50 |

There is a special taxation other than the normal tax schedule for Christmas and leave bonus to the extent that their sum does not exceed two average monthly payments (1/6 of current income). If these bonuses before deduction of SSC are below EUR 2100 p.a., no tax is calculated. Otherwise the tax is the minimum of 30 per cent of the amount net of SSC exceeding EUR 2000 and of 6 per cent of total bonuses minus a tax-free amount of EUR 620.

### 1.1.4. Tax credits

Tax credits are available as follows:

- Employee's tax credit of EUR 54. In the overall tax calculation, negative tax is possible where the amount paid to the taxpayer would equal the gross tax minus tax credits but is limited to 10 per cent of social security contributions to a maximum of EUR 110. For employees with a traffic allowance (see Section 1.1.2.2) the maximum is EUR 251.
- Traffic (commuting) tax credit EUR 291.
- Sole earner's and sole parent's tax credit for families with children. The sole earner's credit is not given when a spouse's income exceeds EUR 6000 . This tax credit is EUR 494 for one child and increases by EUR 175 for the second and by EUR 220 for the third and every additional child. This tax credit is non-wastable and can be paid out as a negative income tax (in addition to the negative tax permitted in respect of the Employee's tax credit).
- Children's tax credit EUR 700.8 (58.40 per month) per child. As this tax credit is paid together with children allowances and not connected with income tax assessment, it is treated as a transfer in this Report (similar treatment as in Revenue Statistics).
- Tax credit for retired persons. The tax credit amounts to EUR 764 for sole earners with income up to EUR 13100 and if the spouse's income does not exceed EUR 2200. Otherwise the tax credit is EUR 400 and is linearly reduced to 0 between EUR 17000 and EUR 25000 of income.


### 1.2. State and local income taxes

None.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employee and employer social security contributions

|  | Ceilings (EUR) |  | Rates (\%) |  |
| :--- | :---: | :---: | ---: | :---: |
|  | Regular wage <br> per month | Christmas and <br> leave bonus | ${\text { Employee }{ }^{2}}^{\text {Employer }^{3}}$ |  |
| Health insurance | 4200 | 8400 | 3.95 | 3.70 |
| Unemployment insurance | 4200 | 8400 | 4 | 3.00 |
| Pension insurance | 4200 | 8400 | 10.25 | 12.55 |
| Accident insurance | 4200 | 8400 | - | 1.40 |
| Contribution to the labour chamber | 4200 | 8400 | 0.50 | - |
| Contribution for the promotion of residential building | 4200 | 8400 | 0.50 | 0.50 |
| Addition to secure wage payments in the case of bankruptcy | 4200 | 8400 | - | 0.55 |

1. No contributions on Christmas and leave bonus. In Revenue Statistics, the contribution to the labour chamber is accounted under Taxes on Income of Individuals (1110) the total of the contribution for the promotion of residential buildings is included in Taxes on payroll (3000).
2. There is a threshold for employee contributions of EUR 374.02 per month.
3. A new program has been introduced as of 1 January 2004 for severance payments. Employers are required to pay 1.53 per cent of gross wages to the Social Health Security Fund (Krankenkassen) for those whose employment starts after 1 January 2003 or where the employer and employee opt to participate in the new program. This contribution is seen as a non-tax compulsory wage-related payment.
4. Mid 2008, the employees' unemployment insurance rate was reduced for low earnings. In 2011, it is zero for monthly earnings up to EUR 1 179, 1\% up to EUR 1 286, 2\% up to EUR 1447 and 3\% above.

### 2.2. Payroll taxes

There are two payroll taxes which are levied on employers for all private sector employees with a monthly gross wage total of more than EUR 1 095: the contribution to the Family Burden Equalisation Fund ( 4.5 per cent) and the Community Tax (3 per cent). The wage-dependant part of the contribution to the Entrepreneurs' Chamber (listed under heading 1000, taxes on profits, in the Revenue Statistics) which is levied, together with the contributions to the Family Burden Equalisation Fund, at different rates depending upon the Länder Chamber (the average rate is approximately 0.4 per cent) is not taken into account. The contribution for the promotion of residential buildings (listed under heading 3000, taxes on payroll, in Revenue Statistics) is included in the social security contributions shown above as it is levied by the Health Insurance Companies on monthly income (current) along with the other social security contribution amounts.

## 3. Universal cash transfers

### 3.1. Amount for marriage

No recurrent payments.

### 3.2. Amount for children

A family allowance is granted for each child. In 2011, the monthly payment is EUR 105.40 for the first child, EUR 118.20 for the second, EUR 140.40 for the third and EUR 155.40 for each subsequent child. It is increased by EUR 7.30 for children above 3 years, EUR 25.50 for children above 10 years of age and by EUR 47.30 for students (above 19). Parents of children under the age of 3 years are entitled to a childcare transfer, introduced in 2002. Beginning 2010, the flexibility of the childcare transfer was increased significantly. The entitled parent can now choose between four alternatives: EUR 14.53 per day until the

36th month of birth, EUR 20.80 ( 24 month) or EUR 26.60 ( 18 month). Additionally instead of the fix amounts the entitled person can opt for $80 \%$ of the last net-earning, whereas the transfer is at least EUR 1000 and EUR 2000 at most (14 months). The children's tax credit (EUR 50.90 monthly, see § 1.14) is paid out together with the family allowance and therefore treated as a transfer.

There is a supplement to the family allowance of EUR 20.00 per month for the third and every additional child, if the family taxable income (i.e. the sum of the tax base for the progressive income tax schedule) of the preceding year did not exceed EUR 55000 . This supplement is paid out on application after an assessment of the very year.

An additional family allowance ("13th allowance") of EUR 100 is given for children in the age between 6 and 16 every September.

## 4. Main changes in tax/benefit systems since 1994

In 1994, a major tax reform took effect. Most measures concerned the taxation of firms. For employees the following points are important. The general tax credit was increased by ATS 3 840, i.e. ATS 320 per month. For employees with low income a negative income tax option was introduced (the negative income tax is limited to the wage earners tax credit, but it cannot exceed 10 per cent of social security contributions).

In 1995, family allowances were reduced by ATS 100 per month (ATS 1200 per year).
In 1996, a consolidation package was introduced, some measures of which took effect already in 1996. The deductibility of special expenses was reduced (half to quarter) and abolished for incomes exceeding ATS 700 000. Tax free overtime supplements were limited to ATS 590 per month. The general tax credit was linearly reduced to zero for income between ATS 200000 and ATS 500000 and there was a change in the deductibility of social security contributions on non-current wages and salaries.

The family package of 1998 brought an increase of ATS 1500 in the family allowances and the children's tax credits each in 1999. A supplement of ATS 2400 in 1999, and ATS 4800 in 2000 for the 3rd, etc., child for families earning less than ATS 504000 was introduced. The sole earner's or sole parent's tax credit negative tax limit was abolished. For 2000 and the following years, there was an additional increase in the sum of family allowances and children's tax credits of ATS 3000 , but the differentiation according to the number of children was transferred to the allowances, i.e. from 2000 onwards there is a unique annual tax credit of ATS 8400 per child.

The tax reform of 1999, effective from the beginning of 2000, brought a reduction in the tax schedule and an increase of the general tax credit leading to a (linearly increasing) tax reduction between ATS 4000 and 7000 p.a. The maximum reduction is reached at a gross income near the ceiling for social security contributions. The reform also included a number of other measures which concerned mainly enterprise taxation.

The budget consolidation measures for 2001 included an abolition of the general tax credit for incomes exceeding ATS 487 400, the halving of the employee's tax credit to ATS 750 and a phasing-out of the pensioner's tax credit for income between ATS 230000 and 300000 . The adaptation of the tax laws to the Euro did not bring any substantive changes. In 2004 (effective), the family allowances for children above three years of age were increased by EUR 7.30 per month.

In 2004, the first step of a comprehensive tax reform came into force. The general tax credit was increased from EUR 887 to EUR 1264 and the phasing-out rules were considerably simplified and made uniform for all groups of taxpayers.

The tax reform in 2005 brought a new income tax schedule. Apart from the top rate of 50 per cent for income exceeding EUR 51000 , it shows the average rates for two amounts of income. The tax amounts for incomes between these amounts have to be calculated by linear interpolation. The formulas that have to be applied are shown in the tax law. The tax reform included some measures which were made retrospective for 2004. These measures are the increase of the sole earner and the single parent tax credit depending on the number of children (together with a higher earnings limit for the spouse of a single earner) and an increase of the traffic reliefs by about 15 per cent. The maximum deductible amount for church contributions was increased as well. In 2006, the traffic reliefs were again increased by about 10 per cent.

In 2007, the traffic allowances were increased by 10 per cent (effective from 1 July), the maximum negative tax for employees with traffic allowances was increased from EUR 110 to EUR 240 (for 2008 and 2009). For 2008, the family allowances for the third and subsequent children were increased. In 2008, the unemployment insurance contributions of low-earning employees were reduced (effective from 1 July). In 2008 up to monthly earnings of EUR 1100 the rate was zero, for earnings below EUR 1200 the contribution was 1 per cent, below EUR 13502 per cent and above the current rate of 3 per cent. These income limits are increased according to the raise of the ceiling levels of social security contributions every year.

In September 2008, the parliament decided some measures to compensate for the strong increase of food and energy prices: inter alia, the tax exemption of overtime supplements was increased and a 13th payment of children allowances introduced.

The tax reform 2009 (effective from 1 January) brought an increase of the zero bracket (from EUR 10000 to EUR 11 000), a reduction of the income tax rates (except the top rate), an upward shift of the top rate bracket (from EUR 51000 to EUR 60000 ) and several measures for families with children: children allowance (EUR 220 or EUR 132 each parent p.a.), deductibility of cost for child care (up to EUR 2300 p.a. per child), tax-free payments (up to EUR 500 p.a.) from employers to their employees for child care and an increase of the children tax credit.

## 5. Memorandum items

### 5.1. Calculation of earnings data

- Sector used: all private employees except apprentices employed full-time for the whole year.
- Geographical coverage: whole country.
- Sex: male and female.
- Earnings base:
* Items excluded:
- Unemployment compensation.
- Sickness compensation.
* Items included:
- Vacation payments.
- Overtime payments.
- Recurring cash payments.
- Fringe benefits (taxable value).
- Basic method of calculation used: average annual earnings.
- Income tax year ends: 31 December.

Period to which the earnings calculation refers to: one year.

2011 Parameter values

| Average earnings/yr | Ave_earn | 39263 | (Secretariat estimate) |
| :---: | :---: | :---: | :---: |
| Non current income as \% | non_cur_pc | 14.286\% |  |
| Tax free inc on non-current | Bonus | 620 |  |
| Ceiling for taxing non-current income | nonc_ceil | 2000 |  |
| Work related | work_rel | 132 |  |
| Allowance f. "Special expenses" | Basic_al | 60 |  |
| Children allowance for 2 earning parents | Child_al_2 | 132 |  |
| Children allowance for sole earner/parent | Child_al_1 | 220 |  |
| Tax free inc. | tax_free | 0\% |  |
| Basic tax credit | basic_cr |  |  |
| Employee's tax credit | wage_cr | 54 |  |
| Max. neg. employee's tax credit | neg_wage_cr | 110 |  |
| Traffic (commuting) tax credit | traffic_cr | 291 |  |
| Sole earner's (parent's) tax credit | sole_cr | 0 |  |
| Children suppl.to SETC: 1st child | dsole1_cr | 494 |  |
| 2nd child | dsole2_cr | 175 |  |
| 3rd+ child | dsole3_cr | 220 |  |
| Spouse income not more than | sole_lim0 | 0 |  |
| Spouse with children | sole_lim1 | 6000 |  |
| Tax on non-current income | non_cur_rate | 6\% |  |
| Altern.tax on non-current income | alt_nonc_rate | 30\% |  |
| Income tax schedule | Tax_sch | 0 | 11000 |
|  |  | 0.365 | 25000 |
|  |  | 0.43214 | 60000 |
|  |  | 0.5 |  |
| Ceiling f. soc. security contributions | SSC_ceil | 4200 |  |
| lower limit | SSC_low | 374.02 |  |
| Employees' contr. rates | health_rate | 3.95\% |  |
|  | unemp_rate | 0\% | 1179 |
|  |  | 1\% | 1286 |
|  |  | 2\% | 1447 |
|  |  | 3\% |  |
|  | Pension_rate | 10.25\% |  |
| Sum without unempl. and others | empl_14 | 14.20\% |  |
|  | others_rate | 1\% |  |
| Employers' contr.rates | health_empr | 3.70\% |  |
|  | unemp_empr | 3\% |  |
|  | Pension_empr | 12.55\% |  |
|  | accident_empr | 1.40\% |  |
|  | payinsur_empr | 0.55\% |  |
| Sum without others | empr_14 | 21.20\% |  |
|  | others_empr | 0.50\% |  |
| Payroll taxes | payroll_rate | 7.50\% |  |
| Child benefit: 1st child | CB_1 | 1264.8 |  |
| 2nd child | CB_2 | 1418.4 |  |
| 3rd child | CB_3 | 1684.8 |  |
| 4th+child | CB_4 | 1864.8 |  |
| suppl.>3 years | CB03sppl | 87.6 |  |
| suppl. $>10$ years | CB10sppl | 306.0 |  |
| suppl. $>19$ years | CB19sppl | 567.6 |  |
| 5 years<suppl<17years | CB5to17 | 100.0 |  |
| Child tax credit | child_cr_1 | 700.8 |  |

## 2011 Tax equations

The equations for the Austrian system are, in principle, on an individual basis. The only variable which is dependent on the marital status is the head of family (sole earner) tax credit which is also given to single people with children. For the Christmas and leave bonus (both amounting to one monthly wage or salary) there are special rules for the calculation of social security contributions (separate ceilings and slightly lower rate) and wage tax (reduced flat rate). The income tax schedule and the tax credits are applied only for "current pays". The children tax credit is in principle given to the mother (as a negative tax together with "family allowances" = transfer for children). The sole earner and the employee tax credit are connected with negative income tax rules. Therefore, the tax finally paid may be different from tax liability minus tax credits.

| Bn | Variable | Code for docn equations | Excel-Function |
| :---: | :---: | :---: | :---: |
| 3 | earnings (\%AW) | per cent | $0,1 / 3,2 / 3,1$ or $5 / 3$ in Taxing Wages output tables (but model can be applied to all earnings levels) |
| 4 | number of children | child | 0 or 2 in Taxing Wages output tables |
| 5 | Gross earnings | earn | =Ave_earn*per cent |
| 6 | Current income | cearn | =(1-non_cur_pc)*earn |
| 7 | Basic allowance | allow | $=($ earn $>14 *$ SSC_low)*Basic_al |
| 8 | SSC on curr.inc. | SSCc | $\begin{aligned} & =(\text { empl_14+unemp }(\text { earn,unemp_rate })+0 \text { thers_rate })^{\star} \\ & \text { MIN }\left(12^{\star} \text { SSC_ceil;cearn }^{\star}\left(\text { cearn }>12^{\star} \text { SSC_low }\right)\right. \end{aligned}$ |
| 9 | Work related expenses | work_rel | =work_rel |
| 10 | Tax-free income | taxfrinc | =tax_free*earn |
| 11 | Child allowance | Child_al_princ Child_al_spouse | ```IF(cearn_spouse-allow_spouse-SSCc_spouse-work_rel_spouse-taxfrinc_s pouse-11945<0,Child_al_1, Child_al_2)*child IF(Child_al_princ=child*Child_al_2, Child_al_2, 0)*Child``` |
| 12 | Tax base for schedule | ctbase | =(earn>14*SSC_low)*(cearn-allow-SSCc-work_rel-taxfrinc-child_al* ${ }^{*}$ child) |
| 13 | Gross tax on current income | gtaxcur | =Tax(ctbase;tax_sch) |
| 14 | Basic tax credit | btaxcr | $=0$ |
| 15 | Married or head of family | headcr | $=(\text { earn_sp<lF(child }>0 \text {;sole_lim1;sole_lim0) })^{*}(\text { sole_cr+(child }>0)^{*}$ dsole1_cr + (child $>1$ )*dsole2_cr+(child>2)*(child-2)*dsole3_cr |
| 16 | Other | othcr | $=$ min(wage_cr; $10 \%$ *SSC)+traffic_cr |
| 17 | Interm. tax on current income | itcur | =gtaxcur-btaxcr-headcr-othcr |
| 18 | Net tax on current income | ntaxcur | $=I F\left(\right.$ itcur $>-$ headcr; itcur;MAX $\left(-0.1^{*}\right.$ SSC-(child $\left.>0\right){ }^{*}$ headcr; <br> -neg_wage_cr-(child>0)*headcr)) |
| 19 | Non current income | ncearn | =earn-cearn |
| 20 | SSC on non-curr. inc. | SSCnc | ```=(health_rate+unemp(earn,unemp_rate)+pension_rate)* MIN(2*SSC_ceil;ncearn)*(ncearn>2*SSC_low)``` |
| 21 | Non current income-SSC | ncearn_adj1 | =ncearn-SSCnc |
| 22 | of which tax free | taxfree | =MIN(bonus;ncearn_adj) |
| 23 | Non-curr. tax base | ncearn_adj2 | =ncearn_adj-taxfree |
| 24 | Tax on non current income | taxnc | =Positive(MIN((ncearn_adj1-nonc_ceil)*alt_nonc_rate;ncearn_adj2*non_c ur_rate)) |
| 25 | Taxable income | taxinc | =ctbase+ncearn_adj2 |
| 26 | Tax liability excl. tax credits | inctax_ex | =gtaxcur + taxnc |
| 27 | Income tax finally paid | inctax | =ntaxcur+taxnc |
| 28 | Employee's SSC | SSC | =SSCc+SSCnc |
| 29 | Employer's SSC | SSCf | $\begin{aligned} & =\left((\text { empr_14+others_empr })^{\star}\right. \text { MIN(12*SSC_ceil;cearn)+empr_14*MIN(12*S } \\ & \text { SC_ceil;ncearn)) } \end{aligned}$ |
| 30 | Pay-roll taxes | payroll | =payroll_rate*earn |
| 31 | Cash transfers | cash | ```=IF(child=0;0;IF(child=2;CB_1+CB_2+child*CB10sppl+child*(child_cr_1+CB 5to17)))``` |
| 32 | Take-home pay |  | =earn-inctax-SSC+cash |
| 33 | Wage cost |  | =earn+SSCf + payroll |

unemp is a Visual Basic Function which chooses lower unemployment SSC rates for low earnings.
Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Belgium

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Belgium 2011

The tax/benefit position of single persons

| Wage level (per cent of average wage)Number of children |  | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | none | none | none | 2 |
|  | Gross wage earnings | 28493 | 42740 | 71233 | 28493 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 3724 | 5586 | 9310 | 3724 |
|  | Work-related expenses | 2611 | 2983 | 3670 | 2611 |
| Other |  |  |  |  |  |
|  | Total | 6335 | 8569 | 12980 | 6335 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 22158 | 34171 | 58253 | 22158 |
| 5. | Central government income tax liability (exclusive of tax credits) | 7463 | 12869 | 24865 | 7463 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family | 1708 | 1643 | 1643 | 2066 |
|  | Children | 0 | 0 | 0 | 1111 |
| Other |  |  |  |  |  |
|  | Total | 1708 | 1643 | 1643 | 3177 |
| 7. | Central government income tax finally paid (5-6) | 5756 | 11226 | 23223 | 4287 |
| 8. | State and local taxes | 426 | 831 | 1718 | 317 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 3724 | 5586 | 9310 | 3724 |
|  | Taxable income | 237 | 393 | 706 | 237 |
|  | Total | 3961 | 5979 | 10017 | 3961 |
| 10. | Total payments to general government (7+8+9) | 10143 | 18037 | 34958 | 8565 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 3623 |
|  | Total | 0 | 0 | 0 | 3623 |
| 12. | Take-home pay (1-10+11) | 18350 | 24703 | 36275 | 23551 |
| 13. | Employer's compulsory social security contributions | 8022 | 12833 | 21061 | 8022 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 21.7\% | 28.2\% | 35.0\% | 16.2\% |
|  | Employees' social security contributions | 13.9\% | 14.0\% | 14.1\% | 13.9\% |
|  | Total payments less cash transfers | 35.6\% | 42.2\% | 49.1\% | 17.3\% |
|  | Total tax wedge including employer's social security contributions | 49.7\% | 55.5\% | 60.7\% | 35.5\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 54.9\% | 54.9\% | 60.9\% | 54.9\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 66.3\% | 66.3\% | 69.4\% | 66.3\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Belgium 2011

The tax/benefit position of married couples

|  | Wage level (per cent of average wage) Number of children | 100-0 | $100-33$ 2 | 100-67 | $100-33$ none |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross wage earnings | 42740 | 56986 | 71233 | 56986 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 5586 | 5586 | 9310 | 5586 |
|  | Work-related expenses | 2983 | 5213 | 5594 | 5213 |
| Other |  |  |  |  |  |
|  | Total | 8569 | 10799 | 14904 | 10799 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 34171 | 46187 | 56329 | 46187 |
| 5. | Central government income tax liability (exclusive of tax credits) | 11045 | 16124 | 20332 | 16124 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family | 3350 | 3350 | 3350 | 3350 |
|  | Children | 1002 | 1002 | 1002 | 0 |
| Other |  |  |  |  |  |
|  | Total | 4352 | 4352 | 4352 | 3350 |
| 7. | Central government income tax finally paid (5-6) | 6693 | 11772 | 15980 | 12774 |
| 8. | State and local taxes | 495 | 871 | 1183 | 945 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 5586 | 5586 | 9310 | 5586 |
|  | Taxable income | 393 | 550 | 681 | 550 |
|  | Total | 5979 | 6136 | 9992 | 6136 |
| 10. | Total payments to general government (7+8+9) | 13168 | 18779 | 27154 | 19855 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
|  | For two children | 3623 | 3623 | 3623 | 0 |
|  | Total | 3623 | 3623 | 3623 | 0 |
| 12. | Take-home pay (1-10+11) | 33195 | 41831 | 47702 | 37131 |
| 13. | Employer's compulsory social security contributions | 12833 | 14445 | 20855 | 14445 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 16.8\% | 22.2\% | 24.1\% | 24.1\% |
|  | Employees' social security contributions | 14.0\% | 10.8\% | 14.0\% | 10.8\% |
|  | Total payments less cash transfers | 22.3\% | 26.6\% | 33.0\% | 34.8\% |
|  | Total tax wedge including employer's social security contributions | 40.3\% | 41.4\% | 48.2\% | 48.0\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 54.9\% | 54.9\% | 54.9\% | 54.9\% |
|  | Total payments less cash transfers: Spouse | 39.4\% | 42.0\% | 54.9\% | 42.0\% |
|  | Total tax wedge: Principal earner | 66.3\% | 66.3\% | 66.3\% | 66.3\% |
|  | Total tax wedge: Spouse | 45.5\% | 61.4\% | 66.3\% | 61.4\% |

Th
he national currency is the euro. In 2011, EUR 0.72 was equal to USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 42740.

## 1. Personal income tax system

### 1.1. Federal government income tax

### 1.1.1. Tax unit

Spouses are taxed separately. As from 2004, the principle of separate taxation applies to all categories of income. A non-earning spouse is taxed separately on a notional share of income that can be transferred to him or her (see "non-earning spouse allowance", below). Married couples nonetheless file joint income tax returns.

### 1.1.2. Tax allowances

### 1.1.2.1. Deduction of social security contributions

Unless stated otherwise, social insurance contributions are deductible from gross income.

### 1.1.2.2. Work-related expenses

Salaried employees and self-employed professionals are entitled to a standard deduction for work-related expenses. This deduction may under no circumstances exceed EUR 3670 per spouse and is computed as follows:

| Gross earnings less social insurance contributions (EUR) | Rate (\%) |
| :--- | :---: |
| Below 5300 | 28.7 |
| Between 5190 and 10530 | 10 |
| Between 10530 and 17530 | 5 |
| Above 17530 | 3 |

Paid company directors are also entitled to a standard deduction for work-related expenses; this is equal to $5 \%$ of gross income (less social insurance contributions) and may not exceed EUR 3670 per spouse.

An additional allowance may be granted to wage-earners if their workplace is more than a certain distance from their home.

Actual expenses incurred in order to acquire or retain earned income are deductible if they exceed the standard deduction. The deductibility of certain categories of work-related expenses (cars, clothing, restaurant meals and business gifts) is limited, however. Taxpayers who report actual expenses may deduct EUR 0.15 per kilometre, up to 100 km per single journey, for travel between their home and their workplace by means other than private car.

### 1.1.2.3. Non-earning spouse allowance (quotient conjugal)

A notional amount of income can be transferred between spouses if one of them earns no more than 30 per cent of the couple's combined earned income. In this case, the amount transferred is limited to 30 per cent of aggregate net earned income, less the individual income of the spouse to whom the notional share is transferred. This allowance is limited to EUR 9470.

### 1.1.2.4. Exempt income

The base amount is:

| Taxable income (S) | Fixed amount | Variable amount |
| :---: | :---: | :---: |
| $0-24410$ | 6830 | 0 |
| $24410-24670$ | 6570 | $24670-\mathrm{S}$ |
| 24670 and up | 6570 | 0 |

These amounts vary with regards to the family situation. Additional exemptions for dependent children (a handicapped child counts as two children):

- 1 child: 1400 .
- 2 children: 3590.
- 3 children: 8050.
- 4 children: 13020.
- > 4 children: 4970 per additional child.

Dependent child exemptions in excess of available income give rise to a reimbursable tax credit. This reimbursable tax credit is calculated at the marginal rate and capped at EUR 400 per dependent child.

Additional special exemptions are also granted for certain household members (in euro):

- Other dependants: 1400 .
- Handicapped spouse: 1400 .
- Other handicapped dependants: 1400.
- Widow(er) with dependent child(ren): 1400 .
- Single father or mother: 1400.

These additional exemptions are applied first to the taxable income of the spouse having the most income, with any remainder then being applied to the income of the other spouse.

The basic exemption plus any additional exemptions for dependants and single parents is applied against each bracket from the bottom up; in other words, the lowest brackets are depleted first.

### 1.1.2.5. Schedule

The basic exemption plus any additional exemptions is applied from the bottom up.

| Taxable income (EUR) | Marginal rate (\%) |
| :--- | :---: |
| $0-8070$ | 25 |
| $8070-11480$ | 30 |
| $11480-19130$ | 40 |
| $19130-35060$ | 45 |
| 35060 and above | 50 |

### 1.2. Local government taxes

Local taxes are levied as a percentage of federal tax liability before deduction of reimbursable tax credits (for low earned income and for children). The rate of this surtax is set by each municipality, and there is no upper limit. The average rate is deemed to be $7.4 \%$.

### 1.3. Tax credits

A refundable tax credit is granted for low earned income other than wage income. For wages, the credit is replaced by an "employment bonus" that reduces individual social security contributions (see below). However, civil servants that do not qualify for the "employment bonus", because they are not subject to social security contributions regulations that apply to the private sector, may qualify for the refundable tax credit.

The tax credit is based on the net amount of earned income other than wage income. The net amount is computed after deduction of work-related expenses.

The base for the credit is income before any transfer of notional income between spouses.

Tax credits are granted by spouse according to the following schedule:
Tax credit schedule

| Net income brackets (R) in EUR |  | Amount of tax credit in EUR |
| :---: | :---: | :---: |
| $L_{1}$ | $\mathrm{L}_{2}$ |  |
|  | 4610 | 0 |
| 4610 | 6150 | $B \times\left(\mathbf{R}-L_{1}\right) /\left(L_{2}-L_{1}\right)$ |
| 6150 | 15380 | B |
| 15380 | 19990 | $B \times\left(L_{2}-\mathbf{R}\right) /\left(L_{2}-L_{1}\right)$ |
| 19990 | And above | 0 |

For 2011 income, the amount of the base (B) was EUR 620.

### 1.4. Rebate on the wage withholding tax

Employers benefit from a rebate on the wage withholding tax, at the rate of $1 \%$. The rebate does not affect the PIT liability of the employee and the amount of the withholding tax he may credit on its PIT liability: it just reduces the amount of withholding tax that the employer has to be to the tax administration. This means that the rebate operates like a wage subsidy, or like a negative payroll tax. The rebate is a standard one: it applies in an unconditional way to any wage earners in Sectors C-K.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Rates and ceiling

## a) Payroll deductions

The rates of employer and employee contributions are set by law. The applicable rates (in \%) are as follows (for businesses having 20 or more employees):

| 2011 | Employee | Employer | Total |
| :--- | :---: | ---: | ---: |
| Unemployment | 0.87 | 3.16 | 4.03 |
| Health insurance indemnities | 1.15 | 2.35 | 3.5 |
| Health care | 3.55 | 3.8 | 7.35 |
| Placement services |  | 0.05 | 0.05 |
| Family allowances |  | 7 | 7 |
| Pensions | 7.50 | 8.86 | 16.36 |
| Child care |  | 0.05 | 0.05 |
| Work-related illnesses |  | 1.01 | 1.01 |
| Work-related accidents |  | 0.32 | 0.32 |
| Education leave | 0.05 | 0.05 |  |
| Business closures | 0.52 | 0.43 |  |
| Wage restraint | 13.07 | 7.60 | 7.59 |
| Total |  | 34.77 | 47.84 |

Vacation pay is not subject to the social security contributions applicable to salaries, but a social security levy of $13.07 \%$ is deducted when the money is attributed.

## b) Reduction of employer contributions

The schedule applicable as from 01.01.2010 is as follows:

| Gross annual earnings $(S)$ in EUR | Fixed amount | Variable amount |
| :---: | :---: | :---: |
| $0-24120$ | 1600 | $0.162(24120-\mathrm{S})$ |
| $24120-48000$ | 1600 | 0 |
| 48000 and up | 1600 | $0.06(\mathrm{~S}-48000)$ |

## c) Reduction of individual social security contributions

A reduction of individual social security contributions is granted monthly for low-income earners, depending on wage level. The schedule below is restated in annual terms.

The schedule applicable as from 01.09.2010 is as follows:

| Gross annual salary $(\mathrm{S})$ in EUR | Reduction in Euros |
| :--- | :---: |
| $0<\mathrm{S}<16982.88$ | 2100 |
| $16982.88<\mathrm{S}<20728.44$ | $\operatorname{Min}(2100,(2100-0.2743(\mathrm{~S}-16982.88))$ |
| $20728.44<\mathrm{S}<26973.96$ | $\operatorname{Min}(1716,(1716-0.1718(\mathrm{~S}-16760.88))$ |
| $\mathrm{S}>26973.96$ | 0 |

The schedule applicable as from 01.05.2011 is as follows:

| Gross annual salary (S) in EUR | Reduction in Euros |
| :--- | :---: |
| $0<S<17322.48$ | 2100 |
| $17322.48<S<21142.80$ | $\operatorname{Min}(2100,(2100-0.2743(S-17322.48))$ |
| $21142.80<S<27511.92$ | $\operatorname{Min}(1716,(1716-0.1718(S-17322.48))$ |
| $S>27511.92$ | 0 |

## d) Special social security contribution

All persons totally or partially subject to the social security scheme for salaried workers are liable for this special contribution. In theory, the amount of the contribution is determined according to aggregate household income. Aggregate household income is equal to combined gross earnings less ordinary social security contributions and work-related expenses. The amount of the contribution is as follows:

| Taxable income (EUR) | Amount due on the lower limit | \% above the lower limit |
| :--- | :---: | :---: |
| from 0 to 18592.02 | 0 | 0 |
| from 18592.02 to 21070.96 | 0 | 9 |
| from 21070.96 to 60161.85 | 223.10 | 1.3 |
| 60161.85 and above |  | 731.29 | 0

## e) Work accidents

All employers are required to insure their employees against accidents that occur in the workplace or while travelling to or from the workplace. The insurance is written by a private company. The usual premiums are approximately $1 \%$ of gross pay for office workers and $3.3 \%$ for labourers. The premiums are based on capped gross wages: in 2011, these premiums apply to gross wages (including holiday pay and extra-legal remunerations) with a minimum of EUR 6068 and a maximum of EUR 37546 (EUR 5949 and EUR 36810 respectively in 2010). Higher rates apply in certain industries in which risks are greater. The premium rate for construction workers, for example, varies between 7 and $8 \%$.

### 2.2. Deductions according to family status or gender

None.

## 3. Universal cash transfers

Family allowances are granted for children. The annual amounts of these benefits (in euro) are as follows:

|  | $<5$ years | $5-6$ years | $7-10$ years | $11-12$ years | $12-16$ years | $17-18$ years | $>18$ years |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st child | 1060.97 | 1090.75 | 1270.99 | 1293.51 | 1387.71 | 1388.47 | 1473.47 |
| 2nd child | 1940.57 | 1970.35 | 2329.79 | 2352.31 | 2541.99 | 2542.75 | 2691.87 |
| 3rd child | 2884.41 | 2914.19 | 3273.63 | 3296.15 | 3485.83 | 3486.59 | 3635.71 |

To determine the resources available to the average worker, the Taxing Wages calculations assume that one child was between seven and ten years of age and that the other child was between eleven and twelve years of age.

## 4. Main changes in the tax/benefit system

None.
2011 Parameter values

|  | Ave_earn | 42740 | Secretariat estimate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Work-related expenses | work_rel_max | 3670 |  |  |  |
|  | work_rel_sch | 0.287 | 5300 |  |  |
|  |  | 0.1 | 10530 |  |  |
|  |  | 0.05 | 17530 |  |  |
|  |  | 0.03 |  |  |  |
| Tax credits (tranche exonérée) | single_cr | 6570 |  |  |  |
|  | Married_cr | 6570 |  |  |  |
|  | Supp_cr_base | 260 |  |  |  |
|  | supp_cr_thrsh1 | 24410 |  |  |  |
| One child | child_cr1 | 1400 |  |  |  |
| Two children | child_cr2 | 3590 |  |  |  |
| Single parents | s_parent_cr | 1400 |  |  |  |
| Maximum Child Credit Payment | child_cr_max | 400 |  |  |  |
| Basic Credit | basic_cr_base | 0 |  |  |  |
|  | basic_cr_thrsh1 | 4610 |  |  |  |
|  | basic_cr_thrsh2 | 6150 |  |  |  |
|  | basic_cr_thrsh3 | 15380 |  |  |  |
|  | basic_cr_thrsh4 | 19990 |  |  |  |
| Income tax schedule |  | tax_rate1 |  |  |  |
|  | tax_sch | 0.25 | 8070 |  |  |
|  |  | 0.30 | 11480 |  |  |
|  |  | 0.40 | 19130 |  |  |
|  |  | 0.45 | 35060 |  |  |
|  |  | 0.50 |  |  |  |
|  | quote_max | 9470 |  |  |  |
|  | quote_rate | 0.3 |  |  |  |
| Local tax | local_rate | 0.074 |  |  |  |
| Unemployment | unemp_rate | 0.0087 |  |  |  |
| Medical care | med_rate | 0.0115 |  |  |  |
| Sickness | sickness_rate | 0.0355 |  |  |  |
| Pension | pension_rate | 0.0750 |  |  |  |
| Employee contribution | SSC_rt | 0.1307 |  |  |  |
|  | SSC_redn | 0 | 0 | 2100 | 0 |
|  | (annual) | 17209.28 | 17209.28 | 2100 | 0.2743 |
|  |  | 21004.68 | 17209.28 | 1716 | 0.1718 |
|  |  | 27332.60 | 0 | 0 | 0 |
|  |  | 99999999 | 0 | 0 |  |
|  |  |  |  |  |  |
| Special annual contribution | SSC_special | 0.000 | 18592.02 |  |  |
|  |  | 0.090 | 21070.96 |  |  |
|  |  | 0.013 | 60161.85 |  |  |
|  |  | 0.000 |  |  |  |
| Employer contributions | SSC_empr_rt | 0.3477 |  |  |  |
|  | SSC_empr_redn | 0 | 1600 | 0.1620 | 24120 |
|  |  | 24120 | 1600 | 0 | 48000 |
|  |  | 48000 | 1600 | -0.06 | 48000 |
|  |  | 9999999 | 0 | 0 |  |
| Structural reduction on the withholding tax on wages | PrP_redn | 0.01 |  |  |  |
| Child benefit (age 7-10) | CB_1 | 1293.51 |  |  |  |
| second child (age 11-12) | CB_2 | 2329.79 |  |  |  |
| third child (age 11-12) | CB_3 | 3273.63 |  |  |  |

## 2011 Tax equations

The equations for the Belgian system in 2011 are mostly calculated on an individual basis. But central government tax for a married couple is calculated on two bases and the lower value is used. One of the bases takes account of the combined income of the couple. Also, tax credits may be used against the tax liability of the secondary earner if the principal earner is unable to use them.

The functions which are used in the equations (Taper, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse respectively. Equations for a single person are as shown for the principal with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | B | MIN(work_rel_max, Tax(earn-SSC, work_rel_sch))+SSC |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc_int | B | earn-tax_al |
| Quote part | Q | J | IF(married, Positive(MIN(tax_inc_int_total*quote_rate, quote_max)-tax_inc_int_spouse), 0) |
| CG adjusted taxable income - principal | tax_inc_adj_princ | P | Positive(tax_inc_int_princ - Q ) |
| CG adjusted taxable income - spouse | tax_inc_adj_spouse | S | Positive(tax_inc_int_spouse + Q ) |
| 5. CG tax before credits | CG_tax_excl | J | Tax(tax_inc_adj, tax_sch) |
| 6. Calculation of credits |  |  |  |
| Child exemption amount | child_ex_inc | P | (children=1)* ${ }^{\text {child_cr1+(children=2)*}}$ *hild_cr2 |
| Family exemption amount | fam_ex_inc | B | IF(Married,married_cr,single_cr+(Children>0)*s_parent_cr)+IF(tax_inc_adj<=0.0,IF(tax_inc_ adj<=supp_cr_thrsh1,supp_cr_base,MAX(0,supp_cr_base+supp_cr_thrsh1-tax_inc_adj))) |
| Initial exempt income - principal | ex_inc_int_princ | P | child_ex_inc+fam_ex_inc_princ |
| Initial exempt income - spouse | ex_inc_int_spouse | S | fam_ex_inc_spouse |
| Transferable amount | ex_inc_tran | J | married*IF(ex_inc_int_princ<tax_inc_adj_princ, MIN(MAX((ex_inc_int_spouse-tax_inc_adj_spouse), 0), tax_inc_adj_princ-ex_inc_int_princ), -(MIN(MAX((ex_inc_int_princ-tax_inc_adj_princ), 0), MAX(0, tax_inc_adj_spouse-ex_inc_int_spouse)))) |
| Final exempt income - principal | ex_inc_fin_princ | P | ex_inc_int_princ+ex_inc_tran |
| Final exempt income - spouse | ex_inc_fin_spouse | S | ex_inc_int_spouse-ex_inc_tran |
| Tax credits | tax_credits | J | Tax(ex_inc_fin, tax_sch) |
| Basic Credit | basic_cr | B | basic_cr_base*IF(tax_inc<=basic_cr_thrsh1, 0, IF(tax_inc<=basic_cr_thrsh2, (tax_inc-basic_cr_thrsh1)/(basic_cr_thrsh2-basic_cr_thrsh1), IF(tax_inc<=basic_cr_thrsh3, 1, IF(tax_inc<=basic_cr_thrsh4, (basic_cr_thrsh4-tax_inc)/ (basic_cr_thrsh4-basic_cr_thrsh3), 0)))) |
| 7. CG tax |  |  |  |
| Tax prior to non-wasteable credits | CG_tax_init | B | Positive(CG_tax_incl-tax_credits) |
| Non-wasteable child credit | child_credit_nw | J | MIN(Tax(MIN((children=1)*child_cr1+(children=2)*Parameters!child_cr2), (positive(ex_inc_int-tax_inc_int), tax_sch), children ${ }^{\star}$ child_cr_max) |
| Final CG tax | CG_tax_final | J | CG_tax_init-basic_cr_total-child_credit_nw |
| 8. State and local taxes | local_tax | J | local_rate*CG_tax_init |
| 9. Employees' soc security | SSC | B | Positive((earn)*SSC_rt-MIN(VLOOKUP(earn, SSC_redn,3), VLOOKUP(earn, SSC_redn, 3)-VLOOKUP(earn, SSC_redn, 4)*(earn-VLOOKUP(earn, SSC_redn, 2)))) |
|  | SSC_special | J | positive(Tax(tax_inc_total, SSC_special) |
|  | SSC_total |  | SSC+SSC_special |
| 11. Cash transfers | cash_trans | J |  |
| 13. Employer's soc security | empr_sch | B | Positive(earn*(SSC_empr_rt- PrP_redn)-(VLOOKUP(earn, SSC_empr_redn, 2)-VLOOKUP(earn, SSC_empr_redn, 3)*(earn-VLOOKUP(earn, SSC_empr_redn, 1)))) |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Canada

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Canada 2011

The tax/benefit position of single persons


## Canada 2011

The tax/benefit position of married couples

| Wage level (per cent of average wage) |  | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 46163 | 61551 | 76938 | 61551 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
| Deduction for social security contributions and income taxes |  |  |  |  |  |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 46163 | 61551 | 76938 | 61551 |
| 5. | Central government income tax liability (exclusive of tax credits) | 7248 | 9556 | 11864 | 9556 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 3318 | 3478 | 3478 | 3478 |
|  | Married or head of family | 1579 | 0 | 0 | 0 |
|  | Children | 639 | 639 | 639 | 0 |
|  | Other(CPP \& EI) | 435 | 564 | 719 | 564 |
|  | Total | 5971 | 4681 | 4836 | 4042 |
| 7. | Central government income tax finally paid (5-6) | 2856 | 4875 | 7028 | 5514 |
| 8. | State and local taxes | 1381 | 2197 | 3068 | 2197 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 2899 | 3761 | 4796 | 3761 |
|  | Taxable income (Provincial Health Care Levy) | 450 | 450 | 750 | 450 |
|  | Total | 3349 | 4211 | 5546 | 4211 |
| 10. | Total payments to general government (7+8+9) | 7586 | 11282 | 15642 | 11922 |
| 11. Cash transfers from general government |  |  |  |  |  |
|  | For head of family | 0 | 0 | 0 | 0 |
|  | For two children | 3258 | 2057 | 1441 | 0 |
|  | Total | 3258 | 2057 | 1441 | 0 |
| 12. | Take-home pay (1-10+11) | 41835 | 52325 | 62738 | 49629 |
| 13. | Employer's compulsory social security contributions | 5397 | 7097 | 8969 | 7097 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 9.2\% | 11.5\% | 13.1\% | 12.5\% |
|  | Employees' social security contributions | 7.3\% | 6.8\% | 7.2\% | 6.8\% |
|  | Total payments less cash transfers | 9.4\% | 15.0\% | 18.5\% | 19.4\% |
|  | Total tax wedge including employer's social security contributions | 18.9\% | 23.8\% | 27.0\% | 27.7\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 65.0\% | 39.1\% | 39.1\% | 35.1\% |
|  | Total payments less cash transfers: Spouse | 31.8\% | 34.1\% | 29.4\% | 30.1\% |
|  | Total tax wedge: Principal earner | 68.1\% | 44.5\% | 44.5\% | 40.8\% |
|  | Total tax wedge: Spouse | 38.6\% | 41.3\% | 37.1\% | 37.7\% |

Thhe national currency is the Canadian dollar (CAD). In 2011, CAD 0.99 was equal to USD 1. In that year, the average worker earned CAD 46163 (Secretariat estimate).

## 1. Personal income tax systems

### 1.1. Central/federal government income taxes

### 1.1.1. Tax unit

Under the present system, tax is levied on individuals separately; certain tax reliefs depend on family circumstances.

### 1.1.2. Tax allowances and credits

### 1.1.2.1. Standard credits

- Basic personal amount: all taxpayers qualify for a basic personal tax credit of CAD 1579.05
- Credit for Spouse or Eligible Dependant: a taxpayer supporting a spouse or other eligible dependant receives a tax credit of CAD 1579.05 which is reduced by 15 cents for each dollar of the dependant's income.
- Child Tax Credit: a tax credit that provides up to CAD 319.65 of tax relief for each dependent child under the age of 18 . The credit can be claimed by either parent.
- Social security contributions: taxpayers are entitled to claim 15 per cent of their contributions to the Canada or Quebec Pension Plans (to a maximum of CAD 2 217.60) and their Employment Insurance premiums (to a maximum of CAD 786.76).
- Working Income Tax Benefit (WITB): the WITB provides a non-wastable tax credit equal to 25 per cent of each dollar of earned income in excess of CAD 3000 to a maximum credit of CAD 944 for single individuals without dependents and CAD 1714 for families (couples and single parents). The credit will be reduced by 15 per cent of net family income in excess of CAD 10711 for single individuals and CAD 14791 for families. This is the default national design; provinces may choose to propose jurisdiction-specific changes to this design, subject to certain principles.
- Canada Employment Tax Credit: a tax credit of up to CAD 159.75 on employment income.


### 1.1.2.2. Main non-standard tax reliefs applicable to an average worker:

A number of non-standard tax reliefs are available to the average worker in Canada. The main ones are:

- Medical expenses credit: taxpayers are entitled to a 15 per cent tax credit for an amount of eligible medical expenses that exceeds the lesser of 3 per cent of net income or CAD 2052.
- Charitable donations credit: the credit is 15 per cent on the first CAD 200 of eligible charitable donations and 29 per cent on eligible donations in excess of CAD 200. Eligible donations are those made to registered charities, to a maximum of 75 per cent of net income.
- Registered pension plan contributions: employees who are members of a registered pension plan are entitled to deduct their contributions to the plan in respect of current and/or past service. Generally, employee contributions to a defined benefit registered pension plan are not subject to any limit; however, limits apply to the benefits that a plan may provide. Individuals can deduct their contributions to a defined contribution registered pension plan up to a limit of 18 per cent of earned income, to a maximum of CAD 22970.
- Registered retirement savings plan (RRSP) premiums: individuals can deduct their contributions to an RRSP up to a limit of 18 per cent of the previous year's earned income, to a maximum of CAD 22450 a year, unless they are also accruing benefits under a registered pension plan or a deferred profit sharing plan. Members of those other plans are limited to RRSP contributions of 18 per cent of the previous year's earned income to a maximum of CAD 22 450, minus a pension adjustment amount based on pension benefits accrued in the previous year.
- Union and professional dues: individuals with annual dues paid to a trade union or an association of public servants or paying dues required to maintain a professional status recognised by statute are allowed to deduct such fees in computing taxable income.
- Moving expenses: eligible moving expenses are deductible from income if the taxpayer moves at least 40 kilometres closer to a new place of employment.
- Child care expenses: a portion of child care expenses is deductible if incurred for the purpose of earning business or employment income, studying or taking an occupational training course or carrying on research for which a grant is received. The lower-income spouse must generally claim the deduction. The amount of the deduction is limited to the least of:

1. the expenses incurred for the care of a child;
2. two-thirds of the taxpayer's earned income; and
3. CAD 7000 for each child who is under age seven, and CAD 4000 per child between seven and sixteen years of age. The amount for a disabled child under seventeen is CAD 10000.

### 1.1.3. Tax schedule

## 2011 Federal income tax rates

| Taxable income (CAD) | Rate (\%) |
| :---: | :---: |
| $0-41544$ | 15 |
| $41544-83088$ | 22 |
| 83 088-128 800 | 26 |
| 128800 and over | 29 |

### 1.2. State and local income taxes

### 1.2.1. General description

All provinces and territories levy their own personal income taxes. All, with the exception of Québec, have a tax collection agreement with the federal government, and thus use the federal definition of taxable income. They are free to determine their own tax brackets, rates and credits. Québec collects its own personal income tax and is free to determine all of the tax parameters, including taxable income. In practice, its definition of taxable income is similar to the federal definition.

### 1.2.2. Tax regime selected for this study

The calculation of provincial tax for the average worker study assumes the worker lives in Ontario, the most populous of the 10 provinces and 3 territories. The main features of the Ontario tax system relevant to this report are summarised below:

Tax Schedule

| Income bracket | Rate (\%) |
| :--- | :---: |
| CAD 0 to CAD 37 774 | 5.05 |
| CAD 37774 to CAD 75550 | 9.15 |
| Over CAD 75 550 | 11.16 |

Surtax

| Provincial tax after accounting for wastable credits | Surtax rate |
| :--- | :--- |
| Amounts Exceeding CAD 4078 | $20 \%$ of the excess amount |
| Amounts Exceeding CAD 5219 | $36 \%$ of the excess amount |

## Wastable tax credits

- A basic tax credit of CAD 459.76.
- A maximum credit of CAD 390.39 for a dependant spouse or eligible dependant that is withdrawn as the income of the spouse or eligible dependant exceeds CAD 773 and is completely withdrawn when the income of the spouse is at least CAD 8 503.42.
- 5.05 per cent of contributions made to the Canada Pension Plan and of Employment Insurance premiums.

Tax Reduction
An earner is entitled to claim a tax reduction where the initial entitlement is equal to CAD 210 plus CAD 389 for each dependent child under the age of 19 . Where someone has a spouse, only the spouse with the higher net income can claim the dependent child tax reduction. If this amount is greater or equal to the liable provincial tax, then no tax is due. If the amount is less than the liable tax, then the actual tax reduction is equal to twice the initial entitlement amount less the liable tax (if this calculation is zero or negative, the reduction is equal to zero).

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

### 2.1.1. Pensions

Generally, all employees are eligible for coverage under the Canada Pension Plan (Québec Pension Plan in the province of Québec). For 2011, all employees are required to contribute to the Canada Pension Plan at a rate of 4.95 per cent of income up to a maximum contribution of CAD 2 217.60. Income subject to contributions is earnings (wages and salaries) less a CAD 3500 basic exemption. The maximum contribution of CAD 2217.60 is reached at an earnings level of CAD 48300 i.e. (CAD $48300-\mathrm{CAD} 3500$ ) x $0.0495=$ CAD 2 217.60. For employees, each contribution to the CPP or QPP gives rise to a tax credit equal to 15 per cent of the contributed amount. Employers are also required to contribute
to the Canada Pension Plan on behalf of their employees at the same rate and can deduct their contributions from taxable income (refer § 2.21).

Self-employed persons must also contribute to the Canada Pension Plan (Québec Pension Plan in the province of Québec) on their own behalf. However, the self-employed are required to contribute at the combined employer/employee rate of 9.90 per cent of earnings up to a maximum of CAD 4 435.20. The self-employed can deduct the employer portion of their contribution from income, equal to 50 per cent of the total contribution or CAD 2 217.60. The remaining 50 per cent, representing the employee portion, is then claimed as a tax credit at 15 per cent.

### 2.1.2. Sickness

There is no national sickness benefit plan administered by the federal government. However, all provinces have provincially-administered health care insurance plans. Three provinces, Québec, Ontario, and British Columbia, levy health insurance premiums on individuals separately from the personal income tax to help finance their health programmes.

In the case of Ontario, the premium is determined based on taxable income. Individuals who earn up to CAD 20000 are exempt. The premium is phased in with a number of different rates to a maximum of CAD 900 for taxable income levels greater than CAD 200 600. The following table provides further details on the structure that is applicable in 2011.

|  | The Ontario Health Premium |  |
| :--- | :---: | :--- |
| Taxable Income | Fixed Component (CAD) | Variable Component |
| 0 to CAD 20 000 | 0 |  |
| CAD 20000 to CAD 25000 | 0 | $6 \%$ of the taxable income in excess of CAD 20000 |
| CAD 25000 to CAD 36000 | 300 |  |
| CAD 36000 to CAD 38500 | 300 | $6 \%$ of the taxable income in excess of CAD 36000 |
| CAD 38500 to CAD 48000 | 450 |  |
| CAD 48000 to CAD 48600 | 450 | $25 \%$ of the taxable income in excess of CAD 48000 |
| CAD 48600 to CAD 72000 | 600 | $25 \%$ of the amount of taxable income in excess of CAD 72600 |
| CAD 72000 to CAD 72600 | 600 |  |
| CAD 72600 to CAD 200000 | 750 | $25 \%$ of the amount of taxable income in excess of CAD 200000 |
| CAD 200000 to CAD 200600 | 750 |  |
| Over CAD 200600 | 900 |  |

### 2.1.3. Unemployment

In general, all employees are eligible for employment insurance. Eligibility to receive benefits is determined by insurable hours worked (with a minimum entry threshold of 420 hours). For 2011, employees are required to contribute at the rate of 1.78 per cent of insurable earnings. Insurable earnings are earnings (wages and salaries) up to a maximum of CAD 44200 per year. The maximum employee contribution is therefore CAD 786.76 per year. Employment insurance contributions give rise to a tax credit equal to 15 per cent of the amount contributed. Employers are also required to contribute to the plan (see Section 2.2.3).

### 2.1.4. Work injury

See Section 2.2.4.

### 2.2. Employers' contributions

### 2.2.1. Pensions

Employers are required to contribute to the Canada Pension Plan on behalf of their employees an amount equal to their employees' contributions. Thus, employers also contribute at the rate of 4.95 per cent of earnings (less the CAD 3500 earnings exemption) to a maximum of CAD 2 217.60.

### 2.2.2. Sickness

There is no national sickness benefit plan administered by the federal government. However, all provinces have provincially-administered health care insurance plans. Three provinces levy a special tax on employer payrolls to finance health services (Québec and Ontario) or health services and education (Manitoba). These payroll taxes are deductible from the employer's income subject to tax. In the case of the province of Ontario, employers pay a 1.95 per cent Employer Health Tax on the value of their payroll that exceeds CAD 400000.

### 2.2.3. Unemployment

Employers are required to contribute to the employment insurance scheme. The general employer contribution is 1.4 times the employee contribution, that is, 2.49 per cent of insurable earnings. Premiums are adjusted for employers who provide sick pay superior to payments provided under the employment insurance regime. All employment insurance contributions are deductible from the employer's income subject to tax.

### 2.2.4. Work injury

There is no national work injury benefit plan administered by the federal government. However, employers are required to contribute to a provincial workers' compensation plan which pays benefits to workers (or their families in case of death) for work-related illness or injury. The employer contribution rates, which vary by industry and province, are related to industry experience of work-related illness and injury. Premiums are deductible from the employer's income subject to tax. In the case of Ontario, employers in the $C$ to K industry sector pay, on average, 2.78 per cent of the wages paid to each employee to a maximum of CAD 79600.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

### 3.2.1. Federal

The Canada Child Tax Benefit (CCTB) provides CAD 1405 per child under age 18 plus a CAD 98 supplement for the 3rd child and each additional child. This basic benefit is reduced by 4 per cent of family net income in excess of CAD 42707 for families with two or more children and 2 per cent for families with one child. In addition, a National Child Benefit supplement (NCB) is provided to low-income families with children. The maximum NCB is CAD 2177 for one child, plus CAD 1926 for a second child, plus CAD 1832 for the third and each additional child. The NCB is phased out based on family net income in
excess of CAD 24863 . The reduction rates are 12.2 per cent for families with one child, 23.0 per cent for families with two children and 33.3 per cent for larger families.

The Universal Child Care Benefit (UCCB) provides all families with CAD 1200 for each child under age six. Amounts received under the UCCB are taxable in the hands of the lower-income spouse but are not used to reduce other income-tested benefits such as the CCTB. In the case of single parents, the UCCB can be taxable in the hands of the eligible dependant. Since the Taxing Wages model assumes that children are at least six years old, this benefit is not applicable for these estimates.

The Goods and Services Tax Credit provides a relief of CAD 260 for each adult 19 years of age or older and CAD 137 for each dependent child under the age of 19. Single tax filers without children and with an employment income higher than CAD 8439 receive an additional CAD 137 that is phased in at a rate of 2 per cent. Single tax filers with children receive an additional CAD 137 that is not subject to phase-in. The credit received for the first dependent child of a single parent is also increased from CAD 137 to CAD 260. The total amount is reduced at a rate of five per cent of net family income over CAD 33884 . The amount is paid directly to families.*

### 3.2.2. Provincial

The province of Ontario announced the creation of the Ontario Child Benefit (OCB) in its 2007 budget. This measure is replacing the Ontario Child Care Supplement for Working Families (OCCS). For each child under eighteen, qualifying families can receive up to CAD 1100 from the OCB. The benefit is withdrawn at a rate of 8 per cent of family income that exceeds CAD 20000.

Qualifying families will receive whichever entitlement is more generous during the transition period. The calculation of the OCCS is as follows: For each child under seven, qualifying two-parent families can receive up to CAD 1100 annually while qualifying single parent families can receive up to CAD 1310 . The actual OCCS is calculated as being either the greater of qualifying child care expenses or a percentage of the earnings of a family over CAD 5 000. The percentage used depends upon the number of children. For a one child family, the rate is 21 per cent. For a two child family, the rate is 42 per cent. For families with more than two children, the rate is 63 per cent. The OCCS is withdrawn at a rate of 8 per cent of family income that exceeds CAD 20000 . Children born before 1 July 2009 and under age seven remain eligible for the OCCS in the transition period to the OCB.

Ontario has a Sales Tax Credit that provides a relief of up to CAD 273 for each adult and each child. It is reduced by four per cent of adjusted family net income over CAD 21032 for single people and over CAD 26290 for families. The amount is paid directly to families.

[^5]
## 4. Main changes in the tax/benefit system since 2009

## 5. Memorandum items

### 5.1. Identification of an average worker

The earnings data refer to production workers in the industries C to K . To obtain the annual average wage figure, the average weekly earnings for the year for employees (including overtime) are multiplied by 52.

### 5.2. Employer contributions to private health and pension schemes

These do exist but no information is available on the amounts involved.

## 2011 Parameter values

| Average earnings/yr | Ave_earn | 46163 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Tax credits | Basic_cred | 1579.05 |  |
| Spouse | Spouse_cred | 1579.05 |  |
| withdrawal rate | Sp_crd_wth | 0.15 |  |
| threshold | Sp_crd_thrsh | 0 |  |
| Canada Employment Tax Credit | Empl_crd | 159.75 |  |
| Child tax credit | Dep_ch_crd | 319.65 |  |
| Canada Child Tax Benefit | Ch_credit | 1405 |  |
| Child under 7 | Ch_crd_und7 | 0 |  |
| additional for 3rd+ | Ch_crd_3rd | 98 |  |
| reduction rate: 1 child | Ch_crd_red1 | 0.02 |  |
| Redn. rate: 2 or more | Ch_crd_red2 | 0.04 |  |
| threshold | Ch_crd_thrsh | 42707 |  |
| National Child Benefit Supplement | WIS_crd_1st | 2177 |  |
|  | WIS_crd_2nd | 1926 |  |
|  | WIS_crd_3rd | 1832 |  |
| threshold to start phase-out | WIS_phout_st | 24863 |  |
| threshold to end phase-out | WIS_phout_end | 42707 |  |
| reduction rate | WIS_redn1 | 0.122 |  |
|  | WIS_redn2 | 0.230 |  |
|  | WIS_redn3 | 0.333 |  |
| Working Income Tax Benefit | WITB_phzin_thrsh | 3000 |  |
| WITB - Phase-in Rate | WITB_phzn_rt | 0.25 |  |
| WITB - Maximum Credit (per Adult/Equiv.) | WITB_max | 944 |  |
| WITB - Addl. Maximum Credit (Fam.) | WITB_max_fam | 770 |  |
| WITB - Reduction Rate | WITB_phzout_rt | 0.15 |  |
| WITB - Threshold | WITB_phzout_thrsh | 10711 |  |
| WITB - Addl. Threshold (Fam.) | WITB_phzn_thrsh_fam | 4080 |  |
| Federal tax schedule | Fed_sch | 0.15 | 41544 |
|  |  | 0.22 | 83088 |
|  |  | 0.26 | 128800 |
|  |  | 0.29 |  |
| High-income surtax rate | H_sur_rate | 0 |  |
| threshold | H_sur_thrsh | 18500 |  |
| Canada pension plan rate | CPP_rate | 0.0495 |  |
| exemption | CPP_ex | 3500 |  |
| max contrib. | CPP_max | 2217.60 |  |
| Unemployment ins.rate | Unemp_rate | 0.0178 |  |
| max contrib. | Unemp_max | 786.76 |  |
| tax credit rate | Unemp_crd_rate | 0.15 |  |
| employer contrib. mult. | Unemp_emplr | 1.4 |  |
| GST adult credit | GST_crd_ad | 260 |  |
| child credit | GST_crd_ch | 137 |  |
| threshold | GST_crd_thrsh | 33884 |  |

## 2011 Parameter values (cont.)

| reduction rate | GST_crd_redn | 0.05 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| single supplement | GST_crd_sgsp | 137 |  |  |
| single supplement eligibility threshold | GST_sgsp_thrsh | 8439 |  |  |
| single supplement phase-in rate | GST_sgsp_rate | 0.02 |  |  |
| Province: Ontario |  |  |  |  |
| Tax Credits | P_basic_crd | 459.76 |  |  |
| Spouse | P_spouse_crd | 390.39 |  |  |
| withdrawal rate | P_sp_crd_wd | 0.0505 |  |  |
| threshold | P_sp_crd_thr | 773 |  |  |
| \% of BFT | P_pct_bft | 0.375 |  |  |
| Unemployement tax credit rate | P_unem_tc_rt | 0.0505 |  |  |
| Surtax rate 1 | P_sur_rt1 | 0.20 |  |  |
| threshold | P_sur_thr1 | 4078 |  |  |
| rate 2 | P_sur_rt2 | 0.36 |  |  |
| threshold | P_sur_thr2 | 5219 |  |  |
| Tax reduction | P_tax_red | 210 |  |  |
| amount per dependent | P_tr_chld | 389 |  |  |
| amount per disabled dep | P_tr_dis_ch | 389 |  |  |
| Provincial tax schedule | Prov_sch | 0.0505 | 37774 |  |
|  |  | 0.0915 | 75550 |  |
|  |  | 0.1116 |  |  |
| Ontario Child Care Supplement |  |  |  |  |
| \% per child of earnings over threshold |  |  |  |  |
| For 1 Child under 7 | P_pct_earn | 0.21 |  |  |
| threshold | P_ch_crd_th | 5000 |  |  |
| max per child under 7 | P_und7_max | 1100 |  |  |
| Single parent sup per ch under 7 | P_sps_und7 | 210 |  |  |
| threshold reduction | P_thrsh_red | 20000 |  |  |
| reduction rate | P_redn_rate | 0.08 |  |  |
| Ontario Child Benefit |  |  |  |  |
| Amount per child | P_ch_amt | 1100 |  |  |
| threshold | P_ch_thresh | 20000 |  |  |
| Reduction rate | P_ch_redn_rate | 0.08 |  |  |
| Sales tax credits |  |  |  |  |
| Sales tax credit adult | P_sales_cred | 273 |  |  |
| Sales tax credit child | P_salcr_chd | 273 |  |  |
| threshold | P_ps_thresh | 21032 |  |  |
| threshold seniors/families | P_ps_thr_sen | 26290 |  |  |
| reduction rate | P_ps_red_rt | 0.04 |  |  |
| reduction rate seniors | P_ps_rr_sen | 0.04 |  |  |
| Ontario Health Premium | P_hlth_sch | 20000 | 0 | 0 |
|  |  | 25000 | 0.06 | 0 |
|  |  | 36000 | 0 | 300 |
|  |  | 38500 | 0.06 | 300 |
|  |  | 48000 | 0 | 450 |
|  |  | 48600 | 0.25 | 450 |
|  |  | 72000 | 0 | 600 |
|  |  | 72600 | 0.25 | 600 |
|  |  | 200000 | 0 | 750 |
|  |  | 200600 | 0.25 | 750 |
| maximum | P_hlth_max | 900 |  |  |
| Employer Health Tax | emp_healthtax | 0.0195 |  |  |
| Employer Workers Compensation Levy | emp_workcomp | 0.0278 |  |  |
| Employer Workers Compensation Levy Ceiling | emp_workcomp_ceil | 79600 |  |  |
| Maximum number of children under the age of 7 | children_und7_max | 1 |  |  |

## 2011 Tax equations

The equations for the Canadian system are mostly repeated for each individual of a married couple. But the spouse credit is relevant only to the calculation for the principal earner and the non-wastable credits are calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances | tax_al | B | 0 |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Earn |
| 5. CG tax before credits: | Basic_Fed_tax | B | Tax(earn, Fed_sch) |
| Basic Federal tax | Basic_Fed_tax | B | Tax(earn, Fed_sch) |
| 6. Tax credits: |  |  |  |
| Basic credit | basic_cr | B | IF (Earn>0, (Basic_cred + Empl_crd) , Basic_cred) |
| Spouse credit | spouse_cr | P | ((married+children)>0)*Taper(Spouse_cred, earn_spouse, Sp_crd_thrsh, Sp_crd_wth) |
| Unemployment insurance | unemp_cr | B | Unemp_crd_rate*SSC |
| Child tax credit | dep_ch_crd | P | IF(Children>0, Children*Dep_Ch_crd, 0) |
| Total (wastable) tax credits | tax_cr | B | basic_cr+spouse_cr+unemp_cr+dep_ch_crd |
| Working Income Tax Benefit | WITB | P | IF(Married>0,MAX(0,MIN(WITB_max+WITB_max_fam,(WITB_phzn_rt* MAX(0,earn_total-WITB_phzin_thrsh)))-MAX(0,WITB_phzout_rt*MAX (0,earn_total-(WITB_phzout_thrsh+WITB_phzn_thrsh_fam))) ), <br> IF(Children>0,MAX(0,MIN(WITB_max+WITB_max_fam,(WITB_phzn_r t*MAX(0,earn_total-WITB_phzin_thrsh)))-MAX(0,WITB_phzout_rt*M AX(0,earn_total-(WITB_phzout_thrsh+WITB_phzn_thrsh_fam)))), MAX(0,MIN(WITB_max,(WITB_phzn_rt*MAX(0,earn_total-WITB_phzi n_thrsh)))-MAX(0,WITB_phzout_rt*MAX(0,earn_total-WITB_phzout_t hrsh))))) |
| 7. CG tax | CG_tax | B | Positive(Basic_Fed_tax-tax_cr)-WITB |
| 8. State and local taxes |  |  |  |
| Liable provincial tax | Prov_tax_sch | B | Tax(earn, Prov_sch) |
| Provincial tax credits | Prov_tax_cred | B | P_basic_crd+P_unem_tc_It*SSC+IF(AND(Married=0, Children>0), <br> P_spouse_crd, Married*Taper(P_spouse_crd, earn_spouse, <br> P_sp_crd_thr, P_sp_crd_wd)) |
| Provincial surtax | Prov_surtax | B | P_sur_rt1*Positive(Prov_tax_sch-Prov_tax_cred-P_sur_thr1)+P_sur_rt2 *Positive(Prov_tax_sch-Prov_tax_cred-P_sur_thr2) |
| Provincial tax reduction | Prov_tax_redn | B | MAX(2* (P_tax_red+Children*P_tr_chld)-(Prov_tax_sch-Prov_tax_cred+ Prov_surtax), 0) |
| Provincial sales tax credit | Prov_tax_stcred | P | Taper(IF(Married=1, 2, 1)*P_sales_cred+Children*P_salcr_chd, earn_total, P_ps_thresh, P_ps_red_rt) |
| Liable provincial tax | Prov_tax | B | Positive(Prov_tax_sch-Prov_tax_cred+Prov_surtax-Prov_tax_redn) |
| 9. Employees' soc security: |  |  |  |
| Canada Pension Plan | CPP | B | MIN(CPP_rate*Positive((earn-CPP_ex), CPP_max) |
| Unemployment insurance | Unemp | B | MIN(Unemp_rate*earn, Unemp_max) |
| State health premium | Prov_health | B | MIN(Hstep(tax_inc, P_hlth_sch), P_hlth_max) |
| Total Employees'soc security | SSC | B | CPP+Unemp+Prov_health |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 11. Cash transfers (nonwastable) |  |  |  |
| Child Tax Benefit | CTB | P | (Children>0)* (Taper(Children*Ch_credit +MAXA((Children-2), <br> $0)^{\star}$ Ch_crd_3rd+MINA(Children, children_und7_max)*Ch_crd_und7, earn_total, Ch_crd_thrsh, IF(Children=1, Ch_crd_red1, <br> Ch_crd_red2)))+MAXA(IF(Children>0, IF(Children<2, WIS_crd_1st, IF(Children<3, WIS_crd_1st+WIS_crd_2nd, <br> WIS_crd_1st+WIS_crd_2nd+(Children-2)* WIS_crd_3rd)), <br> 0)-MAXA((earn_total-WIS_phout_st), 0)*IF(Children=1, WIS_redn1, <br> IF(Children=2, WIS_redn2, WIS_redn3)), 0) |
| GST Credit - Total | GST_cr | P | Taper((GST_crd_ad+(Married=1)* (GST_crd_ad+Children*GST_crd_ch)+( Married=0)* (Children>0)* ${ }^{*}$ GST_crd_ad+GST_crd_sgsp+Positive(Childre $\mathrm{n}-1)^{\star}$ GST_crd_ch)+(Married=0)*(Children=0)*Positive(MIN(GST_crd_sg sp, (earn_total-GST_sgsp_thrsh)*GST_sgsp_rate))), earn_total, GST_crd_thrsh, GST_crd_redn) |
| GST Credit - Adult | GST_cr_adult | P | Taper((GST_crd_ad+(Married=1)* ${ }^{*}$ GST_crd_ad)+(Married=0)*Positive(M IN(GST_crd_sgsp, (earn_total-GST_sgsp_thrsh)*GST_sgsp_rate))), earn_total, GST_crd_thrsh, GST_crd_redn) |
| GST Credit - Child | GST_cr_child | P | GST_cr-GST_cr_adult |
| Ontario child benefit | Prov_child_ben | P | MAX(Taper(MIN(((earn_total)-P_ch_crd_th)*MIN(Children,children_u nd7_max,3)*P_pct_earn,Positive((P_und7_max+IF(Married=0,P_sps _und7.0)) ${ }^{\text {MIN }}$ (Children,children_und7_max))),earn_total,P_thrsh_re d,P_redn_rate),Taper(Children*P_ch_amt,(earn_total)),P_ch_thresh,P _ch_redn_rate)) |
| Ontario sales tax credit | Prov_sales_cr | P | Taper(IF(Married=1.2,1)*P_sales_cred+Children*P_salcr_chd,earn_total, IF(Married+Children=0, P_ps_thresh,P_ps_thr_sen),P_ps_red_rt) |
| Total Cash Transfers | Cash_tran | P | CTB+GST_cr+Prov_child_ben+ Prov_sales_cr |
| 13. Employer's soc security |  |  |  |
| Canada Pension Plan | CPP_empr | B | CPP*Unemp_emplr |
| Unemployment insurance | Unemp_empr | B | Unemp*Unemp_emplr |
| Ontario Employers Health Tax | Health_empr | B | earn*emp_healthtax |
| Ontario Workers Compensation | Comp_empr | B | MAX(earn, emp_workcomp_ceil)*emp_workcomp |
| Total Employer's soc security | SSC_empr | B | CPP_empr+Unemp_empr+Health_empr+Comp_empr |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Chile

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Chile 2011

## The tax/benefit position of single persons

1. Gross wage earnings
2. Standard tax allowances
Basic allowance
Married or head of family

Dependent children

| Deduction for social security contributions and income taxes | 275675 | 413513 | 689188 | 275675 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Work-related expenses |  | 508030 | 762045 | 1270075 | 508030 |
| Other | Total | 3938217 | 5907326 | 8280665 | 3938217 |
|  | 0 | 0 | 0 | 0 |  |
| Tax credits or cash transfers included in taxable income | 0 | 0 | 1564878 | 0 |  |

5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
Married or head of family
Children

|  | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| Total | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 78244 | 0 |
|  | 0 | 0 | 0 | 0 |
|  | 275675 | 413513 | 689188 | 275675 |
| Total | 275675 | 413513 | 689188 | 275675 |
|  | 275675 | 413513 | 767432 | 275675 |
|  | 0 | 0 | 0 | 37788 |
| Total | 0 | 0 | 0 | 37788 |
|  | 3662542 | 5493813 | 9078111 | 3700330 |
|  | 0 | 0 | 0 | 0 |
|  | 0.0\% | 0.0\% | 0.8\% | 0.0\% |
|  | 7.0\% | 7.0\% | 7.0\% | 7.0\% |
|  | 7.0\% | 7.0\% | 7.8\% | 6.0\% |
|  | 7.0\% | 7.0\% | 7.8\% | 6.0\% |
|  | 7.0\% | 7.0\% | 11.0\% | 7.0\% |
|  | n.a. | n.a. | n.a. | n.a. |
|  | 7.0\% | 7.0\% | 11.0\% | 7.0\% |
|  | n.a. | n.a. | n.a. | n.a. |

## Chile 2011

## The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage)
Number of children
2. Standard tax allowances
Basic allowance
Married or head of family

Dependent children

| Deduction for social security contributions and income taxes | 413513 | 551350 | 689188 | 551350 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Work-related expenses |  | 762045 | 1016060 | 1270075 | 1016060 |
| Other | Total | 5907326 | 7876434 | 9845543 | 7876434 |
|  | 0 | 0 | 0 | 0 |  |
| Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |  |

5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
Married or head of family
Children
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

Gross earnings

|  | 413513 | 551350 | 689188 | 551350 |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Total | 413513 | 551350 | 689188 | 551350 |
|  | 413513 | 551350 | 689188 | 551350 |

11. Cash transfers from general government

For head of family
For two children
12. Take-home pay $(1-10+11)$
13. Employer's compulsory social security contributions
14. Average rates

Income tax
Employees' social security contributions
Total payments less cash transfers
Total tax wedge including employer's social security contributions
15. Marginal rates

Total payments less cash transfers: Principal earner
Total payments less cash transfers: Spouse
Total tax wedge: Principal earner
Total tax wedge: Spouse

|  | 0 | 167352 | 37788 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 0 | 167352 | 37788 | 0 |
|  | 5493813 | 7492436 | 9194143 | 7325084 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| $7.0 \%$ | $7.0 \%$ | $7.0 \%$ | $7.0 \%$ |  |
| $7.0 \%$ | $4.9 \%$ | $6.6 \%$ | $7.0 \%$ |  |
| $7.0 \%$ | $4.9 \%$ | $6.6 \%$ | $7.0 \%$ |  |
|  |  |  |  |  |
|  | $7.0 \%$ | $7.0 \%$ | $7.0 \%$ | $7.0 \%$ |
|  | $-1.5 \%$ | $7.0 \%$ | $7.0 \%$ | $7.0 \%$ |
| $7.0 \%$ | $7.0 \%$ | $7.0 \%$ | $7.0 \%$ |  |
| $-1.5 \%$ | $7.0 \%$ | $7.0 \%$ | $7.0 \%$ |  |

$C$hile's national currency is the peso (CLP). For 2011, the average exchange rate was CLP 483.54 to USD 1. That same year, the average worker in Chile earned CLP 5907326 (Secretariat estimate).

Taxes allowances and tax thresholds for the personal income tax system and upper earnings limits for social security contributions are determined using and expressed in CPI-indexed units. At 31 December 2011, the following currency values applied to these units:

| Major revenue items | Unit | CLP | USD |
| :--- | :--- | ---: | ---: |
| Social security contributions | Unidad de Fomento (UF) | $22294.03^{1}$ | 46.12 |
| Monthly tax thresholds | Unidad Tributaria Mensual (UTM) | 39021 | 80.73 |
| Annual tax thresholds | Unidad Tributaria Anual (UTA) | 468252 | 968.74 |

1. This amount is subject to daily adjustment in line with the CPI and is compared with monthly earnings in the assessment of social security contributions

## 1. Personal income tax system

### 1.1. Central/federal government income taxes

### 1.1.1. Tax unit

Each family member declares and pays taxes separately.

### 1.1.2. Tax allowances and credits

### 1.1.2.1. Standard tax reliefs

- A general basic allowance of UTA 13.5, around CLP 6321402 is deductible from income in 2011.
- Relief for social security contributions: employee's compulsory social insurance contributions are deductible for income tax purposes regardless of whether they are paid to government or private health insurers (see Section 2.1 below).


### 1.1.2.2. Main non-standard tax reliefs

- Voluntary contributions and APV (Voluntary Pension Fund Savings): voluntary contributions to pension funds and voluntary pension savings fund (APV) may be deducted from taxable income, with an annual upper limit of CLP 13376418 (UF 600).
- DFL2 Housing Mortgage Loan Payments: the annual amounts paid in respect of mortgage obligations assumed in purchasing newly built houses under legislation DFL 2 of 1959 can be deducted from taxable income. These properties correspond to low-cost housing having a surface not exceeding 140 square meters. The discounts, subject to upper limits, may be applied over the entire duration of the debt.
- Mortgage Interest: taxpayers whose annual income falls below CLP 42142680 (UTA 90) may deduct from their taxable income $100 \%$ of interest paid within a year for mortgage loans. This percentage is reduced in the case of taxpayers with higher incomes up to CLP 70237800 (UTA 150). This relief cannot be granted along-side the DFL2 Housing Mortgage Loan Payments benefit, and cannot exceed CLP 3746016 (UTA 8) per annum.


### 1.1.3. Tax schedule

Tax rates are applied on monthly income and these taxes are retained and paid by employers. In order to estimate taxes, tax rates are applied proportionately to annual average income.

| Taxable income (UTA-UTM) | Taxable income (CLP thousands) | Tax rates |
| :--- | :---: | :---: |
| $0-13.5$ | $0-6321$ | $0 \%$ |
| $13.5-30$ | $6321-14048$ | $5 \%$ |
| $30-50$ | $14048-23413$ | $10 \%$ |
| $50-70$ | $23413-32778$ | $15 \%$ |
| $70-90$ | $32778-42143$ | $25 \%$ |
| $90-120$ | $42143-56190$ | $32 \%$ |
| $120-150$ | $56190-70238$ | $37 \%$ |
| 150 and over | 70238 and over | $40 \%$ |

### 1.2. State and local income taxes

No taxes apply to income at state or local government level.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

Employees have mandatorily to contribute 7\% of their income to a health insurance plan subject to an upper earnings limit of CLP 17327669 (UF 66). They are free to choose whether to pay into a government-managed plan or alternatively to a private insurer* (Isapres). The public insurance is based on a joint system that, in general, operates on an equal basis for all its beneficiaries, irrespective of the risk and the amount of the individual contribution. Its financing is partly covered by the contributions and partly by way of a government subsidy. Premiums paid to the plans offered by Isapres are based on the contributors' individual risk and these plans are exclusively financed with the employees' contributions. These contributions are included in the modeling as the majority of employees pay into plans managed by the government sector.

Employee social security contributions in respect of pensions and unemployment are not classified as taxes in this report; though they are included in modeling as deductions for income tax.

- The mandatory contributions to pension funds and unemployment insurance plans are not classified as taxes, since the payments are made to private institutions. In 1980, the public social security system was replaced with a privately managed individual capitalization system. This system is obligatory to all employees who have joined the labor force since 1983, and of a voluntary nature to all contributing to the former system and free-lance workers. The contributions to the old government operated pension fund system are not included in the modeling because they relate to a minority of employees and the system will eventually disappear once the contributions and related benefit payments to those individuals remaining in it have ceased.
- The modeling allows that the contributions to pension funds and unemployment insurance managed by private institutions are deducted from gross income. In the case of their pension funds, these payments amount to $10 \%$ of their gross income, with an upper

[^6]earnings limit of CLP 17327669 (UF 66). Added to that is an amount that varies depending on the managing company that covers the management of each pension fund account.* The monthly unemployment insurance premium is $0.6 \%$ of the employee's gross income, with an upper earnings limit of CLP 25991504 (UF 99) limit. Employees do not pay the monthly unemployment insurance premium when they have a fixed-term contract.

- There are also mandatory contributions to managed funds by members of the police force and the army which are classified as taxes but are not included in the modeling as they relate to a minority of the overall workforce.
- If the employee has a high risk job, he has to make an additional contribution of up to $2 \%$ of his gross income to the pension fund manager.


### 2.2. Employers' contributions

There are three categories of employer social security contribution, none of which are classified as tax revenues in this report.

- Employers make mandatory payments of $0.95 \%$ of their employees' gross income for an occupational accident and disease insurance policy subject to an upper earnings limit. For the majority of employees the payments are made to employers' associations of labor security which are private non-profit institutions. Those remaining are made to the Social Security Regularisation Unit (ISL). Although this latter organisation is controlled by the government, the funds are invested on the private institutions market. The employers also pay an additional contribution which depends on the activity and risk associated to the enterprise (it cannot exceed $3.4 \%$ of the employees' gross earnings). This additional contribution could be reduced, down to $0 \%$, depending on the safety measures the employer implements in the enterprise. If health and safety conditions at work are not satisfactory, this additional contribution could be applied with a surcharge of up to $100 \%$.
- In addition, employers make payments of $2.4 \%$ of each employee's income ( $3 \%$ for fixed-term contracts) to finance unemployment insurance. These funds are managed privately.
- Employers have to pay a disability insurance of 1.49 per cent** of the employees' gross income, to the pension fund manager.

If the employee has a high risk job, the employer has to pay up to $2 \%$ of the employee's gross income to the pension fund manager.

## 3. Universal cash transfers

### 3.1. Marital status-related transfers

No such transfers are paid.

### 3.2. Transfers related to dependent children

The "Family Allowance" is paid on a monthly basis to any employee making social security contributions who has dependant children. The definition of dependants includes;

- adopted children as well as those born to the parents;
- children up to the age of 18 or 24 years provided they are single and are regular students in an elementary, secondary, technical, specialised or higher education establishment, and whose income is less than or equal to half the minimum wage.

[^7]- The amount of the payment depends on the number of dependent children and the beneficiary's level of income according to the table below. The modelling assumes that the benefit is assessed on the spouse with the lower earning level where both spouses are working.

|  | 2011 transfer by dependant |
| :--- | :---: |
| Annual income range (CLP) | Annual payment (CLP) |
| $0-2188374$ | 83676 |
| $2188375-3635358$ | 59796 |
| $3635359-5669922$ | 18894 |
| 5669923 and over | 0 |

## 4. Memorandum items

### 4.1. Identification of an average worker

- The source of information is a survey conducted by the National Statistics Institute (INE) to determine the Salary and Labour Cost Index. This nationwide survey is carried out on a monthly sample and gathers information on salaries and labour costs. It applies to companies with at least 5-worker payrolls grouped in accordance with UN ISIC Rev. 3 international economic activity standard.
- The average gross earnings was obtained by multiplying the average hourly wage by the average number of hours worked. It covers both full and part-time workers.


### 4.2. Employers' contribution to private health and pension schemes

- In Chile, very few employers make any contributions towards health schemes for their employees, and the relevant information is not available.

2011 Parameter values

| Average earnings/yr | Ave_earn | 5907326 | Secretariat estimate |
| :--- | :--- | :--- | :--- |
| Allowances | Basic_al | 6321402 |  |
| Income tax | Tax_sch | 0.05 | 14047560 |
|  |  | 0.1 | 23412600 |
|  |  | 0.15 | 32777640 |
|  |  | 0.25 | 42142680 |
|  |  | 0.32 | 56190240 |
|  |  | 0.37 | 70237800 |
| Employees SSC | 0.4 |  |  |
| Upper threshold | 0.07 | 17327669 |  |
| Family allowance | 0 | 83676 |  |
| Child element | SSC_sch | 0 | 59796 |
|  |  | 2188374 | 18894 |

## 2011 Tax equations

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :--- | :--- | :--- | :--- |
| 1. Earnings | earn |  |  |
| 2. Allowances: | Tax_al | B | Min(Basic_al,earn) |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc, tax_sch) |
| 6. Tax credits: | tax_cr | B | 0 |
| 7. CG tax | CG_tax | B | CG_tax_excl |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | Tax(earn, SSC_sch) |
| 11. Family allowance | cash_trans | P/S | IF(Children=0.0, IF(earn_spouse>0, VLOOKUP (earn_spouse, |
|  |  |  | CTR_child ), VLOOKUP (earn_princ, CTR_child)) * children ) |
| 13. Employer's soc security | SSC_empr |  | 0 |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Czech Republic

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Czech Republic 2011

The tax/benefit position of single persons


## Czech Republic 2011

The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 290481 | 387308 | 484135 | 387308 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 0 | 0 | 0 | 0 |
|  | Married or head of family | 0 | 0 | 0 | 0 |
|  | Dependent children | 0 | 0 | 0 | 0 |
|  | Deduction for social security contributions and income taxes | 0 | 0 | 0 | 0 |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3+13) | 389245 | 518993 | 648741 | 518993 |
| 5. | Central government income tax liability (exclusive of tax credits) | 58387 | 77849 | 97311 | 77849 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other | 71688 | 46848 | 46848 | 23640 |
|  | Total | 71688 | 46848 | 46848 | 23640 |
| 7. | Central government income tax finally paid (5-6) | -13301 | 11539 | 25623 | 34747 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 31953 | 42604 | 53255 | 42604 |
| Taxable income |  |  |  |  |  |
|  | Total | 31953 | 42604 | 53255 | 42604 |
| 10. | Total payments to general government (7+8+9) | 18652 | 54143 | 78878 | 77351 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 32787 | 26268 | 18605 | 0 |
|  | Total | 32787 | 26268 | 18605 | 0 |
| 12. | Take-home pay (1-10+11) | 304616 | 359433 | 423862 | 309957 |
| 13. | Employer's compulsory social security contributions | 98764 | 131685 | 164606 | 131685 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | -4.6\% | 3.0\% | 5.3\% | 9.0\% |
|  | Employees' social security contributions | 11.0\% | 11.0\% | 11.0\% | 11.0\% |
|  | Total payments less cash transfers | -4.9\% | 7.2\% | 12.4\% | 20.0\% |
|  | Total tax wedge including employer's social security contributions | 21.7\% | 30.7\% | 34.7\% | 40.3\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 38.4\% | 38.4\% | 38.4\% | 31.1\% |
|  | Total payments less cash transfers: Spouse | 43.4\% | 20.5\% | 38.4\% | 11.0\% |
|  | Total tax wedge: Principal earner | 54.0\% | 54.0\% | 54.0\% | 48.6\% |
|  | Total tax wedge: Spouse | 57.8\% | 40.6\% | 54.0\% | 33.6\% |

Thhe national currency is the Koruny (CZK). In 2011, CZK 17.66 equal to USD 1. In that year, the average worker earned CZK 290481 (Country estimate).

## 1. Personal income tax system

### 1.1. Central government income taxes

### 1.1.1. Tax unit

- The tax unit is the individual.


### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Relief for social and health security contributions. Employees' social security contributions (see Section 2.1) are not deductible for income tax purposes.


### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Charitable donations allowance: a tax allowance of up to 10 per cent of taxable income is available for donations made to municipalities or legal entities for the financing of social, health, cultural, humanitarian, religious, ecological and sport activities. The minimum limit for donations is the lesser of 2 per cent of taxable income or CZK 1000.
- Interest payments: taxpayers may claim an allowance of up to CZK 300000 for mortgage interest payments or other interest payments related to the purchase or the improvement of their house. If more than one individual living in the same household apply for this allowance, the sum of their annual deductions is subject to the above-mentioned ceiling, i.e. CZK 300000.
- Supplementary pension scheme contributions: taxpayers who are members of a registered supplementary private pension scheme are entitled to deduct the individually paid (i.e. paid by employee) annual contributions to a registered pension scheme reduced by CZK 6000 from the earned income. The maximum allowance is CZK 12000 a year.
- Private life insurance premiums: taxpayers may claim an allowance of up to CZK 12000 for premiums paid according to a contract between the taxpayer and an insurance company if the benefit (lump sum or recurrent pension) is paid out 60 months after the signature of the contract and in the year in which the taxpayer reaches the age of 60 .


### 1.1.2.3. Tax schedule

From January 2008, a progressive system of taxation is replaced by a single rate of $15 \%$, levied on gross earnings augmented with employer social security contributions net of non-standard tax reliefs. The non-standard tax reliefs are not included in the tax equations underlying the Taxing Wages results.

### 1.1.2.4. Tax credits

- Credit of CZK 23640 per taxpayer, change only for the year 2011.
- Credit of CZK 24840 per spouse (husband or wife) living with a taxpayer in one household provided that the spouse's own income does not exceed CZK 68000 in the taxable period.
- Credit for children: payable tax credit of CZK 11604 (irrespective of the child's own income) if the child satisfies one or more of the following criteria:
* age below 18;
* age below 26 and receiving full-time education;
* age below 26 and physically or mentally disabled provided that the child is not in receipt of a state disability payment.

Non-standard tax credits:

- Credit of CZK 2520 if the taxpayer is in receipt of a partial disability pension or is entitled to both an old-age pension and a partial disability pension.
- Credit of CZK 5040 it the taxpayer is in receipt of a full disability pension, or another type of pension conditional on his full disability pension, or if the taxpayer is entitled to both old-age pension and full disability pension or deemed to be fully disabled under statutory provisions, but his application for a full disability pension was rejected for reasons other than that he was not fully disabled (handicapped).
- Credit of CZK 16140 if the taxpayer is a "ZTP-P" card holder (ZTP-P means handicapped person requiring an escort).
- Credit of CZK 4020 if the taxpayer takes part in a systematic educational or training programme under statutory provisions in order to prepare for his future vocation (profession) by means of such studies or prescribed training until completion of his/ her 26 or 28 years (Ph.D. programme).


### 1.2. State and local income tax

There are no regional or local income taxes.

## 2. Compulsory social security contributions to schemes operated within the government sector

A ceiling on social security contributions of four times the average wage was introduced in 2008. The estimate of the ceiling on social security contributions is CZK 148440 per month for 2011, i.e. CZK 1781280 per year.

### 2.1. Employees' contributions

Compulsory contributions of 11 per cent of gross wages and salaries are paid by all employees into government operated schemes. The total is made up as follows (in \%):

| Health insurance | 4.5 |
| :--- | :--- |
| Social insurance | 6.5 |

### 2.2. Employers' contributions

The total contribution for employers is 34 per cent of gross earnings.

The contribution consists of the health insurance contribution (9 per cent of gross wages and salaries) and social insurance (25 per cent).

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

Non-taxable family allowances are paid as follows:

| Family income | Up to 2.4 LM |
| :--- | :---: |
| Age of child | Total payment CZK per month |
| Below 6 | 500 |
| $6-15$ | 610 |
| $15-26$ | 700 |

The central government pays this allowance in respect of each dependent child based on the family income level and provided that family income does not exceed 2.4 times the relevant living minimum (LM). Family income includes the earnings of both parents net of income tax and the employees' social security and health insurance contributions. The monthly LM for the AW-type family with children can be calculated by summing the following amounts (in CZK):

|  | Living minimum |
| :--- | ---: |
| Basic personal requirement | 3126 |
| Single | 2880 |
| First person in household | 2600 |
| Second and other persons who are not a dependent child | 1600 |
| Child aged below 6 | 1960 |
| Child aged between 6 and 15 | 2250 |
| Child aged between 15 and 26 |  |
| Household expenses | 2880 |
| One person household | 5480 |
| Two person household | 7080 |
| Three person household | 9040 |
| Four person household | 11290 |
| Five person household |  |

A family is also entitled to a social allowance if there is at least one child in the family and the net monthly income of the family is below two times the LM. The transfer is calculated based on the following formula:
child's basic personal requirement - child's basic personal requirement * net family income
If the net family income is below the LM, then the LM is to be used in this formula instead of the net family income. The central government pays this allowance monthly.

### 3.3. Additional transfers

An additional allowance is paid by local government to low income families. The amount transferred varies according to the budget capacity and is provided if total family income including family allowances is less than the LM. This allowance is not included in the computation.

## 4. Main changes in tax/benefit systems since 2011

Main changes in the tax and benefit systems in force since January 2010:

- The tax credit for taxpayer was reduced from CZK 24840 to CZK 23640 in the taxable period.


## 5. Memorandum items

### 5.1. Identification of AW and valuation of earnings

The Ministry of Finance estimates the average earnings of the AW based on the data supplied by the Czech Statistical Office. The data supplied cover years up to 2010. The calculation of the average earnings AW is made by CZ-NACE division, which is compatible with ISIC classifications Rev. 4.

### 5.2. Employers' contributions to private pension, health and related schemes

There are supplementary private pension schemes only, but employers' contributions vary. Relevant information is not available.

2011 Parameter values

|  | Ave_earn | 290481 | Country estimate |
| :--- | :--- | :--- | :--- |
| Income tax rate | tax_rate | 0.15 |  |
| Social security contributions | SSC_rate | 0.11 |  |
| Employers | SSC_empr_rate | 0.34 |  |
| Child Tax credit | child_cr | 11604 |  |
| Tax credit for individuals | tax_cr_base | 23640 |  |
| Tax credit for spouse | tax_cr_spo | 24840 |  |
| Tax credit for spouse income ceiling | Tax_cr_spo_inc_ceil | 68000 |  |
| Living minimum (LM) |  |  |  |
|  | basic_adult | 3126 | 2880 |
|  | basic_household | 5480 | 1960 |
|  | basic_child | 1 | 580 |
|  | house_exp | 2 | 7080 |
|  |  | 3 | 9040 |

## 2011 Tax equations

The equations for the Czech system are on an individual basis. But the spouse tax credit is relevant only to the calculation for the principal earner and cash transfers are calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

|  | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn | B |  |
| 2. CG taxable income | tax_inc_princ | B | Earn+(earn*SSC_empr_rate) |
| 3. CG tax before credits |  |  |  |
| CG tax before credits principal | CG_tax_excl_princ | B | Tax(tax_inc_princ, tax_rate) |
| 4. Tax credits: |  |  |  |
| Tax credit for children | tax_cr_ch | P | children*child_cr |
| Basic tax credit | tax_cr_bas | B | tax_cr_bas |
| Tax credit for spouse | tax_cr_spouse | P | Married*tax_cr_spo |
| 5. $\mathrm{CG} \operatorname{tax}$ |  |  |  |
| CG tax principal | CG_tax_princ | B | $\operatorname{Max}\left(C G \_t a x \_e x c l \_p r i n c-t a x \_c r \_b a s \_p r i n c-\right.$ tax_cr_spo, 0)-tax_cr_ch |
| 6. State and local taxes | local_tax | B | 0 |
| 7. Employees' soc security | SSC | B | MIN(earn,soc_sec_contr_ceil)*SSC_rate |
| 8. Cash transfers |  |  |  |
| Net family income | net_inc | J | earn_total-CG_tax_total-SSC_total |
| 9. Living minimum (monthly) | LM | J | (1-Married)*basic_adult+Married*basic_household +Children*basic_child+ VLOOKUP((1+Married+Children), house_exp, 2, FALSE) |
| 10. Total cash transfers | cash_trans | J | Children*IF(net_inc<=(2.4)*LM*12, transf_1*12) <br> +Children*12*IF(net_inc<LM*12, basic_child*(1/2), <br> IF(net_inc<2*LM*12, basic_child*(1- net_inc/ $\left.\left.\left.\left(2^{\star} L M^{\star} 12\right)\right), 0\right)\right)$ |
| 11. Employer's soc security | SSC_empr | B | MIN(earn,soci_sec_contr_ceil)*SSC_empr_rate |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Denmark

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Denmark 2011

The tax/benefit position of single persons


## Denmark 2011

The tax/benefit position of married couples

1. Gross wage earnings
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxe
Work-related expense
Other
3. Tax credits or cash transfers included in taxable income

Earnings tax credit deduction
4. Central government taxable income (1-2+3)
5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
998199879987

Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes

| Total | 14981 | 9987 | 9987 | 9987 |
| :--- | ---: | ---: | ---: | ---: |
|  | 29050 | 41408 | 54641 | 41408 |
|  | 62188 | 88242 | 116973 | 88242 |
|  |  |  |  |  |
|  | 41059 | 61699 | 71909 | 61699 |
|  |  |  |  |  |
| Total | 41059 | 61699 | 71909 | 61699 |
|  | 132297 | 191350 | 243522 | 191350 |

11. Cash transfers from general government

For head of family
For two children
Green check
12. Take-home pay (1-10+11)

|  | 24036 | 24036 | 24036 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 3200 | 3200 | 3200 | 2600 |
| 27236 | 27236 | 27236 | 2600 |  |
| 277790 | 346353 | 421798 | 321717 |  |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | $23.8 \%$ | $25.4 \%$ | $26.9 \%$ | $25.4 \%$ |
| $10.7 \%$ | $12.1 \%$ | $11.3 \%$ | $12.1 \%$ |  |
| $27.4 \%$ | $32.1 \%$ | $33.9 \%$ | $37.0 \%$ |  |
| $27.4 \%$ | $32.1 \%$ | $33.9 \%$ | $37.0 \%$ |  |
|  |  |  |  |  |
|  | $42.3 \%$ | $42.3 \%$ | $42.3 \%$ | $42.3 \%$ |
| $46.3 \%$ | $40.9 \%$ | $40.9 \%$ | $40.9 \%$ |  |
| $42.3 \%$ | $42.3 \%$ | $42.3 \%$ | $42.3 \%$ |  |
| $46.3 \%$ | $40.9 \%$ | $40.9 \%$ | $40.9 \%$ |  |

Thhe national currency is the Kroner (DKK). In 2011, DKK 5.36 was equal to USD 1. In that year, the average worker earned DKK 382850 (Secretariat estimate).

## 1. Personal income tax system

In the Danish personal income tax system, the income of the individual taxpayer is split into three categories:

- Personal income, which consists of employment income, business income, pensions, unemployment benefits, etc.
- Capital income (e.g. interest income and some capital gains) is calculated as a net amount (the sum of positive and negative capital income net of interest expenses). Dividend income and the property value of owner-occupied dwellings are taxed at different tax rates.
- Taxable income - the aggregate of personal income and capital income less deductions (e.g. work-related expenses, etc.).

All three categories are relevant for various tax rates, see Section 1.2.1.
The employees' social security contributions and their payments to labour market supplementary pension schemes (see Section 2.1 ) are not included in personal income (or taxable income).

Regarding the tax unit, the earned income of each spouse is taxed separately. However, as is mentioned in Section 1.2.1, some unutilised personal allowances can be transferred between them.

### 1.1. Tax allowances and tax credits

### 1.1.1. Standard reliefs

Wage or salary earners who make expenses in order to earn their income (e.g. transport expenses, trade union membership dues, unemployment premiums) can fully deduct these expenses from taxable income. In this Report, contributions to unemployment insurance are therefore regarded as a standard tax allowance (and as a social security contribution).

The tax credit scheme allows the taxpayer to deduct 4.25 per cent of earned income to a maximum of DKK 13600 in order to calculate taxable income. The effective value of the credit is equal to the municipality tax ( 24.9 per cent), the church tax rate ( 0.7 per cent) plus the 8.0 per cent health tax rate that is paid to the state ( 33.6 per cent on average) multiplied by the value of the deduction.

### 1.1.2. Main non-standard tax reliefs applicable to an AW

- Interest payments are fully deductible from capital income.
- The non-standard deduction for wage and salary earners: the actual costs that are made in order to acquire income are deductible from taxable income. The main items are: - Contributions paid to trade unions.
* Transportation costs: up to 24 km per day: no deduction. $24-100 \mathrm{~km}$ : DKK 2.00 per km. Above 100 km : DKK 1.00 per km as a standard, but transport from municipalities placed in the outskirts of the country gives a credit of DKK 2.00 also above 100 km .
* Other costs above DKK 5500.
- Contributions/premiums paid to private pension saving plans are in general deductible from personal income. From 1999 onwards, contributions/premiums paid to private pension saving plans with sum payments are no longer deductible from income subject to the top tax bracket rate.
- Other reliefs:
* alimonies, if according to contract, are deductible from taxable income;
* contributions to certain non-profit institutions are deductible from taxable income (limit DKK 14 500);
- losses incurred from unincorporated business in earlier years are, in principle, deductible from personal income.


### 1.1.3. Tax credits

Each individual is granted a personal allowance, which is converted into a wastable tax credit by applying the marginal tax rate of the first bracket of the income tax schedule. For taxpayers who are 18 years of age or are older, the tax credit amounts to:

| For central government income tax | 3.64 per cent of DKK $42900=$ DKK 1562 |
| :--- | :--- |
| For central government health tax | 8.00 per cent of DKK $42900=$ DKK 3432 |
| For local government income tax and church tax (average rate) | 25.656 per cent of DKK $42900=$ DKK 11006 |

Special personal allowance for an individual younger than 18: DKK 32200.
If a married person cannot utilise the personal allowance, the unutilised part is transferred to the spouse.

### 1.2. Central government income taxes

### 1.2.1. Tax schedule

Low tax bracket to the central government is assessed on the aggregate of personal income and positive net capital income at the rate of 3.64 per cent.

From 2010 and onwards, the medium tax bracket was suspended.
Top tax bracket to the central government is assessed on the excess of DKK 389900 of the aggregate of personal income and positive net capital income at the rate of 15 per cent. If a married individual cannot utilise the total allowance of DKK 389 900, the unutilised part is not transferred to the spouse.

If the marginal tax rate including local tax but excluding church tax exceeds 51.5 per cent, the top tax bracket rate is reduced by the difference between the marginal tax rate and 51.5 per cent. The reduction at the average local tax rate is 0.1 per cent in 2011.

### 1.2.2. Health care tax

Central government levies an additional health care tax of 8 per cent. The tax base is taxable income (see Section 1).

### 1.3. State and local income taxes

### 1.3.1. General description

Local income taxes are levied only by the municipalities (and the church). The rates vary across jurisdictions.

### 1.3.2. Tax base

The tax base is taxable income (see Section 1). Tax credit varies with tax rates. The average amount is given below.

### 1.3.3. Tax rates

Lowest rate: 22.8 per cent (municipalities).
Highest rate: 27.8 per cent (municipalities).
Average rate: 25.656 per cent (municipalities: 24.921 per cent; church: 0.735 per cent).
The average rate is used in this study. It is applied to the tax base less personal allowances (see Section 1.1).

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

Employees make a fixed contribution of DKK 10431 for unemployment insurance. From 1999 onwards, the contribution for unemployment insurance is split into two: one part consists of the contribution for unemployment insurance (DKK 3 672) while the other part consists of a voluntary contribution to an early retirement scheme (DKK 5 364). In addition an administration fee of DKK 1395 on average is added.

Contributions to the unemployment funds are not mandatory. Nevertheless these payments are defined as social security contributions and classified as taxes in the Danish national accounts because there is no direct link between what members pay to the schemes and what they receive and the funds are subsidised by the state. In this Report, both contributions as well as the administration fee are included. Additional social security contributions are assessed on the basis of employees' gross earnings at the rate of 8.0 per cent.* Social security contributions are not assessed on social transfers or on capital income.

In addition, there is a compulsory fixed contribution to a general Labour Market Supplementary Pension Scheme of DKK 1080 for workers who work at least 117 hours per month (for workers who work less than 117 hours but not less than 78 hours, the rate is DKK 720; for workers who work less than 78 hours but not less than 39 hours, the rate is DKK 360); their employer makes a corresponding contribution that is double this amount. Under this scheme, each employee has a plan and it should be noted that the contribution that is ascribed to this plan is determined by the level of employment and does not necessarily relate to the actual amount described above. The employee contribution of DKK 1080 is modelled as a standard tax relief from the personal income tax. As the employee and employer contribution is paid to a privately-managed pension scheme, these contributions are not considered to be taxes but rather as non-tax compulsory payments and are therefore not included in the tax calculations.

[^8]
### 2.2. Employers' contributions

From 2000 onwards, the social security contribution is zero. The employer only contributes to a Labour Market Supplementary Pension scheme, which in case of a full-time employee corresponds to a fixed amount of DKK 2160 (being twice the fixed amount of DKK 1080 mentioned in Section 2.1).

## 3. Universal cash transfers

The transfers for each dependent child are as follows:

| Age group | Quarterly amount (DKK) for each child |
| :---: | :---: |
| $0-2$ | 4248 |
| $3-6$ | 3363 |
| $7-17$ | 2646 |

The transfer is independent of the parents' income. There are additional special amounts for single parents: the transfer for each dependent child is DKK 4960 per year and a yearly transfer of DKK 5052 regardless of the number of children. In addition, there is a state transfer of DKK 12672 per year for each dependent child in case an "absent parent" does not contribute (this amount) to the family. This transfer is included in this Report's calculations for single parents.

Individuals older than 18 years receive a "green check" of DKK 1 300; this amount is increased with DKK 300 per child for up to two children. Only one partner in a married couple receives the increased "green check" for children. The "green check" is nominally fixed and is quickly phased out at a rate of 7.5 per cent for income above DKK 362800.

## 4. Main changes in tax/benefit systems

From 2000 to 2002, the low tax bracket rate has been reduced from 7 per cent to 5.5 per cent. The low tax bracket is assessed on the aggregate of personal income and positive net capital income.

After the parliamentary elections in 2001, the Conservative/Liberal government adopted a tax freeze policy, which implied that tax rates could not be increased, either in nominal or relative terms, during that government term. Taxes were therefore not increased during the period 2002-05. After the parliamentary elections in February 2005, the Conservative/Liberal government and the tax freeze policy were confirmed.

In order to respect the "tax freeze", the low tax bracket has been reduced by 0.36 per cent from 2004 to 2010 as a compensation for increases in local income taxes from 33.31 per cent in 2004 to 33.66 per cent in 2011.

In the spring of 2003, the government agreed with one of the opposition parties to implement a tax package. The aim of this package was to decrease the level of labour taxation in Denmark, and thereby to reduce the distortions in the labour market and to improve the incentives to work. The package contained two main elements: an increase of the threshold for the medium tax bracket of nearly DKK 50000 and the introduction of a tax credit scheme whereby the taxpayer can deduct 2.5 per cent of earned income to a maximum of DKK 7500 (in 2007) in the calculation of taxable income.

Before 2004, a compulsory contribution of 1 per cent of employees' gross earnings was paid to an individual Labour Market Supplementary Pension Scheme established for the
employee - this contribution is not considered as a social security contribution but rather as savings being made by the individual. However, from 2004 to 2010, this contribution was suspended and finally abolished and the deposits paid out as of April 2010.

In September 2007, the tax cuts from the 2003-package was extended. The threshold for the medium tax bracket was to be raised with DKK 57900 in 2009 to meet with the top tax bracket threshold. The deductible tax credit was increased to 4.0 per cent of earned income in 2008 and to 4.25 per cent in 2009; thus raising the maximum to 12300 in 2008 and to 13600 in 2009. The effective value of the credit and of the personal income allowance is equal to the local income tax rate, the church tax plus the health care tax rate (33.5 per cent on average) multiplied by the value of the deduction.

From the 1 January 2007, a Local Government Reform has come into force, which changes the structure of labour taxation. The reform however had only a minimal impact on the overall level of taxation. The number of municipalities has been cut from 270 to 98 and five regions have replaced the 14 counties. The regions will not impose taxes but will be financed through state subsidies and by contributions from the municipalities. The reform implied an increase in the average municipal tax rate from 24.134 per cent in 2006 to 24.577 per cent in 2007. Since then, there has been a further increase in the average municipal tax to 24.903 per cent in 2010 . The county tax has been replaced by a new health care tax of 8 per cent which is levied by central government. The health care tax rate has remained 8 per cent since 2008. The county tax was part of state income taxation. The levels of taxation have thus been reduced from three to two: only the central and local governments now levy taxes.

In the spring of 2009, the government and one of the opposition parties agreed upon a major tax reform to be phased in from 2010 to 2019. The reform aims at reducing the high marginal tax rates on personal income and thus to stimulate labour supply in the medium to long-term. The reform decreases income taxes by DKK 29 billion in 2010. The tax reform is planned to be revenue neutral as a whole, but is underfinanced in the short run (2010-12) in order to stimulate the economy. The main measures taken in 2010 include the reduction of the rate of the bottom tax bracket from 5.26 per cent to 3.67 per cent, abolition of the medium tax bracket with the 6 per cent rate altogether, and increase the top tax bracket threshold by DKK 28800 to DKK 389 000. The reform will decrease the lowest marginal tax rate from 42.4 per cent to 41.0 per cent and the highest marginal tax rate on labour income from 63.0 per cent to 56.1 per cent. The marginal tax rate on positive net capital income (up to 51.5 after abolition of the middle tax bracket) is further reduced for the vast majority by introduction of an extra allowance of DKK 40000 (DKK 80000 for married couples) for positive net capital income in the top bracket tax.

The reform is partly financed by higher energy, transport and environmental taxes to support the energy and climate policy objectives of the government, and also by increases of excise rates on health-related goods (fat, candy, sugary drinks, tobacco). These increases are partly compensated by giving a "green check" to households (see Section 3). The tax reform is also partly financed by base broadening measures. The measures include a gradual reduction from 2012 to 2019 of the tax value (from 33.5 to $25.5 \%$ ) of assessment oriented deductions and limitations of the tax deductibility of net interest payments over a nominal threshold of DKK 50000 (DKK 100000 for married couples). Also the deductibility of payments above DKK 100000 a year to individual pension insurance schemes with less than life-long coverage has been limited, as well as tightening of the tax
treatment of company cars and other fringe benefits. Furthermore, a $6 \%$ tax is imposed from 2011 on pension payments exceeding DKK 362800.

To consolidate the budget, a Fiscal Consolidation Agreement was reached in May 2010, somewhat modifying the prescriptions of the Spring Package of 2009.

The specific provisions of the Fiscal Consolidation Agreement include:

- The suspension from 2011 until 2013 of automatic adjustments in various tax thresholds (including personal allowances).
- Postponing from 2011 to 2014 the increase of the threshold for the top income tax rate (15\%) from DKK 389900 to 409100 (EUR 52316 to 54 892). The increase was an element of the Spring Package 2.0.
- The labour union membership fees' tax deductibility is limited to DKK 3000 (EUR 403) from the year 2011. The threshold is not adjusted.
- From 2011, the annual amount of child allowance is limited to DKK 35000 (EUR 4 696), irrespective of the number of children. Child allowances will be gradually reduced by $5 \%$ until 2013.


## 5. Memorandum items

### 5.1. Identification of an AW

The AW is identified as an average worker employed at firms which are members of the Danish Employers' Confederation.

### 5.2. Employers' contribution to private schemes

The employer must provide his employees with work injuries' insurance.
Employees typically participate in a private occupational (labour market) pension scheme to which both the employee and the employer make contributions. The employee's contribution is deductible for income tax purposes and is treated in this Report as a non-standard tax relief. The employer's contribution is not included in the gross wage income of the employee.

2011 Parameter values

| Average worker | Ave_earn | 382850 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Central taxes | Health_tax_rate | 0.08 |  |
|  | Low_rate | 0.0364 |  |
|  | Top_thrsh | 389900 |  |
|  | Top_rate | 0.15 |  |
|  | Marg_rate_ceil | 0.515 |  |
|  | Adj_top_rate | 0.14939 |  |
|  | Temp_tax_rate | 0 |  |
|  | Temp_tax_thrsh | 0 |  |
|  | Personal_al | 42900 |  |
| Green check | Green_check | 1300 |  |
|  | Green_check_thrsh | 362800 |  |
|  | Green_check_child | 300 |  |
|  | Green_check_children | 600 |  |
|  | Green_check_taper_rate | 0.075 |  |
| Local taxes | gener_rate | 0.24921 |  |
|  | church_rate | 0.00735 |  |
| total local tax rate | Local_rates | 0.25656 |  |
| Earned income tax credit scheme | earncredit_rate | 0.0425 |  |
|  | earncredit_max | 13600 |  |
| Child transfers | Child_3t06 | 13452 |  |
|  | Child_7to17 | 10584 |  |
| for single parents | Sing_par_basic | 5052 |  |
|  | Sing_par_ch | 17632 |  |
| Individual Labour Market Pension Scheme | Pension_rate | 0 |  |
| Employees soc. security: |  |  |  |
| suppl. pension scheme | Pension | 1080 |  |
| unempl. insurance | Unemp | 10431 |  |
| SSC rate | SSC_rate | 0.08 |  |
| Employer soc. security: |  |  |  |
| suppl. pension scheme | Pension_empr | 2160 |  |
| refunded by government | Pension_ref | 0.00 |  |
| SSC rate | SSC_empr | 0 |  |

## 2011 Tax equations

The equations for the Danish system in 2011 are mostly on an individual basis but there is an interaction in the calculation of Central Government tax between spouses and the child benefit is calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | B | SSC+Pension_rate*earn |
|  | earncredit | B | Min(earn*earncredit_rate, earncredit_max) |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al-earncredit+taxbl_cr) |
|  | pers_inc | B | Positive(earn-pension-pension_rate*earn-ssc_rate*earn) |
| 5. CG tax before credits | CG_tax_excl_princ | P | Low_rate*tax_inc_princ+Medium_rate*Positive(tax_inc_princ-M edium_thrsh-Married*Positive(Medium_thrsh-pers_inc_spouse)) +Adj_top_rate*Positive(tax_inc_princ-Top_thrsh) |
|  | CG_health_tax_excl _princ | P | Health_tax_rate*tax_inc_princ |
|  | CG_tax_excl_spouse | S | Low_rate*tax_inc_spouse+Medium_rate*Positive(tax_inc_spous e-Medium_thrsh)+Adj_top_rate*Positive(tax_inc_spouse-Top_th rsh) |
|  | CG_health_tax_excl _spouse | S | (Married=1)*Health_tax_rate*tax_inc_spouse |
| 6. Tax credits: | tax_cr_princ | P | Personal_al*Low_rate+Married*Positive(Personal_al-pers_inc_s pouse)*Low_rate |
|  | health_tax_cr_princ | P | Health_tax_rate*(Personal_al+Married*Positive(Personal_al-tax_ inc_spouse)) |
|  | tax_cr_spouse | S | Personal_al*Low_rate |
|  | health_tax_cr_spouse | S | (Married=1)*Health_tax_rate*Personal_al |
| 7. $\mathrm{CG} \operatorname{tax}$ | CG_tax | B | Positive(CG_tax_excl-tax_cr)+Positive(CG_health_tax_excl-health _tax_cr) |
| 8. State and local taxes | local_tax_princ | P | Positive((Local_rates)* (tax_inc_princ-Personal_al-Married*Positi ve(Personal_al-tax_inc_spouse))) |
|  | local_tax_spouse | S | (Local_rates)*Positive(tax_inc_spouse-Personal_al) |
| 9. Employees' soc security |  |  |  |
| relevant earnings | SSC_earn | B | Earn |
| contribution | SSC | B | (earn>0)* (Unemp+SSC_rate*SSC_earn) |
| 10. Total payments | tot_payments | J | Positive(CG_tax_total+local_tax_total+SSC_total) |
| 11. Cash transfers | cash_trans | J | (Children>0)* ${ }^{*}$ Child_3to6+(Children>1)*(Children-1)*Child_7to1 <br> 7+(Married=0)*(Sing_par_basic+Children*Sing_par_ch)) <br> +IF(Married=1,(Taper_(green_check,pers_inc_princ,Green_check_ thrsh,Green_check_taper_rate)+Taper(green_check+MIN(Childre n* Green_check_child, <br> Green_check_children),pers_inc_spouse,Green_check_thrsh,Gre en_check_taper_rate)),Taper(green_check+MIN(Children* <br> Green_check_child, Green_check_children),pers_inc_princ, Green_check_thrsh,Green_check_taper_rate)) |
| 13. Employer's soc security | SSC_empr | B | 0 |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Estonia

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Estonia 2011 <br> The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 6611 | 9916 | 16527 | 6611 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 1728 | 1728 | 1728 | 3456 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 185 | 278 | 463 | 185 |
|  | Work-related expenses | 0 | 0 | 0 | 0 |
| Other |  |  |  |  |  |
|  | Total | 1913 | 2006 | 2191 | 3641 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 4698 | 7910 | 14336 | 2970 |
| 5. | Central government income tax liability (exclusive of tax credits) | 986 | 1661 | 3011 | 624 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children | 0 | 0 | 0 | 0 |
|  | Other |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 7. | Central government income tax finally paid (5-6) | 986 | 1661 | 3011 | 624 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
|  | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 185 | 278 | 463 | 185 |
|  | Taxable income |  |  |  |  |
|  | Total | 185 | 278 | 463 | 185 |
| 10. | Total payments to general government (7+8+9) | 1172 | 1939 | 3473 | 809 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 921 |
|  | Total | 0 | 0 | 0 | 921 |
| 12. | Take-home pay (1-10+11) | 5439 | 7977 | 13053 | 6723 |
| 13. | Employer's compulsory social security contributions | 2274 | 3411 | 5685 | 2274 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 14.9\% | 16.8\% | 18.2\% | 9.4\% |
|  | Employees' social security contributions | 2.8\% | 2.8\% | 2.8\% | 2.8\% |
|  | Total payments less cash transfers | 17.7\% | 19.6\% | 21.0\% | -1.7\% |
|  | Total tax wedge including employer's social security contributions | 38.8\% | 40.1\% | 41.2\% | 24.3\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 23.2\% | 23.2\% | 23.2\% | 23.2\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 42.9\% | 42.9\% | 42.9\% | 42.9\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Estonia 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 9916 | 13221 | 16527 | 13221 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 5184 | 5184 | 5184 | 3456 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 278 | 370 | 463 | 370 |
|  | Work-related expenses | 0 | 0 | 0 | 0 |
| Other |  |  |  |  |  |
|  | Total | 5462 | 5554 | 5647 | 3826 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 4454 | 7667 | 10880 | 9395 |
| 5. | Central government income tax liability (exclusive of tax credits) | 935 | 1610 | 2285 | 1973 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children | 0 | 0 | 0 | 0 |
|  | Other |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 7. | Central government income tax finally paid (5-6) | 935 | 1610 | 2285 | 1973 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 278 | 370 | 463 | 370 |
|  | Taxable income |  |  |  |  |
|  | Total | 278 | 370 | 463 | 370 |
| 10. | Total payments to general government (7+8+9) | 1213 | 1980 | 2748 | 2343 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 460 | 460 | 460 | 0 |
|  | Total | 460 | 460 | 460 | 0 |
| 12. | Take-home pay (1-10+11) | 9163 | 11701 | 14239 | 10878 |
| 13. | Employer's compulsory social security contributions | 3411 | 4558 | 5685 | 4558 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 9.4\% | 12.2\% | 13.8\% | 14.9\% |
|  | Employees' social security contributions | 2.8\% | 2.8\% | 2.8\% | 2.8\% |
|  | Total payments less cash transfers | 7.6\% | 11.5\% | 13.8\% | 17.7\% |
|  | Total tax wedge including employer's social security contributions | 31.2\% | 34.2\% | 35.9\% | 38.8\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 23.2\% | 23.2\% | 23.2\% | 23.2\% |
|  | Total payments less cash transfers: Spouse | 0.0\% | 23.2\% | 23.2\% | 23.2\% |
|  | Total tax wedge: Principal earner | 42.9\% | 42.9\% | 42.9\% | 42.9\% |
|  | Total tax wedge: Spouse | 0.0\% | 24.3\% | 42.9\% | 24.3\% |

Th
Ihe Estonian currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In 2011, the average worker in Estonia earned EUR 9916 (Country estimate).

## 1. Personal income tax system

### 1.1. Central government income tax

### 1.1.1. Tax unit

The tax unit is the family.

### 1.1.2. Tax allowances

### 1.1.2.1. Standard tax reliefs

- A general (basic) allowance of EUR 1728 is deductible from individual income in 2011.
- A child allowance of EUR 1728 is also deductible from income for each of the second and any subsequent children up to and including the age of 16 .
- Relief for social security contributions: employee's compulsory contributions for unemployment insurance are deductible for income tax purposes.
- Tax credits: none for employees.


### 1.1.2.2. Non-standard tax reliefs applicable to income from employment

- II pillar pension contributions: in 2011, these represent voluntary payments to private funds for all employees and are paid at a rate of $2 \%$ of earnings.
- Occupational accident and illness benefits that are not paid as insurance benefits are deductible from taxable income within the limit of EUR 768 per year.
- Housing loan interest, educational costs, gifts and donations are deductible from taxable income within upper limits of EUR 3196 and $50 \%$ of taxable income per year.
- Voluntary pension contributions (III pillar): contributions paid by a resident to the provider of a pension plan based in Estonia or in another EU member State according to a pension plan that is approved and entered into a special register in accordance with the pension legislation are deductible from taxable income. In 2011, such deductions are subject to an annual limit of a sum equal to $15 \%$ of the employee's income from employment.


### 1.1.3. Tax schedule

The rate of $21 \%$ applies for all levels of taxable income.

### 1.2. Regional and local income tax

There are no regional or local income taxes.

## 2. Compulsory social security insurance system

The compulsory social security insurance system consists of three schemes as follows:

- pension insurance;
- health insurance;
- unemployment insurance.


### 2.1. Employees' contributions

Employees pay $2.8 \%$ of their earnings in contributions for unemployment insurance. The taxable base is the total amount of the gross wage or salary including vacation payments, fringe benefits and remuneration of expenses related to work above a certain threshold. The assessment period is the calendar month.

### 2.2. Employers' contributions

Social security insurance contributions are also paid by employers on behalf of their employees. The taxable base and the assessment period are the same as for employees' contributions. The employers' contribution rates are applied in two parts:

- Unemployment insurance - 1.4\% of employee earnings.
- Pension and health insurance - as follows for monthly earnings above EUR 278.02.

| Scheme name | Rate of contribution (\%) |
| :--- | :---: |
| Pension insurance | 20.00 |
| Health insurance | 13.00 |
| Total | $\mathbf{3 3 . 0 0}$ |

In addition there is a lump sum payment for each employee of EUR 91.75 per month (split between pensions and health insurance on a 20:13 basis)

## 3. Payroll tax

None.

## 4. Universal cash transfers

### 4.1. Transfers related to marital status

None.

### 4.2. Transfers for dependent children

Estonia's family benefits are designed to provide partial coverage of the costs families incur in caring for, raising and educating their children.

The state pays family benefits to all children until they reach the age of 16. Children enrolled in basic or secondary schools or vocational education institutions operating on the basis of basic education have the right to receive family benefits until the age of 19. Applications for the allowance are made on an annual basis and the payments are not taxable. The values of these benefits in 2011 are shown in the table below. The single parent child allowance is paid for each child.

In addition there are nine other types of family benefits for which payment depends on either the age of the child(ren) and/or the status of the person(s) looking of them:
maternity benefit; childbirth allowance; parental benefit; child care allowance; conscript's child allowance; child's school allowance, child allowance for a child under guardianship or foster care; start in independent life allowance; adoption allowance (single payment). These are not included in the modelling.

| Type of benefit | Annual amount <br> of benefit (in EUR) |
| :--- | ---: |
| Child allowance (paid until children turn 16 or until the end of the academic year in which they turn 19 if they continue |  |
| studying). | 230.16 |
| For the first and second child | 690.48 |
| For the third and any subsequent children | 230.16 |
| Single parent's child allowance | 2024.88 |
| Parents allowance for families with seven or more children |  |

## 5. Main changes in tax/benefit system since 2005

- The personal income tax rate was steadily reduced from $24 \%$ in 2005 to $21 \%$ in 2008.
- The child tax allowance applied for the third and subsequent children for 2005 and the second and subsequent children in 2006 and 2007. It applied to all children in 2008 and then returned to the 2007 position in 2009.
- The employee unemployment contribution rate was reduced from 1 to $0.6 \%$ in 2006 and then raised in 2 stages to $2.8 \%$ at the end of 2009. The corresponding rates for employers were a reduction from 0.5 to $0.3 \%$ in 2006 increasing to $1.4 \%$.


## 6. Memorandum items

### 6.1. Average gross annual wage earnings calculation

In Estonia, the gross earnings figures cover wages and salaries paid to individuals in formal employment including payment for overtime. They also include bonus payments and other payments such as pay for annual leave, paid leave up to seven days, public holidays, absences due to sickness for up to 30 days, job training, and slowdown through no fault of the person in formal employment.

The average gross wage earnings figures of all adult workers covering industry sectors B-N by NACE Rev. 2 are estimated with average wage growth rate forecast of Estonian Ministry of Finance.

### 6.2. Employer contributions to private pension and health schemes

Some employer contributions are made to private health and pension schemes but there is no relevant information available on the amounts that are paid.

## 2011 Parameter values

| Average earnings/yr | Ave_earn | 9916 | Country estimate |
| :--- | :--- | :--- | :--- |
| Allowances | Basic_al | 1728 |  |
|  | Child_al | 1728 |  |
| Income tax | Tax_rate | 0.21 |  |
| Employers SSC | SSC_rate1 | 0.33 |  |
|  | Threshold | 3336.24 | 1101 |
|  | lump_sum | 0.014 |  |
|  | SSC_rate2 | 0.028 |  |
| Employees SSC | SSC_rate3 |  |  |
| Child allowances |  | 230.16 | 690.48 |
| First \& second child | CA_first\&second | 230.16 |  |
| Other children | CA_others | 365 |  |
| Additional for children of lone parents | CA_onepar | numdays |  |
| Days in tax year |  |  |  |

## 2011 Tax equations

The equations for the Estonian system are mostly on an individual basis.
The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | J | Min(Basic_al**(1+married)+SSC_empee+(children>1)* ${ }^{*}$ hild_al ${ }^{*}$ (Children-1),earn) |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | Tax_inc*tax_rate |
| 6. Tax credits: | tax_cr | B | 0 |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC_empee | B | earn*SSC_rate3 |
| 11. Cash transfers | cash_trans | $J$ | IF(Children<3,CA_firstsecond*Children,(2*CA_firstsecond)+(CA_ot her*(Children-2)))+(Married=0)*Children*CA_onepar |
| 13. Employer's soc security | SSC_empr | B | IF(earn>0,IF(earn>threshold,earn*SSC_rate1,lump_sum),0)+earn* SSC_rate2 |

[^9]
## Finland

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Finland 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 27630 | 41445 | 69075 | 27630 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 1691 | 2536 | 4227 | 1691 |
|  | Work-related expenses | 620 | 620 | 620 | 620 |
| Other |  |  |  |  |  |
|  | Total | 2311 | 3156 | 4847 | 2311 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 25319 | 38289 | 64228 | 25319 |
| 5. | Central government income tax liability (exclusive of tax credits) | 873 | 3162 | 8739 | 873 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 740 | 646 | 315 | 740 |
| Married or head of family |  |  |  |  |  |
| Children |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 740 | 646 | 315 | 740 |
| 7. | Central government income tax finally paid (5-6) | 133 | 2516 | 8424 | 133 |
| 8. | State and local taxes | 4282 | 6887 | 12098 | 4282 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 1691 | 2536 | 4227 | 1691 |
|  | Taxable income | 266 | 428 | 751 | 266 |
|  | Total | 1957 | 2964 | 4978 | 1957 |
|  | Total payments to general government (7+8+9) | 6371 | 12367 | 25501 | 6371 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 3659 |
|  | Total | 0 | 0 | 0 | 3659 |
| 12. | Take-home pay (1-10+11) | 21259 | 29078 | 43574 | 24918 |
| 13. | Employer's compulsory social security contributions | 6217 | 9325 | 15542 | 6217 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 16.0\% | 22.7\% | 29.7\% | 16.0\% |
|  | Employees' social security contributions | 7.1\% | 7.2\% | 7.2\% | 7.1\% |
|  | Total payments less cash transfers | 23.1\% | 29.8\% | 36.9\% | 9.8\% |
|  | Total tax wedge including employer's social security contributions | 37.2\% | 42.7\% | 48.5\% | 26.4\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 42.6\% | 47.5\% | 47.5\% | 42.6\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 53.1\% | 57.2\% | 57.2\% | 53.1\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Finland 2011

## The tax/benefit position of married couples

1. Gross wage earnings
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes

| 2536 | 3382 | 4227 | 3382 |  |
| ---: | ---: | ---: | ---: | ---: |
|  | 620 | 1240 | 1240 | 1240 |
| Total | 3156 | 4622 | 5467 | 4622 |
|  | 0 | 0 | 0 | 0 |
|  | 38289 | 50638 | 63608 | 50638 |
|  |  |  |  |  |
|  | 3162 | 3162 | 4035 | 3162 |
|  |  |  |  |  |
|  | 646 | 1314 | 1386 | 1314 |

Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)

| Total | 646 | 1314 | 1386 | 1314 |
| :--- | ---: | ---: | ---: | ---: |
|  | 2516 | 2516 | 2649 | 2516 |
|  | 6887 | 7760 | 11168 | 7760 |
|  |  |  |  |  |
|  | 2536 | 3382 | 4227 | 3382 |
|  | 428 | 482 | 693 | 482 |
|  | Total | 2964 | 3864 | 4921 |
|  | 12367 | 14140 | 18738 | 14140 |

11. Cash transfers from general government

For head of family
For two children

|  | 2536 | 2536 | 2536 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 2536 | 2536 | 2536 | 0 |
|  | 31614 | 43656 | 52873 | 41120 |
|  | 9325 | 12433 | 15542 | 12433 |
|  |  |  |  |  |
|  | $22.7 \%$ | $18.6 \%$ | $20.0 \%$ | $18.6 \%$ |
| $7.2 \%$ | $7.0 \%$ | $7.1 \%$ | $7.0 \%$ |  |
| $23.7 \%$ | $21.0 \%$ | $23.5 \%$ | $25.6 \%$ |  |
|  | $37.7 \%$ | $35.5 \%$ | $37.5 \%$ | $39.3 \%$ |
|  |  |  |  |  |
|  | $47.5 \%$ | $47.5 \%$ | $47.5 \%$ | $47.5 \%$ |
|  | $12.8 \%$ | $23.2 \%$ | $42.6 \%$ | $23.2 \%$ |
| $57.2 \%$ | $57.2 \%$ | $57.2 \%$ | $57.2 \%$ |  |
| $28.8 \%$ | $37.3 \%$ | $53.1 \%$ | $37.3 \%$ |  |

Thhe national currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year, the average worker earned EUR 41445 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Central government income taxes

### 1.1.1. Tax unit

Spouses are taxed separately for earned income.

### 1.1.2. Standard tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Work-related expenses: a standard deduction for work-related expenses equal to the amount of wage or salary, with a maximum amount of EUR 620 is granted.
- Tax credit: an earned income tax credit is granted against the central government income tax. If the credit exceeds the amount of central government income tax, the excess credit is deductible from the municipal income tax and the health insurance contribution for medical care. The credit is calculated on the basis of taxpayers' income from work. The credit amounts to 5.9 per cent of income exceeding EUR 2500 , until it reaches its maximum of EUR 740. The amount of the credit is reduced by 1.2 per cent of the earned income minus work related expenses exceeding EUR 33000 . The credit is fully phased out when taxpayers' income is about EUR 95000.


### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Interest: interest on loans associated with the earning of taxable income, loans for the purchase of an owner-occupied dwelling, and student loans guaranteed by the state can be deducted against capital income. Of the excess of interest over capital income, 28 per cent can be credited against income tax up to a maximum of EUR 1400.
- Membership fees: membership fees paid to employees' organisations or trade unions.
- Travelling expenses: travelling expenses from the place of residence to the place of employment using the cheapest means in excess of EUR 600 up to a maximum deduction of EUR 7000.
- Double housing expenses: if the place of employment is located too far from home in order to commute (distance $>100 \mathrm{~km}$ ), the taxpayer can deduct the costs of hiring a second dwelling located near the job up to EUR 250 per month. This deduction can be claimed only by one person per household.
- Other work-related outlays: outlays for tools, professional literature, research equipment and scientific literature, and expenses incurred in scientific or artistic work (unless compensated by scholarships).

Travelling expenses and other work-related outlays are deductible only to the extent that their total amount exceeds the amount of the standard deduction for work-related expenses.

### 1.1.3. Rate schedule

Central government income tax:

| Taxable income (EUR) | Tax on lower limit (EUR) | Tax on excess income in bracket (\%) |
| :--- | :---: | :---: |
| $15600-23200$ | 8 | 6.5 |
| $23200-37800$ | 502 | 17.5 |
| $37800-68200$ | 3057 | 21.5 |
| 68200 and more | 9593 | 30.0 |

### 1.2. Local income tax

### 1.2.1. Tax base and tax rates

The tax base of the local income tax is taxable income as established for the income tax levied by central government.

Municipal tax is levied at flat rates. In 2011, the tax rate varies between 16.25 and 21.50 per cent, the average rate being approximately 19.17 per cent.

Municipal tax is not deductible against central government taxes. Work-related expenses and other non-standard deductions are deductible, as for purposes of the central government income tax.

### 1.2.2. Tax allowances in municipal income taxation

- An earned income tax allowance is calculated on the basis of taxpayer's income from work. The allowance amounts to 51 per cent of income between EUR 2500 and EUR 7 230, and 28 per cent of the income exceeding EUR 7 230, until it reaches its maximum of EUR 3 570. The amount of the allowance is reduced by 4.5 per cent of the earned income minus work related expenses exceeding EUR 14000.
- A basic tax allowance is granted on the basis of taxable income remaining after the other allowances have been subtracted. The maximum amount, EUR 2250 , is reduced by 20 per cent of the income exceeding EUR 2250.


## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employee contributions

### 2.1.1. Rate and ceiling

In 2011, the rate of the health insurance contribution for medical care paid by an employee is 1.19 per cent. The tax base for thiscontribution is net taxable income for municipal income tax purposes.

In addition there is an employees' pension insurance contribution which amounts to 4.7 per cent of gross salary, an employees' unemployment insurance contribution equal to 0.6 per cent of gross salary and a health insurance contribution for daily allowance equal to 0.82 per cent of gross salary. For employees aged 53 or older, the pension insurance contribution amounts to 6.0 per cent of gross salary. These contributions are deductible for income tax purposes.

### 2.1.2. Distinction by marital status or sex

The rates do not differ.

### 2.2. Employers' contributions

The average rate of the employers' social security contribution in 2011 is 22.5 per cent of gross wage.

## 3. Universal cash transfers

### 3.1. Amount for marriage

None.

### 3.2. Amount for children

The central government pays in 2011 the following allowances (EUR):

| For the first child | 1204.8 |
| :--- | :--- |
| For the second child | 1331.3 |
| For the third child | 1698.7 |
| For the fourth child | 1945.8 |
| Fifth and subsequent child | 2192.8 |

The child subsidy for a single parent is increased by an annual amount of EUR 561.5 for each child.

## 4. Main changes in the tax/benefit system since 2010

In January 2011, all central government tax brackets were adjusted by about 3\%.
The maximum amount of the earned income tax credit in state taxation was raised from EUR 650 to EUR 740.

The maximum amount of the basic allowance in municipal taxation was raised from EUR 2200 to EUR 2250.

The rate of the employees' health insurance contribution for medical care was lowered from 1.47 per cent to 1.19 per cent and the rate of the employees' health insurance contribution for daily allowance was lowered from 0.93 per cent to 0.82 per cent. The rate of the employees' unemployment insurance contribution was raised from 0.4 per cent to 0.6 per cent and the rate of the employees' pension insurance contribution was raised from 4.5 per cent to 4.7 per cent.

## 5. Memorandum items

### 5.1. Calculation of average gross annual wage

The Finnish figures are generally calculated as follows:

- Gross annual earnings are calculated at an individual level on the basis of the hour's usually worked, average hourly pay for the fourth quarter, and the share of annual periodic bonuses.
- The earnings exclude sickness and unemployment compensations, but include all normal overtime compensations, bonuses, holiday remunerations and remunerations for public holidays.


### 5.2. Employer contributions to private pension and health schemes

No information is available.

| 2011 Parameter values |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Ave_earn | 41445 | Secretariat estimate |
| Expenses | Work_exp_max | 620 |  |
|  | Work_exp_rate | 1 |  |
| Allowances | al_SSC_rate | 0.0583 |  |
| State tax | Tax_min | 8 |  |
| Tax schedule | Tax_sch | 0 | 15200 |
|  |  | 0.065 | 22600 |
|  |  | 0.175 | 36800 |
|  |  | 0.215 | 66400 |
|  |  | 0.30 |  |
|  |  |  |  |
| Earned income tax credit | eitc_thrsh | 2500 |  |
|  | eitc_rate | 0.052 |  |
|  | eitc_redn_thrsh | 33000 |  |
|  | eitc_redn_rate | 0.012 |  |
|  | eitc_max | 650 |  |
| Earned income tax allowance | al_thrsh | 2500 |  |
|  | al_thrsh2 | 7230 |  |
|  | al_rate | 0.51 |  |
|  | al_rate2 | 0.28 |  |
|  | al_redn_thrsh | 14000 |  |
|  | al_redn_rate | 0.045 |  |
|  | al_max | 3570 |  |
| low income | SL_max | 2200 |  |
|  | SL_rate | 0.2 |  |
| Local intax | Local_rate | 0.1898 |  |
|  | Church_rate | 0 |  |
|  | Local_tot | 0.1898 |  |
| Soc sec taxpayer | SSC_rate | 0.0147 |  |
| soc.sec empr | SSC_empr | 0.223 |  |
| Cash transfer | ch_1 | 1204.8 |  |
|  | ch_2 | 1331.3 |  |
|  | ch_3 | 1698.7 |  |
|  | ch_4 | 1945.8 |  |
|  | ch_5 | 2192.8 |  |
|  | ch_small | 0 |  |
|  | ch_lone | 561.5 |  |

## 2011 Tax equations

The equations for the Finnish system are mostly on an individual basis except for the child benefit which is calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| Work related expenses | work_rel | B | MIN(Work_exp_max, Work_exp_rate*earn) |
| SSC deduction | SSC_al | B | earn*al_SSC_rate |
| 2. Allowances: | tax_al | B | work_rel+SSC_al |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | = Tax(tax_inc, Tax_sch)+Tax_min* (tax_inc>Tax_thrsh) |
| 6. Tax credits: | tax_cr | B | MINA(eitc_max,eitc_rate*Positive(earn-eitc_thrsh))-MINA(eitc_max,eitc_red n_rate*Positive(earn-work_rel-eitc_redn_thrsh)) |
| 7. CG tax | CG_tax | B | Positive(CG_tax_excl - tax_cr) |
| Earned income allowance | earninc_al | B | MIN(al_max, IF(earn>al_thrsh2, <br> al_rate*(al_thrsh2-al_thrsh1)+al_rate2*(earn-al_thrsh2), <br> Positive(earn-al_thrsh)))- MIN(al_max, al_redn_rate* <br> Positive(earn-work_rel-al_redn_thrsh)) |
| Low income | low_inc | B | Positive(MIN(earn-work_rel-low_al-SSC_al, SL_max)-SL_rate*Positive(earn- work_rel- low_al-SSC_al-SL_max)) |
| Taxable income (local) | tax_inc_l | B | tax_inc-earninc_al-low_inc |
| 8. State and local taxes | local_tax | B | Positive(tax_inc_I*Local_tot-(local_tot/ (local_tot+SSC_rate))*Positive(Tax_cr-CG_tax_excl)) |
| 9. Employees' soc security | SSC | B | Positive(SSC_rate*tax_inc_I - (SSC_rate/ (local_tot+SSC_rate))* ${ }^{*}$ Positive(Tax_cr-CG_tax_excl)) + SSC_al |
| 11. Cash transfers | cash_trans | J | $\begin{aligned} & (\text { Children }>0)^{\star} \text { ch_1+(Children>1) }{ }^{\star} \text { ch_2+ (Children>2) }{ }^{\star} \text { ch_3+ } \\ & (\text { Children }>3)^{\star} \text { ch_4+ Positive(Children-4)*ch_4 } \\ & +(\text { Married }=0)^{\star} \text { Children*ch_lone } \end{aligned}$ |
| 13. Employer's soc security | SSC_empr | B | earn*SSC_empr |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## France

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## France 2011

## The tax/benefit position of single persons

1. Gross wage earnings
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income
4. Central government taxable income (1-2+3)
5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
Married or head of family
Children
Other

|  | 0 | 0 | 0 | 72 |
| :---: | :---: | :---: | :---: | :---: |
| Total | 0 | 0 | 0 | 72 |
|  | 2966 | 5120 | 12301 | 1783 |
|  | 0 | 0 | 0 | 0 |
|  | 3275 | 4905 | 7809 | 3275 |
| Total | 3275 | 4905 | 7809 | 3275 |
|  | 6242 | 10025 | 20110 | 5058 |
|  | 0 | 0 | 0 | 1517 |
|  | 0 | 0 | 0 | -8 |
| Total | 0 | 0 | 0 | 1509 |
|  | 17664 | 25834 | 39654 | 20357 |
|  | 9115 | 15172 | 25476 | 9115 |
|  | 12.4\% | 14.3\% | 20.6\% | 7.5\% |
|  | 13.7\% | 13.7\% | 13.1\% | 13.7\% |
|  | 26.1\% | 28.0\% | 33.6\% | 14.8\% |
|  | 46.5\% | 49.4\% | 53.5\% | 38.4\% |
|  | 31.7\% | 30.4\% | 42.3\% | 21.5\% |
|  | n.a. | n.a. | n.a. | n.a. |
|  | 63.2\% | 51.3\% | 59.7\% | 57.7\% |
|  | n.a. | n.a. | n.a. | n.a. |

France 2011

## The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage) Number of children
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes

|  | 6679 | 8908 | 11136 | 8908 |
| :---: | ---: | ---: | ---: | ---: |
| 2918 | 3890 | 4863 | 3890 |  |
|  |  |  |  |  |
| Total | 9597 | 12798 | 15999 | 12798 |
|  | 0 | 0 | 0 | 0 |
|  | 26262 | 35014 | 43765 | 35014 |
|  |  |  |  |  |
|  | 3040 | 4652 | 6748 | 5934 |

6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

Gross earnings
Total
10. Total payments to general government $(7+8+9)$
Total
11. Cash transfers from general government

For head of family (Gross)
For two children (Gross)
CRDS Deducted

|  | 1517 | 1517 | 1517 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | -8 | -8 | -8 | 0 |
|  | 1509 | 1509 | 1509 | 0 |
|  | 29423 | 38963 | 46347 | 35336 |
|  | 15172 | 17121 | 24287 | 17121 |
|  |  |  |  |  |
|  | $8.5 \%$ | $8.0 \%$ | $11.3 \%$ | $12.4 \%$ |
|  | $13.7 \%$ | $13.7 \%$ | $13.7 \%$ | $13.7 \%$ |
| $17.9 \%$ | $18.5 \%$ | $22.5 \%$ | $26.1 \%$ |  |
| $42.3 \%$ | $40.0 \%$ | $44.9 \%$ | $45.6 \%$ |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | $26.1 \%$ | $24.0 \%$ | $30.4 \%$ | $30.4 \%$ |
| $20.2 \%$ | $24.8 \%$ | $31.7 \%$ | $31.7 \%$ |  |
| $48.3 \%$ | $46.9 \%$ | $51.3 \%$ | $51.3 \%$ |  |
|  | $31.4 \%$ | $35.3 \%$ | $63.2 \%$ | $41.3 \%$ |

Thhe national currency is now the euro (EUR). In 2011, EUR 0.72 equalled USD 1. In that year, the average worker earned EUR 35859 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Tax levied by the central government on 2010 income*

### 1.1.1. Tax unit

The tax unit is aggregate family income, but children are included only if their parents claim them as dependants. Other persons may be included on certain conditions: unlike spouses, who are always taxed jointly, children and other members of the household may opt to be taxed separately. Beginning with the taxation of 2004 income, the law provides for joint taxation of partners in a French civil union (pacte civilde solidarité, or PACS), as soon as the PACS is signed. Reporting obligations for "PACSed" partners are similar to those of married couples.

Earned income is reported net of compulsory employer and employee payroll deductions, except for 2.4 percentage points' worth of CSG (contribution sociale généralisée) and the $0.5 \%$ CRDS (contribution pour le remboursement de la dette sociale), which are not deductible from the income tax base.

### 1.1.2. Tax reliefs and tax credits

### 1.1.2.1. Standard tax reliefs

- Work-related expenses, corresponding to actual amounts or a standard allowance of $10 \%$ of net pay (with a minimum of EUR 421 and a ceiling of EUR 14 157).
- Family status: the "family quotient" (quotient familial) system takes a taxpayer's marital status and family responsibilities into account. It involves dividing net taxable income into a certain number of shares [two shares for a married (or "PACSed") couple, one share for a single person, one half-share for each dependent child, an additional half-share for the third and each subsequent dependent child, an additional half-share for each dependent child of a single parent, and so on]: the total tax due is equal to the amount of tax corresponding to one share multiplied by the total number of shares. The tax benefit for a half-share is limited, however, to EUR 2336 per half-share in excess of two shares for a couple, or one share for a single person, except for the first two half-shares granted for the first child of a lone parent, in which case the maximum benefit is EUR 4040.

[^10]
### 1.1.2.2. Main non-standard reliefs available to the average worker

Certain expenditures to improve or maintain the taxpayer's primary residence, including outlays for heat insulation or heating adjustments, major capital expenditures and money spent to equip a home to produce energy from a renewable source $(15 \%, 25 \%$, $40 \%$ or $50 \%$ tax credits, subject to a multi-year maximum); compensatory allowances if paid in a lump sum ( $25 \%$ reduction, capped at EUR 30500 ); child care costs for children under seven ( $50 \%$ reduction, up to annual expenditure of EUR 2300 ), dependent children attending secondary school or in higher education; donations to charities or other organisations assisting the needy; trade union dues, etc.

### 1.1.2.3. Refundable tax credit: employment premium (prime pour l'emploi, or PPE)

This is a tax credit for households comprising wage-earners whose equivalent full-time net taxable earned income was between EUR 3743 and EUR 26572 in 2010. The credit is determined in a multi-step calculation. First, the amount of the premium is calculated for each eligible wage-earner, and then the individual amounts are aggregated. The resulting amount may then be increased under certain conditions (dependent children or single-parent wage-earner). It is this final amount that is deducted from the family's tax liability. However, the credit is attributed only if the household's reference taxable income does not exceed the following limits: EUR 16251 for a single person, EUR 25231 for a single-parent family with two children, EUR 32498 for a married or PACSed couple with no children, EUR 41478 for a married or PACSed couple with two children. The credit was increased sharply, since the maximum amount was raised to EUR 948 in 2007 (on 2006 income), versus EUR 714 in 2006 (on 2005 income). The PPE is not paid if it is less than EUR 30.

In the event of part-time work, the income used to compute the amount of the credit is converted to a full-time equivalent, and the resultant credit is then adjusted to the actual amount of time worked and increased. The increase has been raised: in 2007 (2006 income), the PPE of persons whose work ratio is $50 \%$ (persons working half-time all year or full-time for six months) amounts to $92.5 \%$ of the PPE of persons working full-time all year, versus $82.5 \%$ in 2006.

The following table shows the applicable schedule for computing the employment premium by income level and type of family, as selected by the OECD:

| Family status | Full-time equivalent annual earnings between | Amount of employment premium (PPE) | Increase <br> for family responsibilities |  |
| :---: | :---: | :---: | :---: | :---: |
| Single person with no children | $\begin{aligned} & \text { EUR } 3743<R<=\text { EUR } 12475 \\ & \text { EUR } 12475<R<=\text { EUR } 17451 \end{aligned}$ | $\begin{aligned} & R^{*} 7.7 \% \\ & (\text { EUR } 17451-R \text { ) * 19.3\% } \end{aligned}$ |  |  |
|  |  |  | Childless | Two children |
| Two-earner couple (married/PACSed) | EUR $3743<$ R < = EUR 12475 <br> EUR 12475 < R < = EUR 17451 | $\begin{aligned} & R^{*} 7.7 \% \\ & (\text { EUR } 17451-R \text { ) * } 19.3 \% \end{aligned}$ |  | $\begin{aligned} & \text { EUR } 72 \\ & \text { EUR } 72 \end{aligned}$ |
|  |  |  | Childess Two children |  |
| Single-earner couple (married/PACSed) | EUR 3743 < R < = EUR 12475 <br> EUR 12475 < R < = EUR 17451 <br> EUR 17451 < R < = EUR 24950 <br> EUR 24950 < R < = EUR 26572 | R * $7.7 \%$ + EUR 83 <br> (EUR 17451 - R) * 19.3\%+ EUR 83 <br> EUR 83 <br> (EUR 26572 -R) * 5.1\% |  | EUR 72 <br> EUR 72 <br> EUR 36 <br> EUR 36 |
| Single-parent family with two children | EUR 3743 < R<= EUR 12475 <br> EUR $12475<R<=$ EUR 17451 <br> EUR 17451 < R < = EUR 26572 | $\begin{aligned} & R^{*} 7.7 \% \\ & (\text { EUR } 17451-R \text { ) * } 19.3 \% \\ & 0 \end{aligned}$ | EUR 108 EUR 108 EUR 72 |  |

The PPE is increased for dependants in a household, and whether a married/PACSed couple has one or two earners can also affect the amount of the credit (with the amount for single-earner couples increased by EUR 83). The PPE is increased by EUR 36 for each dependent child, except in special cases (e.g. single-earner married/PACSed PPE recipients in the top two income brackets).

For the third consecutive year, the government decided to continue the freeze on the PPE scale for 2011.

Since 2010, the PPE is partly replaced by a new cash transfer benefit implemented in July 2009: the RSA (active solidarity income). This cash transfer ensures households earn a minimum income that increases with the number of hours worked. The RSA is not assessed here because to do so the knowledge of every cash transfer of the households (such as cash transfers for housing, unemployment, etc.) is needed. The RSA is designed to meet three goals:

- encourage people to enter or return to the labour market, by guaranteeing them a lasting improvement in income;
- reduce poverty by providing recipients with a decent income;
- improve social support and occupational reintegration.

The RSA is a new benefit that supersedes two existing basic welfare payments, the so called "revenu minimum d'insertion" (minimum unemployment benefit - RMI) and the so called "allocation de parent isolé" (single-parent allowance - API). It also replaces temporary payments for welfare recipients who return to work ("prime de retour à l'emploi", "prime forfaitaire de retour à l'emploi" bonuses and the "intéressement proportionnel" system of benefits combined with part-time work). However, the eight family types studied here earn too high an income to benefit from this credit.

### 1.1.2.4. Tax exemption on overtime work

Since the 21 August 2007 Act, overtime work is exempted from employee social contributions, universal social contributions and personal income tax. Employer contributions are also reduced.

### 1.1.3. Tax schedule*

|  | Fraction of taxable income <br> (1 share, in euros) | Rate (in \%) |
| :--- | :--- | :---: |
| 1st bracket | Up to 5963 | 0 |
| 2nd bracket | From 5963 to 11896 | 5.5 |
| 3rd bracket | From 11896 to 26420 | 14 |
| 4th bracket | From 26420 to 70830 | 30 |
| 5th bracket | Above 70830 | 41 |

A special rebate for taxpayers with a low tax liability is applied to the amount of tax resulting from the above schedule before reductions and tax credits. To be eligible, the tax on the household's income must be less than EUR 866, in which case the rebate is equal to one-half the difference between this ceiling and the amount of tax before the rebate. If the final tax is less than EUR 61, no tax is payable.

[^11]
### 1.2. Taxes levied by decentralised authorities

Local taxes levied on working households are:

- residency tax (taxe d'habitation), which is set by municipalities;
- property taxes on developed and undeveloped land;
- there are common rules for each type of tax, to which certain municipalities make certain adjustments.

These local taxes, the rates of which vary widely, depending on the municipality, are not assessed here.

### 1.3. Universal social contribution (contribution sociale généralisée - CSG)

The universal social contribution (CSG) was introduced on 1 February 1991. Since 1 January 2005, the rate of CSG has been 7.5\%. This rate has been applied to a base of $97 \%$ of gross pay since 1998. The CSG is deductible against taxable income, but at a lower rate of 5.1\%.

### 1.4. Contribution to the reimbursement of social debt (contribution au remboursement de la dette sociale - CRDS)

The contribution to the reimbursement of social debt has been in effect since 1 February 1997. Like the universal social contribution, its base has passed to $97 \%$ of gross pay as of 1 January 2005. The rate is set at $0.5 \%$. Unlike social security contributions, CRDS payments are not deductible from taxable income.

## 2. Compulsory social security contributions to schemes operated within the government sector

Some contributions are levied on a capped portion of monthly earnings. Since 1997, this ceiling has been adjusted once a year on 1 January. In January 2011, the ceiling was EUR 2946 (or EUR 35352 per year).

### 2.1. Employee contributions

### 2.1.1. Pension

- $6.65 \%$ on earnings up to the ceiling.
- $0.10 \%$ on total earnings.


### 2.1.2. Illness, pregnancy, disability, death

- $0.75 \%$ on total earnings.


### 2.1.3. Unemployment

$2.4 \%$ on earnings up to 4 times the ceiling.

### 2.1.4. Other

- Supplemental pension for non-managers: minimum $3 \%$ up to the ceiling and $8 \%$ between one and three times the ceiling.
- The AGFF contribution replaces ASF, which had previously been included in "unemployment" levies. The rate of this contribution for non-managerial workers is $0.8 \%$ of earnings up to the social security ceiling plus $0.9 \%$ of any income in excess of the ceiling but not exceeding triple the amount of the ceiling.


### 2.2. Employer contributions

### 2.2.1. Pensions

$8.3 \%$ of gross pay, up to the ceiling, plus a $1.6 \%$ levy on total pay.

### 2.2.2. Illness, pregnancy, disability, death

$13.1 \%$ of total earnings.
A contribution of $0.3 \%$ (contribution de solidarité autonomie - CSA) has been levied on total salary.

### 2.2.3. Unemployment

4\% of earnings, up to four times the ceiling; in addition, $0.15 \%$ up to four times the ceiling to endow the salary guarantee fund (AGS).

### 2.2.4. Work-related accidents

Contribution rates for work-related accidents vary by line of business and are published annually in the official gazette (Journal officiel de la République française). For the sectors of NACE sections C to K , the average rate is $2.30 \%$.

### 2.2.5. Family allowances

$5.4 \%$ of total pay.

### 2.2.6. Other

- Supplemental pension: for non-managers, $4.5 \%$ up to the ceiling and $12 \%$ between one and three times the ceiling.
- The AGFF contribution is $1.2 \%$ for non-managers up to the ceiling, and $1.3 \%$ for managers plus for non-managers between one and three times the ceiling. In the table, this is combined with the rates for supplemental pensions.
- Others (construction, housing, apprenticeship, further training): $3.05 \%$ of pay up to the social security ceiling plus $2.95 \%$ above the ceiling. The transport tax is not included because it varies geographically.
- Since 1 January 2011, the "Fillon act" (device designed for low wages, up to 1.6 SMIC, to reduce the amount of employer contributions and totally exempt from these dues pay at level of the SMIC) is modified and included an annualised calculation of the general tax reliefs of employer contributions.


### 2.2.7. Reduction of employer-paid social insurance contributions

Act No. 2003-47 of 17 January 2003 on salaries, working time and the development of employment (the "Fillon Act") amended how the reduction of contributions is calculated.

As a result, since 1 July 2005 the maximum reduction has been $26 \%$ for a worker paid the minimum wage. It then declines gradually to zero at $160 \%$ of the monthly minimum wage. It applies irrespective of the number of hours worked.

The Budget Act for 2007 (Article 41 V ) bolsters this measure for very small enterprises with effect from 1 July 2007. For employers with between 1 and 19 employees, the maximum deduction was raised to $28.1 \%$ at the minimum wage, declining gradually - here too - to zero at $160 \%$ of the minimum wage.

For part-time wage-earners, the relief is computed using an equivalent full-time salary and is then adjusted proportionally to the number of hours paid.

The gross annual minimum wage (for 1820 hours) in 2010 was an estimated EUR 16380. The minimum wage is adjusted each year at 1 July.

The over-time hours of work are not taken into account in the calculation of the reduction as far as there are not paid more than 25 or $50 \%$ more than a normal hour of work.

## 3. Universal cash transfers

### 3.1. Main family benefits (in respect of dependent children)

- Family allowances: monthly base for family allowances (BMAF) = EUR 395.04 as of 1 January 2011.
- Rate: two children: $32 \%$; per additional child: $41 \%$.
- Family supplement: $41.65 \%$ of the BMAF at 1 January 2011. Subject to need, this is paid to families as of the first child (not incorporated into the model).
- The CRDS is levied on family allowances at a rate of $0.5 \%$.


## 4. Main changes in the tax system and social benefits regime since the taxation of 2004 income

- Tax system: reduction of marginal tax rates.


## 5. Memorandum items

To assess the degree of comparability between countries, the following additional information should be taken into account:

- Coverage is of the private and semi-public sectors of NACE sections C to K up to 2007 and NACE Rev. 2 sections B to N from 2008.
- The category "employees" encompasses all full-time dependent employees (excluding apprentices and interns).
- The figures presented are obtained by applying income tax and social contribution scales to gross salaries as listed in annual social data reports (DADS) in NACE.

|  | 2011 Parameter values |  |  |
| :--- | :--- | :--- | :--- |
| AW earnings | Ave_earn | 35859 | Secretariat estimate |
| Work expenses | work_rel_fl | 421 |  |
|  | work_rel_ceil | 14157 |  |
| Basic allowance | work_rel_rate | 0.1 |  |
| Tax schedule | basic_al_rate |  | 5963 |
|  | basic_al_max |  | 11896 |
|  | tax_sch | 0 | 26420 |
|  |  | 0.055 | 70830 |
|  |  | 0.14 |  |
| Décote value |  | 0.30 |  |
| Prime Pour l'Emploi | limit_demipart | 0.41 |  |
|  | limit_sp_demipart1 | 2336 | 4040 |
|  | decote | 866 | 61 |
|  | tax_min | 16251 |  |
|  | rev_ref_sing | 32498 | 4490 |
|  | rev_ref_mar | maj_dem_part |  |
|  |  |  |  |

2011 Parameter values (cont.)

|  | rate1 | 0.077 |  |
| :---: | :---: | :---: | :---: |
|  | rate2 | 0.193 |  |
|  | extra_pers | 36 |  |
|  | rate3 | 0.051 |  |
|  | seuil1 | 3743 |  |
|  | seuil2 | 12475 |  |
|  | seuil3 | 17451 |  |
|  | seuil4 | 24950 |  |
|  | seuil5 | 26572 |  |
|  | Seuil_min | 30 |  |
|  | ppe_mar_1earn | 83 |  |
|  | maj_tp_seuil | 0.5 |  |
|  | maj_tp | 0.85 |  |
| CSG+CRDS | CSG_rat_noded | 0.02328 |  |
|  | CRDS_rat_noded | 0.00485 |  |
|  | CSG_CRDS_rat_noded | 0.02813 |  |
|  | CSG_rat_ded | 0.04947 |  |
|  | CRDS_special | 0.005 |  |
| Social security contributions | pension_rate | 0.0665 |  |
|  | Pension_rate | 0.001 |  |
|  | SSC_ceil | 35352 |  |
|  | sickness_rate | 0.0075 |  |
|  | unemp_rate1 | 0.0240 |  |
|  | unemp_rate2 | 0.0240 |  |
| Extra pension (non-cadres) (incl. AGFF) | pens_rate_ex | 0.038 |  |
|  | pens_rate_ex2 | 0.089 |  |
| Employer contributions | pens_empr1 | 0.083 |  |
|  | pens_empr2 | 0.016 |  |
|  | sickness_empr | 0.131 |  |
|  | CSA | 0.003 |  |
| Unemployment (incl. "garantie de salaire") | unemp_empr | 0.0415 |  |
| Accidents | accidents_empr | 0.023 |  |
| Family Allowance | SMIC | 16380 | estimate |
|  | fam_empr | 0.054 |  |
| Extra pension (incl. AGFF) | pens_empr_ex | 0.057 |  |
|  | pens_empr_ex2 | 0.133 |  |
| Others | others_empr1 | 0.0305 |  |
|  | others_empr2 | 0.0295 |  |
| Employer SSC reduction rate | SSC_empr_redrate2 | 0.6 |  |
| Employer SSC reduction maximum | SSC_empr_red_max | 0.26 |  |
| Employer SSC reduction SMIC reference | SSC_empr_SMIC_ref | 1.6 |  |
| Child benefit (second child) | CB_2 | 1516.95 |  |
| third \& subsequent | CB_3 | 1943.60 |  |
| Derivation of minimum income | SMIC_horraire | 9.00 |  |
|  | SMIC_heures | 1820 |  |
|  | minrevtp | 16380 |  |

## 2011 Tax equations

The equations for the French system are mostly calculated on a family basis.
Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| Quotient for tax calculation | quotient | J | 1+Married+IF(Children<3, Children/2, Children-1)+0.5* $\left.{ }^{\text {(Married }}=0\right)^{*}($ Children $>0$ ) |
| 2. Allowances: |  |  |  |
| CSG deductible | CSG_ded | B | CSG_rat_ded*earn |
| Salary net | earn_dec | B | earn-SSC-CSG_ded |
| Work related | work_exp | J | MIN(work_rel_ceil, MAX(work_rel_rate* earn_dec_total, MIN(work_rel_fl, earn_dec_total))) |
| Basic | basic_al | B | 0 |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | J | Positive(earn_dec_total-work_exp) |
| 5. CG tax before credits |  |  |  |
| Calculation according to schedule | sch_tax | J | MAX(quotient*Tax(tax_inc/quotient, tax_sch), IF(Married, 2*Tax(tax_inc/2, tax_sch)-limit_demipart*(quotient-2), Tax(tax_inc, tax_sch)-(Children>0)* (limit_sp_demipart1+limit_demipart*(quotient-2)))) |
| Adjusted for decote | adj_tax | J | Positive(MIN(1.5*sch_tax-decote/2, sch_tax)) |
| Tax liable | inc_tax | J | (adj_tax>=tax_min)*adj_tax |
| CSG+CRDS (non-deductible) | CSG_CRDS_noded | J | Positive(CSG_CRDS_rat_nod*earn) |
| CSG (deductible) | CSG_ded | J | CSG_rat_ded*earn |
| 6. Tax credits: |  |  |  |
| Prime pour l'emploi | PPE_main_princ | P | $=$ seuilMin(IF(tax_inc<((Married=0)*rev_ref_sing+(Married=1)*rev_ref_mar+maj_ dem_ <br> part*Children),1.0)*IF(earn_dec_princ>=seuil1,(Married=1)*(earn_dec_spouse< seuil1)*IF(earn_dec_princ*MAX(minrevtp/ <br> earn_princ,1)>seuil4,Positive(seuil5-earn_dec_princ*MAX(minrevtp/ <br> earn_princ,1)) *rate3* (((earn_princ/minrevtp)>=1)+((earn_princ/ <br> minrevtp)<=maj_tp_seuil)*MIN(earn_princ/minrevtp,1)*(1+maj_tp)+((earn_princ/ minrevtp)>maj_tp_seuil) $)^{\star}($ earn_princ/ <br> minrevtp) $<1)^{\star}\left((1-\text { maj_tp })^{\star}\right.$ MIN( (earn_princ/minrevtp,1)+maj_tp)) <br> ,ppe_mar_1earn)+(earn_dec_princ*MAX(minrevtp/ <br> earn_princ,1)<seuil2)*rate1*earn_dec_princ*MAX(minrevtp/ <br> earn_princ,1)*(((earn_princ/minrevtp)>=1)+((earn_princ/ <br> minrevtp)<=maj_tp_seuil)*MIN(EARN_PRINC/ <br> minrevtp,1)*(1+maj_tp)+((EARN_PRINC/minrevtp)>maj_tp_seuil)* ${ }^{*}($ earn_princ/ <br> minrevtp) $<1)^{\star}\left((1-\text { maj_tp })^{*}\right.$ MIN(earn_princ/minrevtp,1) <br> +maj_tp))+(earn_dec_princ*MAX(minrevtp/ <br> earn_princ,1)>=seuil2) *Positive(seuil3-earn_dec_princ*MAX(minrevtp/ <br> earn_princ,1))*rate2* (((earn_princ/minrevtp)>=1)+((earn_princ/ <br> minrevtp)<=maj_tp_seuil)*MIN(earn_princ/minrevtp,1)* (1+maj_tp)+((earn_princ/ <br> minrevtp) $>$ maj_tp_seuil) $)^{\star}((\text { earn_princ } / \text { minrevtp })<1)^{\star}\left((1-\text { maj_tp })^{\star}\right.$ <br> MIN(earn_princ/minrevtp,1)+maj_tp)),0),seuil_min) |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
|  | PPE_main_spouse | S | =seuilMin(IF(tax_inc<((Married=0)*rev_ref_sing+(Married=1)*rev_ref_mar+maj_ dem_part*Children),1.0)*IF(earn_dec_spouse>=seuil1,(Married=1)*(earn_dec_pr inc<seuil1)*IF(earn_dec_spouse*MAX(minrevtp/ earn_spouse,1)>seuil4,Positive(seuil5-earn_dec_spouse*MAX(minrevtp/ earn_spouse,1))*rate3*(((earn_spouse/minrevtp)>=1)+((earn_spouse/ minrevtp)<=maj_tp_seuil)*MIN(earn_spouse/ minrevtp,1)* $(1+$ maj_tp $)+\left((\text { earn_spouse/minrevtp })>m a j \_t p \_ \text {seuil }\right)^{*}(($ earn_spouse/ minrevtp) $<1)^{\star}\left((1-\text { maj_tp })^{*}\right.$ MIN(earn_spouse/ minrevtp,1)+maj_tp)),ppe_mar_1earn)+ (earn_dec_spouse*MAX(minrevtp/ earn_spouse,1)<seuil2)*rate1*earn_dec_spouse*MAX(minrevtp/ earn_spouse,1)*(((earn_spouse/minrevtp)>=1)+((earn_spouse/ minrevtp)<=maj_tp_seuil)*MIN(earn_spouse/ minrevtp, 1$)^{\star}(1+$ maj_tp $)+((\text { earn_spouse/minrevtp })>\text { maj_tp_seuil })^{\star}(($ earn_spouse/ minrevtp)<1)*((1-maj_tp)*MIN(earn_spouse/minrevtp,1)+maj_tp)) +(earn_dec_spouse*MAX(minrevtp/ earn_spouse,1)>=seuil2)*Positive(seuil3-earn_dec_spouse*MAX(minrevtp/ earn_spouse,1))*rate2*(((earn_spouse/minrevtp)>=1)+((earn_spouse/ minrevtp)<=maj_tp_seuil)*MIN(earn_spouse/ minrevtp, 1$)^{*}(1+$ maj_tp $)+\left((\text { earn_spouse/minrevtp })>m a j \_t p \_ \text {seuil }\right)^{*}(($ earn_spouse/ minrevtp) $<1)^{\star}\left(\left(1-m a j \_t p\right)^{\star}\right.$ MIN(earn_spouse /minrevtp,1)+maj_tp)),0),seuil_min) |
| Additional flat rate allowance | add_all | J | $=$ IF(tax_inc<((Married=0)*rev_ref_sing+(Married=1)*rev_ref_mar+maj_dem_part *Children),1.0)*OR((earn_dec_princ>=seuil1),(earn_dec_spouse>=seuil1))* <br> (IF(OR(IF(earn_dec_princ>0,AND(earn_dec_princ>=seuil1,earn_dec_princ* <br> MAX(minrevtp/earn_princ,1)<=seuil3),0),IF(earn_dec_spouse> <br> 0,AND(earn_dec_spouse>= seuil1,earn_dec_spouse*MAX(minrevtp/ <br> earn_spouse,1)<=seuil3),0)),extra_pers*Children,IF(OR(IF(earn_dec_princ> <br> 0,AND(seuil3<earn_dec_princ*MAX(minrevtp/earn_princ,1), <br> earn_dec_princ*MAX(minrevtp/earn_princ,1)<=seuil5, <br> earn_dec_spouse<seuil1),0), IF(earn_dec_spouse>0, <br> AND(seuil3<earn_dec_spouse*MAX(minrevtp/ <br> earn_spouse,1),earn_dec_spouse*MAX(minrevtp/ <br> earn_spouse,1)<=seuil5,earn_princ<seuil1),0)),extra_pers*(Children>0),0))+(Mar ried $=0)^{*}$ (Children>0)*extra_pers) |
| Total NWTC | tax_cr | J | PPE_main_princ+PPE_main_spouse+add_all |
| 7. CG tax | CG_tax | J | inc_tax+CSG_CRDS_noded+CSG_ded-tax_cr |
| 8. State and local taxes | local_tax | J | 0 |
| 9. Employees' soc security | SSC | B | pension_rate*MINA(earn, SSC_ceil)+(sickness_rate+pension_rate2)* earn+unemp_rate1*MINA(earn, SSC_ceil)+(earn>SSC_ceil) *unemp_rate2 *MINA(earn-SSC_ceil, 3*SSC_ceil)+ pens_rate_ex* MINA(earn, SSC_ceil)+(earn>SSC_ceil) *pens_rate_ex2 *MINA(earn-SSC_ceil, 3*SSC_ceil-SSC_ceil) |
| 11. Cash transfers | cash_transf_gross | J | IF(Children<2, 0, CB_2+(Children-2)*CB_3) |
|  | crds_cash_transf | J | cash_transf_gross*-1*CRDS_special |
|  | cash_transf_net | J | cash_transf_gross+crds_cash_transf |
| 13. Employer's soc security | SSC_empr_gross | B | (pens_empr1+others_empr1)*MINA(earn, SSC_ceil)+ IF(SSC_ceil<earn, pens_empr2+others_empr2, 0) ${ }^{\star}$ (earn-SSC_ceil)+(CSA+sickness_empr+ fam_empr+ accidents_empr)*earn+pens_empr_ex*MINA(earn, SSC_ceil)+(earn>SSC_ceil)*pens_empr_ex2*MINA(earn-SSC_ceil, 3*SSC_ceil-SSC_ceil)+IF(earn<SSC_ceil, unemp_empr1*earn, unemp_empr1*earn+(unemp_empr2-unemp_empr1)*(earn-SSC_ceil)) |
|  | SSC_empr_reduction | B | IF(OR(earn>SSC_empr_SMIC_ref*SMIC,earn=0),0,-MIN (SSC_empr_red_max*earn,(SSC_empr_red_max/ SSC_empr_redrate2)*(SSC_empr_SMIC_ref*minrevtp/earn-1)*earn)) |
|  | SSC_empr_final | B | SSC_empr_gross+SSC_empr_reduction |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Germany

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Germany 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 29237 | 43855 | 73092 | 29237 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
|  | Married or head of family | 0 | 0 | 0 | 1308 |
|  | Dependent children | 0 | 0 | 0 | 0 |
|  | Deduction for social security contributions and income taxes | 3940 | 5910 | 6943 | 3867 |
|  | Work-related expenses | 1000 | 1000 | 1000 | 1000 |
|  | Other | 36 | 36 | 36 | 36 |
|  | Total | 4976 | 6946 | 7979 | 6211 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 24261 | 36909 | 65113 | 23026 |
| 5. | Central government income tax liability (exclusive of tax credits) | 4104 | 8348 | 20230 | 3537 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children | 0 | 0 | 0 | 4416 |
|  | Other |  |  |  |  |
|  | Total | 0 | 0 | 0 | 4416 |
| 7. | Central government income tax finally paid (5-6) | 4104 | 8348.22 | 20230 | -879 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 6103 | 9155 | 11756 | 6030 |
|  | Taxable income |  |  |  |  |
|  | Total | 6103 | 9155 | 11756 | 6030 |
| 10. | Total payments to general government (7+8+9) | 10207 | 17503 | 31985 | 5151 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 19030 | 26352 | 41107 | 24086 |
| 13. | Employers' compulsory social security contributions | 5767 | 8650 | 11244 | 5767 |
| 14. | Average rates |  |  |  |  |
|  | Income tax | 14.04\% | 19.04\% | 27.68\% | -3.01\% |
|  | Employees' social security contributions | 20.88\% | 20.88\% | 16.08\% | 20.63\% |
|  | Total payments less cash transfers | 34.91\% | 39.91\% | 43.76\% | 17.62\% |
|  | Total tax wedge including employer's social security contributions | 45.64\% | 49.81\% | 51.26\% | 31.19\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 47.26\% | 52.54\% | 44.31\% | 45.22\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 55.95\% | 60.36\% | 44.31\% | 54.24\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Germany 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 43855 | 58474 | 73092 | 58474 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
|  | Dependent children | 0 | 0 | 0 | 0 |
|  | Deduction for social security contributions and income taxes | 5800 | 7734 | 9667 | 7880 |
|  | Work-related expenses | 1000 | 2000 | 2000 | 2000 |
|  | Other | 72 | 72 | 72 | 72 |
|  | Total | 6872 | 9806 | 11739 | 9952 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 36983 | 48668 | 61353 | 48522 |
| 5. | Central government income tax liability (exclusive of tax credits) | 4598.00 | 8043.56 | 12087.20 | 8207.90 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children | 4416 | 4416 | 4416 | 0 |
|  | Other |  |  |  |  |
|  | Total | 4416 | 4416 | 4416 | 0 |
| 7. | Central government income tax finally paid (5-6) | 182 | 3628 | 7671 | 8208 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 9045 | 12060 | 15075 | 12206 |
|  | Taxable income |  |  |  |  |
|  | Total | 9045 | 12060 | 15075 | 12206 |
| 10. | Total payments to general government (7+8+9) | 9227 | 15688 | 22746 | 20414 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 34628 | 42786 | 50346 | 38059 |
| 13. | Employers' compulsory social security contributions | 8650 | 11534 | 14417 | 11534 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 0.42\% | 6.20\% | 10.50\% | 14.04\% |
|  | Employees' social security contributions | 20.63\% | 20.63\% | 20.63\% | 20.88\% |
|  | Total payments less cash transfers | 21.04\% | 26.83\% | 31.12\% | 34.91\% |
|  | Total tax wedge including employer's social security contributions | 34.05\% | 38.88\% | 42.47\% | 45.64\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 43.42\% | 46.97\% | 49.62\% | 47.26\% |
|  | Total payments less cash transfers: Spouse | 44.19\% | 46.97\% | 49.62\% | 47.26\% |
|  | Total tax wedge: Principal earner | 52.74\% | 55.70\% | 57.92\% | 55.95\% |
|  | Total tax wedge: Spouse | 53.39\% | 55.70\% | 57.92\% | 55.95\% |

Thhe national currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. The average worker earned EUR 43855 (Secretariat estimate).

## 1. Personal income tax systems

### 1.1. Central/federal government income taxes

### 1.1.1. Tax unit

Spouses are generally assessed jointly. They however have the option of being assessed separately. The income of dependent children is not assessable with that of the parents. The calculations in this Report assume joint taxation of the income of the spouses.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs and work-related expenses

- Basic reliefs: none.
- Standard marital status reliefs: in the case of joint assessment, specific allowances are doubled. The income tax liability is computed by applying the income splitting method.
- Relief(s) for children: as of 1 January 2010, there are increased tax credits of EUR 2208 for the first and the second child, of EUR 2280 for the third child and of EUR 2580 for the fourth and subsequent children. There is a tax allowance of EUR 2184 for the subsistence of a child and an additional EUR 1320 for minding and education or training needs (EUR 3 504). The amount of this allowance is doubled in case of jointly assessed parents. If the value of the tax credit is less than the relief calculated applying the tax allowances, the taxpayer obtains the tax allowance instead of the tax credit. It is also doubled for lone parents in cases where the other parent does not pay alimony. This is the assumption in the calculations presented in this Report.
- Relief for lone parents: taxpayers who live alone with at least one child that entitles them to the tax allowances or tax credits for children, receive an additional allowance of EUR 1308.
- Reliefs for social security contributions and life insurance contributions: social security contributions and other expenses incurred in provision for the future (e.g. life insurance) are deductible up to specific ceilings. In 2005, a new calculation scheme came into force:
Step 1: all contributions made to pension funds (i.e. both employee's and employer's contributions) are added up. Step 2: the resulting amount is limited to EUR 20 000. Step 3: a certain percentage is applied to this amount (starting from 60 per cent in 2005 , this percentage will be increased by 2 percentage points each year; it will reach 100 per cent in 2025). Step 4: the resulting amount, diminished by the (tax-free) contributions of the employer, is deductible from income.
The tax treatment of social security expenses (health, unemployment and care insurance) changed as of 1 January 2010. Employees' annual contributions to statutory health insurance excluding sickness benefit (assumed to amount to 96 per cent of statutory health contributions) and employees' contributions to mandatory long-term
care insurance are deductible from the tax base. In case these contributions do not exceed EUR 1 900/3 800 (single/married couples), contributions to unemployment insurance and other insurances premiums can be deducted in addition up to this ceiling. If the resulting sum of deductible amounts according the legislation in force since 2005 is lower than the allowance calculated under the scheme that was valid up to 2004, the former regulations are applied in favour of the taxpayer (for more details on the old scheme: see 2005 edition and Section 4. of this Report).
- Work-related expenses: EUR 1000 lump-sum allowance per gainfully-employed person.
- Special expenses: lump sum allowance (EUR 36/72 [singles/couples]) for special expenses, e.g. for tax accountancy. The actual expenses will be fully deductible from taxable income if the taxpayer proves that these expenses exceed the lump sum allowance.


### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Contributions to pensions, life insurance, superannuation schemes: other expenses than the compulsory contributions to social security are deductible as reliefs for (voluntary) social security contributions up to specific ceilings (see Section 1.1.2.1).
- Medical expenses: partially deductible if not covered by insurance.
- Other: work-related expenses that exceed the lump-sum allowance are fully deductible (no ceiling).


### 1.1.3. Tax schedule

The German tax schedule is formula-based. Taxable income is rounded down (to the EUR).

- X is the taxable income,
- T is the income tax liability,
- The following definitions are used in the income tax liability formulas:
$Y=\frac{X-8004}{10000}$
$Z=\frac{X-13469}{10000}$
The income tax liability (amounts in EUR) is calculated as follows:

1. $\mathrm{T}=0$ for $\mathrm{X} \leq 004$
2. $\mathrm{T}=(912.17 \mathrm{Y}+1400) \mathrm{Y}$ for $8005 \leq \mathrm{X} \leq 13469$
3. $\mathrm{T}=(228.74 \mathrm{Z}+2397) \mathrm{Z}+1038$ for $13470 \leq \mathrm{X} \leq 52881$
4. $\mathrm{T}=0.42 \mathrm{X}-8172$ for $52882 \leq \mathrm{X} \leq 250730$
5. $\mathrm{T}=0.45 \mathrm{X}-15694$ for $250731 \leq \mathrm{X}$

These formulas are used to calculate the income tax for single individuals.
The income tax liability for spouses who are assessed jointly is computed as follows: the income tax is calculated with respect to one-half of the joint taxable income. The resulting amount is doubled to obtain the income tax liability of the family (splitting method).

### 1.1.4. Solidarity surcharge

The solidarity surcharge is levied at 5.5 per cent of the income tax liability subject to an exemption limit of EUR 972/1944 (singles/couples). The income tax liability is calculated applying the tax allowance for children. If the income tax liability exceeds the exemption limit, the solidarity surcharge will be phased in at a higher rate of 20 per cent of the difference between the income tax liability and the exemption limit until it equals 5.5 per cent of the total liability.

### 1.2. State and local income taxes

None.

## 2. Compulsory social security contributions to schemes operated within the government sector

The amount of social security contributions depends on the wage and the insurance contribution rate. All contributions are subject to a contribution ceiling, i.e. the maximum income for which statutory insurance contributions are calculated. The contribution rates for pension, health, care and unemployment insurances are fixed by the government.

### 2.1. Employees' contributions

Earnings up to EUR 4800 per year are free of employee social security contributions. As from 1 April 2003, there is an additional concession for employees with monthly income between EUR 400.01 and EUR 800 per month (EUR 4800.12 and EUR 9600 per year). If the employee's income falls within this range, part of the income will be exempt from social insurance contributions. However, employers are still required to pay the normal contributions on the employee's earnings. The arrangement is purely intended to relieve the financial burden on employees. The employees' contributions rise on a straight-line basis within the band. While the 30 per cent contributions on earnings up to EUR 400 are solely paid by employers, employees' earning EUR 400.01 per month pay a rate of 10.375 per cent, whereas the employers pay full contributions of 19.625 per cent. Together they pay 30 per cent, the same rate as for earnings up to EUR 400 (the real aggregate rate differs slightly because of individual health insurance rates as the 0.9 basis points of health insurance is borne solely by employees and because of the increased care insurance rate for childless employees). The employees' contributions to social insurance then rise over the income band reaching the full rate at EUR 800 per month. Details on social security contributions for workers earning more than EUR 9600 per year are provided below.

### 2.1.1. Pensions

Employers and employees pay each half of the contribution rate of 19.9 per cent in 2011, that is 9.95 per cent of the employee's gross wage earnings, up to a contribution ceiling of EUR 66000.

### 2.1.2. Sickness

Since 1 January 2011, the rate has been increased to 7.3 per cent for employers and 8.2 per cent for employees. The contribution ceiling is EUR 44550 . While all calculations shown in this Report assume membership in the public health insurance, workers with earnings above the contribution ceiling may opt out of the mandatory public health insurance system and may choose a private insurance provider instead (those opting for a private health insurance provider are required to obtain private long-term care insurance as well).

### 2.1.3. Unemployment

Employees pay half of the insurance contributions; the employer pays the other half. In 2011, the contribution rate is 3.0 per cent of assessable income. Employee and employer each pay 1.5 per cent. The contribution ceiling is EUR 66000.

### 2.1.4. Care

A long-term care insurance (a 1 per cent contribution rate) went into effect on 1 January 1995. The rate was raised to 1.7 per cent of the gross wage when home nursing care benefits were added six months later. As of 1 July 2008, the rate was increased to 1.95 per cent. The employers pay half of the contributions for long-term care insurance. In other words, employers and employees both pay a rate of 0.975 per cent. The assessable income is scaled according to the gross wage earnings but there is a contribution ceiling of EUR 44550 in 2011.

As from 1 January 2005, child-raising is given special recognition in the law relating to statutory long-term care insurance. Childless contribution payers are required to pay a supplement of 0.25 per cent, raising the contribution rate paid by a childless employee from 0.975 per cent to 1.225 per cent as of 1 July 2008.

### 2.1.5. Work injury

Employer only.

### 2.1.6. Family allowances

None.

### 2.1.7. Others

None.

### 2.2. Employers' contributions

If employees have income up to EUR 4 800, there are special rules with respect to tax and social security contributions. All social security contributions and taxes are paid by the employer. The payment amounts to 30 per cent of the wage. This payment consists of a 28 per cent social security contribution rate and a 2 per cent tax rate. For employers' contributions for annual earnings between EUR 4800.01 and EUR 9 600, see Section 2.1.

### 2.2.1. -2.2.4. (Pensions, sickness, unemployment, care):

See Section 2.1

### 2.2.5. Work injury

Germany has established a statutory occupational accident insurance. It is provided by industrial, agricultural and public-sector employers' liability insurance funds. This insurance protects employees and their families against the consequences of accidents at work and occupational illnesses. It is funded through the contributions paid by employers only. The amount of the employer's contributions depends on the sum total of employee's annual pay and the employer's respective hazard level. As it is not possible to identify a representative contribution rate, these amounts are not considered in this Report.

### 2.2.6. Family allowances

None.

### 2.2.7. Others

None.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

None.

## 4. Main changes in tax/benefit systems since 1997

The following table shows changes in the tax credit and the tax allowance for children since 1997:

|  | Child credit |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | First child | Second child | Third child | Fourth and subsequent <br> children | Child allowance |
| 1997 | 1350 | 1350 | 1841 | 2147 |  |
| 1999 | 1534 | 1534 | 1841 | 2147 | 3534 |
| 2000 | 1657 | 1657 | 1841 | 2147 | 5080 |
| 2002 | 1848 | 1848 | 1848 | 2148 | 5808 |
| $2009^{\star}$ | 1968 | 1968 | 2040 | 2340 | 6024 |
| 2010 | 2208 | 2208 | 2280 | 2580 | 7008 |

* Plus EUR 100 one-off child credit payment for each child.

Up to 2004, the calculation of the relief for social security contributions and other expenses proceeded in three steps. First, EUR 3 068/6 136 (singles/couples) was deducted. These amounts were, however, lowered by 16 per cent of gross wages (serving as a proxy for employers' social security contributions). This deduction was provided as a partial compensation for the self-employed which do not receive tax-free employers' social security contributions. Second, the remaining expenses were deductible up to EUR 1 334/2 668 (singles/couples). Third, half of the remaining expenses were deductible up to EUR 667/1 334 (singles/couples).

In 2004, the tax rate was reduced and the formula for calculating the income tax was changed. The relief for lone parents was reduced to EUR 1 308, the lump sum allowance for work related expenses was reduced to EUR 920.

As from 1 January 2005, the final stage of the 2000-tax reform came into effect. The bottom and top income tax rates were further reduced to 15 per cent and 42 per cent. Since 1998, both the bottom and top income tax rate have been reduced by about 11 percentage points while the personal allowance has been raised from EUR 6322 to EUR 7 664. The tax cuts reduce the tax burden for all income taxpayers, affording the greatest relief to employees and families with low and medium incomes as well as to small- and medium-sized unincorporated businesses.

On 1 January 2005, the law regulating the taxation of pensions and pension expenses entered into force. The law provides a gradual transition to ex post taxation of pensions paid by the statutory pensions insurance. In the long run, the tax treatment of capital-based employee pension schemes based on a contract between employer and employee will be reformed in the same way as the tax treatment in respect of the state pension scheme. In addition to the increased deductibility of contributions to the state and certain private pension schemes, the law contains rules which are intended to increase the attractiveness of private capital-based pension schemes and to encourage individuals to invest privately for their old-age pension.

Up to 30 June of 2005, employees paid half of the sickness insurance contributions; the employer paid the other half. As from 1 July 2005, members of the statutory health insurance scheme also pay an income-linked contribution of 0.9 per cent to which employers do not contribute. As from 1 July 2005, all statutory health insurance funds have reduced their contribution rates by 0.9 percentage points.

In 2007, a new top income tax rate of 45 per cent was introduced for taxable income above EUR 250000 (EUR 500000 for jointly assessed spouses).

In 2009, the bottom income tax rate was reduced to 14 per cent. The basic allowance was increased to EUR 7 834. All thresholds were increased by EUR 400.

Since 1 January 2010, the basic allowance has been augmented to EUR 8004 and all thresholds have been increased by EUR 330. Furthermore, new legislation improves the tax treatment of expenditure on health insurance and long-term care insurance.

## 5. Memorandum items

### 5.1. Average gross annual earnings calculation

- Source of calculation: Federal Statistical Office.
- Excluding sickness and unemployment, including normal overtime and bonuses.


### 5.2. Employer's contributions to private pension, etc. schemes

No information available, though such schemes do exist.

2011 Parameter values

| AW earnings | Ave_earn | 43855 | Secretariat estimate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tax allowances | Child_al | 7008 |  |  |  |  |
| Lone Parents | Lone_al | 1308 |  |  |  |  |
| Work related | Work_rel_al | 1000 |  |  |  |  |
| SSC allowance | SSC_dn | 2700 |  |  |  |  |
|  | SSC_dn_rt | 0.16 |  |  |  |  |
|  | SSC_dn_lim | 1334 |  |  |  |  |
|  | SSC_dn_lump_rt | 0.2 |  |  |  |  |
| Allow. for special expenses | SE_al | 36 |  |  |  |  |
| Church tax rate | Ch_tax_rt | 0 |  |  |  |  |
| Tax formula | Tax_rate2 | 0.42 |  |  |  |  |
|  | Tax_rate3 | 0.45 |  |  |  |  |
|  | Tax_thrsh1 | 8004 |  |  |  |  |
|  | Tax_thrsh2 | 13469 |  |  |  |  |
| Top Rate Tax Reduction | Reduction | 8172 |  |  |  |  |
|  | Reduction2 | 15694 |  |  |  |  |
| Tax Equation Rates |  |  |  |  |  |  |
| tax_eqn_rates | Squared | Single | Constant |  |  |  |
| z | 228.74 | 2397 | 1038 |  |  |  |
| y | 912.17 | 1400 | 0 |  |  |  |
| income tax rate stage | tax_first_stage | 8004 |  |  |  |  |
|  | tax_second_stage | 13469 |  |  |  |  |
|  | tax_third_stage | 52881 |  |  |  |  |
|  | tax_fourth_stage | 250730 |  |  |  |  |
| Solidarity Surcharge | surcharge | 0.055 |  |  |  |  |
| Solidarity Exemption Limit | surcharge_limit | 972 |  |  |  |  |
| Alternative Surcharge Rate | surcharge_alt | 0.2 |  |  |  |  |
| Child credit | Ch_cred |  |  |  |  |  |
|  | 1. ch. | 2208 |  |  |  |  |
|  | 2. ch. | 2208 |  |  |  |  |
|  | 3.ch. | 2280 |  |  |  |  |
|  | 4.ch. | 2580 |  |  |  |  |
| Social security | Sickness | Pension | Unemployment | Care | Alternative employer rate | SSC Factor F |
| period_1 | 12 | 12 | 12 | 12 | 12 | 12 |
| period_2 | 0 |  |  |  |  |  |
| sum (Month's) | 12 | 12 | 12 | 12 | 12 | 12 |
| employer_1 | 0.073 | 0.0995 | 0.015 | 0.00975 | 0.3 | 0.7435 |
| employer_2 | 0 |  |  |  |  |  |
| employee_1 | 0.082 | 0.0995 | 0.015 | 0.00975 |  | 0.7435 |
| employee_2 | 0 |  |  |  |  |  |
| childless_1 | 0.082 | 0.0995 | 0.015 | 0.01225 |  | 0.7435 |
| childless_2 | 0 |  |  |  |  |  |
| ceil | 44550 | 66000 | 66000 | 44550 |  |  |
| SSC Floor | SSC_floor | 9600 |  |  |  |  |
| Intermediate SSC Ceiling | SSC_floor1 | 4800 |  |  |  |  |

## 2011 Tax equations

The equations for the German system in 2011 are mostly calculated on a family basis.
The standard functions which are used in the equations are described in the technical note about tax equations. The function acttax carry out a rounded calculation for the tables but the unrounded version purtax is used in calculating the marginal rates.

For a taxpayer with children, either the child allowance is given in the tax calculation or the cash transfer is given if this is more beneficial. In practice, therefore, it is necessary to make two calculations - with and without the child allowance. Nevertheless, the calculation of solidarity surcharge is always based on the calculation which does assume that the child tax allowance is given.

Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". The affixes "_princ" and "_spouse" on Variable names in functions indicate that the values have to be calculated for the principal and spouse, respectively. The parameter year in function SSC_Allowance is the year for which you calculate the Allowance.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| Quotient for tax calculation | quotient | J | 1+Married |
| 2. Allowances: |  |  |  |
| Children | children_al | J | Children*Child_al |
| Lone parent | lone_allce | J | Lone_al* $\left.{ }^{\text {(Children }>0}\right)^{*}($ Married $=0)$ |
| Soc sec contributions | SSC_al | J | Function: SSC_Allowance(earn_princ, earn_spouse, SSC_princ + SSC_spouse , Quotient, SSC_dn, SSC_dn_rt, SSC_dn_lim, SSC_dn_lump_rt, If(Children>0; "employee"; "childless"), year, rounded) |
| Work related | work_al | J | Work_rel_al+MIN(earn_spouse,Work_rel_al) |
| Allow. for special expenses | SE_al | J | SE_al*quotient |
| Total | tax_al | J | children_al+SSC_al+work_al+ lone_allce + SE_al |
| 3. Credits in taxable income | taxbl_cr | J | 0 |
| 4. CG taxable income | tax_inc | J | earn-tax_al |
| 5. CG tax before credits |  |  |  |
| adjusted taxable income | adj | J | tax_inc/quotient |
| formula based tax schedule | tax_formula | J | Function: acttax(taxinc, rate, reduction, threshold1, threshold2, threshold3, equationrate, tax_first_stage, tax_second_stage, tax_third_stage, tax_fourth_stage, rate2, reduction2) |
| Adjust for the quotient | tax_adj | J | Quotient*tax_formula |
| Include solidarity surcharge | sol_surch | J | MIN(tax_adj * surcharge, Positive(tax_adj - surcharge_limit* Quotient) * surcharge_alt) |
| Tax paid | CG_tax_excl | J | tax_adj+sol_surch |
| 6. Tax credits: | tax_cr | J | 0 |
| 7. $\mathrm{CG} \operatorname{tax}$ | CG_tax | J | CG_tax_excl |
| 8. State and local taxes | local_tax | J | 0 |
| 9. Employees' soc security | SSC | B | Function: SSC (earn_princ, If(Children>0; "employee"; "childless"), rounded) + SSC (earn_spouse, If(Children>0; "employee"; "childless"), rounded) |
| 11. Cash transfers | Cash_tran | J | Children*ch_cred |
| 13. Employer's soc security | SSC_empr | B | Function: SSC (earn_princ, "employer", rounded) + SSC (earn_spouse, "employer", rounded) |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Greece

This chapter provides a description of the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations.

Thhe national currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1.

## 1. Personal income tax system

### 1.1. Central government income tax

### 1.1.1. Tax unit

Individuals are subject to national income tax. Every individual who derives income from sources in Greece is subject to tax irrespective of his nationality, place of domicile or residence. Moreover, every individual with domicile in Greece is subject to tax on his/her worldwide income irrespective of the individual's nationality. Due consideration is given to bilateral conventions designed to obviate double taxation. Individuals who have a yearly income of more than EUR 3000 (or EUR 6.000 for income derived only from salaried work) are obliged to file a tax return. Spouses file a joint return but each spouse is liable for the tax payable on his or her share of the joint income. Losses incurred by one spouse may not be set off against the income of the other spouse. Deductible personal expenses concerning both spouses and tax credits are apportioned to each spouse according to the income earned by each one of them. Income of children under the age of 18 is, in principle, added and taxed with the income of their parents.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard tax reliefs

- Social security contributions: all compulsory social security contributions and optional contributions to legally constituted funds are deductible from taxable gross income.


### 1.1.2.2. Deductions from the taxable income (non-standard tax reliefs)

There is a deduction of EUR 2400 for the taxpayer himself and for any handicapped person living with him and dependent upon him, (invalidity over 67\%).

### 1.1.2.3. Deductions from the payable amount of tax, as calculated on the basis of the scale (non-standard tax credits)

- 20 per cent of the expenses of hospital care of the taxpayer and his/her dependents. The total credit cannot exceed EUR 6000 . Hospital expenses in respect of unmarried or widowed children who suffer from an incurable disease, who are mentally retarded or are blind and whose total annual income does not exceed EUR 6000 are also included.
a) 20 per cent of the total annual amount of rent paid for the taxpayer's main residence, not exceeding EUR 800, provided that the taxpayer or his dependents do not own a dwelling with a surface equal to or larger than the rented dwelling in the same region and that the taxpayer does not receive any rent allowance from the state (the tax credit cannot exceed EUR 160).
b) 20 per cent of annual rent paid for the dependent children who are studying at a recognised educational establishment in Greece up to a maximum of EUR 800 provided that the dwelling is situated in the same region of the school or university (the tax credit cannot exceed EUR 160).
c) 20 per cent of the educational expenses incurred by the taxpayer for himself or for his dependent children up to a maximum of EUR 800 per person. The expenses paid by divorced parents are also included (the tax credit cannot exceed EUR 160 for each child separately).
d) 20 per cent of the legally compulsory contributions to social security funds, and optional contributions to legally constituted funds; up to a maximum of EUR 800 (the tax credit cannot exceed EUR 160).
e) 20 per cent of expenses paid to doctors (medical expenses) for the taxable person, his/her spouse and his/her dependents. Medical expenses in respect of unmarried or widowed children who suffer from an incurable disease, who are mentally retarded or are blind are also included.
- 20 per cent of the annual interest of mortgage loans for the main residence of the taxpayer. The relief is limited where the financed amount does not exceed EUR 200000 and the residence does not exceed 120 square meters.
- 20 per cent of the interest paid on loans granted for by banks and other credit institutions for the restoration, maintenance or improvement of scheduled buildings and buildings located in areas classified as traditional urban districts or as traditional settlements. The amount of the deduction is calculated upon the interest derived from the part of the loan that does not exceed EUR 200000.
- 20 per cent of the amount of alimony that is paid to a spouse and is adjudicated/or agreed by notary deed. The tax reduction cannot exceed EUR 3000.
- EUR 60 in respect of each dependent child for taxpayers with employment income living for at least 9 months of the year in certain border areas or in certain islands. In case of a married couple, at least one spouse must satisfy these requirements in order for his/her family to receive this deduction.
a) 20 per cent of the total amount of donations to the State, municipalities and communities, state universities, the church, the monasteries of Mount Athos, the World Patriarchate of Constantinople, the Patriarchate of Alexandria and Jerusalem, the Sacred Monastery of Mountain Sinai, the state and municipal nursing homes and hospitals which are subsidised from State budget and the Archaeological Resources Fund.
b) 20 per cent of the total amount of donations to public or private non-profit legal entities which have been or are being legally constituted for cultural purposes.
c) 20 per cent of the amounts donated to philanthropic institutions, non-profit making bodies which provide educational services or grant scholarships, Greek legal entities governed by private or public law which have been or are being set up for philanthropic purposes.

Note: The total amount of all the above donations cannot exceed 10 per cent of the total income that is taxed by the general provisions.

- 20 per cent of the insurance expenses for life/death/accident/sickness for the taxable person, his/her spouse or their dependent children. This also includes the expenses for
child insurance paid annually by divorced parents. The tax credit cannot exceed EUR 240 for a single taxpayer and EUR 80 for a family.
- 20 per cent of the fees paid to lawyers for the provision of legal services for the taxable person, his/her spouse and his/her dependents.
- 20 per cent of the amount spent on the installation of natural gas systems, solar panel systems, thermal insulation and teleheating systems, if the amount spent does not exceed EUR 3000 . If the amount spent is between EUR 3000 and EUR 6000 , then the deduction is $10 \%$ of the amount.

Notes:

1. Taxpayers who reside abroad but derive taxable income from sources in Greece are not eligible for these deductions, with the exemptions of residents of the EU member States who derive at least 90 per cent of their total income from sources in Greece.
2. If the yearly taxable income is more than EUR 40000 , then for the amount of expense that is attributed to income that exceeds EUR 40 000, the percentage of the reduction of tax will be $10 \%$ (instead of $20 \%$ ) of the expense (except of the last category of expense for natural gas systems, solar panel systems, etc.).

### 1.1.2.4. Tax calculation

For income tax purposes, there are six categories of taxable income: income from immovable property (categories A-B), income from movable property (category C), income from business (category D), income from agriculture (category E), income from employment (category F) and income from professional services or other sources (category G).

Net income is computed separately within each category with tax rules that vary across income categories. Total taxable income is computed as the aggregate of the net results of all categories. Losses in one category may be set off against income of another category. If the declared income is not accepted as the base for the tax assessment, the tax authorities can base the assessment on the presumptive income, which is the minimum amount of income required to cover the taxpayer's main living expenses.

Employment income (category F) is subject to withholding tax. The tax is withheld by the employer and is calculated by applying the taxpayer's progressive income tax schedule. The employer calculates the withholding tax on the basis of the taxpayer's annual net salary (net of social security contributions). The withholding tax is then reduced by 1.5 per cent of the total amount of taxes due. The resulting tax is the annual tax due, $1 / 14$ of which constitutes the monthly withholding tax for the private sector's employees (every employee receives 14 monthly salaries per year, i.e. 12 monthly wages plus 1 salary as Christmas bonus, $1 / 2$ salary as Easter bonus and $1 / 2$ salary as summer vacation bonus). For the employees of the public sector, the monthly withholding tax is calculated approximately as $1 / 12$ of the annual tax due, because of the fact that bonuses in the public sector have been very significantly reduced. If the taxpayer's final tax liability (derived from the annual declared income) exceeds the aggregate of the amounts already withheld or prepaid, the remaining tax is generally payable in three equal bimonthly instalments. Any excess tax paid or withheld will be refunded.

### 1.2. Rate schedule

A new unified progressive tax scale is introduced for all individuals (salaried persons, non-salaried persons, pensioners and self-employed) as follows:

Tax schedule for individuals for income earned in 2011

| Taxable income (EUR) | Tax rate \% |  | Total |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | 0 | 0 | Income step (EUR) | Tax (EUR) |
| 12000 | 10 | 700 | 5000 | 0 |
| 16000 | 18 | 720 | 7000 | 700 |
| 26000 | 25 | 2500 | 4000 | 1420 |
| 40000 | 35 | 4900 | 10000 | 3920 |
| 6000 | 38 | 7600 | 14000 | 8820 |
| 100000 | 40 | 20000 | 16420 |  |
| Over 100 000 | 4000 | 40000 | 32420 |  |

Notes:

1. Married persons must submit a joint return, but taxes, duties and levies are calculated separately on the income declared by each spouse.
2. For young people up to 30 years old, for pensioners over 65 years old, for people with special needs and for all pensioners who have children with special needs, the tax free first tax bracket is EUR 9000.

In order to help the tax crosschecks and to fight tax evasion, the tax free amount of income is conditional upon the submission of a certain amount of receipts for goods or services received, which is calculated as $25 \%$ of the income and up to EUR 60000 declared income.

Receipts for acquisition of assets, bills for utilities, tickets of transportation and expenses that are recognised for other deductions or credits are exempted.

In case of not providing or providing more than the required receipts, there is an additional 10 per cent penalty or tax credit respectively, on the difference.

The untaxed amount of income in respect of dependent children is changed to:

- EUR 2000 for one child.
- EUR 4000 for two children.
- EUR 3000 for each child above two.

Only the principal is entitled to the increase in the tax-free amount for dependent children. If the principal does not earn income or his/her income is less than the income in the first tax bracket augmented by the tax-free amount for children, then the tax-free amount related to the dependent children or the part of the band increase that is not used by the principal, is added to the tax-free income amount of the other spouse.

### 1.3. State and local income taxes

There are no local income taxes in Greece. Municipalities (the local authorities) receive 20 per cent of the national income tax revenues.

## 2. Compulsory social security contributions to schemes operated within the government sector

The great majority of individuals who are employed in the private sector and render dependent personal services are principally, directly and compulsorily insured in the Social

Insurance Organisation (IKA). Apart from the main contribution, IKA compulsorily collects contributions for other minor Funds created for the employee's benefit (Unemployment Benefits Funds, etc.). A subsidiary Social Insurance Fund (ETEAM) for employees who are principally insured in IKA has been established since 1983.

The average rates of contributions payable by white-collar employees as a percentage of gross earnings are as follows (\%) (since the beginning of 2003):

|  | Employer | Employee | Total |
| :--- | ---: | ---: | ---: |
| 1. Social Insurance Organisation (IKA) | 18.43 | 9.22 | 27.65 |
| 2. Subsidiary Social Insurance Fund (ETEAM) | 3.00 | 3.00 | 6.00 |
| 3. Other Funds | 7.13 | 4.28 | 11.41 |
| Total | $\mathbf{2 8 . 5 6}$ | $\mathbf{1 6 . 5 0}$ | $\mathbf{4 5 . 0 6}$ |

Higher contributions are due ( 19.45 per cent paid by the employee and 30.21 per cent paid by the employer) in case of blue-collar workers who are engaged in heavy work (unhealthy, dangerous, etc., work) as they are entitled to a pension five years earlier than the other workers. In the industrial sector, the employer pays an additional occupational risk contribution at a rate of 1 per cent because these workers are more vulnerable to labour accidents and occupational diseases.

Contributions are calculated on the basis of the monthly salary or wages paid but within the limits specified in the National General Collective Employment Agreement. Monthly gross remuneration includes salaries and wages, fringe benefits and bonuses and any profit distributions to employees. A ceiling of EUR 2432.25 per month applies for individuals who have started working prior to 1-1-1993 (2010-ceiling). On the other hand, for individuals who have started working after 1-1-1993, the social security contributions ceiling is EUR 5 546.80.

Self-employed individuals must make monthly compulsory lump-sum contributions to OAEE (Free Professional Social Insurance Organisation); these contributions depend on the number of years that the self-employed has been insured (for more details, see the explanatory annex to table III. 3 of the OECD's Tax Database).

All of these social security contributions are fully deductible for income tax purposes.
A special solidarity contribution was introduced which increases the tax burden of employees. It is levied on total income at rates of between 1 and 4 per cent depending on the level of income. It is not covered in the Taxing Wages model as the rate of contribution is not defined solely by the sum of earnings and family benefits but also by the level of income from other sources.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

Employees working in the private sector, according to the relevant Collective Labour Agreement or arbitrary decision, are granted by their employers a benefit representing 10 per cent of their gross basic salary (excluding any other cash transfers), independently of their spouse's income status. For public servants this benefit is limited to a flat gross amount of EUR 35 monthly. In a two-earner family, this cash transfer is granted to both spouses.

### 3.2. Transfers for dependent children

Benefits for dependent children are determined by the worker's Collective Labour Agreement. The benefits are usually equal to 5 per cent of the gross basic monthly salary of each spouse per child. When a relevant Collective Labour Agreement does not exist, the rules of the National General Collective Labour Agreement apply. The latter agreement works as a safety net; it provides a benefit related to marital status but not related to dependent children.

Benefits for dependent children are granted for each child starting either from the 1st, 2nd or the 3rd child, depending on the provisions of the relative Collective Labour Agreement that is in force. Examples of industries whose workers receive benefits for each and every child are the insurance industry ( 7.5 per cent), the accountants ( 5 per cent) and the shipping industry ( 6 per cent). For public servants, this benefit is limited to a flat gross monthly amount of EUR 18 for each of the first two children (a different amount applies for the 3rd and additional children).

If no benefit for dependent children is provided by the worker's Collective Labour Agreement, a very small yearly subsidy is provided by the Manpower Employment Organisation (OAED) under certain circumstances and depending on the employees' income and family status. Only one of the spouses is entitled to this OAED cash transfer.

### 3.3. State benefits for having more than 2 children

Law 1892/1990 determines the benefits for having more than two children. For 2010, the monthly state benefit for a family that has a 3rd child is EUR 178.81. This benefit is tax-free and is given during the first 6 years of the child's life. In addition, families with more than 3 children receive a tax free monthly allowance of EUR 44.68 for each of every unmarried child under the age of 23 . The Law also provides for a multi-children pension of EUR 102.85 that is given to the mother who no longer is the beneficiary of the monthly multi-children allowance of EUR 44.68. Law 3454/2006 provides for a lump sum amount of EUR 2000 for all mothers for every of their 3rd and additional child.

## 4. Main changes in the tax/benefit system since 2010

In the year 2011, a lot of changes have been introduced. There is still a unified progressive tax schedule, which treats all sources of income uniformly, but the steps and rates of the scale have changed. The new income tax schedule has 10 different rates. The new tax rates range between 0 and 45 per cent. The tax free first tax bracket for the salaried persons, non salaried persons, self employed and pensioners have decreased from EUR 12000 to EUR 5 000. Taxpayers will need to submit receipts for goods or services received in order to qualify for the EUR 5000 exemption. Finally, a great number of deductions from the taxable income have been altered to deductions from the payable amount of tax.

## 5. Memorandum items

### 5.1. Identification of an AW and method of calculations used

The National Statistical Service of Greece (NSS) conducts three surveys:

1. Labour cost survey. This survey is conducted every four years. The main variables collected are: total labour cost, gross wages and salaries, employer's social security contributions and hours actually worked. Wages and salaries include:

- Wages and salaries normally paid in each pay period.
- Extra payments (13th and 14th salary, extra bonuses, etc.)

This data is collected for all the local units of each enterprise surveyed and tabulated by sector of activity (NACE Rev. 1). The last available data is for the year 2008.
2. Structure of earnings survey. This surveyis conducted every 4 years on sample of enterprises occupying above 10 employees. The data is collected on the firm level. In each enterprise, a sample of persons employed is surveyed. The main variables collected are: wages and salaries, age, level of education, profession, etc. The last available data refers to the year 2006. This data is the source of the AW figure in this Report.
3. Quarterly survey of labour cost index and index of employment. From 2005 onwards, the following indices are calculated:

- Labour Cost Index.
- Wages and Salaries Index.
- Index of employers' Social Security Contributions.
- Index of number of persons employed.
- Index of hours worked.

The results of all the surveys mentioned above, are tabulated by sector of activity and cover enterprises with more than 10 employees of sectors $B$ to $N$ of the economy. The Agriculture sector, the Public sector and the Health and Education sector are not covered.

The figure of the average wage in this Report is based on the "Structure of Earnings survey" conducted in 2002 and 2006, combined with data for the compensation index increase for the period thereafter. The "Structure of Earnings survey" showed that the net average wage in 2002 was EUR 10847 (calculated with ISIC Rev. 3.1 classification) and in 2006 was EUR 15301 (calculated with ISIC Rev. 4 classification).

It is pointed out that until 2009 the AW was overestimating the actual gross earnings because the AW was calculated on the basis of earnings figures gross of the benefits linked to marriage and children. Married taxpayers earn up to 10 per cent of additional income; parents earn up to 5 per cent of additional income for each child. These benefits could not be separated from other gross earnings in Greece and were therefore taken into account when calculating the AW. This implied that tax burdens for all family types might have been overestimated. From 2010 onwards, the AW for the period 2000 to 2010 includes only the total annual gross earnings per employee, net of:

- The special payments for shift and night work and during weekends and holidays, on condition that they are not treated as overtime.
- The annual payments in kind: foods, drinks, footwear, clothes, accommodation, business cars provided, mobile phones, etc.
- The total annual bonuses paid not at every pay period (holiday leave, 13th and 14th salary, annual bonuses based on productivity, annual premiums related to profit-sharing).
- The education bonus.
- The working time bonus.
- The marriage and children allowance.

The estimations for the AW for the years 2000-10 are the following (in EUR):

| EUR | ISIC Rev. 3.1 classification <br> (Sectors C-K) | ISIC Rev. 4. classification <br> (Sectors B-N); these values are <br> used in this Report |
| :--- | ---: | :---: |
| 2000 | 9.732 | 9.496 |
| 2001 | 10.640 | 9.740 |
| 2002 | 10.847 | 10.847 |
| 2003 | 12.778 | 12.960 |
| 2004 | 13.612 | 13.819 |
| 2005 | 14.099 | 14.203 |
| 2006 | 15.300 | 15.301 |
| 2007 | 16.606 | 16.539 |
| 2008 | 16.488 | 16.700 |
| 2009 | n.a. | 18.541 |
| 2010 | n.a. | 20.457 |

n.a.: not available.

### 5.2. Main employers' contributions to private pension, health, and related schemes

Contributions to private pension and sickness schemes made by employers are not added to employees' gross earnings for tax purposes and are therefore not subject to tax. Since these contributions are not obligatory for employers, no data is provided by the National Statistical Service of Greece. Very few employers have adopted such additional insurance schemes.

2011 Parameter values

| Tax credit | Child_cred | 0 |  |
| :--- | :--- | :--- | :--- |
| Rates of family subsidies |  |  |  |
| paid by employers | Wife_sub | 0.1 |  |
| children (up to 3) | Child_sub | 0.05 | 5000 |
| Income tax schedule | Tax_sch | 0 | 12000 |
|  |  | 0.10 | 16000 |
|  |  | 0.18 | 26000 |
|  |  | 0.25 | 40000 |
|  |  | 0.35 | 60000 |
|  |  | 0.38 | 100000 |
|  | 0.40 |  |  |
| Social security contributions | Bandaugment_ch | 2000 |  |
|  | Bandaugment_ch2 | 4000 |  |
|  | Bandaugment_ch3 | 3000 |  |
|  | SSC_rate | 0.165 |  |
|  | SSC_rate_empr | 0.2856 |  |
|  | SSC_ceil | 77655.20 | 0 |

## 2011 Tax equations

The equations for the Greek system in 2011 are mostly on an individual basis. The level of gross earnings for the principal earner is increased by the spouse and child subsidy paid by the employer.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn_princ | P | Ave_earn*(1+Married*Wife_sub+ MIN(Children,3)*Child_sub) |
|  | earn_spouse | S | Ave_earn*(1+Married*Wife_sub+ MIN(Children,3)*Child_sub) |
| 2. Allowances: | tax_al | B | SSC |
| 3. Credits in taxable income | taxbl_cr |  | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits |  |  |  |
| Increase in first income tax bracket | band_increase | P | (Children=1)*Bandaugment_ch+(Children=2)*Bandaugment_ch*Children |
|  |  | S | IF(earn_spouse>0, IF(tax_inc_princ< Effect_low_band_princ, MIN(band_increase_princ, Effect_low_band_princ - tax_inc_princ),0),0) |
| Effective first income tax bracket | Effect_low_band | B | IF(earn>0,Low_thrsh+band_increase,0) |
| CG tax before credits | CG_tax_excl | B | Tax(tax_inc,tax_sch)-Low_rate*Positive(MIN(Effect_low_band-Low_thrsh,tax_inc-Low_t hrsh)) |
| 6. Tax credits: | tax_cr |  | 0 |
| 7. $C G \operatorname{tax}$ | CG_tax | B | Positive(CG_tax_excl-tax_cr) |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | IF(SSC_ceil_use=1,SSC_rate*MIN(earn,SSC_ceil),SSC_rate*earn) |
| 11. Cash transfers | cash_trans | B | 0 |
| 13. Employer's soc security | SSC_empr | B | IF(SSC_ceil_use=1,SSC_rate_empr*MIN(earn,SSC_ceil),SSC_rate_empr*earn) |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Hungary

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Hungary 2011

## The tax/benefit position of single persons



## Hungary 2011

## The tax/benefit position of married couples



Thhe national currency is the Forint (HUF). In 2011, HUF 200.57 was equal to USD 1. In that year, the average worker earned HUF 2624088 (Secretariat estimate).

## 1. Personal income tax systems

### 1.1. Central/federal government income taxes

### 1.1.1. Tax unit

The tax unit is, in all cases, the separate individual. In exceptional cases, the employer can become subject to personal income tax, for instance in the case of benefits in kind.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Basic reliefs: none.
- Standard marital status reliefs: none.
- Employee Tax credit: this credit is calculated as 16 per cent of the wage income (multiplied by 1.27), with a monthly maximum of HUF 12 100. If the worker's annual wage income (multiplied by 1.27) exceeds HUF 2750000 , the tax credit is reduced at the rate of HUF 0.12 for every HUF 1 above this limit. The credit is fully extinguished once the tax base reaches HUF 3960000.
- Family tax allowance: for families having children, the basis of income tax can be reduced by the family tax allowance, which amounts to HUF 62500 per month/each dependent (for families having one or two children), or HUF 206250 per month/each dependent (for families having at least three children). This tax allowance can be applied by a pregnant woman (or her husband) as from the 91st day after conception until birth of the child. The tax allowance may be claimed by one spouse or be split between the spouses.


### 1.1.2.2. Main non-standard tax reliefs

- Trade Union membership dues: membership dues and contributions paid to trade unions and other corporate bodies of employees are deductible without any restriction.
- Tax credits are made available for physical disability or agricultural activities. Tax deduction is available for those having income from abroad.


### 1.1.3. Tax schedule

The rate of personal income tax amounts to 16 per cent.
From 2010, gross income plus the 27 per cent of employer social security contributions qualify as the base of the personal income tax.

### 1.2. State and local income taxes

In Hungary there is no local personal income tax system supplementing the central one. More precisely, the total income tax collected is split between the central government
and local governments. At the same time, the local governments can levy taxes on sites and buildings, tourist facilities and business activities.

## 2. compulsory social security contributions to schemes operated

 within the government sector
### 2.1. Employees' contributions

### 2.1.1. Pensions

The rate of pension contribution amounts to 10 per cent of gross earnings. The maximum annual amount of this contribution is HUF 7665000.

### 2.1.2. Sickness

The rate of health security contribution amounts to 6 per cent of gross earnings.

### 2.1.3. Unemployment

The worker must pay, as employees' contribution, 1.5 per cent of gross earnings.

### 2.1.4. Others

None. The average worker does not have any obligation to pay other contributions than the above mentioned. However, the contribution rates may be different for certain types of income or for certain groups of income recipients (e.g. employees with pensioner status). None of these exceptions are applicable to the workers taken into consideration in this report.

### 2.2. Employers' contributions

### 2.2.1. Pensions

The rate of pension security contribution amounts to 24 per cent of gross earnings.

### 2.2.2. Sickness

The rate of health security contribution amounts to 2 per cent of gross earnings.

### 2.2.3. Unemployment

The employer has to pay 1 per cent of gross earnings.

### 2.2.4. Others

Social security contributions will have to be paid on other benefits than gross earnings (e.g. grants in kind) and payments (e.g. certain kind of contracts).

The employer contributions also include a payroll tax: the training contribution amounts to 1.5 per cent of gross earnings.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status <br> None.

### 3.2. Transfers for dependent children

Effective from 1 January 2008:

| Type of family | HUF per month |
| :--- | :---: |
| For a couple with one child | 12200 |
| For a single earner with one child | 13700 |
| For a couple with two children, per child | 13300 |
| For a single earner with two children, per child | 14800 |
| For a couple with 3 or more children, per child | 16000 |
| For a single earner with 3 or more children, per child | 17000 |
| For a couple with permanently sick and disabled child | 23300 |
| For a single earner with permanently sick and disabled child | 25900 |

## 4. Main changes in the tax/benefit system since 2010

A flat personal income tax system was introduced.
The tax relief related to children was modified.
The employee tax credit was reduced.
The employees' pension contribution was increased.
Since 2002, payroll taxes (the employer lump sum health contribution and the training contribution) have been included in the tax/benefit calculation.

## 5. Memorandum items

### 5.1. Employer contributions to private social security arrangements

According to the relevant legislation in force, payments made by employers to private pension funds on behalf of their employees are exempted from both personal income tax and all social security contributions.

In Hungary, the law dealing with the voluntary mutual insurance funds (like pension funds) was enacted on 6 December 1993. Based on the rules for 2011, the monthly contribution paid to a voluntary mutual pension fund by the employer of a private worker who participates in a voluntary mutual pension fund, limited to an amount below half of the mandatory minimum wage, is taxable according to an effective personal income tax rate of 19.04 per cent (the nominal tax rate of 16 per cent multiplied by 1.19). In the case of employers' contributions paid to health or mutual aid funds, the applicable limit is 30 per cent of the mandatory minimum wage. Contributions in excess of these limits are taxable at an effective personal income tax rate of 19.04 per cent and a health contribution of 27 per cent is also payable on these amounts. Sponsor's donations paid by the employer to its employees' voluntary mutual insurance fund are taxable as well. In addition, employees can apply a 20 per cent tax credit (with a limit of HUF 100000 or 130000 per year; in the case of payments simultaneously made to pension, health or mutual aid funds, the limit is HUF 120000 or 150000 per year) on these taxable payments. The tax authority pays the tax credit directly to a voluntary mutual insurance fund.

In general, insurance premiums (on the basis of which an employee is named as the recipient/beneficiary of insurance services) paid by the employer are taxable, and social security contributions plus training contribution are also payable. At the same time insurance premiums related to life insurance policy for accidental death, injury liability, or medical care insurance for full and permanent incapacity to work are exempted from taxation and any contributions.

As from 2008, employer pension institutions can be established. Based on the rules for 2011, the monthly contribution paid to an employer pension institution by the employer of a private worker, limited to an amount below half of the mandatory minimum wage, is taxable according to an effective personal income tax rate of 19.04 per cent. Contributions in excess of this limit are taxable at an effective personal income tax rate of 19.04 per cent and a health contribution of 27 per cent is also payable on these amounts.

## 2011 Parameter values

|  | Ave_earn | 2624088 | Secretariat estimate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Child allowance (per child) | child_al | 1 | 750000 |  |  |
|  |  | 2 | 750000 |  |  |
|  |  | 3 | 2475000 |  |  |
|  |  | 4 | 2475000 |  |  |
| Tax base correction | base_corr | 0.27 |  |  |  |
| Income tax schedule | tax_sch | 0.16 |  |  |  |
| Social security contributions | SSC_unemp | 0.015 |  |  |  |
|  | SSC_p | 0.1 |  |  |  |
|  | SSC_lim | 7665000 |  |  |  |
|  | SSC_h | 0.06 |  |  |  |
| Tax credits | tax_cr_pe | 0.16 |  |  |  |
|  | tax_cr_ce | 12100 |  |  |  |
|  | tax_cr_li | 2750000 |  |  |  |
|  | tax_cr_ra | 0.12 |  |  |  |
| Employers | SSC_empr | 0.27 |  |  |  |
| Payroll taxes | payroll_rate | 0.015 |  |  |  |
|  |  | \# of children | 1 | 2 | $3+$ |
| Transfers for children | CB_rates | 0 | 12200 | 13300 | 16000 |
| (monthly) |  | 1 | 13700 | 14800 | 17000 |

## 2011 Tax equations

The equations for the Hungarian system in 2011 are mostly on an individual basis. But the child allowance is relevant only to the calculation for the principal earner and cash transfers are calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :--- | :--- | :--- | :--- |
| 1. Earnings | earn |  |  |
| 2. Allowances: | child_al | P | IF(Children>0, Children*VLOOKUP(Children, child_al, 2), 0) |
| Children | tax_al | B | child_al |
| Total | taxbl_cr | B | earn*base_corr |
| 3. Credits in taxable income | tax_inc | B | earn+taxbl_cr-tax_al |
| 4. CG taxable income | CG_tax_excl | B | tax_inc*tax_sch |
| 5. CG tax before credits |  |  | MAX(0, MIN(earn*(1+base_corr)*tax_cr_pe, tax_cr_ce*12)-MAX(0, |
| 6. Tax credits | tax_cr | B | (earn*(1+base_corr)-tax_cr_li)*tax_cr_ra)) |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | earn*SSC_unemp+earn*SSC_h+MIN(earn, SSC_lim)*SSC_p |
| 11. Cash transfers | cash_trans | J | Children*(VLOOKUP((1-Married), CB_rates, MIN(Children, 3)+1)*12) |
| 13. Employer's soc security | SSC_empr | B | earn*SSC_empr |
| Employer's payroll taxes | Payroll | B | earn*payroll_rate |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only.

## Iceland

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Iceland 2011

## The tax/benefit position of single persons



## Iceland 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 5577213 | 7436285 | 9295356 | 7436285 |
|  | Standard tax allowances |  |  |  |  |
|  | Basic allowance |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 223089 | 297451 | 371814 | 297451 |
|  | Work-related expenses |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 223089 | 297451 | 371814 | 297451 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 5354125 | 7138833 | 8923541 | 7138833 |
| 5. | Central government income tax liability (exclusive of tax credits) | 1308493 | 1717191 | 2156531 | 1717191 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 1060932 | 939164 | 1060932 | 939164 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 1060932 | 939164 | 1060932 | 939164 |
| 7. | Central government income tax finally paid (5-6) | 247561 | 778027 | 1095599 | 778027 |
| 8. | State and local taxes | 771529 | 906938 | 1285882 | 906938 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 27982 | 55964 | 55964 | 55964 |
|  | Taxable income |  |  |  |  |
|  | Total | 27982 | 55964 | 55964 | 55964 |
| 10. | Total payments to general government (7+8+9) | 1047072 | 1740929 | 2437446 | 1740929 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
|  | For two children | 254515 | 156713 | 67478 | 0 |
|  | Total | 254515 | 156713 | 67478 | 0 |
| 12. | Take-home pay (1-10+11) | 4784656 | 5852068 | 6925388 | 5695355 |
| 13. | Employer's compulsory social security contributions | 482429 | 643239 | 804048 | 643239 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 18.3\% | 22.7\% | 25.6\% | 22.7\% |
|  | Employees' social security contributions | 0.5\% | 0.8\% | 0.6\% | 0.8\% |
|  | Total payments less cash transfers | 14.2\% | 21.3\% | 25.5\% | 23.4\% |
|  | Total tax wedge including employer's social security contributions | 21.0\% | 27.6\% | 31.4\% | 29.5\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 46.3\% | 43.4\% | 43.4\% | 38.6\% |
|  | Total payments less cash transfers: Spouse | 42.6\% | 40.6\% | 43.4\% | 35.8\% |
|  | Total tax wedge: Principal earner | 50.6\% | 47.9\% | 47.9\% | 43.5\% |
|  | Total tax wedge: Spouse | 47.2\% | 45.3\% | 47.9\% | 40.9\% |

Thhe national currency is the Króna (plural: Krónur) (ISK). In 2011, ISK 115.97 was equal to USD 1. In 2011, the average worker is expected to earn ISK 5577213 (Secretariat estimate).*

## 1. Personal income tax system

### 1.1. Central government income taxes

### 1.1.1. Tax unit

Income is taxed on an individual basis, except for capital income of married couples which is taxed jointly.

### 1.1.2. Tax allowances and credits

### 1.1.2.1. Standard reliefs

- Basic tax credit: a fixed tax credit, amounting to ISK 530466 in 2011, is granted to all individuals 16 years and older, regardless of their marital status. The tax credit is deducted from levied central and local government taxes. Unutilised tax credits or portions thereof are wastable, i.e. non-refundable and non-transferable between tax years.
- Standard marital status relief: married couples may utilise up to 100 per cent of each spouses' unutilised portion of his/her basic tax credit.
- Relief(s) for children: none.
- Relief(s) forcompulsory pension contributions: the compulsory payment to pension funds amounts to 4 per cent of wages and is deductible. In addition, an optional payment of up to 4 per cent of wages may also be deducted. As the additional 4 per cent contribution is optional, it is viewed as a non-standard relief in this Report.


### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Interest payment relief: a fully refundable tax credit is granted to purchasers of personal dwellings (homes) to recuperate a part of mortgage-related interest expenses. The maximum tax-related interest credit in 2011 is ISK 400000 for a single person, ISK 500000 for a single parent and ISK 600000 for a married couple. The following constraints apply to interest rebates: 1) They cannot exceed 7.0 per cent of the remaining debt balance incurred in buying a home for one's own use. 2) The maximum amount of interest payments that qualify for an interest rebate calculation is ISK 800000 for an individual, ISK 1000000 for a single parent and ISK 1200000 for a couple. 3) Eight per cent of taxable income is subtracted from the interest expense. 4) The rebates begin to be curtailed at a net worth threshold of ISK 4000000 for a single individual and a single parent and ISK 6500000 for a couple and are eliminated altogether at a 60 per cent higher amount, or ISK 6400000 and 10400 000, respectively. (These amounts are based on income in the year 2011 but are paid out in 2012). In addition to the ordinary interest payment relief a temporary interest

[^12]cost rebate will be paid out in 2012, based on fiscal year 2011. The additional relief amounts to $0.6 \%$ of debt due to the purchase of a home. The relief is capped at ISK 200000 for single individuals and ISK 300000 for single parents and couples. The amount is reduced proportionally for net worth exceeding ISK 10000000 for a single person and ISK 15000000 for a single parent or couple. The upper threshold is ISK 20000000 for a single individual and 30000000 for a single parent or couple.

- Fishermen are entitled to a special credit against income tax of ISK 740 per day at sea in 2011.


### 1.1.3. Tax schedule

The income tax base is composed of personal income (e.g. wages, salaries, fringe benefits, pensions, etc.), which is taxed on an individual basis, and capital income which is taxed jointly for married couples.

The tax on personal income is triple-rated. The central government income tax rate in 2011 is 22.90 per cent for income up to ISK 209400 per month. A 25.8 per cent tax rate applies to the next ISK 471150 or up to ISK 680550 . For income exceeding ISK 680550 , the tax rate is 31.8 per cent. The income tax rate applies to all personal income in excess of ISK 118482 per month (ISK 1421780 per year). Tax relief is provided by the basic credit described in Section 1.1.2.1.

The tax on capital income which exceeds ISK 100000 (ISK 200000 for married couple) is 20 per cent. It is levied on all capital income of individuals, such as interest, dividends, rents etc. 30 per cent of rent income is tax free.

### 1.2. Local government income tax

The local government income tax base is the same as the central government's personal income tax base.

The local governments' income tax is single-rated, but the rate varies between 12.44 and 14.48 per cent between municipalities. The average rate in 2011 is 14.41 per cent.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

Fee to the Retiree Investment Fund: 16 to 70 year-old individuals are subject to a fixed tax of ISK 9182 in 2011, provided the individual's taxable income is at least ISK 1421780 for the year. This tax will be collected in 2012.

Fee to the broadcast media: 16 to 70 year-old individuals with taxable income over ISK 1421780 for the year as well as legal entities are subject to a fixed tax of ISK 18800 in 2011, which will be collected in 2012.

### 2.2. Employers' contributions

Employers have to pay a social security tax on total wages of 8.65 per cent. In addition, 0.65 per cent is levied on the wages of fishermen as a premium for their government accident insurance.

## 3. Universal cash transfers

### 3.1. Marital status related transfers

None.

### 3.2. Transfers for dependent children

Child benefits are granted for each child, subject to income thresholds. In 2011, they are as follows (in ISK per year):

| For each child under the age of seven: | 61191 |
| :---: | :---: |
| Children under the age of eighteen at the end of 2011: |  |
| First child | 152331 |
| Each additional child | 181323 |
| Benefits for single parents: |  |
| First child | 253716 |
| Each additional child | 260262 |
| Income threshold for benefit curtailment: |  |
| For couples | 3600000 |
| For a single parent | 1800000 |
| Curtailment of benefits (children under the age of seven only): |  |
| For each child | 3 per cent |
| Curtailment of benefits (all children under the age of eighteen): |  |
| For one child | 3 per cent |
| For two children | 5 per cent |
| For three children or more | 7 per cent |

Note that child benefits in this Report are based on income in the year 2011 but are paid out in 2012 (see also Section 4.4).

## 4. Main changes in the tax/benefit system since 1998

### 4.1. The deductibility of the payment to pension funds

All employees are required to participate in pension funds. The employee contribution is generally 4 per cent of wages and the employer contribution was 6 per cent, and increased to 8 per cent as of beginning 2007. Both contributions are deductible from income before tax. In some cases, the contributions of employees and employers are higher. An optional, additional payment from employees of up to 4 per cent of wages is also deductible and goes into an individual retirement account.

This voluntary pension savings option was first introduced in 1999 in order to encourage personal saving. At the time the contribution rate was 2 per cent for employees and 0.2 per cent for employers. In May 2000, these rates were doubled to 4 and 0.4 per cent, respectively, as noted above. In addition, some employers, such as the central government, have increased their employer counter-contribution by agreement with employees. The central government contributed 1 per cent against a voluntary employee contribution of 4 per cent in 2001 and 2 per cent as of the beginning of 2002. All such contributions are tax-deductible, both with the employer and the employee at the time the contribution is made. The actual pension is taxed as personal income when it is drawn. As of the beginning of 2004, the employer option of deducting the above 0.4 per cent against the social security tax was abolished. Since such employer counter-contributions had become part of wage agreements in most cases, it was no longer felt that such a tax incentive was needed.

### 4.2. A reduction of the central government income tax rate 1997-2007

In 1997-2007, the Government pursued a policy of reducing the marginal tax rate, as can been seen in the table below. This development was reversed in 2009 when income tax was raised by 1.35 percentage points in response to the Treasury's rising debt burden brought on by the economic crisis. At the beginning of 2010, the tax system was changed from single rated to triple rated. The tax rate was set at 24.1 per cent for the first monthly ISK 200000 but it was raised by 2.9 per cent for the next ISK 450000 and again by 6 per cent for income in excess of ISK 650 000. In 2011, these rates and the corresponding thresholds were slightly modified. For 2011, the rates are $22.9 \%, 25.8 \%$ and $31.8 \%$, and the corresponding income thresholds are ISK 209400 and 680550 per month; see Section 1.1.3 for further details. From 1998 onwards, the central government and average local government personal income tax rates have been as follows:

|  | Central government general <br> tax rate (\%) | Municipal tax rate <br> $(\%)$ | Total tax rate <br> $(\%)$ | Central government surtax <br> $(\%)$ |
| :--- | :---: | :---: | :---: | :---: |
| 1998 | 27.41 | 11.61 | 39.02 | 7.00 |
| 1999 | 26.41 | 11.93 | 38.34 | 7.00 |
| 2000 | 26.41 | 11.96 | 38.37 | 7.00 |
| 2001 | 26.08 | 12.68 | 38.76 | 7.00 |
| 2002 | 25.75 | 12.79 | 38.54 | 7.00 |
| 2003 | 25.75 | 12.80 | 38.55 | 5.00 |
| 2004 | 25.75 | 12.83 | 38.58 | 4.00 |
| 2005 | 24.75 | 12.98 | 37.73 | 2.00 |
| 2006 | 23.75 | 12.97 | 36.72 | 0 |
| 2007 | 22.75 | 12.97 | 35.72 | 0 |
| 2008 | 22.75 | 12.97 | 35.72 | 0 |
| 2009 | 24.10 | 13.10 | 37.20 | 0 |
| 2010 | 24.10 | 13.12 | 37.32 | 27.31 |
| 2011 | 22.90 | 14.41 |  | $2.90 / 6.00$ |

### 4.3. A special tax on higher income

In 1998, the special tax on higher income was raised by 2 percentage points, from 5 to 7 per cent. For 2003 -income, it was reduced back to 5 per cent. It was reduced to 4 per cent for 2004 -income and to 2 per cent for 2005 -income. In the fiscal year 2006, the tax was abolished. In the latter half of 2009, the special tax on higher income was introduced again at 8 per cent. In 2010, the tax system changed to triple-rated; see Sections 4.2 and 1.1.3.

### 4.4. A revision of child benefit system

Child benefits are granted for each child, subject to income thresholds. The amendments to tax legislation that came into effect in 2004 included a schedule for raising child benefits. As from 2007, the child benefits will be paid for children up to 18 years instead of 16 years. For 2004-2011, benefits are as follows (in ISK per year):

|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| For all children under the age of seven | 37397 | 46747 | 56096 | 57891 | 61191 | 61191 | 61191 | 61191 |
| Children under the age of eighteen: |  |  |  |  |  |  |  |  |
| First child | 126952 | 139647 | 139647 | 144116 | 152331 | 152331 | 152331 | 152331 |
| Each additional child | 151114 | 166226 | 166226 | 171545 | 181323 | 181323 | 181323 | 181323 |
| Benefits for single parents: |  |  |  |  |  |  |  |  |
| First child | 211447 | 232591 | 232591 | 240034 | 253716 | 253716 | 253716 | 253716 |
| Each additional child | 216902 | 238592 | 238592 | 246227 | 260262 | 260262 | 260262 | 260262 |
| Income threshold for benefit curtailment: |  |  |  |  |  |  |  |  |
| For couples | 1487463 | 1859329 | 2231195 | 2880000 | 3600000 | 3600000 | 3600000 | 3600000 |
| For a single parent | 743732 | 929665 | 1115598 | 1440000 | 1800000 | 1800000 | 1800000 | 1800000 |
| Curtailment of benefits under the age of seven: |  |  |  |  |  |  |  |  |
| For each child |  |  |  |  |  |  | 3\% | 3\% |
| Curtailment of benefits under the age of eighteen: |  |  |  |  |  |  |  |  |
| For one child | 3\% | 3\% | 2\% | 2\% | 2\% | 2\% | 3\% | 3\% |
| For two children | 7\% | 7\% | 6\% | 5\% | 5\% | 5\% | 5\% | 5\% |
| For three children or more | 9\% | 9\% | 8\% | 7\% | 7\% | 7\% | 7\% | 7\% |

The data for 2011 is subject to change as the benefits are not payable until 2012.

### 4.5. A revision of interest rebates

In 2004, the interest rebate was cut by 10 per cent, effective for that year only. The ceiling on interest payments that qualify for the interest rebate was reduced from 7 per cent to 5.5 per cent in 2005 and the interest rate cut was reduced from 10 per cent to 5 per cent. As of the beginning of 2006, the ceiling was further reduced to 5 per cent. In 2005 and again in 2007, the net worth ceiling was lifted considerably in reaction to the increase in net worth due to the house price boom in 2005-07. In 2008, as mortgage-related interest expenses surged, the ceiling on interest payments was raised back to 7 per cent and the maximum rebate amount increased by 37 per cent. These measures stayed in effect in 2009. In 2010, the maximum rebate amount increased by 47-62 per cent and the net worth ceiling was reduced significantly. The rate of taxable income which is subtracted from the interest expense was increased from 6 per cent to 8 per cent. In addition to the ordinary interest payment relief a temporary interest cost rebate was introduced in 2010; see Section 1.1.2.2. These measures still apply in 2011.

### 4.6. Transferability of basic tax credit between spouses

The basic tax credit was made transferable between spouses in stages; see Section 1.1.2.1 above. In fiscal year 2001, 90 per cent of the credit became transferable, rising to 95 per cent in 2002 and 100 per cent in 2003.

## 5. Memorandum items

### 5.1. Identification of AW (only five categories) and valuation of earnings

The data on average earnings refers to average workers in five categories according to the NACE Rev. 1 classification which corresponds to the ISIC Rev. 3 system. The categories are D-production, F-construction, G-wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods, I-transport, storage and communication, and J-financial intermediation. Public sector employees are not included. Together, these
five categories comprise approximately $80 \%$ of Iceland's private sector labour force. This classification system corresponds with the NACE Rev. 2 classification system, which corresponds with the ISIC Rev. 4 system (sectors B-N).

The original data are obtained from a monthly survey among Icelandic firms with 10 or more employees.

### 5.2. Employer contributions to private pension funds, health and related schemes

By law, all employees and employers must contribute to pension funds. These funds are private, generally linked to unions and employee associations. The private pension funds are not part of the government-run social security system, to which a payroll tax is paid as described under Section 2.2 above. Compulsory and voluntary payments to such funds are described in Section 4.1 above.

2011 Parameter values

| AW-income | Ave_earn | 5577213 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Pension rate for tax allowance | pension_rate | 0.04 |  |
| Tax credit | Basic_crd | 530466 |  |
|  | Married_propn | 1 |  |
| Central income tax | tax_sch | 0.229 | 2512800 |
|  |  | 0.258 | 8166600 |
|  |  | 0.318 |  |
| Special tax | special_rate | 0 |  |
| threshold | special_thrsh |  |  |
| Local tax | local_rate | 0.1441 |  |
| Church tax | church_tax | 0 |  |
| Social Security Contr. | SSC_fixed | 27982 |  |
|  | SSC_thrsh | 1421780 |  |
| Employer SSC | SSC_empr | 0.0865 |  |
|  |  |  |  |
| General child allowance: |  |  |  |
| child allowance | CA | 61191 |  |
| Maximum number of children under 7 | max_child_under7 | 1 |  |
|  |  |  |  |
| Supplement child allowance: |  |  |  |
| Married couple case |  |  |  |
| first child | SA_first_m | 152331 |  |
| other children | SA_others_m | 181323 |  |
| income threshold | SA_tresh_m | 3600000 |  |
| Single parent case |  |  |  |
| first child | SA_first_S | 253716 |  |
| other children | SA_others_s | 260262 |  |
| income threshold | SA_tresh_S | 1800000 |  |
| reduction rate (one child) | SA_redn_1 | 0.03 |  |
| reduction rate (two children) | SA_redn_2 | 0.05 |  |
| reduction rate (tree or more children) | SA_redn_3 | 0.07 |  |

## 2011 Tax equations

The equations for the Iceland system are mostly on an individual basis. But the tax credit for married couples is relevant only to the calculation for the principal earner and child benefit is calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | B | earn*pension_rate |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | earn-tax_al |
| 5. CG tax before credits | CG_tax_excl | B | tax(tax_inc, tax_sch) |
| 6. Tax credits: | tax_cr | P | MIN(CG_tax_excl_princ,Basic_crd+MAX(Married*Basic_crd-CG_tax_excl_spouse-(tax_i nc_spouse*local_rate),0)) |
|  |  | S | MIN(Married*Basic_crd, CG_tax_excl_spouse) |
|  | special_tax | J | 0 |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr+special_tax |
| 8. State and local taxes | local_tax | P | MAX(tax_inc_princ*local_rate-MAX(Basic_crd+ Max(Married* <br> Basic_crd-CG_tax_excl_spouse-(tax_inc_spouse*local_rate),0)-CG_tax_excl_princ,0),0) |
|  |  | S | MAX(tax_inc_spouse*local_rate-MAX(Married*Basic_crd-CG_tax_excl_spouse,0),0) |
| 9. Employees' soc security | SSC | B | SSC_fixed*(earn>SSC_thrsh) |
| 11. Cash transfers: |  |  |  |
| Total family income | inc_tot | J | earn_total |
| Child allowance | cash_trans | J | Positive(MIN(Children,max_child_under7)*CA-Positive(inc_total*(1-pension_rate)-IF(M arried,SA_tresh_m,SA_tresh_s) )*SA_redn_1) +(Children>0)*(IF(Married,SA_first_m+ Positive(Children-1)*SA_others_m,SA_first_s+ Positive(Children-1)*SA_others_s) -Positive(inc_tot*(1-pension_rate)-IF(Married,SA_tresh_m,SA_tresh_s))*IF(Children=1, SA_redn_1,IF(Children=2,SA_redn_2,SA_redn_3))) |
| 13. Employer's soc security | SSC_empr | B | earn*SSC_empr_rate |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Ireland

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Ireland 2011

The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 21894 | 32841 | 54736 | 21894 |
| 2. | Standard tax allowances | 0 | 0 | 0 | 0 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 21894 | 32841 | 54736 | 21894 |
| 5. | Central government income tax liability (exclusive of tax credits) | 4379 | 6577 | 15554 | 4379 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 1650 | 1650 | 1650 | 1650 |
|  | Single, head of family | 0 | 0 | 0 | 1650 |
| Children |  |  |  |  |  |
|  | Other | 1650 | 1650 | 1650 | 1650 |
|  | Total | 3300 | 3300 | 3300 | 4950 |
| 7. | Central government income tax finally paid (5-6) | 1930 | 4895 | 15404 | 851 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 876 | 1314 | 2189 | 876 |
| Taxable income |  |  |  |  |  |
|  | Total | 876 | 1314 | 2189 | 876 |
| 10 | Total payments to general government (7+8+9) | 2806 | 6208 | 17593 | 1727 |
| 11. Cash transfers from general government |  |  |  |  |  |
|  | For head of family | 0 | 0 | 0 | 6682 |
|  | For two children | 0 | 0 | 0 | 3360 |
|  | Total | 0 | 0 | 0 | 10042 |
| 12 | Take-home pay (1-10+11) | 19088 | 26633 | 37142 | 30209 |
| 13. | Employer's compulsory social security contributions | 2354 | 3530 | 5884 | 2354 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 8.8\% | 14.9\% | 28.1\% | 3.9\% |
|  | Employees' social security contributions | 4.0\% | 4.0\% | 4.0\% | 4.0\% |
|  | Total payments less cash transfers | 12.8\% | 18.9\% | 32.1\% | -38.0\% |
|  | Total tax wedge including employer's social security contributions | 21.3\% | 26.8\% | 38.7\% | -24.6\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 31.0\% | 52.0\% | 52.0\% | 64.4\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 37.7\% | 56.7\% | 56.7\% | 67.9\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Ireland 2011

The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 32841 | 43789 | 54736 | 43789 |
|  | Standard tax allowances | 0 | 0 | 0 | 0 |
|  | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
|  | Central government taxable income (1-2+3) | 32841 | 43789 | 54736 | 43789 |
| 5. | Central government income tax liability (exclusive of tax credits) | 6568 | 8758 | 10947 | 8758 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 3300 | 3300 | 3300 | 3300 |
|  | Single, head of family | 0 | 0 | 0 | 0 |
| Children |  |  |  |  |  |
|  | Other | 2460 | 3300 | 3300 | 3300 |
|  | Total | 5760 | 6600 | 6600 | 6600 |
| 7. | Central government income tax finally paid (5-6) | 2426 | 4013 | 6816 | 4013 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1314 | 1314 | 2189 | 1314 |
|  | Taxable income |  |  |  |  |
|  | Total | 1314 | 1314 | 2189 | 1314 |
| 10. | Total payments to general government (7+8+9) | 3740 | 5326 | 9006 | 5326 |
| 11. Cash transfers from general government |  |  |  |  |  |
|  | For head of family | 1321 | 0 | 0 | 0 |
|  | For two children | 3360 | 3360 | 3360 | 0 |
|  | Total | 4681 | 3360 | 3360 | 0 |
| 12. | Take-home pay (1-10+11) | 33783 | 41822 | 49090 | 38462 |
| 13. | Employer's compulsory social security contributions | 3530 | 4461 | 5884 | 4461 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 7.4\% | 9.2\% | 12.5\% | 9.2\% |
|  | Employees' social security contributions | 4.0\% | 3.0\% | 4.0\% | 3.0\% |
|  | Total payments less cash transfers | -2.9\% | 4.5\% | 10.3\% | 12.2\% |
|  | Total tax wedge including employer's social security contributions | 7.1\% | 13.3\% | 19.0\% | 20.3\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 72.4\% | 31.0\% | 31.0\% | 31.0\% |
|  | Total payments less cash transfers: Spouse | 26.6\% | 24.0\% | 31.0\% | 24.0\% |
|  | Total tax wedge: Principal earner | 75.1\% | 37.7\% | 37.7\% | 37.7\% |
|  | Total tax wedge: Spouse | 32.3\% | 30.0\% | 37.7\% | 30.0\% |

Thhe national currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year, the average worker earned EUR 32841 (Secretariat estimate).

## 1. Personal income tax systems

### 1.1. Central/federal government income taxes

### 1.1.1. Tax unit

Tax is levied on the combined income of both spouses. Either spouse may, however, opt for separate assessment, in which case the tax payable by both spouses must be the same as would be payable under joint taxation. A further option allows either spouse to opt for assessment as single persons in which case they are treated as separate units. The calculations presented in this Report are based on family taxation.

### 1.1.2. Tax credits

### 1.1.2.1. Standard reliefs

- Basic reliefs: the single person's credit is EUR 1650 per year.
- Standard marital status reliefs: the married person's credit is EUR 3300 per year (i.e. twice the basic credit of EUR 1 650).
- Employee credit: with the exception of certain company directors and their spouses and the spouses of partners in partnership cases, all employees, including (subject to certain conditions) children who are full-time employees in the business of their parents, are entitled to an employee credit of EUR 1650.
- Single-Parent Family Relief: the single parent family credit is EUR 1650.


### 1.1.2.2. Main non-standard tax reliefs applicable to an APW

- Interest on qualifying loans: a qualifying loan in respect of the purchase, repair or improvement of the principal private residence. This relief is subject to the following overall limits in 2011

|  | First time mortgage holders | Other mortgage holders |
| :--- | :---: | :---: |
| Married couple | EUR 8000 | EUR 5 079 |
| Widowed person | EUR 8 000 | EUR 5 079 |
| Single person | EUR 4 000 | EUR 2539 |

- Medical Insurance: relief at the taxpayer's standard rate of tax is available for taxpayers who make a payment to an authorised insurer under a contract which provides for the payment of medical expenses resulting from sickness of the person, his wife, child or other dependants. This relief is now granted at source and is paid to the insurance provider.
- Mortgage Interest Relief: mortgage interest relief is discontinued for any mortgage over 7 years from 1 May 2009.
- Work-related Expenses: these are relieved to the extent that they are wholly, exclusively and necessarily incurred in the performance of the duties of an employment.
- Home Carers Allowance: this is a tax credit of EUR 810 for families where one spouse works at home to care for children, the aged or incapacitated persons, where the carer spouse's income does not exceed EUR 5 079. A reduced measure of relief is granted for income between EUR 5080 and EUR 6 620: if the income exceeds EUR 5 080, the tax credit is reduced by one half of the income of the Home Carer that exceeds this limit. This credit and the increased standard rate tax band for two income couples (see tax schedule below) are mutually exclusive but the person may opt for whichever is the more beneficial. If the Home Carer earns income of up to EUR 5080 in his/her own right for the tax year, the full tax credit may be claimed. For the purposes of this tax credit, income means any taxable income such as income from a part-time job, dividends, etc., but does not include the Carer's Allowance payable by the Department of Social and Family Affairs.


### 1.1.3. Tax schedule

|  | Band of taxable income (EUR) |  |  |
| :---: | :---: | :---: | :---: |
| Single/widow(er) | Married couple <br> (one income) | Married couple <br> (two incomes) | One-parent <br> families |
| Up to 32800 | Up to 41800 | Up to the lesser of: $65600 ;$ <br> 41800 plus the amount <br> of the lowest income <br> (\%) | 36800 |
| Balance | Balance | Balance | Balance |

### 1.1.4. Low income exemption and marginal relief tax

Where total income is less than or equal to the income exemption limit that income is exempt from tax.

Exemption limits:

|  | EUR |
| :--- | ---: |
| Single/Widowed |  |
| $\quad$ Under 65 | 5210 |
| 65 and over | 17000 |
| Married | 10420 |
| $\quad$ Under 65 | 34000 |
| 65 and over |  |
| Children | 575 |
| $\quad$ One or two children (each) | 830 |
| Subsequent children |  |

The marginal relief rate of tax applies where liability to tax at the marginal relief rate is less than that which would be chargeable under the normal tax schedule and where total income is less than twice the relevant exemption limit, otherwise tax is charged under the normal tax schedule.

Marginal relief tax is charged, where applicable, at a rate of 40 per cent on the difference between total income and the relevant exemption limit.

### 1.2. State and local income taxes

No State or local income taxes exist in Ireland.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

Contributions are payable as a percentage of an employee's gross earnings less allowable superannuation contributions. No distinction is made by marital status or sex. The first EUR 352 of weekly earnings are exempt from social insurance. If the employee is not exempt, then an allowance of EUR 127 per week is applicable for social insurance contribution purposes. The following is a breakdown of the 2011 rate of contribution together with ceilings where applicable:

| Description | Rate | Threshold (EUR) | Ceiling (EUR) |
| :--- | :--- | :--- | :--- |
| Pension and social insurance | 4.00 |  |  |

### 2.2. Employers' contributions

Like employees' contributions, employers' contributions are payable as a percentage of gross employee earnings less allowable superannuation contributions. The following is a breakdown of the 2011 rate of contribution:

| Description | Rate \% | Ceiling (EUR) |
| :--- | :---: | :--- |
| Occupational injuries | 0.50 |  |
| Redundancy contribution | 0.40 |  |
| Pension and social insurance | 9.85 |  |
| Total | 10.75 | No ceiling |

The employers' contribution is reduced from 10.75 per cent to 8.5 per cent in respect of employees earning less than EUR 356 per week.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

These are payable to all children under the age of 16 (or under 19 years, if the child is undergoing full-time education by day or is incapacitated and likely to remain so for a prolonged period). These payments do not depend on any insurance or on the means of the claimant. The amounts payable in 2011 are as follows:

| Period | Monthly rate per child |  |
| :--- | :--- | :---: |
| January 2010 to December 2010 | First to second child: EUR 140.00 |  |

### 3.3. Transfers for low income families

A non taxable family income supplement is payable to low income families where either the principal earner and/or the spouse are in full-time employment. Full-time employment is defined as working nineteen hours per week or more. The hours worked by the principal and the spouse can be aggregated for the purposes of this definition. When calculating income for the purposes of the relief superannuation payments, social welfare payments, tax payments, health and employment and training levies are all subtracted to arrive at disposable income.

The level of payment is dependent on the amount of family income and the number of children. The supplement payable is 60 per cent of the difference between the family income and the income limit applicable to the family. A minimum of EUR 20 per week is payable to eligible families. No supplement is payable to families with income in excess of the relevant income limit.

The income limit for a family with two children in 2011 is EUR 602 per week.
One Parent Family Payment: This new non taxable payment is available for men and women who for a variety of reasons are bringing up a child or children without the support of a partner. The payment which is means tested is payable in full where the persons earnings does not exceed EUR 7 618. Where earnings are between EUR 7618 and EUR 22100 a reduced payment is received. The amount of the full payment for 2010 is EUR 6552 plus EUR 1550 for each child. Because of the complex means testing system this type of person is excluded from the AW examples.

## 4. Other main changes in tax/benefit system since 2010

## 5. Universal Social Charge (USC)

The Universal Social Charge (USC) replaces the Income and Health Levies and applies at a low rate on a broad base.

The USC is charged on an individualised basis on gross income at 2 per cent on income up to and including EUR 10 036, at 4 per cent for income in excess of EUR 10036 but not greater than EUR 16016 and at 7 per cent above that level. Those aged over 70 year do not pay this higher rate and there is a lower exemption threshold EUR 4004.

The USC does not apply to social welfare payments, including contributory and non-contributory social welfare State pensions.

Individuals in possession of full medical card, including a Health Amendment Act card, will only pay USC at a max rate of $4 \%$ irrespective of the level of their income. However, when an individual has self-employment income in excess of EUR 100000 for a tax year, the max rate is $7 \%$ on the amount of the excess. Non-medical card holders are subject to a maximum rate of $10 \%$ on such income.

USC rates for individuals aged 70 years and over and individuals who hold FULL medical cards: the $4 \%$ rate applies to all income over 10036 . There is a surcharge of $3 \%$ on individuals who have income from self employment that exceeds EUR 100000 in a year, regardless of age. Where such individuals are aged over 70 years or hold a full medical card, a rate of $7 \%$ applies.

## 6. Memorandum items

### 6.1. Employer contributions to private social security arrangements

Information not available, although such schemes do exist.

2011 Parameter values

|  | Ave_earn | 32841 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Tax allowances |  |  |  |
| Tax Credits | Basic_al_at_standardrate | 1650 |  |
|  | Married_al_at_standardrate | 1650 |  |
|  | Empl_al_at_standardrate | 1650 |  |
|  | Singleparent_at_standardrate | 1650 |  |
|  | Carers_allow | 810 |  |
|  | Carers_thrsh1 | 5080 |  |
|  | Carers_thrsh2 | 6620 |  |
|  | Carers_taper_rt | 0.5 |  |
| Exemption amount | Single_ex | 5210 |  |
|  | Married_ex | 5210 |  |
|  | Child_ex | 575 |  |
|  | Child_ex_3 | 830 |  |
| Marginal relief limit | Single_MR | 10420 |  |
|  | Married_MR | 10420 |  |
|  | Child_MR | 1150 |  |
|  | Child_MR_3 | 1660 |  |
| Marginal relief | marg_rel_rate | 0.4 |  |
| Income tax | Single_sch | 0.2 | 32800 |
|  |  | 0.41 |  |
|  | Single_sch_child | 0.2 | 36800 |
|  |  | 0.41 |  |
|  | Married_sch_oneinc | 0.2 | 41800 |
|  |  | 0.41 |  |
|  | Married_sch_twoinc | 0.2 | 65600 |
|  |  | 0.41 |  |
| Universal Social Charge | USC | 0.02 | 10036 |
|  |  | 0.04 | 16016 |
|  |  | 0.07 |  |
|  | USC_sch_med_card | 0.02 | 10036 |
|  |  | 0.04 |  |
|  | USC threshold | 4004 |  |
| Maximum increase in first band | Band_increase_lim | 27400 |  |
| Social security contributions | SSC_thresh | 18304 |  |
| Employees | pension_rate | 0.04 |  |
|  | pension_ceil | 0 |  |
|  | Non_cum_Allc | 6604 |  |
| Employers | Empr_rate | 0.1075 |  |
|  | Empr_lower_rate | 0.085 |  |
|  | Empr_thrsh | 18512 |  |
| Child benefit | Ch_ben | 1680 |  |
|  | Ch_ben_3 | 2004 |  |
| Family income supplement | FIS_pay_limit | 31304 |  |
|  | FIS_min | 1040 |  |
|  | FIS_rate | 0.6 |  |
| Medical card | single_med_card | 9568 |  |
|  | married_med_card | 13858 |  |
|  | child_add_med_card | 1976 |  |

## 2011 Tax equations

The equations for the Irish system in 2011are mostly on a family basis using mainly a tax credit system for the first time. But social security contributions are calculated separately for each spouse. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: |  |  | (provided at standard rate (tax credit equivalent)) |
| 3. Credits in taxable income | taxbl_cr | J | 0 |
| 4. taxable income | tax_inc | J | earn |
| New carers allowance (provided as a tax credit) | career_allow |  | IF((Married*Children)>0, IF(earn_spouse<=Carers_thrsh1, Carers_allow, IF(earn_spouse>Carers_thrsh2, 0, Positive <br> (Carers_allow-Carers_taper_rt*(earn_spouse-Carers_thrsh1)))), 0) |
| Preliminary Tax Liable (including carers allowance) | tax_prel | J | IF(Married=0, IF(Children=0, Tax(tax_inc, Single_sch), Tax(tax_inc, Single_sch_child)), IF(AB7=0, Tax(tax_inc, Married_sch_oneinc)-AG7, <br> Tax(earn_principal+Positive(earn_spouse-Band_increase_lim), <br> Married_sch_oneinc)+Tax(MIN(earn_spouse, Band_increase_lim), <br> Married_sch_oneinc))) |
| 5. tax before credits (but including carers allowance) | _tax_excl | J | IF((Married*earn_spouse)>0, MINA(tax_prel, (Tax(tax_inc, Married_sch_oneinc)-career_allow)), tax_prel) |
| Universal social charge | USC | J | IF(earn>USC_threshold, Tax(earn,USC_sch),0) |
| 6. Tax credits: | basic_cr | J | Basic_al_at_standardrate+(Married*Married_al_at_standardrate) |
|  | single_par_cr |  | IF(Married=0, IF(Children>0, Singleparent_at_standardrate, 0), 0) |
|  | other_cr |  | Empl_al_at_standardrate+ (IF(earn_spouse>0, Empl_al_at_standardrate, 0) ) |
|  | tax_cr |  | basic_cr+single_par_cr+other_cr |
| Exemption amount | exemp_amt | J | Single_ex+Married*Married_ex+Child_ex*MIN(2, Children)+ (Children>2)*(Children-2)*Child_ex_3 |
| Marginal relief limit | MRL | J | Single_MR+Married*Married_MR+Child_MR*MIN(2, Children)+ (Children>2)*(Children-2)*Child_MR_3 |
| 7. Net tax | CG_tax | J | If(earn_total<=MRL, MIN(marg_rel_rate*positive(earn_total-exem_amt), positive(_tax_excl-tax_cr)), positive(_tax_excl-tax_cr))+USC |
| 8. State and local taxes | local_tax | J | 0 |
| 9. Employees' soc security |  |  |  |
| Weekly allowance | weekly_allce | B | IF(earn $=0,0$, MINA(IF(earn>pension_ceil, Non_cum_Allc*pension_ceil/earn, Non_cum_Allc), earn)) |
| Medical card factor | Med_crd_fac | J | (single_med_card+Married* (married_med_card-single_med_card) +child_add_med_card*Children<earn_princ+earn_spouse) |
| Employees' soc security | SSC | B | IF(earn>SSC_thresh, pension_rate*Positive(earn-weekly_allce), 0) |
| 11. Cash transfers |  |  |  |
|  | Child_benefit | J | Children*Ch_ben+(Children>2)* (Children-2)* (Ch_ben_3-Ch_ben) |
|  | FIS | J | (Children>0)* ${ }^{\star}$ F((earn-_tax-SSC)<=FIS_pay_limit , <br> MAXA((FIS_pay_limit-(earn-_tax-SSC))*FIS_rate, FIS_min), 0) |
| Total cash transfers | cash_trans |  | Child_benefit+FIS |
| 13. Employer's soc security | SSC_empr | B | IF(earn<=Empr_thrsh, Empr_lower_rate, Empr_rate)* MIN(earn, Empr_ceil) |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Israel

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Israel 2011

## The tax/benefit position of single persons



## Israel 2011

## The tax/benefit position of married couples

1. Gross wage earnings

Number of children
2. Standard tax allowances

Basic allowance

# Wage level (per cent of average wage) 

100-0

Married or head of family
Dependent children
Deduction for social security contributions and income taxes
Work-related expenses

|  | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| Total | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 |
|  | 119016 | 158688 | 198360 | 158688 |
|  | 15587 | 19555 | 24262 | 19555 |
|  | 5643 | 12540 | 12540 | 12540 |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 5016 | 5016 | 0 |
|  | 0 | 2636 | 0 | 0 |
|  | 0 | 7946 | 3238 | 2930 |
| Total | 5643 | 20192 | 17556 | 12540 |
|  | 9944 | 7308 | 9944 | 9944 |
|  | 0 | 0 | 0 | 0 |
|  | 9198 | 10587 | 13636 | 10587 |
| Total | 9198 | 10587 | 13636 | 10587 |
|  | 19143 | 17895 | 23580 | 20531 |
|  | 4710 | 4710 | 4710 | 0 |
| Total | 4710 | 4710 | 4710 | 0 |
|  | 104584 | 145503 | 179490 | 138157 |
|  | 5547 | 6955 | 8800 | 6955 |
|  | 8.4\% | 4.6\% | 5.0\% | 6.3\% |
|  | 7.7\% | 6.7\% | 6.9\% | 6.7\% |
|  | 12.1\% | 8.3\% | 9.5\% | 12.9\% |
|  | 16.0\% | 12.2\% | 13.4\% | 16.6\% |
|  | 35.0\% | 58.0\% | 35.0\% | 35.0\% |
|  | -3.1\% | 10.4\% | 12.0\% | 3.5\% |
|  | 38.6\% | 60.3\% | 38.6\% | 38.6\% |
|  | 0.4\% | 13.5\% | 16.8\% | 6.8\% |

7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

| Gross earnings |  | 9198 | 10587 | 13636 | 10587 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable income |  |  |  |  |  |
|  | Total | 9198 | 10587 | 13636 | 10587 |
| 10. Total payments to general government (7+8+9) |  | 19143 | 17895 | 23580 | 20531 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 4710 | 4710 | 4710 | 0 |
|  | Total | 4710 | 4710 | 4710 | 0 |
| 12. Take-home pay (1-10+11) |  | 104584 | 145503 | 179490 | 138157 |
| 13. Employer's compulsory social security contributions |  | 5547 | 6955 | 8800 | 6955 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 8.4\% | 4.6\% | 5.0\% | 6.3\% |
| Employees' social security contributions |  | 7.7\% | 6.7\% | 6.9\% | 6.7\% |
| Total payments less cash transfers |  | 12.1\% | 8.3\% | 9.5\% | 12.9\% |
| Total tax wedge including employer's social security contributions |  | 16.0\% | 12.2\% | 13.4\% | 16.6\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 35.0\% | 58.0\% | 35.0\% | 35.0\% |
| Total payments less cash transfers: Spouse |  | -3.1\% | 10.4\% | 12.0\% | 3.5\% |
| Total tax wedge: Principal earner |  | 38.6\% | 60.3\% | 38.6\% | 38.6\% |
| Total tax wedge: Spouse |  | 0.4\% | 13.5\% | 16.8\% | 6.8\% |

Thhe Israeli currency is the Israeli Shekel (ILS). In 2011, ILS 3.57 was equal to USD 1. In that year, the average worker in Israel earned ILS 119016 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Central government income tax

### 1.1.1. Tax unit

In general, spouses are taxed separately on their earned income, subject to the condition that its sources are independent. The household is taxed jointly if their earned income is deemed to be interdependent. The conditions for interdependence involve situations where one spouse works in a business which the other spouse either owns or has certain levels of capital or management/voting rights.

### 1.1.2. Tax allowances and credits

### 1.1.2.1. Standard tax credits

The standard tax credits are given in the form of credit points subtracted from the tax liability. Each point is worth ILS 2508 in 2011.

- Basic credit: every resident taxpayer is entitled to 2.25 credit points (ILS 5643 in 2011).
- Additional credit for women: women are entitled to a further half credit point (ILS 1254 in 2011).
- Child credit: working mothers (and fathers in one parent families) with children aged under 18 are entitled to one additional credit point per child (ILS 2508 in 2011).
- Single parent credit: single parents (male or female) are entitled to one additional credit point (ILS 2508 in 2011).


### 1.1.2.2. Non-standard tax credits applicable to income from employment

- Tax credits are awarded for contributions to approved pension schemes, up to a ceiling which varies according to the employee's circumstances.
- Employees living in certain development areas or in conflict zones receive credits as a percentage of their income up to ceiling. In 2011, the credits range from $13 \%$ in the lowest category to $25 \%$ in the highest category with ceilings of ILS 151680 and 227640 respectively. About $8 \%$ of the population lives in these areas.
- New immigrants are entitled to three additional credit points in their first eighteen months in Israel, two additional credit points in the following year, and one credit point in the year after.
- Discharged soldiers receive 2 credit points for three years after the completion of at least 23 months of service or 1 credit point for a shorter service.
- Graduates of academic studies receive 1 credit point for three years after the completion of a B.A. degree (or after the completion of 1700 study hours that led to a professional certificate) and 0.5 credit point for two years after the completion of a M.A. degree.


### 1.1.3. Tax schedule

The tax schedule for earned income in 2011 is as follows:

| Taxable income (ILS) | Tax rate (\%) |
| :--- | :---: |
| $0-60840$ | 10 |
| $60840-103920$ | 14 |
| 103 920-168 840 | 23 |
| $168840-254880$ | 30 |
| $254880-482760$ | 33 |
| Above 482 760 | 45 |

### 1.2. Regional and local income tax

There are no regional or local income taxes.

## 2. Compulsory social security insurance system

Social security contributions are made up of a combination of those for National Insurance and Health Insurance. The tax rates paid by employees and employers are applied in two brackets:

- A reduced rate for income up to a level of $60 \%$ of the average wage per employee post (ILS 4984 per month in 2011).
- A full rate for income exceeding $60 \%$ of the average wage per employee post and up to a level of around 9 times the average wage per employee post (ILS 73422 per month in 2011).


### 2.1. Employees' contributions

The taxable base for social security insurance contributions paid by employees is the total amount of the gross wage or salary including fringe benefits. The assessment period is the calendar month. The effective employees' contribution rates in 2011 are as follows:

| Insurance branch | Full rate contribution (\%) | Reduced rate contribution (\%) |
| :--- | :---: | :---: |
| Total for National Insurance branches | 7.00 | 0.40 |
| Health | 5.00 | 3.10 |
| Total contributions | 12.00 | 3.50 |

### 2.2. Employers' contributions

Social security insurance contributions are also paid by employers on behalf of their employees. These relate to National Insurance only - employers do not pay any contributions for health insurance.

From January to March there was a reduced rate of 3.85 per cent and the full contribution rate was 5.43 per cent. From April onwards there was a reduced rate of 3.45 per cent and the full contribution rate was 5.90 per cent.

The average employers' contribution rates in 2011 are as follows and these are used in the modelling:

| Insurance branch | Full rate contribution (\%) | Reduced rate contribution (\%) |
| :--- | :---: | :---: |
| Total for National Insurance branches | 5.7825 | 3.55 |
| Health | - | - |
| Total contributions | 5.7825 | 3.55 |

## 3. Payroll taxes

The following payroll taxes exist in Israel but neither of them is included in the modelling as they have limited coverage:

- Wage tax on the non-profit institutions: the VAT law imposes a 7.5 per cent on the wage-bill on the non-profit sector including government;
- Wage tax on the financial institutions: the VAT law also imposes a 16 per cent tax on the wage-bill of the financial institutions.


## 4. Universal cash transfers

### 4.1. Transfers related to marital status

None.

### 4.2. Transfers for dependent children

A monthly child allowance is paid to the parent (usually the mother) of unmarried children aged up to 18 . The amount of the entitlement for each child depends on the date of birth of the child. Between August 2003 and June 2009, all children born after 1 June 2003 received the same benefit as the first child. But, according to the Coalition agreement signed in March 2009, the benefits for the second, third and fourth child (including those born after June 2003) are to be increased gradually over a period of five years (i.e. from 2009 to 2013).

In 2011, the monthly payments per child are shown in the following table. The "average" figure is used in the modelling.

|  | Children born before 1 June 2003 |  |  | Children born on or after 1 June 2003 |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: | :---: |
|  | Average | Jan.-Mar. | Apr.-Dec. | Average | Jan.-Mar. | Apr.-Dec. |
| First child | 169 | 169 | 169 | 169 | 169 | 169 |
| Second child | 223.5 | 195 | 252 | 223.5 | 195 | 252 |
| Third child | 284 | 284 | 284 | 252 | 252 | 252 |
| Fourth child | 446 | 446 | 446 | 252 | 252 | 252 |
| Fifth child and above | 375 | 375 | 375 | 169 | 169 | 169 |

In addition, a Study Grant is paid to lone parents with children aged 6 to 14. The grant is paid in one instalment, usually in September at the beginning of the school year. In 2011, the rates of grant per child were ILS 1468 and ILS 816 respectively for children aged 6-11 and 12-14.

## 5. Main changes in the tax and benefit systems since 2002

- There has been a policy of gradually reducing the level of personal income taxes since 2003. The number of tax brackets was reduced from seven to six in 2003. In addition, the tax rates in at least one of the six tax brackets (see Section 3 above) have been reduced in every year since then. This policy is expected to continue till 2016.
- The full contribution rate for employee social security contributions was increased gradually from $9.7 \%$ in 2002 to $12 \%$ in 2006 . The reduced contribution rate was lowered from $5.76 \%$ in 2002 to $3.5 \%$ in 2006. The upper threshold for contributions was removed in July 2002 but re-instated one year later. In August 2009, as a temporary measure until December 2011, it was increased to 10 times the average wage per employee post until December 2010 and to 9 times the average wage per employed post until December 2011.
- Prior to July 2005, there was only one contribution rate for employer social security contributions and this was set at $5.93 \%$ between July 2002 and June 2005. The upper threshold for contributions was removed in July 2002 but was re-instated one year later. The current system of two tax brackets was introduced in July 2005 with a reduced contribution rate of $5.33 \%$ and a full rate of $5.68 \%$. There has been a lowering of rates in each year between 2006 and 2009. In August 2009, as a temporary measure until March 2011, the reduced rate was increased from $3.45 \%$ to $3.85 \%$.
- The Employers tax on wage bill of the non-profit sector excluding government was abolished in 2008.
- In the period between August 2003 and June 2009, all children that were born on or after 1 June 2003 received the same level of benefit payment as the first child. The 2009 Coalition Agreement introduced a gradual increase in the benefit payments for the second, third and fourth children in all families (including those where children were born after June 2003) over a period of five years from July 2009 to June 2013.


## 6. Memorandum items

### 6.1. Average gross annual wage earnings calculation

The average wage figures represent the amount earned for a full time post by employees working 35 hours per week or more. This information is available from the Israeli Income Survey for the years up to 2010 with an estimate for 2011. As to the economic classification, Israel uses a modified version of ISIC 3 where the B-I industries (see table below) are a very close equivalent of C-K industries in ISIC 3.1. Israel's Central Bureau of Statistics intends to adopt ISIC 4 by 2011.

```
A Agriculture
B Manufacturing
Electricity and water supply
Construction (building and civil engineering projects)
Wholesale and retail trade and repairs
Accommodation services and restaurants
Transport, storage and communication
Banking, insurance and other financial institutions
Business activities
Public administration
    Education
    Health, welfare and social work services
    Community, social, personal and other services
```


### 6.2. Employer contributions to private pension

Until 2007, employers were not legally obliged to pay into a pension plan for their employees. Pension rights were guaranteed in collective agreements that covered less than half of the labour force. About one million employees in Israel had no pension arrangement
(mainly those earning a relatively low wage, temporary workers and those working for subcontractors).

In 2008, a compulsory employment pension was introduced for employees with a period of employment of at least 6 months. The minimum rate of contributions in 2011 is 10 per cent of the employee's salary (up to the level of the average wage of ILS 8307 per month), one third to be paid by the employee and two thirds by the employer. The minimum contribution rate will increase by 2.5 per cent of the employee's salary in each subsequent year, reaching 15 per cent by 2013.

### 6.3. Earned income tax credit

A non-wastable earned income tax credit was implemented in 2008 in selected geographical areas of Israel covering $15 \%$ of the population. Entitlement to this credit is established based on earnings in the previous year. The tax credit was extended to all areas of Israel in 2012 (based on the earnings in 2011 and therefore we include it in the 2011 version of the model). For mothers of children up to the age of 2 and for single parents the full coverage started in 2011 (based on earnings in 2010).

Under the law, workers aged 23 or more who are parents of one or two children aged less than 18 (or workers aged 55 or more even without children), and earn at least 45 per cent of the minimum wage (currently ILS 1990 per month) but not more than ILS 5990 per month are eligible for a monthly increment of up to ILS 320. The corresponding figure for a family with 3 or more children is ILS 460 . Families in which both parents work, and their joint income does not exceed ILS 11530 , will be entitled to these benefits for each wage-earner. The grant will is paid four times a year directly into the account of the eligible persons.

2011 Parameter values

| Average earnings/yr | Ave_earn | 119016 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Income tax | Tax_sch | 0.1 | 60840 |
|  |  | 0.14 | 103920 |
|  |  | 0.23 | 168840 |
|  |  | 0.3 | 254880 |
|  |  | 0.33 | 482760 |
|  |  | 0.45 |  |
| Employees SSC | SSC_sch | 0.035 | 59808 |
|  |  | 0.12 | 881064 |
|  |  | 0 |  |
| Employers SSC | SSC_rate2 | 0.0355 | 59808 |
|  |  | 0.057825 | 881064 |
|  |  | 0.0000 |  |
| Child benefit | CB_firstchild | 2028 |  |
|  | CB_secondchild | 2682 |  |
|  | Studygrant_rate | 1468 |  |
| Wastable tax credits |  |  |  |
| Basic element | WTC_Basic | 5643 |  |
| Lone parent | WTC_lone | 2508 |  |
| Parents/per child | WTC_Child | 2508 |  |
| Women | WTC_woman | 1254 |  |
| Negative Income tax |  |  |  |
| Family with 1 or | NIT_sch1 | 0 | 23880 |
| 2 children |  | 0.161 | 41508 |
|  |  | 3.491 | 41520 |
|  |  | 0 | 55320 |
|  |  | -0.23 | 71880 |
| Family with 3 or | NIT_sch2 | 0 | 23880 |
| more children |  | 0.235 | 41244 |
|  |  | 0 | 41520 |
|  |  | 0 | 55320 |
|  |  | -0.235 | 78840 |
|  | NIT_basic1 | 960 |  |
|  | NIT_basic2 | 1440 |  |
|  | NIT_min | 240 |  |
|  | NIT_MinIncome | 23880 |  |
|  | NIT_MaxIncome | 138360 |  |
| Days in tax year | numdays | 366 |  |

## 2011 Tax equations

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | Tax_al | B | 0 |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Earn |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc, tax_sch) |
| 6. Tax credits (nonwastable): |  |  |  |
| Principal | tax_cr_princ | B | $(\text { earn }>0)^{\star}\left(\right.$ wtc_basic+ $\left(\mathrm{IF}(\text { married }=0)^{\star}(\right.$ children $>0)$,wtc_woman+wtc_lone $+\left(\right.$ wtc_child ${ }^{*}$ children)) |
| Spouse | tax_cr_spouse | B | (earn>0)* ${ }^{\text {( wtc_basic+wtc_woman+(wtc_child }}$ * children) $)$ |
| Tax credits (nonwastable) | NIT_princ | B | NIT $=+$ MAX $(0$, <br> MAX ( $0,+\mathrm{IF}$ (princ_earnings<NIT_MinIncome,0,IF(Children=0.0,IF(Children<3,NIT_basic <br> 1+Tax(princ_earnings <br> ,NIT_sch1),NIT_basic2+Tax(princ_earnings,NIT_sch2)))))+NIT_sch1_rate5*MAX(0,+ <br> (princ_earnings + spouse_earnings)-NIT_MaxIncome-MIN(MAX(princ_earnings - <br> NIT_sch1_inc4.0),(NIT_sch1_inc5 - NIT_sch1_inc4))-MIN(MAX(spouse_earnings - <br> NIT_sch1_inc4.0),(NIT_sch1_inc5- NIT_sch1_inc4)))) NIT = 0 if NIT<NIT_min |
|  | NIT_spouse | B | NIT $=+$ MAX $(0$, <br> MAX(0,+IF(spouse_earnings<NIT_MinIncome,0,IF(Children=0.0,IF(Children< <br> 3,NIT_basic1+Tax(spouse_earnings <br> ,NIT_sch1),NIT_basic2+Tax(spouse_earnings,NIT_sch2)))))+NIT_sch1_rate5*MAX(0,+ (princ_earnings + spouse_earnings)-NIT_MaxIncome-MIN(MAX(princ_earnings - <br> NIT_sch1_inc4.0),(NIT_sch1_inc5 - NIT_sch1_inc4))-MIN(MAX(spouse_earnings - <br> NIT_sch1_inc4.0),(NIT_sch1_inc5- NIT_sch1_inc4)))) NIT $=0$ if NIT<NIT_min |
| 7. CG tax | CG_tax | B | Positive(CG_tax_excl-tax_cr)-NIT |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | Tax(earn, SSC_sch) |
| 11. Cash transfers | cash_trans | J | IF(children=1,CB_firstchild,IF(Children=2,CB_firstchild+CB_secondchild)+(IF(married=0 )*(children>0),Studygrant_rate*children) |
| 13. Employer's soc security | SSC_empr | B | Tax(earn, SSC_rate2) |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Italy

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Italy 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of APW) <br> Number of children | none | $\begin{array}{r} 100 \\ \text { none } \end{array}$ | 167 none | 67 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross wage earnings | 19354 | 29030 | 48384 | 19354 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 1837 | 2755 | 4645 | 1837 |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 1837 | 2755 | 4645 | 1837 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 17517 | 26276 | 43739 | 17517 |
| 5. | Central government income tax liability (exclusive of tax credits) | 4130 | 6494 | 12941 | 4130 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 1254 | 990 | 377 | 1254 |
|  | Married or head of family | 0 | 0 | 0 | 0 |
|  | Children | 0 | 0 | 0 | 1363 |
| Other |  |  |  |  |  |
|  | Total | 1254 | 990 | 377 | 2616 |
| 7. | Central government income tax finally paid (5-6) | 2876 | 5505 | 12564 | 1513 |
| 8. | State and local taxes | 455 | 683 | 1137 | 455 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 1837 | 2755 | 4645 | 1837 |
| Taxable income |  |  |  |  |  |
|  | Total | 1837 | 2755 | 4645 | 1837 |
| 10. | Total payments to general government (7+8+9) | 5168 | 8943 | 18346 | 3805 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 2593 |
|  | Total | 0 | 0 | 0 | 2593 |
| 12. | Take-home pay (1-10+11) | 14186 | 20088 | 30038 | 18141 |
| 13. | Employer's compulsory social security contributions | 6209 | 9313 | 15522 | 6209 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 17.2\% | 21.3\% | 28.3\% | 10.2\% |
|  | Employees' social security contributions | 9.5\% | 9.5\% | 9.6\% | 9.5\% |
|  | Total payments less cash transfers | 26.7\% | 30.8\% | 37.9\% | 6.3\% |
|  | Total tax wedge including employer's social security contributions | 44.5\% | 47.6\% | 53.0\% | 29.0\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 39.3\% | 39.4\% | 49.8\% | 40.0\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 54.0\% | 54.1\% | 62.0\% | 54.5\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Italy 2011

## The tax/benefit position of married couples

1. Gross wage earnings
Wage level (per cent of APW)

| $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: |
| 2 | 2 | 2 | none |
| 29030 | 38707 | 48384 | 38707 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes

|  | 2755 | 3673 | 4592 | 3673 |
| :---: | :---: | :---: | :---: | :---: |
| Total | 2755 | 3673 | 4592 | 3673 |
|  | 0 | 0 | 0 | 0 |
|  | 26276 | 35034 | 43793 | 35034 |
|  | 6494 | 8509 | 10624 | 8509 |
|  | 990 | 2775 | 2243 | 2775 |
|  | 690 | 0 | 0 | 0 |
|  | 1218 | 1218 | 1282 | 0 |
| Total | 2897 | 3993 | 3525 | 2775 |
|  | 3597 | 4516 | 7099 | 5734 |
|  | 683 | 911 | 1139 | 911 |
|  | 2755 | 3673 | 4592 | 3673 |
| Total | 2755 | 3673 | 4592 | 3673 |
|  | 7035 | 9100 | 12829 | 10318 |
|  | 1540 | 922 | 831 | 0 |
| Total | 1540 | 922 | 831 | 0 |
|  | 23535 | 30529 | 36386 | 28389 |
|  | 9313 | 12417 | 15522 | 12417 |
|  | 14.7\% | 14.0\% | 17.0\% | 17.2\% |
|  | 9.5\% | 9.5\% | 9.5\% | 9.5\% |
|  | 18.9\% | 21.1\% | 24.8\% | 26.7\% |
|  | 38.6\% | 40.3\% | 43.1\% | 44.5\% |
|  | 40.7\% | 40.7\% | 40.1\% | 39.4\% |
|  | 27.7\% | 39.2\% | 40.0\% | 39.2\% |
|  | 55.1\% | 55.1\% | 54.6\% | 54.1\% |
|  | 45.3\% | 53.9\% | 54.5\% | 53.9\% |

Th
Lhe national currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year the average worker earned EUR 29030 (Secretariat estimate).

## 1. Personal income tax

### 1.1. Central government income tax

### 1.1.1. Tax unit

Spouses are taxed separately.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Tax allowances

- Social security contributions due by law.


### 1.1.2.2. Tax credits

All the tax credits in Italy are non-refundable.

- Standard tax credits

The PAYE tax credit is defined as a function of net income:

| Taxable income (EUR) | PAYE tax credit (EUR) |
| :--- | :--- |
| Up to 8000 | 1840 |
| From 8001 to 15000 | Maximum tax credit $+502^{*}(15000-$ taxable income $) / 7000$ |
| From 15001 to 55000 | Maximum tax credit* 55000 - taxable income $) / 40000$ |
| More than 55000 | 0 |

The maximum value for the tax credit depends on the level of taxable income:

| Level of taxable income (EUR) | Maximum tax credit (EUR) |
| :--- | :---: |
| From 8001 to 15000 | 1338 |
| From 15001 to 23000 | 1338 |
| From 23001 to 24000 | 1348 |
| From 24001 to 25000 | 1358 |
| From 24001 to 26000 | 1368 |
| From 26001 to 27700 | 1378 |
| From 27701 to 28000 | 1363 |
| From 28001 to 55000 | 1338 |

- Tax credits for family dependents

The tax credits for family dependants, which have replaced the former tax allowances, are as follows:

| Family tax credit (EUR) ${ }^{1}$ | Amount (EUR) |
| :--- | :--- |
| Spouse | 800 decreasing to 0 for net income over 80000 |
| Children | 900 decreasing to 0 for net income over 95000 |
| $\quad$ Under three years of age | 800 decreasing to 0 for net income over 95000 |
| $\quad$ Over three years of age | 750 decreasing to 0 for net income over 80000 |
| Other dependent relatives |  |

1. Tax credits are granted for family dependents earning less than EUR 2 840.51.

The spouse tax credit is calculated as a function of net income:

| Level of taxable income (EUR) | Amount of tax credit (EUR) |
| :--- | :---: |
| Up to 15000 | $(800-110)^{*}$ taxable income $/ 15000$ |
| From 15001 to 29000 | 690 |
| From 29001 to 29200 | 700 |
| From 29201 to 34700 | 710 |
| From 34701 to 35000 | 720 |
| From 35001 to 35100 | 710 |
| From 35101 to 35200 | 700 |
| From 35201 to 40000 | 690 |
| From 40001 to 80000 | $690^{*}(80000-$ taxable income $) / 40000$ |
| More than 80000 | 0 |

The child tax credit is calculated as a function of net income:

- for families with only one child: 800*(95 000 - taxable income)/95 000;
- for families with more than one child the amount of 95000 is increased by 15000 for each child other than the first, for every children (including the first one).

Families with more than 3 children receive an additional tax credit of EUR 200 per child.
A lone parent receives an actual tax credit for the first child equal to the maximum of the spouse tax credit and the child tax credit.

Tax credits for children have to be equally shared between the parents; different shares are no longer allowed.

If the spouse's tax liable net of the PAYE tax credit is less than his/her share (50 per cent) in the child tax credit, the entire child tax credit is provided to the principal earner.

### 1.1.2.3. Main non standard tax allowances and tax credits

- Other compulsory contributions.
- Periodical benefits allowed to the spouse fixed by judicial authority.
- Charitable donations to certain religious institutions (up to EUR 1 032.91).
- Medical and assistance expenses incurred by handicapped persons.
- Expenses to restore one's own residence at 36 per cent of full expenses (up to EUR 48 000), apportioned into 5 or 10 annual allowances of the same amount.
- Expenses for energy requalification of buildings at 55 per cent of full expenses (up to EUR 100 000) apportioned into 3 annual allowances of the same amount.
- Expenses for the replacement of covers, windows and shutters and for the installation of solar panels at 55 per cent of full expenses (up to EUR 60000 ).

For the following expenses, a tax credit of 19 per cent of each incurred expense is allowed:

- Mortgage loan interest (up to EUR 4000 ).
- Most medical expenses that exceed EUR 129.11.
- Payments to insurance funds up to EUR 1 291.14.
- Expenses to attend secondary school and university courses; in case such courses are private, the expenses allowed cannot exceed those foreseen for State courses.
- Expenses for nursery school (up to EUR 632 for each child).
- Rents paid by out of town students (up to EUR 2 633).
- Funeral charges up to EUR 1 549.37.
- Expenses for disabled persons.
- Donations to political parties (ranging from EUR 51.65 to EUR 103 291.38).
- Payments to foundations (up to EUR 2 065.83).
- Expenses related to sport activities for children between 5 and 18 years of age (up to EUR 210 per child).


### 1.1.3. Tax schedule

The following tax schedule is applied to taxable income:

| Bracket (EUR) | Rate (\%) |
| :--- | :---: |
| Up to 15000 | 23 |
| Over 15000 up to 28000 | 27 |
| Over 28000 up to 55000 | 38 |
| Over 55000 up to 75000 | 41 |
| Over 75000 | 43 |

### 1.2. State and local taxes

These surcharges are due only by taxpayers who pay individual income tax IRPEF (imposta sul reddito delle persone fisiche).

### 1.2.1. Regional surcharge tax

This surcharge tax has been introduced in 1997. The tax is levied by each region on resident taxpayers' total taxable income at a discretionary rate, which must fall within an established range. As from the year 2000, this range is 0.9-1.4 per cent.

The figure given in the 2010 parameter values table under the heading "Regional and local tax" includes the regional surcharge tax paid in the most representative city which is Rome (Lazio); the rate is 1.7 per cent in 2011.

### 1.2.2. Local surcharge tax

This surcharge tax has been introduced in 1999. The tax may be levied by each local government at an initial rate that cannot exceed 0.2 per cent. If the tax is levied, the local government can increase the initial rate, on a yearly basis, up to a maximum of 0.5 per cent. Each yearly increase cannot exceed 0.2 per cent.

The figure given in the 2011 parameter values table under the heading "Regional and local tax" includes the local surcharge tax paid in the most representative city which is Rome; the rate is 0.9 per cent in 2011.

The surcharge rates can be adjusted above the fixed roof because of the health care losses.

## 2. Compulsory social security

### 2.1. Employee contributions

- Rate and ceiling
* The average rate is 9.49 per cent on earnings up to EUR 43042.
* The average rate is 10.49 per cent on earnings over EUR 43042 and up to EUR 93622 .
* For earnings exceeding EUR 93 622, the employee pays a fixed amount given by ( $0.0949 \times 43042$ ) $+0.1049 \times(93622-43042)$.
- Distinction by marital status or sex
* None


### 2.2. Employer contributions

- Contributions equal 32.08 per cent on earnings up to EUR 93 622. For earnings exceeding EUR 93 622, the employer pays a fixed amount given by 0.3208 x 93622 .


## 3. Universal cash transfers

### 3.1. Amount for spouse and for dependent children

Cash transfers are granted for family income that is:

- composed of at least 70 per cent wage and/or pension income;
- below a given threshold set by law each year.

Family income is the sum of the incomes of all individuals comprising the family.
Cash transfers are determined each year by INPS (Istituto Nazionale di Previdenza Sociale), the public body that collects and manages the social security contributions for dependent workers for the period beginning in July of that year ( $t$ ) to June in the following year $(t+1)$ and relate to family income earned in the previous year $(t-1)$.

As such, the transfers granted in any given year are determined by the family income in the previous two years. The following table provides a description of the calculations.

| Transfer granted in year $t$ | Relevant amounts as given in INPS tables |
| :--- | :--- |
| January-June | The amount of cash transfers is that given in the INPS table published in July $(t-1)$. The transfers are <br> granted with reference to family income earned in year $(t-2)$. |
| July-December | The amount of cash transfers is that given in the INPS table published in July $t$. The transfers are granted <br> with reference to family income earned in year $(t-1)$. |

For the purposes of Taxing Wages, the cash transfers that are calculated represent those amounts that would be received by the family based on their incomes for that year even though these amounts would only begin to be paid in July of the following year.

## 4. Main changes

The "extraordinary bonus" for low income families has been abolished.

## 5. Memorandum Item

### 5.1. Identification of an AW

The data refer to the annual earnings of average workers.

### 5.2. Contributions by employers to private pension, health, etc., schemes

In addition to the mandatory social security contributions employers may pay contributions to private pension schemes (currently about forty pension funds). Employer's contributions are included in the taxable income of the employee.

Employees may also choose to contribute to the pension funds with all or part of the retirement allowance that is otherwise withheld by the employers. In this case the employee can deduct from his taxable income an amount equal to twice the amount of the contribution paid to fund.

Employer's contributions to private health insurance schemes are not included in the taxable income of the employee up to the limit of EUR 3 615.20.

2011 Parameter values

| Average earnings/yr | Ave_earn | 29030 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Tax schedule | tax_sch | 0.23 | 15000.00 |
|  |  | 0.27 | 28000.00 |
|  |  | 0.38 | 55000.00 |
|  |  | 0.41 | 75000.00 |
|  |  | 0.43 | 999999999.99 |
| Tax credits |  |  |  |
| - Employment |  |  |  |
|  | emp_add | 0 | 1840.00 |
|  |  | 8000 | 1338.00 |
|  |  | 15000 | 1338.00 |
|  |  | 23000 | 1348.00 |
|  |  | 24000 | 1358.00 |
|  |  | 25000 | 1368.00 |
|  |  | 26000 | 1378.00 |
|  |  | 27700 | 1363.00 |
|  |  | 28000 | 1338.00 |
|  |  | 55000 | 0.00 |
| - Spouse | Spouse_cred | 0 | 800.00 |
|  |  | 15000 | 690.00 |
|  |  | 29000 | 700.00 |
|  |  | 29200 | 710.00 |
|  |  | 34700 | 720.00 |
|  |  | 35000 | 710.00 |
|  |  | 35100 | 700.00 |
|  |  | 35200 | 690.00 |
|  |  | 40000 | 690.00 |
|  |  | 80000 | 0 |
| limit | Sp_crd_lim | 2840.51 |  |
| - Child credit | Child_credit | 800 |  |
| - Additional child credit | add_child | 200 |  |
| Regional and local tax | reg_rt | 0.026 |  |
| Social security contributions | SSC_sch | 0.0949 | 43042 |
|  |  | 0.1049 | 93622 |
|  |  | 0.00 | 999999999.99 |
| Employer contributions | Empr_sch | 0.3208 | 93622 |
|  |  | 0.00 | 999999999.99 |
| Cash transfers: |  |  |  |
| family allowance schedule (t) |  |  |  |
| - married couple | trans_sch | Table is |  |
| - single parent | Trans_sch_sp | Table is |  |

## 2011 Tax equations

The equations for the Italian system in 2011 are mostly repeated for each individual of a married couple. But the spouse credit is relevant only to the calculation for the principal earner and any child credit which the spouse is unable to use is transferred to the principal. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | B | SSC |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | earn-tax_al1 |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc, tax_sch) |
| 6. Tax credits: |  |  |  |
| Employment credit | emp_cr_max | P | VLOOKUP(tax_inc, emp_add, 2)) |
|  | emp_cr_max_spouse | S | IF(tax_inc_spouse=0.0,(VLOOKUP(tax_inc_spouse,emp_add,2))) |
|  | emp_cr | P | ```MIN(CG_tax_excl, IF(tax_inc<=8000,emp_cr_max, IF(tax_inc<=15000,emp_cr_max+502*(15000-tax_inc)/7000, IF(tax_inc>55000,emp_cr_max,emp_cr_max*(55000-tax_inc)/40000)))``` |
|  |  | S | MIN(CG_tax_excl_spouse, IF(tax_inc_spouse<=8000,emp_cr_max_spouse, IF(tax_inc_spouse<=15000,emp_cr_max_spouse+502*(15000-tax_inc_spouse)/7000, IF(tax_inc_spouse>55000,emp_cr_max_spouse,emp_cr_max_spouse* (55000-tax_inc_ spouse)/40000)))) |
| Spouse credit | spouse_cr | P | ```IF(Married=1, IF(tax_inc_spouse>Sp_crd_lim,0, IF(tax_inc>80000.0, IF(tax_inc<15000.800-110*tax_inc/15000, IF(tax_inc>40000.690*(80000-tax_inc)/ 40000,VLOOKUP(tax_inc,Spouse_cred,2))))),0)``` |
| Child credit | child_cr_princ | P |  |
|  | child_crfull_spouse | S | IF(Children $=0.0$,(spouse_cr=0)*Married ${ }^{*}\left(800^{*}(95000-\right.$ tax_inc_spouse)/ $95000+$ (Children-1)* $800^{*}(110000-$ tax_inc_spouse)/110000)) |
|  | child_crpct_spouse | S | IF(child_crfull_spouse>0,IF((CG_tax_excl_spouse-emp_cr_spouse)/ child_crfull_spouse<0.5.0,0.5),0) |
|  | child_cr_spouse | S | child_crfull_spouse*child_crpct_spouse |
| Total | tax_cr | B | MIN(emp_cr+spouse_cr+child_cr, CG_tax_excl) |
| 7. CG tax | CG_tax | B | Positive(CG_tax_excl-tax_cr) |
| 8. State and local taxes | reg_rt | B | IF(CG_tax=0, 0, tax_inc*reg_rt) |
| 9. Employees' soc security | SSC | B | Tax(earn, SSC_sch) |
| 11. Cash transfers |  | J | IF(Children=0.0,12*VLOOKUP(earn_total, IF(Married,trans_sch,trans_sch_sp),1+Children)) |
| 13. Employer's soc security | SSC_empr | B | Tax(earn, Empr_sch) |

Key to range of equation: $B$ calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Japan

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Japan 2011

## The tax/benefit position of single persons



## Japan 2011

## The tax/benefit position of married couples

1. Gross wage earnings
2. Standard tax allowances
Basic allowance
Married or head of family

Dependent children
Deduction for social security contributions and income taxes
Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income
4. Central government taxable income (1-2+3)
5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

Gross earnings
Taxable income
10. Total payments to general government $(7+8+9)$

| Total | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  | 94178 | 146353 | 191036 | 146353 |
|  | 136356 | 210850 | 300217 | 274350 |
|  |  |  |  |  |
|  | 641569 | 855425 | 1069282 | 855425 |
|  |  |  |  |  |
| Total | 641569 | 855425 | 1069282 | 855425 |
|  | 872102 | 1212629 | 1560535 | 1276129 |

11. Cash transfers from general government

For head of family
For two children
12. Take-home pay (1-10+11)
13. Employer's compulsory social security contributions
14. Average rates

Income tax
Employees' social security contributions
Total payments less cash transfers
Total tax wedge including employer's social security contributions
15. Marginal rates

Total payments less cash transfers: Principal earner
Total payments less cash transfers: Spouse
Total tax wedge: Principal earner
Total tax wedge: Spouse

Wage level (per cent of average wage)
Number of children
100-
4781406

| 380000 | 760000 | 760000 | 760000 |  |
| ---: | ---: | ---: | ---: | ---: |
| 380000 | 0 | 0 | 0 |  |
|  | 0 | 0 | 0 | 0 |
| 641569 | 855425 | 1069282 | 855425 |  |
| 1496281 | 2146281 | 2632563 | 2146281 |  |
|  |  |  |  |  |
| Total | 2897850 | 3761707 | 4461844 | 3761707 |
|  | 0 | 0 | 0 | 0 |
|  | 1883556 | 2613502 | 3507166 | 2613502 |
|  |  |  |  |  |
|  | 94178 | 146353 | 191036 | 146353 |

Total | 294000 | 294000 | 294000 | 0 |  |
| ---: | ---: | ---: | ---: | ---: |
|  | 294000 | 294000 | 294000 | 0 |
|  | 4203304 | 5456580 | 6702476 | 5099080 |
|  | 678864 | 905152 | 1131440 | 905152 |
|  |  |  |  |  |
|  | $4.8 \%$ | $5.6 \%$ | $6.2 \%$ | $6.6 \%$ |
|  | $13.4 \%$ | $13.4 \%$ | $13.4 \%$ | $13.4 \%$ |
| $12.1 \%$ | $14.4 \%$ | $15.9 \%$ | $20.0 \%$ |  |
|  | $23.0 \%$ | $25.1 \%$ | $26.4 \%$ | $30.0 \%$ |
|  |  |  |  |  |
|  | $23.4 \%$ | $26.7 \%$ | $26.7 \%$ | $26.7 \%$ |
| $21.4 \%$ | $26.4 \%$ | $21.9 \%$ | $26.4 \%$ |  |
| $32.9 \%$ | $35.8 \%$ | $35.8 \%$ | $35.8 \%$ |  |
|  | $31.1 \%$ | $35.6 \%$ | $31.6 \%$ | $35.6 \%$ |

Th
Lhe national currency is the Yen (JPY). In 2011, JPY 79.84 was equal to USD 1. In that year, the average worker is assumed to earn JPY 4781406 (Secretariat estimate). In Japan, the central government income tax year is a calendar year and the local government income tax year is from April to March. The calculations in this report are based on the tax rules and rates, which are applicable the 1st April.

## 1. Personal income tax systems

### 1.1. Central government income tax

### 1.1.1. Tax unit

Each individual is taxed separately.

### 1.1.2. Allowances and tax credits

### 1.1.2.1. Standard reliefs

- Basic allowance: a taxpayer may deduct JPY 380000 as a basic allowance from his or her income.
- Allowance for spouse: allowance equal to JPY 380000 is given to a resident taxpayer who lives with a spouse whose income does not exceed JPY 380000.
- Special allowance for spouse: the allowance included in the following table is given to a resident taxpayer who lives with a spouse:

| Spouse's income | Amount |
| ---: | ---: |
| $0-380000$ | 0 |
| 380 001-399 999 | 380000 |
| 400 000-449 999 | 360000 |
| 450 000-499 999 | 310000 |
| 500 000-549 999 | 260000 |
| 550 000-599 999 | 210000 |
| 600 000-649 999 | 160000 |
| $650000-699999$ | 110000 |
| $700000-749999$ | 60000 |
| $750000-759$ 999 | 30000 |
| 760000 or more | 0 |

- Allowance for dependents: if a resident taxpayer has children and other relatives whose income does not exceed JPY 380000 and who are over 15 years old, an allowance of JPY 380000 is given for each dependent.
- Special allowance for dependents: if a resident taxpayer has dependents whose income does not exceed JPY 380000 and who are between 19 and 22 years old, an allowance of JPY 630000 is given for each dependent instead of the allowances for dependents mentioned above.
- Deduction for social insurance premiums: the amount of social insurance premiums for a resident taxpayer or his/her dependents shall be deducted from his/her income without any ceiling.
- Employment income deduction: the following amounts may be deducted from employment income in calculating taxable income:
* If gross employment income does not exceed JPY 1800000 the deduction is 40 per cent of salaries (etc.), but the minimum amount deductible is JPY 650000.
* If gross employment income exceeds JPY 1800 000, but not JPY 3600000 , the deduction is JPY 180000 plus 30 per cent of salaries.
* If gross employment income exceeds JPY 3600 000, but not JPY 6600000 , the deduction is JPY 540000 plus 20 per cent of salaries.
* If gross employment income exceeds JPY 6600 000, but not JPY 10000 000, the deduction is JPY 1200000 plus 10 per cent of salaries.
* If gross employment income exceeds JPY 10000 000, the deduction is JPY 1700000 plus 5 per cent of salaries.


### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Credit for housing loans: a resident taxpayer who constructs, purchases, enlarges or rebuilds a house and finances the cost by means of a housing loan and uses the property as his or her own dwelling is entitled to an income tax credit up to the amount described below for 10 years (or 15 years) after the first use of the house, provided that the floor space is not less than $50 \mathrm{~m}^{2}$ and that at least half of the floor space is used as the owner-occupied dwelling. The base of the tax credit equals the balance of the housing loan debt amount, calculated at the end of each year, consisting of the loan obtained not only from private financial institutions but also from public institutions. This tax credit cannot be claimed by those whose total income is not less than JPY 30 million.

The rates of the tax credits correspond to the year in which residence in the house commenced. The rates are as follows:

| Residence starts: | From 1 January in 2005 to 31 December 2005 | From 1 January in 2006 to 31 December 2006 | From 1 January in 2007 to 31 December 2007 |
| :---: | :---: | :---: | :---: |
| Tax credit rate | If the remaining housing loan balance at the end of year (R.H.L.B.) <br> is JPY 40 million or less: <br> The R.H.L.B. x $1.0 \%$ <br> (for first 8 years) <br> The R.H.L.B. x $0.5 \%$ <br> (for last 2 years) | If the R.H.L.B. is JPY 30 million or less: <br> The R.H.L.B. x $1.0 \%$ <br> (for first 7 years) <br> The R.H.L.B. x 0.5\% <br> (for last 3 years) | If the R.H.L.B. is JPY 25 million or less: <br> The R.H.L.B. x $1.0 \%$ [or 0.6\%] <br> (for first 6 years [or 10 years]) <br> The R.H.L.B. x 0.5\% [or 0.4\%] <br> (for last 4 years [or 5 years]) |
| Maximum tax credit amount (for each year) | JPY 400000 <br> JPY 200000 (for last 2 years) | JPY 300000 <br> JPY 150000 (for last 3 years) | JPY 250000 [or 150 000] JPY 125000 [or 100 000] (for last 4 years [or 5 years]) |
| Maximum tax credit amount (for the deductible period in total) | JPY 3.6 million | JPY 2.55 million | JPY 2 million |
| Tax credit rate | If the R.H.L.B. is JPY 20 million or less: <br> The R.H.L.B. x $1.0 \%$ [or 0.6\%] <br> (for first 6 years [or 10 years]) <br> The R.H.L.B. x 0.5\%[or 0.4\%] <br> (for last 4 years [or 5 years]) | If the R.H.L.B. is JPY 50 million or less: The R.H.L.B. x $1.0 \%$ | If the R.H.L.B. is JPY 40 million or less: The R.H.L.B. x $1.0 \%$ |


| Residence starts: | From 1 January in 2008 <br> to 31 December 2008 | From 1 January in 2009 <br> to 31 December 2010 | From 1 January in 2011 <br> to 31 December 2011 |
| :--- | :--- | :--- | :--- |
| Maximum tax credit <br> amount (for each year) | JPY 200 000 [or 120 000] <br> JPY 100 000 [or 80 000] (for last 4 years <br> [or 5 years]) | JPY 500 000 | JPY 400 000 |
| Maximum tax credit <br> amount (for the <br> deductible period in total) | JPY 1.6 million | JPY 5 million | JPY 4 million |

- Deduction for life insurance premiums and personal pension plan premiums: if a resident taxpayer pays insurance premiums on life insurance contracts and the recipient of the insurance proceeds is the taxpayer, his/her spouse or other relatives living with him/her, the portion of these insurance premiums which does not exceed the maximum prescribed below, is deductible from ordinary income, retirement income or timber income.
In addition, if a resident taxpayer pays insurance premiums for a "qualified personal pension plan (insurance type)", and the recipient of the pension payment is the taxpayer or his/her spouse under a specific condition, the portion of such premiums which does not exceed the maximum prescribed below, is deductible from ordinary income, retirement income, or timber income.

| Annual Premium Paid (JPY) |  |
| :---: | :---: |
| Over | Not over |
|  | 25000 |
| 25000 | 50000 |
| 50000 | 100000 |
| 100000 | - |
| Total amount of premiums paid (1) |  |
|  |  |

The insurance premiums of this type of pension plan are not considered as the life insurance premiums described above. Thus, a resident tax payer can claim the deduction up to JPY 100000 in total. For the insurance contracts made on or after 1 January 2012, the maximum deduction will be increased to JPY 120000 from JPY 100000 . A resident taxpayer can claim the deduction up to JPY 40000 for life insurance premiums, personal pension plan premiums and long-term care insurance premiums respectively.

- Deduction for medical expenses: if a resident taxpayer pays bills for medical or dental care for himself/herself or for his/her spouse or other relatives living with him/her and the amount of such expenses (excluding those recovered by insurance) exceeds the lesser of JPY 100000 or 5 per cent of the total of his/her ordinary income, retirement income and timber income, the excess amount is deductible from his/her ordinary income, retirement income or timber income. The maximum deduction is JPY 2 million.
- Deduction for earthquake insurance premiums: earthquake insurance premiums up to JPY 50000 can be deducted from income. Although the income deduction for casualty insurance premiums was basically abolished, the deduction for long-term casualty insurance premiums remains available if contracted before 31 December 2006. The maximum deduction for long-term casualty insurance premiums is JPY 15000 . If an individual applies for both a deduction for earthquake insurance premiums and a deduction for long-term casualty premiums, the maximum deductible amount is JPY 50000 in total.


### 1.1.3. Tax schedule

| Taxable income (JPY) | Tax rate (\%) | Deductible amounts for each <br> bracket (JPY) |  |
| :---: | :---: | :---: | :---: |
| Over | Not over | (A) | (B) |
|  | 1950000 | 5 | - |
| 3950000 | 3300000 | 10 | 97500 |
| 6950000 | 6950000 | 20 | 427500 |
| 9000000 | 9000000 | 23 | 636000 |
| 18000000 | 18000000 | 33 | 1536000 |

1. The fraction of taxable income that is less than JPY 1000 is rounded down.

Tax liability is obtained by multiplying the taxable income by tax rate (A) and deducting the amount (B). For example, income tax due on taxable income of JPY 7 million is:
$7000000 \times 0.23$ (A) - 636000 (B) = JPY 974000.

### 1.2. State and local income taxes

### 1.2.1. General description of the system

State and local income taxes in Japan consist of prefectural inhabitant's tax levied by prefectures and municipal inhabitant's tax levied by cities, towns and villages. The prefectural inhabitant's tax is collected together with the municipal inhabitant's tax by cities, towns and villages.

### 1.2.2. Tax base

Basically, prefectural and municipal inhabitants' taxes (local taxes) consist of two parts; one is proportional taxable income and the other is a fixed per capita amount. The way to compute the taxable income of local taxes is similar to that of the previous year's national income tax. The main difference is the amount of reliefs. For example, the amount of Basic Allowance, Allowance for Spouse, Allowance for Dependants is JPY 330 000, the amount of Special Allowance for dependants is JPY 450000 , etc. As from 1 April 2012, deduction for dependents (up to 15 years old) (JPY 330.000) and the additional part of the deduction for the specified dependents (between 16 and 18 years) (JPY 120.000) will be abolished along with the change in the central government income tax.

### 1.2.3. Tax rate

- The standard fixed (annual) per-capita amount of Prefectural inhabitants tax is JPY 1000.
- The standard fixed (annual) per-capita amount of Municipal inhabitants tax is JPY 3000.
- The standard rate of the local taxes equals a proportional rate of 10 per cent (Prefectural inhabitant's tax: 4 per cent, Municipal inhabitant's tax: 6 per cent).*

[^13]| Taxable income for local income <br> tax purposes | The tax credit |
| :--- | :--- |
| JPY 2000 000 or less | 5 per cent of the lesser of: <br> - total amount of differences in personal reliefs between those for national income tax purposes and for <br>  <br> local income tax purposes; or <br> - taxable income for local income tax purposes. |
| More than JPY 2000 000 | [(total amount of differences in personal reliefs between those for national income tax purposes and for <br> local income tax purposes) - (taxable income for local income tax purposes - JPY 2000000$)] ~$ <br> minimum credit is JPY 2500 |

Note: Local authorities do not levy the per-capita rate and the proportional rate on a taxpayer whose previous year's income does not exceed a certain amount. For example, in special wards of Tokyo, this threshold is calculated as follows:

- Per-capita rate: [1 + number of spouse and dependent(s) qualified for the allowance for spouse/dependents] * 350.000 [+210.000 in case the taxpayer has a qualified spouse or dependent(s)].
- Proportional rate: [1 + number of spouse and dependent(s) qualified for the allowance for spouse/dependents] * $350.000[+320.000$ in case the taxpayer has a qualified spouse or dependent(s)].


### 1.2.4. Tax rate selected for this study

Country-wide rates as described above. The local income tax rates chosen for the purpose of this Report represent a country-wide average.

## 2. Compulsory social security contribution to schemes operated within the government sector

### 2.1. Employees' contributions

### 2.1.1. Pension

8.029 per cent (8.206 per cent as from September 2011) of total remuneration (standard remuneration and bonuses), up to the insurable ceiling of JPY 620000 (monthly).

### 2.1.2. Sickness

As from April 2011, about 4.75 per cent, (about 4.67 per cent before March 2011), of total remuneration, (standard remuneration and bonuses), up to the insurable ceiling of JPY 1210 000, (monthly).

### 2.1.3. Unemployment

0.6 per cent of total remuneration.

### 2.1.4. Work injury and family allowance

None.

### 2.2. Employers' contributions

### 2.2.1. Pensions

8.029 per cent (8.206 per cent as from September 2011) of total remuneration, up to the insurable ceiling of JPY 620000 (monthly).

### 2.2.2. Sickness

As from April 2011, about 4.75 per cent (about 4.67 per cent before March 2011) of total remuneration up to the insurable ceiling of JPY 1210000 (monthly).

### 2.2.3. Unemployment

0.95 per cent of total remuneration.

### 2.2.4. Work injury

0.3 per cent to 10.3 per cent of total remuneration, the contribution rate depending on each industry's accident rate over the last three years and other factors. There are thirty-one rates for fifty-five industrial categories at present. For the calculations in this publication the rate used is 0.3 per cent.

### 2.2.5. Family allowance

0.13 per cent of total remuneration.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

Not available.

### 3.2. Transfers for dependent children

Until March 2010, JPY 10000 (per month) under the age of three, and JPY 5000 (per month) for the first and second child from the age of three until the first March after the age of twelve and JPY 10000 (per month) for the third and subsequent children from the age of three until the first March after the age of twelve. Families of which the principal's gross earnings net of certain deductions exceeds JPY 5320000 (JPY 4600000 for self-employed), plus JPY 380000 per dependent are not entitled to child transfers.

From April 2010 to September 2011, JPY 13000 (per month) is paid to parents/guardians regardless of their income for each child until he/she graduates from junior high school.

From October 2011 to March 2012:
a) JPY 15000 (per month) is paid to parents/guardians regardless of their income for each child who is under 3 years old or for a third or subsequent child until he/she graduates from elementary school.
b) JPY 10000 (per month) is paid to parents/guardians regardless of their income for each child except (a) until he/she graduates from junior high school.

## 4. Main changes in the tax/benefit systems since 1998

As part of the Fiscal Year 1999 tax reform, the highest marginal rate of the personal income tax imposed by the central government was reduced from 50 per cent to 37 per cent. The top rate of the local inhabitants' tax was reduced from 15 per cent to 13 per cent. A proportional tax reduction was granted with respect to the national income tax and the local inhabitants tax. The amount is equal to the lesser of 20 per cent (local inhabitants tax: 15 per cent) of the amount of tax before reduction or JPY 250000 (local inhabitants tax: JPY 40000 ).

As part of the FY 2005 tax reform, the rate of the reduction was reduced from 20 per cent to 10 per cent (local inhabitants tax: from 15 per cent to 7.5 per cent) and the ceiling was reduced from JPY 250000 to JPY 125000 (local inhabitants' tax from JPY 40000 to JPY 20 000) as from 2006 (local inhabitants tax: FY 2006). And as part of the FY 2006 tax reform, the reduction was abolished as from 2007 (local inhabitants tax: FY 2007).

As part of the FY 2006 tax reform, the progressive rate structure of national income tax was reformed into a 6 brackets structure with tax rates ranging from 5 per cent to 40 per cent, and the rate of local inhabitants' tax became proportional at a rate of 10 per cent.

Eligible age for transfers for dependent children was raised from three to six as from 1 June 2001, from six to nine as from 1 April 2004 and from nine to twelve as from 1 April 2006. It has been doubled to JPY 10000 for the first and second child under the age of three as from 1 April 2007.

As from 2010, 13000 yen per month is paid to parents/guardians regardless of their income for each child until he/she graduates from junior high school.

## 5. Memorandum item

### 5.1. Average gross annual wage earnings calculation

The source of calculation is the Basic Survey on Wage Structure, published by the Ministry of Health, Labour and Welfare. This survey covers all establishments with ten or more regular employees over the whole country, and contains statistical figures for monthly contractual cash earnings in June and annual special cash earnings (such as bonuses) received by various categories of workers. Male and female workers of the manufacturing, mining and quarrying, construction, wholesale and retail trade, accommodation and food service activities, financial and insurance activities, real estate activities sector are the point of departure. Their gross annual earnings have been calculated by multiplying monthly contractual cash earnings by 12 and adding any annual special cash earnings. In the Basic Survey, sickness and unemployment compensations are excluded from cash earnings, but average overtime and bonuses are included.

As far as the Basic Survey is concerned, it covers the whole country, and no special assumption is made regarding the place of residence of the average worker.

### 5.2. Employer contributions to private pension and health schemes

No information available.

2011 Parameter values

|  | Ave_earn | 4781406 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Allowances for central tax | basic_al | 380000 |  |
|  | spouse_al | 380000 |  |
|  | Spouse_al_sp | 0 | 0 |
|  |  | 380001 | 380000 |
|  |  | 400000 | 360000 |
|  |  | 450000 | 310000 |
|  |  | 500000 | 260000 |
|  |  | 550000 | 210000 |
|  |  | 600000 | 160000 |
|  |  | 650000 | 110000 |
|  |  | 700000 | 60000 |
|  |  | 750000 | 30000 |
|  |  | 760000 | 0 |
| spouse_al_ceil |  | 380000 |  |
|  | child_al | 0 |  |
| Employment income deduction | emp_inc_min | 650000 |  |
|  | emp_inc_sch | 0.4 | 1800000 |
|  |  | 0.3 | 3600000 |
|  |  | 0.2 | 6600000 |
|  |  | 0.1 | 10000000 |
|  |  | 0.05 |  |
| Central gov't tax schedule | tax_sch | 0.05 | 1950000 |
|  |  | 0.10 | 3300000 |
|  |  | 0.20 | 6950000 |
|  |  | 0.23 | 9000000 |
|  |  | 0.33 | 18000000 |
|  |  | 0.40 |  |
| Allowances for state/local tax | s_basic_al | 330000 |  |
|  | s_spouse_al | 330000 |  |
|  | s_spouse_al_sp | 0 | 0 |
|  |  | 380001 | 330000 |
|  |  | 450000 | 310000 |
|  |  | 500000 | 260000 |
|  |  | 550000 | 210000 |
|  |  | 600000 | 160000 |
|  |  | 650000 | 110000 |
|  |  | 700000 | 60000 |
|  |  | 750000 | 30000 |
|  |  | 760000 | 0 |
|  | S_spouse_al_ceil | 380000 |  |
|  | s_child_al | 330000 |  |
| Prefectural tax | pref_per_cap | 1000 |  |
| Municipal tax | mun_per_cap | 3000 |  |
|  | local_sch | 0.1 |  |
| Social security contributions | SSC_pens | 0.08088 |  |
|  | pens_ceil | 7440000 |  |
|  | SSC_sick | 0.0473 |  |
|  | sick_ceil | 14520000 |  |
|  | SSC_unemp | 0.0060 |  |
| Employer contribution proportion | SSC_empr_unemp | 0.0095 |  |
|  | SSC_empr_oth | 0.0043 |  |
| Child transfer | Child_transfer | 147000 |  |

## 2011 Tax equations

The equations for the Japanese system are mostly on an individual basis. But the tax allowances for the spouse and for children are relevant only to the calculation for the principal earner. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: |  |  |  |
|  | tax_al | P | basic_al + Married* (earn_princ - (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<=spouse_al_ceil)*spouse_al + Married*VLOOKUP(Positive(earn_princ (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))),spouse_al_sp,2,TRUE) + Children*child_al + MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch)) + SSC_princ |
|  |  | S | MIN(earn_spouse, basic_al + MAX(emp_inc_min, Tax(earn, emp_inc_sch)) + SSC_spouse) |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | Positive(Tax(tax_inc, tax_sch)) |
| 6. Tax credits: | tax_cr | B | 0 |
| 7. CG tax | CG_tax | B | CG_tax_excl |
| 8. State and local taxes |  |  |  |
| Local taxable income | local_tax_inc | P | Positive(earn_princ- <br> (s_basic_al+Married*((earn_spouse-(earn_spouse>0)*MAX(emp_inc_min,Tax(earn_spouse,emp_inc _sch))<=s_spouse_al_ceil)*s_spouse_al+VLOOKUP(Positive(earn_spouse-(earn_spouse>0)*MAX(e mp_inc_min,Tax(earn_spouse,emp_inc_sch))),s_spouse_al_sp,2,TRUE))+Children*s_child_al+ MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))+SSC_princ)) |
|  |  | S | Positive(earn_spouse- <br> (s_basic_al+(earn_spouse>0)*MAX(emp_inc_min,Tax(earn_spouse,emp_inc_sch))+SSC_spouse)) |
| Local tax | local_tax | P | (earn_princ-MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))>350000+(Married* (earn_princ (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<=s_spouse_al_ceil)+ Children>0) ${ }^{\star}\left(\left(\right.\right.$ Married ${ }^{\star}($ earn_princ - (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<=s_spouse_al_ceil)+Children)* $350000+210000$ )) ${ }^{*}($ pref_per_cap+mun_per_cap)+ (earn_princ-MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch)) $>350000+$ (Married*(earn_princ (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<=s_spouse_al_ceil)+ Children>0)*((Married* (earn_princ - (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<=s_spouse_al_ceil)+Children)*350000+320000))*Positive(Tax(Positive(earn_spouse-tax_al_spouse),local_sch)-IF(Positive(earn_spouse-tax_al_spouse)>2000000,MAXA(2500,((Positive (earn_spouse-tax_al_spouse)-MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))) <br> -(Positive(earn_spouse-tax_al_spouse)-2000000))*5\%),MINA((Positive(earn_spouse-tax_al_spouse) -MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))),Positive(earn_spouse-tax_al_spouse))*5\%)) |
|  |  | S | (earn_spouse - (earn_spouse>0)*MAX(emp_inc_min,Tax(earn_spouse, emp_inc_sch)) $>350000)^{\star}$ (pref_per_cap+mun_per_cap+Positive(Tax(local_tax_inc_spouse,local_sch)-IF(local_tax_i nc_spouse>2000000,MAXA(2500,((local_tax_inc_spouse-tax_inc_spouse)-(local_tax_inc_spouse-20 $\left.00000))^{*} 5 \%\right)$,MINA((local_tax_inc_spouse-tax_inc_spouse),local_tax_inc_spouse)*5\%))) |
| 9. Employees' soc security | SSC | B | SSC_pens*MIN(earn, pens_ceil)+SSC_sick*MIN(earn, sick_ceil)+SSC_unemp*earn |
| 11. Cash transfers | cash_trans | B | IF(Children>0,Child_transfer*Children, 0 ) |
| 13. Employer's soc security | SSC_empr | B | SSC_pens*MIN(earn, pens_ceil)+SSC_sick*MIN(earn, sick_ceil)+(SSC_empr_unemp+SSC_empr_oth)*earn |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation).

## Korea

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Korea 2011

## The tax/benefit position of single persons



## Korea 2011

## The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage)
Number of children
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income
4. Central government taxable income (1-2+3)
5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions Gross earnings
Taxable income
10. Total payments to general government $(7+8+9)$
11. Cash transfers from general government

For head of family
For two children

| 12. Take-home pay (1-10+11) | Total | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
| 13. Employers' compulsory social security contributions | 32666696 | 43545123 | 54346746 | 42752603 |
| 14. Average rates | 3642494 | 4856658 | 6070823 | 4856658 |
| Income tax |  |  |  |  |
| Employees' social security contributions | $1.6 \%$ | $1.6 \%$ | $1.8 \%$ | $3.3 \%$ |
| Total payments less cash transfers | $8.1 \%$ | $8.1 \%$ | $8.1 \%$ | $8.1 \%$ |
| Total tax wedge including employer's social security contributions | $9.6 \%$ | $9.7 \%$ | $9.8 \%$ | $11.3 \%$ |
| Marginal rates | $17.9 \%$ | $17.9 \%$ | $18.1 \%$ | $19.4 \%$ |
| Total payments less cash transfers: Principal earner |  |  |  |  |
| Total payments less cash transfers: Spouse | $17.5 \%$ | $17.5 \%$ | $17.5 \%$ | $21.6 \%$ |
| Total tax wedge: Principal earner | $9.7 \%$ | $9.4 \%$ | $11.8 \%$ | $9.4 \%$ |
| Total tax wedge: Spouse | $25.1 \%$ | $25.1 \%$ | $25.1 \%$ | $28.8 \%$ |
|  | $18.0 \%$ | $17.7 \%$ | $19.8 \%$ | $17.7 \%$ |

12. Take-home pay $(1-10+11)$
13. Employers' compulsory social security contributions
14. Average rates

Income tax

Total payment less
Total tax wedge including employer's social security contributions

Total payments less cash transfers: Principal earner

Totaltax wedge: Principal earner
Total tax wedge: Spouse

| Total | 22777649 | 32345776 | 35727776 | 27345776 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 13377177 | 15860659 | 24530267 | 20860659 |
|  | 926577 | 1210585 | 1730762 | 1960585 |
|  |  |  |  |  |
|  | 402973 | 502928 | 769229 | 532455 |


| Total | 402973 | 502928 | 769229 | 532455 |
| :--- | ---: | ---: | ---: | ---: |
|  | 523604 | 707658 | 961533 | 1428131 |
|  | 52360 | 70766 | 96153 | 142813 |
|  |  |  |  |  |
|  | 2912166 | 3882889 | 4853611 | 3882889 |
|  |  |  |  |  |
| Total | 2912166 | 3882889 | 4853611 | 3882889 |
|  | 3488130 | 4661312 | 5911297 | 5453832 |

Th
he national currency is the Won (KRW). In 2011, KRW 1107.81 was equal to USD 1. In this year, the average worker is expected to earn KRW 36154826 (Country estimate, average from January to November).

## 1. Personal income tax system

### 1.1. Central government income tax system

### 1.1.1. Tax unit

Each individual is taxed on his/her own income.
Non-taxable wage income includes the:

- national pension, medical insurance, unemployment insurance and work injury insurance that are borne by employer;
- overtime payment to productive workers: up to KRW 2400000 of overwork payment of productive workers in manufacturing and mining sectors whose monthly wage is less than KRW 1000000.


### 1.1.2. Allowances and tax credits

### 1.1.2.1. Standard reliefs

- Employment income deduction: the following deduction from gross income is provided to wage and salary income earners:

| Salary | Deduction |
| :---: | :---: |
| Up to KRW 5000000 | 80\% |
| KRW 5000000 to KRW 15000000 | KRW 4000000 plus $50 \%$ of the salary over KRW 5000000 |
| KRW 15000000 to KRW 30000000 | KRW 9000000 plus $15 \%$ of the salary over KRW 15000000 |
| KRW 30000000 to KRW 45000000 | KRW 11250000 plus $10 \%$ of the salary over KRW 30000000 |
| Over KRW 45000000 | KRW 12750000 plus $5 \%$ of the salary over KRW 45000000 |

- Basic allowance: a taxpayer can deduct KRW 1500000 from his/her income for each person who meets one of following conditions:
* the taxpayer him/herself;
* the taxpayer's spouse whose taxable income (gross earnings net of employment income deduction) is less than KRW 1000 000;
* the taxpayer's (including the spouse's) dependents (parents, siblings, children) within the same household whose income after accounting for the employment income deduction is less than KRW 1000000 and whose age is:

1. parents: 60 years or older;
2. brother/sister: 60 years or older or 20 years or younger;
3. children: 20 years or younger (if both partners in the household earn wage-income, this Report assumes that the principal wage earner will claim the allowance).

- Additional allowance: a taxpayer can deduct KRW 1000000 [500 000 in the case of (c), 2000000 in the case of (b) and (e)] from his/her gross income when the taxpayer or his/ her dependents fall into one of the following categories [for this report, only cases (c) and (d) are modelled]:
* a person aged 70 years or older (a);
* a handicapped person (b);
* a female wage earner who is the head of a household with dependents (but without spouse) or a female wage earner with spouse (in this Report*, any female wage earner is entitled to this allowance) (c);
* a child aged 6 years or younger (in this Report, the allowance of KRW 1000000 is claimed by the principal wage earner in a household with children) (d);
* Lineal descendants who are born or adopted during the concerned taxable year (the allowance is KRW 2000000 per child) (e).
- Extra allowance for multiple children: an income earner with two or more dependent children eligible for basic allowance may deduct from gross income KRW 1000000 if there are (at least) 2 children plus an additional KRW 2000000 for every additional child.
- National pension deduction: employees can deduct 100 per cent of their National Pension contributions.
- Tax credits: wage and salary income earners obtain the following tax credit:

| Calculated tax | Amount of tax credit |
| :--- | :--- |
| Up to KRW 500 000 | $55 \%$ of calculated tax |
| Over KRW 500 000 | KRW 275 000 plus $30 \%$ of the calculated tax over KRW 500 000 <br> (maximum credit: KRW 500 000) |

### 1.1.2.2. Main non-standard tax reliefs

Wage and salary income earners may deduct from gross income the expenses for the following items during the tax year:

- Insurance premiums (a): the general insurance premium up to KRW 1000 000, as well as the Medical insurance premium and the Unemployment insurance premium can be entirely (100 per cent) deducted from taxable income.
- Medical expenses (b): up to KRW 7000000 . Full deductions are allowed for medical expenses exceeding 3 per cent of taxable income for the taxpayer himself, taxpayer's dependents who are aged 65 years or older and handicapped persons.
- Educational expenses (c): tuition fees for pre-school, elementary, middle school and college (but the graduate school fee deduction is allowed only for the taxpayer himself), either for the taxpayer himself or his/her dependents (including the taxpayer's spouse, children, and siblings), can be deducted from gross income. The deductible amount is

[^14]100 per cent for the taxpayer himself. For the taxpayer's dependents, the maximum deductions are as follows:

* for pre-school: up to KRW 3000000 per child;
* for elementary, middle and high school: up to KRW 3000000 per student;
* for college/university: up to KRW 9000000 per student.
- Saving/Payment for housing (d): full amount paid up to KRW 10000000 for the interest of long-term mortgage loans plus 40 per cent of the amount repaid of the loan for leasing a house or the amount contributed to a savings account for housing by a taxpayer who does not own a house or owns one which is not more than $85 \mathrm{~m}^{2}$ and whose value does not exceed KRW 300000000.
- Charities (e):
* donations to a government body, donations for national defence, natural disaster, and certain charitable associations: total amount up to gross income is deductible;
* donations to public welfare or religious associations: up to thirty per cent of gross income.
- Credit card purchases (f): employees may deduct 20 per cent of their credit card (25 per cent of their debit card or prepaid card) purchases that exceed 25 per cent of their total income to a maximum of the lesser of KRW 3000000 or 20 per cent of their total income.
- Lump-sum tax relief: any taxpayer whose total deductible expense for (a), (b), (c), (d) and (e) is not over KRW 1000000 may deduct KRW 1000000 from gross income as a lump-sum tax relief.


### 1.1.3. Tax schedule

| Over (KRW) | Not more than (KRW) | Marginal tax rate (\%) |
| ---: | :---: | :---: |
| 0 | 12000000 | 6 |
| 12000000 | 46000000 | 15 |
| 46000000 | 88000000 | 24 |
| 88000000 |  | 35 |

### 1.2. Local income tax

### 1.2.1. Tax base

The local income tax base is the income tax paid to the central government.

### 1.2.2. Tax rate

A uniform rate of 10 per cent is applied. However, the local government can adjust the rate between the lower limit of 5 per cent and the upper limit of 15 per cent.

### 1.2.3. Tax rate (selected for this study)

A country-wide rate of 10 per cent is used in this Report.

## 2. Compulsory social security contribution to schemes operated within the government sector

### 2.1. Employees' contribution

### 2.1.1. National pension

4.5 per cent of the standardised average monthly wage income (for the purposes of this Report, the standardised average monthly wage income is assumed to be equal to the monthly gross earnings) to a maximum of KRW 2025000.

### 2.1.2. Medical insurance

The medical insurance premium, which has a rate of 3.00471 per cent, is levied on standardised average monthly wage income. The contribution for the medical insurance includes for old-age as of 1 July 2009.

### 2.1.3. Unemployment insurance

0.55 per cent of gross income.

### 2.1.4. Industrial accident compensation insurance (premiums)

Compulsory application, premiums paid only by employers.

### 2.2. Employers' contribution

### 2.2.1. National pension

4.5 per cent of standardised average monthly wage income to a maximum of KRW 2025000.

### 2.2.2. Medical insurance

The medical insurance premium, which has a rate of 3.00471 per cent, is levied on standardised average monthly wage income. The contribution for the medical insurance includes a long term care insurance contribution for old-age as of 1 July 2009.

### 2.2.3. Unemployment insurance

- the insurance premium is between 0.7 per cent and 1.3 per cent of gross income;
- the insurance premium selected for this study is 0.8 per cent.


### 2.2.4. Work injury insurance

- the insurance premium consists of an industry-specific rate which is set by the Labour Minister multiplied by gross income;
- the average rate of all industries (selected for this study) is 1.77 per cent.


## 3. Universal cash transfers

None.

## 4. Main changes in tax/benefit system since 2000

| 2000 | Contribution to National Pension are to be deductible from 2001, upper cap of employment income deduction limit(KRW 12000 000) is abolished from 2001 |
| :---: | :---: |
| 2001 | Personal income tax rates are lowered by $10 \%(10,20,30,40 \%$ were reduced to $9,18,27,36 \%$, respectively) from 2002 |
| 2002 | Limits of deduction for education fees are expanded from 2003. For pre-school: from KRW 1000000 to KRW 1500000 . For elementary, middle school and high school: from KRW 1500000 to KRW 2000 000. For college and university: from KRW 3000000 to KRW 5000000. Limit of deduction for interest of long-term mortgage loan for housing is expanded from KRW 3000000 to KRW 6000000 from 2003 |
| 2003 | Employment income deduction and tax credit applicable to low income are increased. The deduction rate for the taxable wage income range of KRW 5000000 to KRW 15000000 is increased from 45 per cent to 47.5 per cent. The tax credit rate for calculated tax below KRW 500000 is increased from $45 \%$ to $50 \%$ and the maximum tax credit is increased from KRW 400000 to KRW 450000. |
| 2004 | Limits of deduction for education fees are expanded. For pre-school: from KRW 1500000 to KRW 2000000 . For college and university: from KRW 5000000 to KRW 7000000. <br> Limit of deduction for interest on long-term mortgage loan for housing is expanded from KRW 6000000 to KRW 10000000. <br> The marginal deduction rate for the taxable wage income range from KRW 5000000 to KRW 15000000 is increased from 47.5 per cent to 50 per cent. <br> The tax credit rate for tax amounts below KRW 500000 is increased from $50 \%$ to $55 \%$ and the maximum permitted tax credit goes up from KRW 450000 to KRW 500000. |
| 2005 | Personal income tax rates are lowered by $1 \%$ point ( $9,18,27,36 \%$ were reduced to $8,17,26,35 \%$, respectively) Lump-sum tax relief are expanded from KRW 600000 to KRW 1000000. |
| 2007 | Eligibility for the extra allowance amount has been changed. Previously, an income earner with a small number of dependents (e.g. spouse, child) eligible for basic allowance was eligible for an allowance of up to KRW 1000000 depending on the number of dependents. As from 2007, however, an income earner with two or more dependent children eligible for basic allowance is eligible for an allowance equivalent to KRW 500.000 if there are 2 children plus an additional KRW 1000000 for every additional child (e.g. 2 children: KRW $500000 ; 3$ children: KRW 1500000 ; 4 children: KRW 2500 000, etc.). |
| 2008 | Tax schedule has been changed: from KRW 10000 000, KRW 40000000 , KRW 80000000 to KRW 12000 000, KRW 46000000 , KRW 88000 000; <br> New items have been added to the additional allowance with respect to lineal descendants who are born or adopted during the concerned taxable year; <br> Credit card purchase deduction has been changed: Employees may deduct 20 per cent (previously $15 \%$ ) of their credit/debit card purchases that exceed 20 per cent (previously $15 \%$ ) of their total income; <br> Deduction for donations to public welfare or religious associations has been increased up to $15 \%$ of gross income. Previously, the limit was $10 \%$ of gross income. |
| 2009 | Personal income tax rates have been changed: from $8 \%, 17 \%, 26 \%, 35 \%$ to $6 \%, 16 \%, 25 \%$, and $35 \%$. <br> Employment income deduction has been changed: from $100 \%, 50 \%, 15 \%$, and $10 \% 5 \%$ to $80 \%, 50 \%, 15 \%$, and $10 \%$. $5 \%$ |
|  |  |

## 5. Memorandum item

### 5.1. Identification of the average worker (AW)

Sectors used: industry Sectors B-N with reference to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev. 4)

Geographical coverage: whole country.
Type of workers: wage workers (male and female).

### 5.2. Method to calculate wages

Report on Labour Force Survey at Establishments covering data in 2011 by the Ministry of Employment and Labour is used to calculate the annual wages of the AW. The statistics were obtained through a sample survey of 12000 firms with five or more permanent employees throughout the whole country.

Note: changes were made to calculation method of wages in 2011. Therefore, a simple comparison of payroll amount with that of previous years may be improper.

Basic method of calculation used: average monthly wages multiplied by 12.

### 5.3. Employer's reserve for employee's retirement payment

An employer should pay to a retiree the retirement payment which is not less than 30 days' wage and salary per one year of service (about 8.3 per cent of gross income or more). An employer can contribute to the Retirement Payment Reserve Fund established within the company or Retirement Insurance Fund established outside the company to prepare for the retirement payment. Such contribution is treated as business expense under certain constraints. Because contribution to the Retirement Fund is not compulsory, this survey does not include such contribution except the contribution converted to employer's contribution to the national pension plan (see Section 2.2.1).

## 2011 Parameter values

| AW earnings | Ave_earn | 36154826 | Country estimate |
| :---: | :---: | :---: | :---: |
| Tax allowances | basic_al | 1500000 |  |
| spouse | spouse_al | 1500000 |  |
| dependents including children | dep_al | 1500000 |  |
| extra allowance 1 | ext1_all | 500000 |  |
| extra allowance 2 | ext2_all | 1000000 |  |
| additional allowance | add_all | 1000000 |  |
| additional allowance 2 | add2_all | 2000000 |  |
| Main non-standard tax relief | lump_sum | 1000000 |  |
| max number of kids permitted to be under 6 | child_und 6 _max | 1 |  |
| Employment income deduction | empdedsch | 0 | 0.8 |
|  |  | 5000000 | 0.5 |
|  |  | 15000000 | 0.15 |
|  |  | 30000000 | 0.1 |
|  |  | 45000000 | 0.05 |
| Tax credit threshhold | tax_thresh | 500000 |  |
| maximum credit | cred_max | 500000 |  |
| tax credit rate 1 | cred_rate1 | 0.55 |  |
| tax credit rate 2 | cred_rate2 | 0.3 |  |
| Tax schedule | tax_sch | 0.06 | 12000000 |
|  |  | 0.15 | 46000000 |
|  |  | 0.24 | 88000000 |
|  |  | 0.35 |  |
| Local tax rate | local_rate | 0.1 |  |
| Social security contributions | SSC_pens | 0.045 |  |
|  | SSC_pens_max | 2025000 |  |
|  | SSC_sick | 0.0300471 |  |
|  | SSC_unemp | 0.0055 |  |
| Employer contributions | emp_pens | 0.045 |  |
|  | emp_sick | 0.0300471 |  |
|  | emp_unemp | 0.008 |  |
|  | emp_inj | 0.0177 |  |

## 2011 Tax equations

The equations for the Korean system are independent between spouses except that the principal earner has tax allowances for the spouse and for any children.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables married and children. A reference to a variable with the affix total indicates the sum of the relevant variable values for the principal and spouse. And the affixes princ and spouse indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with spouse values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: |  |  |  |
| Employment income | emp_al | B | Empincded(earn, empincdedsch) |
| Basic | bas_al | B | basic_al |
| Spouse | sp_al | P | Married*spouse_al*(earn_spouse-emp_al_spouse<=spouse_al) |
| Dependents | dp_al | P | Children*dep_al |
| Extra and additional Allowances | ext_al_princ | P | IF(Children=2,ext1_all,IF(Children>=3,ext1_all+(Children-2)*ext2_all,0))+(Children>0)*ad d2_all |
| Extra and additional allowances | ext_al_spouse | S | (earn_spouse>0)*add_all |
| National pension deduction | $n \mathrm{n}$ _de | B | Min(earn*SSC_pens, SSC_pens_max) |
| Lump-sum | lump_sum | B | IF(earn*(SSC_sick+SSC_unemp)>lump_sum,earn*(SSC_sick+SSC_unemp),lump_sum) |
| Total | tax_al | B | emp_al+bas_al+sp_al+dp_al+ext_al+np_al+lump_sum |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc, tax_sch) |
| 6. Tax credits: | tax_cr | B | IF(CG_tax_excl<=tax_thresh, cred_rate1* CG_tax_excl, MIN((cred_rate1*tax_thresh+ cred_rate2*(CG_tax_excl-tax_thresh)), cred_max)) |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr |
| 8. State and local taxes | local_tax | B | local_rate*CG_tax |
| 9. Employees' soc security | SSC | B | MIN(earn*SSC_pens, sSc_pens_max)+earn*(SSC_sick+SSC_unemp)) |
| 11. Cash transfers | cash_trans | J | 0 |
| 13. Employer's soc security | SSC_empr | B | MIN(earn*(SSC_pens), ssc_pens_max) <br> +earn*(emp_pens+emp_sick+emp_unemp+emp_inj) |

[^15]
## Luxembourg

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Luxembourg 2011

## The tax/benefit position of single persons



## Luxembourg 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 49890 | 66521 | 83151 | 66521 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 480 | 960 | 960 | 960 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 5513 | 7351 | 9188 | 7351 |
|  | Work-related expenses | 936 | 1872 | 1872 | 1872 |
|  | Other | 0 | 4500 | 4500 | 4500 |
|  | Total | 6929 | 14683 | 16520 | 14683 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government rounded taxable income (1-2 + 3) | 42950 | 51800 | 66600 | 51800 |
| 5. | Central government income tax liability (exclusive of tax credits) | 2632 | 4475 | 8511 | 4475 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 300 | 600 | 600 | 600 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other | 0 | 0 | 0 | 0 |
|  | Total | 300 | 600 | 600 | 600 |
| 7. | Central government income tax finally paid (5-6) | 2332 | 3875 | 7911 | 3875 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 6537 | 8666 | 10870 | 8666 |
|  | Taxable income |  |  |  |  |
|  | Total | 6537 | 8666 | 10870 | 8666 |
| 10. | Total payments to general government (7+8+9) | 8869 | 12541 | 18781 | 12541 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 7522 | 7522 | 7522 | 0 |
|  | Total | 7522 | 7522 | 7522 | 0 |
| 12. | Take-home pay (1-10+11) | 48544 | 61501 | 71891 | 53980 |
| 13. | Employer's compulsory social security contributions | 6142 | 8189 | 10236 | 8189 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 4.7\% | 5.8\% | 9.5\% | 5.8\% |
|  | Employees' social security contributions | 13.1\% | 13.0\% | 13.1\% | 13.0\% |
|  | Total payments less cash transfers | 2.7\% | 7.5\% | 13.5\% | 18.9\% |
|  | Total tax wedge including employer's social security contributions | 13.4\% | 17.7\% | 23.0\% | 27.7\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 29.9\% | 33.6\% | 41.0\% | 33.6\% |
|  | Total payments less cash transfers: Spouse | 23.9\% | 33.6\% | 41.0\% | 33.6\% |
|  | Total tax wedge: Principal earner | 37.6\% | 40.9\% | 47.5\% | 40.9\% |
|  | Total tax wedge: Spouse | 32.3\% | 40.9\% | 47.5\% | 40.9\% |

Th
he national currency is the euro (EUR). In 2011, EUR 0.72 equalled USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 49890.

## 1. Personal income tax system

### 1.1. Taxes levied by central government

### 1.1.1. Tax unit

Spouses and partners are taxed jointly on their income. The income of minor children is included in determining the couple's taxable income. However, any earned income that children may derive from work is excluded from joint taxation.

### 1.1.2. Tax reliefs and tax credits

### 1.1.2.1. Standard reliefs in the form of deductions from income

- Wage-earners are entitled to a standard minimum deduction of EUR 540 for work-related expenses other than travel, unless their actual deductible expenses are higher. This deduction is doubled for spouses taxed jointly.
- Taxpayers may deduct at least EUR 396 for commuting expenses. This standard deduction increases by EUR 99 for each kilometre beginning with the fourth, up to a limit of EUR 2970.
- Like other taxpayers, wage-earners having no special expenses (interest charges, insurance premiums or contributions other than for social security) may take a standard deduction of EUR 480 for special expenses. Actual insurance premiums are deductible up to the limit set by law.
- If both spouses have earned income and are taxed jointly, they qualify for an earned income allowance of EUR 4500.
- Social security contributions: contributions paid to compulsory health insurance and pension schemes are deductible in full.
- Dependency insurance: the dependency contribution is not deductible for income tax purposes.


### 1.1.2.2. Standard reliefs in the form of tax credits

- Wage-earners and pensioners receive a refundable tax credit of EUR 300 per annum.
- Single-parents receive a refundable tax credit of EUR 750 per annum.


### 1.1.2.3. Non-standard allowances deductible from taxable income

- Interest charges are deductible insofar as they are not considered operating expenses or acquisition expenses, and provided they are unrelated economically to the exempt income. However, the deduction of interest charges is capped at EUR 672 per year. This ceiling is increased by EUR 672 for the taxpayer's spouse/partner and for each child.
- Taxpayers may deduct premiums paid to insurers licensed in an EU country in respect of life, death, accident, disability, illness or liability insurance, as well as dues paid to recognised mutual assistance companies. However, deductions are subject to the same limits as interest charges.
- Payments to an insurance company or credit institution in respect of an individual retirement scheme are deductible. These payments are capped according to the subscriber's age and must meet certain investment policy constraints. The ceiling varies between EUR 1500 and EUR 3 200. Each spouse/partner may take out such a contract and qualify for the respective ceilings.
- Contributions to building society savings are deductible up to the limits for interest charges.
- Interest charges in respect of the rental value of owner-occupied housing are deductible only up to an annual ceiling. During the first five years, the ceiling is EUR 1 500; for the following five years it is EUR 1 125; thereafter it is EUR 750. These ceilings are increased by an equal amount for the taxpayer's spouse/partner, and for each qualifying child.
- As from 1 January 2009, the maximal deduction of premium related to the mortgage life insurance on the taxpayer's principal residence is EUR 6000 . This ceiling is increased by an equal amount for the taxpayer's spouse/partner and by 1200 for each qualifying child. For taxpayers over the age of 30, the allowable deduction of EUR 6000 is increased by $8 \%$ for each year over 30 , with a ceiling of $160 \%$.
- Upon request, taxpayers may be granted exemptions for extraordinary expenses that are unavoidable, and that considerably reduce their ability to pay taxes (e.g. uninsured health care costs, support for needy relatives, uninsured funeral costs beyond the taxpayer's means, domestic or childcare expenses, expenses for children outside the taxpayer's household, or expenses for children in a single-parent household).


### 1.1.3. Tax schedule reliefs

Income tax is determined on the basis of the following schedule (amounts in Euros):

$$
\begin{aligned}
& \text { 0\% for the portion of income between } 11265 \\
& \text { 8\% for the portion of income between } 11265 \text { and } 13173 \\
& \text { 10\% for the portion of income between } 13173 \text { and } 15081 \\
& 12 \% \text { for the portion of income between } 15081 \text { and } 16989 \\
& 14 \% \text { for the portion of income between } 16989 \text { and } 18897 \\
& \text { 16\% for the portion of income between } 18897 \text { and } 20805 \\
& 18 \% \text { for the portion of income between } 20805 \text { and } 22713 \\
& \text { 20\% for the portion of income between } 22713 \text { and } 24621 \\
& 22 \% \text { for the portion of income between } 24621 \text { and } 26529 \\
& 24 \% \text { for the portion of income between } 26529 \text { and } 28437 \\
& 26 \% \text { for the portion of income between } 28437 \text { and } 30345 \\
& 28 \% \text { for the portion of income between } 30345 \text { and } 32253 \\
& 30 \% \text { for the portion of income between } 32253 \text { and } 34161 \\
& \text { 32\% for the portion of income between } 34161 \text { and } 36069 \\
& 34 \% \text { for the portion of income between } 36069 \text { and } 37977 \\
& 36 \% \text { for the portion of income between } 37977 \text { and } 39885 \\
& \text { 38\% for the portion of income between } 39885 \text { and } 41793 \\
& \text { 39\% for the portion of income exceeding } 41793
\end{aligned}
$$

The income tax liability of single taxpayers is determined by applying the above schedule to taxable income.

The income tax liability of married taxpayers and partners corresponds to double the amount obtained if the above schedule is applied to half of their income (class 2).

For widow(er)s, taxpayers with a dependent child allowance and persons over 64 years of age (class 1a), tax is calculated as follows: the schedule is applied to adjusted taxable income reduced by half of the difference between that amount and EUR 45060 , with the marginal tax rate capped at $39 \%$.

Income tax as determined by the applicable schedules is subject to a $4 \%$ "solidarity" surtax to finance the employment fund. The rate is $6 \%$ for the taxable income exceeding EUR 150000 (tax classes 1 and 1a), respectively EUR 300000 (tax class 2).

For the year 2011, a crisis contribution of $0.8 \%$ is withheld on all categories of income (professional and replacement income and non-professional income) for all individuals affiliated to the Luxembourg social security system.

### 1.1.4. Income exemptions

A taxpayer may claim a deduction for a dependent child under 21 years of age who is not part of the household. This deduction is allowed for expenses actually incurred but may not exceed EUR 3480.

### 1.2. Local (municipal) taxes

No particular income tax is levied by municipalities, which receive a direct share of the income tax revenue collected by the State. This share is equal to $18 \%$ of tax revenue.

## 2. Compulsory social security contributions to schemes operated within the government sector

|  | Employer's share <br> $(\%)$ | Employee's share <br> $(\%)$ | Ceiling on contributions <br> (in euros) |
| :--- | :---: | :---: | :---: |
| a) Pension and disability insurance | 8 | 8 | 105453.60 |
| b) Health insurance | 3.05 | 3.05 | 105453.60 |
| c) Dependency insurance | 0.11 | 1.40 | Monthly allowance $439.39^{*}$ |
| d) Health in the workplace | 1.15 |  |  |
| e) Accident insurance |  |  |  |

[^16]No distinction is made according to family status or gender.
As from 1 January 2009, the differences in social security contributions between workers and employees are abolished.

## 3. Universal cash transfers

### 3.1. For married persons

None.

### 3.2. For dependent children

Every child raised in the Grand Duchy entitles the person on whom the child is dependent to a monthly family allowance. Family allowances are adjusted regularly for the cost of living. For 2010, the amounts are:

| Effective date | As of 1 July 2006 |
| :--- | :---: |
| 1 eligible child | EUR 185.60 |
| 2 eligible children | EUR 440.72 |
| 3 eligible children | EUR 802.74 |

Starting with the fourth eligible child, the allowance is raised by EUR 361.82 per child.
The amounts indicated above are increased by EUR 16.17 for children aged 6 to 11 and by EUR 48.52 for those aged 12 years or older.

Additionally, a child bonus amounting to EUR 76.88 per child per month is paid in cash irrespective of the taxable income of the parents as from 1 January 2009. This amount is paid by the National Family Benefits Administration.

## 4. Main changes since 2008

### 4.1. Partnerships

The Act of 9 July 2004 introduced the notion of partnerships into tax law. The Act construes the term "partnership" as a relationship between two persons, called "partners", of opposite sex or the same sex, who live together as a couple and declare themselves as such.

As from 1 January 2008, the fiscal treatment of the partnerships is modified. The deduction for extraordinary expenses is replaced by the joint taxation of partners as it already exists for spouses.

### 4.2. Introduction of tax credits

The following changes were made as of 1 January 2009:

- Four tax allowances have been replaced by refundable tax credits. Instead of reducing their taxable income by EUR 600, wage-earners get a tax credit of EUR 300 per annum. A similar tax credit is allowed for pensioners.
- The tax exemption of EUR 1920 for single-parent households is replaced by a tax credit of EUR 750 per annum.
- A tax credit of EUR 300 per annum is granted to self-employed persons deriving income from trade or business, income from agriculture and forestry or income from self-employment. This tax credit substitutes the allowance for business income and the agricultural allowance.


## 5. Memorandum item

### 5.1. Identification of the average worker

Average gross hourly wages by industry and by gender are determined on the basis of biannual surveys on industry wages and working hours. These surveys cover gross compensation for regular hours (working hours + leave time) plus overtime pay. Hourly wages include bonuses and allowances such as premiums for output, production or productivity. In contrast, non-periodic compensation (bonuses, profit-sharing) that is not
paid systematically in each pay period is not included. Nevertheless, in order to allow for comparisons between countries, gross annual pay is adjusted on the basis of average non-periodic compensation as calculated from triennial surveys of labour costs.

Regarding working hours, the time taken into account is the time effectively offered, including regular working hours, overtime, night shifts and work on Sunday.

2011 Parameter values

| AW earnings | Ave_earn | 49890 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Tax allowances: general | gen_dedn | 480 |  |
| professional expenses | prof_exp | 540 |  |
| travel expenses | travel_exp | 396 |  |
| extra if both spouses earning | extra_dedn | 4500 |  |
| Low earner allowance | allow_1 |  |  |
| Low earner allowance (couples) | allow_2 |  |  |
| Class 1a limit | cl_1a_lim | 45060 |  |
| Tax schedule | tax_sch | 0 | 11265 |
|  |  | 0.08 | 13173 |
|  |  | 0.1 | 15081 |
|  |  | 0.12 | 16989 |
|  |  | 0.14 | 18897 |
|  |  | 0.16 | 20805 |
|  |  | 0.18 | 22713 |
|  |  | 0.2 | 24621 |
|  |  | 0.22 | 26529 |
|  |  | 0.24 | 28437 |
|  |  | 0.26 | 30345 |
|  |  | 0.28 | 32253 |
|  |  | 0.3 | 34161 |
|  |  | 0.32 | 36069 |
|  |  | 0.34 | 37977 |
|  |  | 0.36 | 39885 |
|  |  | 0.38 | 41793 |
|  |  | 0.39 |  |
| Child credit maximum | ch_cred | 0 |  |
| Social Minimum Salary | min_salary | 21090.72 |  |
| Multiplier for unemployment | unemp_rate_1 | 1.04 |  |
|  | Unemp_rate_2 | 1.06 |  |
|  | Unemp_lim | 150000 |  |
| Crisis contribution | Crisis_contr | 0.008 |  |
| Social security contributions | SSC_rate | 0.1105 |  |
|  | SSC_ceil | 105453.60 |  |
|  | infirm | 0.014 |  |
|  | infirm_abatement | 0.25 |  |
| Employer contributions | workhealth | 0.0011 |  |
|  | SSC_empr | 0.1105 |  |
|  | SSC_acc | 0.0115 |  |
| Child benefit (1 child) | CB_1 | 185.6 |  |
| 2 children | CB_2 | 440.72 |  |
| extra age 6-11 | CB_ex | 16.17 |  |
| Child bonus | ch_bonus | 922.50 |  |
| Worker tax credit | worker_credit | 300 |  |
| Single parent tax credit | cr_monoparent | 750 |  |
| Class 1a Discount | discount | 0.5 |  |
| Maximum Marginal Rate | max_rate | 0.39 |  |

## 2011 Tax equations

The equations for the Luxembourg system are on a joint basis except for social security contributions.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: |  |  |  |
| Basic | basic | J | IF(earn_spouse $=0,1,2)^{*}$ gen_dedn |
| Work-related | work_rel | J | IF(earn_spouse=0, 1, 2)* (prof_exp+travel_exp) |
| Other | other_al | J | (earn_spouse>0)*extra_dedn |
| Total | tax_al | J | min(basic+work_rel+other_al+SSC_ded_total, earn) |
| 3. Credits in taxable income | taxbl_cr | J | 0 |
| Family quotient | quotient | J | 1+Married |
| 4. CG taxable income unadjusted taxable income | tax_inc | J | earn-tax_al |
| 5. CG tax before credits | tax_excl | J | ((Children=0)*IF(Married=0,Tax(tax_inc, tax_sch), quotient*Tax(tax_inc/quotient, tax_sch)) + (Children>0)*IF(Married=0, Taxclass1a(tax_inc, tax_sch, discount, cl_1a_lim, max_rate), quotient*Tax(tax_inc/quotient, tax_sch)))$)^{*} I F($ tax_inc>unemp_lim*(1+Married,unemp_rate_2,unemp_rate_1) |
| 6. Tax credits: | worker_cr | J | IF(earn_spouse=0.1,2)*worker_credit |
|  | monoparent_cr | J | cr_monoparent*(AND(Married=0,Children>0)) |
|  | tax_cr | J | worker_cr+monoparent_cr |
| 7. $\mathrm{CG} \operatorname{tax}$ | CG_tax | J | tax_excl-tax_cr |
| 8. State and local taxes | local_tax | J | 0 |
| 9. Employees' soc security | SSC | B | SSC_rate*MIN(earn, <br> SSC_ceil)+infirm*Positive(earn-infirm_abatement*min_salary)+(earn*crisis_contr) |
| Deductible portion | SSC_ded | B | SSC_rate*MIN(earn, SSC_ceil) |
| 11. Cash transfers | cash_trans | J | ((Children=1)* (CB_1+CB_ex)+ (Children=2)*(CB_2+2*CB_ex))*12+Children*ch_bonus |
| 13. Employer's soc security | SSC_empr | B | (SSC_empr+workhealth)*MIN(earn, SSC_ceil)+SSC_acc*MIN(earn, SSC_ceil) |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Mexico

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations.

## Mexico 2011 <br> The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 59963 | 89944 | 149906 | 59963 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 1988 | 2111 | 2358 | 1988 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
| Deduction for social security contributions and income taxes |  |  |  |  |  |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 1988 | 2111 | 2358 | 1988 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 57974 | 87832 | 147549 | 57974 |
| 5. | Central government income tax liability (exclusive of tax credits) | 3777 | 7026 | 18207 | 3777 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 3898 | 2611 | 0 | 3898 |
| Married or head of family |  |  |  |  |  |
| Children |  |  |  |  |  |
| Other |  | 0 | 0 | 0 | 0 |
|  | Total | 3898 | 2611 | 0 | 3898 |
| 7. | Central government income tax finally paid (5-6) | -121 | 4414 | 18207 | -121 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 750 | 1222 | 2211 | 750 |
| Taxable income |  |  |  |  |  |
|  | Total | 750 | 1222 | 2211 | 750 |
| 10. | Total payments to general government (7+8+9) | 628 | 5637 | 20419 | 628 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 59334 | 84307 | 129488 | 59334 |
| 13. | Employers' compulsory social security contributions | 8378 | 10608 | 15191 | 8378 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | -0.2\% | 4.9\% | 12.1\% | -0.2\% |
|  | Employees' social security contributions | 1.3\% | 1.4\% | 1.5\% | 1.3\% |
|  | Total payments less cash transfers | 1.0\% | 6.3\% | 13.6\% | 1.0\% |
|  | Total tax wedge including employer's social security contributions | 13.2\% | 16.2\% | 21.6\% | 13.2\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 12.1\% | 12.5\% | 22.9\% | 12.1\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 17.5\% | 18.7\% | 28.4\% | 17.5\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Mexico 2011 <br> The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 89944 | 119925 | 149906 | 119925 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 2111 | 3467 | 4100 | 3467 |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes |  |  |  |  |
|  | Work-related expenses |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 2111 | 3467 | 4100 | 3467 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 87832 | 116458 | 145807 | 116458 |
| 5. | Central government income tax liability (exclusive of tax credits) | 7026 | 8591 | 10803 | 8591 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 2611 | 7493 | 6510 | 7493 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other | 0 | 0 | 0 | 0 |
|  | Total | 2611 | 7493 | 6510 | 7493 |
| 7. | Central government income tax finally paid (5-6) | 4414 | 1098 | 4293 | 1098 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1222 | 1597 | 1972 | 1597 |
|  | Taxable income |  |  |  |  |
|  | Total | 1222 | 1597 | 1972 | 1597 |
| 10. | Total payments to general government (7+8+9) | 5637 | 2695 | 6265 | 2695 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 84307 | 117230 | 143642 | 117230 |
| 13. | Employers' compulsory social security contributions | 10608 | 17024 | 18986 | 17024 |
| 14. | Average rates |  |  |  |  |
|  | Income tax | 4.9\% | 0.9\% | 2.9\% | 0.9\% |
|  | Employees' social security contributions | 1.4\% | 1.3\% | 1.3\% | 1.3\% |
|  | Total payments less cash transfers | 6.3\% | 2.2\% | 4.2\% | 2.2\% |
|  | Total tax wedge including employer's social security contributions | 16.2\% | 14.4\% | 15.0\% | 14.4\% |
| 15 | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 12.5\% | 12.5\% | 12.5\% | 12.5\% |
|  | Total payments less cash transfers: Spouse | -9.8\% | 7.4\% | 12.1\% | 7.4\% |
|  | Total tax wedge: Principal earner | 18.7\% | 18.7\% | 18.7\% | 18.7\% |
|  | Total tax wedge: Spouse | 9.5\% | 13.0\% | 17.5\% | 13.0\% |

Thhe national currency is the peso (MXN). In 2011, MXN 12.43 is equal to USD 1. In 2011, the estimated earnings of the average worker are MXN 89944 (Country estimate).

## 1. Personal income tax

### 1.1. Central government income tax

### 1.1.1. Tax unit

Each person is taxed separately.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard tax reliefs

There are two basic allowances, a yearly holiday bonus and an end-of-year bonus.

- Holiday Bonus: Mexico's Labour Law stipulates a minimum holiday bonus of 25 per cent of six days of the worker's wage. The maximum exemption according to Tax Law is equivalent to 15 days of the minimum wage (the minimum wage for the whole country).* Given these two restrictions, the allowance is estimated as the minimum established by the Labour Law, up to the amount that is exempt according to Tax Law.
- End-of-year bonus: the minimum end-of-year bonus established in the Labour Law is 15 days of the worker's wage. Tax Law exempts end-of-year-bonuses up to 30 days of the minimum wage (the amount for the whole country). The allowance is estimated as the minimum established by the Labour Law, up to the amount that is exempt according to Tax Law.


### 1.1.2.2. Main non-standard tax reliefs

## Deductions:

- Compulsory school transportation costs.
- Medical expenses (doctor and dental fees and hospital expenses): An unlimited deduction is allowed for the taxpayer's medical expenses. For those made by the taxpayer, on behalf of his or her spouse and straight line relatives, the deduction is allowed only if the person, for whom the taxpayer makes the expense, earns less than the minimum annual wage of his geographical area.
- Complementary contributions of certain retirement accounts are considered eligible as long as they do not exceed 10 per cent of taxable income and MXN 105960 (five annual minimum wages).

[^17]- Funeral charges: for the spouse and straight-line relatives up to a minimum annual wage of the taxpayer's geographical area.
- Charitable donations made to institutions such as:
* Federal, state, and municipal governments.
* Non-profit organisations involved in the fields of social beneficence, education, culture and research and technology.
- Deposits on special savings accounts, payments of insurance premium of pension plans and for the acquisition of shares of investment societies as long as they do not exceed MXN 152000.
- Health insurance premiums for individuals, if the beneficiary is the taxpayer, and/or his family.
- Real interest expenditure for the payment of mortgage loans for housing purposes that do not exceed MXN 6859 929. Real interest expenditure is considered the excess of interest expense over the inflation rate.*
- Deduction of taxpayer's educational expenditures for himself, on behalf of his/her spouse, parents or children, among others, for the following educational levels.

| Educational Level | Maximum Annual Deduction (MXN) |
| :--- | :---: |
| Kinder Garden | 14200 |
| Primary Education | 12900 |
| Secondary Education | 19900 |
| Technical Profession | 17100 |
| High School | 24500 |

### 1.1.2.3. Employment subsidy credit

The employment subsidy credit is assigned through a table and this amount is decreasing in the level of income obtained by each worker. For monthly income higher than MXN 7 382, no employment subsidy credit is given. Employees with an income tax lower than the credit receive in cash the difference along with their salary. The rest of the workers that receive the credit are entitled to a reduction in their tax burden. The employment subsidy credit is paid by the employers who may credit it against their tax liabilities; the credit therefore represents a fiscal cost for the government.

[^18]
### 1.1.3. Tax schedule and other tables

### 1.1.3.1. Tax schedule*

| Taxable income (MXN) |  | Fixed quota (MXN) | Tax on the amount in excess <br> of the lower limit (\%) |
| ---: | ---: | ---: | ---: |
| Lower limit | Upper limit |  | 1.92 |
| 0 | 5952.84 | 114.24 | 6.40 |
| 5952.85 | 50524.92 | 2966.76 | 10.88 |
| 50524.93 | 88793.04 | 7130.88 | 16.00 |
| 88793.05 | 103218.00 | 9438.60 | 17.92 |
| 103218.01 | 123580.20 | 13087.44 | 21.36 |
| 123580.21 | 249243.48 | 39929.04 | 23.52 |
| 249243.49 | 392841.96 | 73703.40 | 30.00 |
| 39284.97 | And over |  |  |

1. The increase in the tax rates of the three highest PIT brackets is temporal. From 2010 to 2012, the rate of the highest income bracket will be 30 per cent (as shown in the table 1.131), in 2013 the highest rate will be 29 per cent and in 2014 it will be 28 per cent. The rates of the sixth and seventh brackets will decrease in the same proportion.

### 1.1.3.2. Employment subsidy credit table

For taxable income in a certain income range, the employment subsidy credit is given in the third column of the following table:

| Lower limit (MXN) | Upper limit (MXN) | Tax credit (MXN) |
| :---: | :---: | :---: |
| 0.0 | 21227.52 | 4884.24 |
| 21227.53 | 31840.56 | 4881.96 |
| 31840.57 | 41674.08 | 4879.44 |
| 41674.09 | 42454.44 | 4713.24 |
| 42454.45 | 53353.80 | 4589.52 |
| 53353.81 | 56606.16 | 4250.76 |
| 56606.17 | 64025.04 | 3898.44 |
| 64025.05 | 74696.04 | 3535.56 |
| 74696.05 | 85366.80 | 3042.48 |
| 85366.81 | 88587.96 | 2611.32 |
| 88587.97 | And over | 0.00 |

### 1.2. State and local income taxes

States do not levy taxes on income.

### 1.3. Payroll taxes

Mexico does not have a Federal pay-roll tax. However, most States apply a state pay-roll tax with an average rate of 2.0 per cent. These taxes are not considered in this Report since there are a wide range of practices with respect to the definition of the tax base that does not allow obtaining a reliable estimation.

[^19]
## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

Social security contributions are divided as follows:
For sickness and maternity insurance, 0.625 per cent of the workers monthly wage, plus 0.40 per cent of the amount in excess of three times the minimal legal wage (the amount that applies within the Federal District of Mexico City MWFD). For disability and life insurance, 0.625 per cent of the monthly wage.

In 2011, a ceiling of 25 MWFD applies to the salary that is used to calculate the social security contributions.

### 2.2. Employers' contributions

- For sickness and maternity 20.40 per cent of the MWFD, plus 1.10 per cent of the amount in excess of three times the MWFD, plus 1.75 of the monthly wage.
- For disability and life insurance, 1.75 per cent of worker's monthly wage.
- For social services and nursery, 1 per cent of worker's monthly wage.
- For insurance for work injuries of employees, 2.04 per cent of worker's monthly wage.*

In 2011, a ceiling of 25 MWDF applies to the salary that is used to calculate the social security contributions.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

None.

## 4. Main changes in the tax/benefit system since 1995

The Social Security Law enacted in July 1997 changed fundamentally the financing of non-government employees' social security, which shifted from a pay-as-you-go scheme to funded individual accounts. The government does not manage these accounts; new private financial institutions were created specifically for this purpose. However, the contractual obligation is between the workers and the government, not with the private administrator of the fund, because legally they are still considered as contributions to social security, independently of who manages the fund. It should be noted that the federal government also contributes to each pension account, and guarantees a minimum pension to every beneficiary of the social security system, again independently of the administration of the fund.

[^20]
## 5. Memorandum items

### 5.1. Method used to identify an average worker and to calculate his gross earnings

The income data refer to average workers. It should be noted that in the sample used for this survey, medium and large size firms are over-represented. In Mexico, there are no state or local government income taxes. Information on non-standard tax reliefs is not available.

Figures for 1999 and subsequent years cannot be compared with preliminary figures from previous editions of this publication for two reasons: first, the wage level of the average worker is now based on observed data instead of being estimated; second, social security contributions taken into account no longer include contributions made by employers and employees to privately managed individual accounts. Contributions no longer included in the calculation of social security contributions are specified in the table below.

### 5.2. Main employees' and employers' contributions to private pension, health, etc., schemes

|  | Account | Per cent of workers' <br> monthly wage |
| :--- | :--- | :---: |
| Employers' contributions | Retirement | 2.00 |
|  | Discharge and old age insurance | 3.15 |
| Employees' contributions | Housing Fund (INFONAVIT) | 5.00 |
|  | Discharge and old age insurance | 1.125 |

2011 Parameter values

| Average earnings/yr | Ave_earn | 89944 | Country estimate |  |
| :---: | :---: | :---: | :---: | :---: |
| (general min wage per day) | min_wage | 58.06 |  |  |
| (general min wage per day for the |  |  |  |  |
| Federal District of Mexico City) | min_wage_FD | 59.82 |  |  |
| Income tax | tax_table | 0.00 | 0 | 1.92 |
|  |  | 5952.85 | 114.24 | 6.40 |
|  |  | 50524.93 | 2966.76 | 10.88 |
|  |  | 88793.05 | 7130.88 | 16.00 |
|  |  | 103218.01 | 9438.60 | 17.92 |
|  |  | 123580.21 | 13087.44 | 21.36 |
|  |  | 249243.49 | 39929.04 | 23.52 |
|  |  | 392841.97 | 73703.40 | 30.00 |
| Tax credit basic | Basic_crd | 0.0 | 4884.24 |  |
|  |  | 21227.53 | 4881.96 |  |
|  |  | 31840.57 | 4879.44 |  |
|  |  | 41674.09 | 4713.24 |  |
|  |  | 42454.45 | 4589.52 |  |
|  |  | 53353.81 | 4250.76 |  |
|  |  | 56606.17 | 3898.44 |  |
|  |  | 64025.05 | 3535.56 |  |
|  |  | 74696.05 | 3042.48 |  |
|  |  | 85366.81 | 2611.32 |  |
|  |  | 88587.97 | 0.00 |  |
|  |  |  |  |  |
| Employees SSC | SSC_rate | 0.0125 |  |  |
|  | SSC_rate_sur | 0.0040 |  |  |
|  |  |  |  |  |
| Employers SSC | SSC_empr | 0.0654 |  |  |
|  | SSC_empr_min | 0.2040 |  |  |
|  | SSC_empr_sur | 0.0110 |  |  |

## 2011 Tax equations

The equations for the Mexican system in 2011 are on an individual basis.
The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .


Key to range of equation: $B$ calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation).

## Netherlands

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations.

## Netherlands 2011 <br> The tax/benefit position of single persons



## Netherlands 2011

## The tax/benefit position of married couples

1. Gross wage earnings

> Wage level (per cent of average wage)
> Number of children
2. Standard tax allowances:

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
0
$100-0$
2
45904
$100-33$
2
61205
$100-67$
2
76506

Work-related expenses
Other

|  | Total | 0 | 0 | 0 | 0 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 3. | Tax credits or cash transfers included in taxable income |  | 2591 | 3770 | 4892 |
| 4. | Central government taxable income (1-2 + 3) | 46768 | 63159 | 78764 | 63159 |
|  |  |  |  |  |  |
| 5. Central government income tax liability (exclusive of tax credits) | 7543 | 7847 | 9332 | 7847 |  |

6. Tax credits :

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)

| Total | 287 | 436 | 499 | 367 |
| :--- | ---: | ---: | ---: | ---: |
|  | 7256 | 7411 | 8833 | 7480 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 0 |
|  | 5584 | 8188 | 11976 | 9342 |
| Total | 5584 | 8188 | 11976 | 9342 |
|  | 12841 | 15599 | 20809 | 16822 |

11. Cash transfers from general government

For head of family
For two children

|  | 2002 | 1894 | 1894 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 2002 | 1894 | 1894 | 0 |
|  | 35065 | 47500 | 57591 | 44383 |
|  | 4659 | 5870 | 7558 | 5870 |
|  |  |  |  |  |
|  | $15.8 \%$ | $12.1 \%$ | $11.5 \%$ | $12.2 \%$ |
| $12.2 \%$ | $13.4 \%$ | $15.7 \%$ | $15.3 \%$ |  |
| $23.6 \%$ | $22.4 \%$ | $24.7 \%$ | $27.5 \%$ |  |
|  | $30.7 \%$ | $29.2 \%$ | $31.5 \%$ | $33.8 \%$ |
|  |  |  |  |  |
|  | $48.1 \%$ | $40.9 \%$ | $40.9 \%$ | $40.9 \%$ |
|  | $18.7 \%$ | $17.4 \%$ | $38.9 \%$ | $21.3 \%$ |
|  | $53.5 \%$ | $47.0 \%$ | $47.0 \%$ | $47.0 \%$ |
| $24.7 \%$ | $23.2 \%$ | $45.2 \%$ | $26.8 \%$ |  |

Thhe national currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year, the average worker earned EUR 45904 (Secretariat estimate).*

## 1. Personal income tax system (Central Government)

### 1.1. Central government income tax

There are three categories ("boxes") of taxable income:

- Taxable income from work and owner-occupied housing.
- Taxable income from a substantial interest in a limited liability company.
- Taxable income from savings and investments.

This description is limited to the most relevant aspects of taxable income from the first category, "taxable income from work and owner-occupied housing", because of its relevance for the AW.

### 1.1.1. Tax unit

Husbands and wives are taxed separately on their personal income, which includes income from business, profession and employment, pensions and social security benefits. Certain parts of income may be freely split between husbands and wives, such as the net-income from owner-occupied housing and the income from savings and investments.

### 1.1.2. Tax allowances

### 1.1.2.1. Standard allowances

Related to wage earnings:

- Employees' social security contributions (see Section 2.1) are deductible, whereas the health insurance contribution is not deductible and is not a part of the Taxing Wages model (for more information, see the Special Feature on "non-tax compulsory payments" in the 2009 edition of the Taxing Wages Report). The employers' health insurance contribution is subject to tax.


### 1.1.2.2. Non-standard allowances applicable to AW

Related to wage earnings:

- For distances of more than 10 km between home and work, fixed amounts for travel expenses with public transportation are deductible. The maximum deduction for employees who travel by public transport is EUR 1951 for distances of more than 80 km . If the travel expenses are reimbursed or the employer provides transport, there is no

[^21]deduction; the reimbursement is untaxed (also for employees who travel by car) if it is below certain specified amounts;

- Employee contributions to private (company provided) pension schemes.

Related to owner-occupied housing:

- Excess of mortgage interest over net imputed rent.

Related to personal circumstances:

- Medical expenses and other exceptional expenses:

Fiscal deduction of exceptional health expenses will be reduced to the specific costs as a result of the chronic illness. As specific costs are seen diet costs, special medicine described by a doctor and transportation costs. Visual tools and insurance premiums are not seen as specific costs and are therefore no longer deductible.

For a single person: the specific expenses in excess of 1.65 per cent of income are deductible if income exceeds EUR 7332 and is below EUR 38955 . If income is lower than or equal to EUR 7 332, the non-deductible limit is EUR 122. For a person with a partner: the joint income is used to determine the non-deductible amounts and the non-deductible limit is EUR 244.

If income exceeds EUR 38 955, the specific expenses in excess of 1.65 per cent of EUR 38955 increased with 5.75 per cent of income above EUR 38955 are deductible.

- Some educational expenses: in direct connection with vocational education. Expenses above the threshold of EUR 500 are deductible. Expenses above EUR 15000 are not deductible;
- Donationsto certain institutions (charity) that serve the public good are deductible if in excess of 1 per cent of the income and in excess of EUR 60. No more than 10 per cent of the income may be deducted in this way.


### 1.1.3. Tax schedule

The tax schedule for income from work and owner-occupied housing is as follows:

| Taxable income (EUR) | Social security contributions |  |  |
| :---: | :---: | :---: | :---: |
|  |  | $<65$ years | $>65$ years |
| $0-18628$ | 1.85 | 31.15 | 13.25 |
| $18628-33436$ | 10.80 | 31.15 | 13.25 |
| $33436-55694$ | 42 | - | - |
| 55694 and over | 52 | - | - |

The contributions for the general social security schemes are levied on income from work and owner-occupied housing in the first and second income tax bracket. These social security contributions are not deductible for income tax purposes. Individuals of 65 years and older pay 13.25 per cent (for widows and orphans pensions, and exceptional medical expenses); individuals younger than 65 years pay 31.15 per cent (for widows and orphans pensions, exceptional medical expenses, and old age income provision). For further information see Section 2.1.

### 1.1.4. Tax credits

### 1.1.4.3. Standard tax credits

The tax credits are deducted partly from the income tax liability and partly from the contributions that are made to the general social security schemes (see Section 1.1.3). For most families, the share of the credit attributed to tax is related to the ratio of the tax rate to the sum of the tax rate and the social security contributions rate in the first bracket of the tax schedule. In 2011, this ratio was 5.6 per cent ( $=1.85 \% /(1.85 \%+31.15 \%)$, implying that 5.6 per cent of the ( $\operatorname{tax}$ ) credit is attributed to the personal income tax and the remaining 94.4 per cent to social security contributions. If the individual's total tax credit is higher than the total tax and social security contributions levied on the first tax bracket, the shares of the residual amount of the tax credit that are attributed to the personal income tax and social security contributions are based on the rates of deduction in the second tax bracket in order that the employee can benefit from the full amount of the credit where the level of income allows it. As a result, the ratio of the tax rate to the sum of the tax rate and social security contribution rates is increased to $25.7 \%$ for the residual amount in 2011 [i.e. $10.8 \% /(31.15 \%+10.8 \%)$ ].

For example in 2011, the total tax credit of a single parent with 2 children earning $67 \%$ of the average wage amounts to EUR 7684 . The total tax and social security contributions levied on the first tax bracket equals EUR 6147.24 [ $\left.=18628^{*}(31.15 \%+1.85 \%)\right]$. The residual tax credit equals EUR 1 536.76.

The first tax ratio of $5.6 \%$ is applied on EUR 6147.24 and the second tax ratio of $25.7 \%$ is applied on EUR 1536.76 . Then the part of the total tax credit that is attributed to personal income tax is EUR 740. The remaining 6984 is attributed to the social security contributions.

Note that the tax/benefit position tables show the total amount of social security contributions net of the credits that are claimed.

- General tax credit: this credit amounts to EUR 1 987; the transfer of the general tax credit of the spouse to the principal will diminish with 6.67 per cent per year in the period 2009-24, such that in 15 year time the general tax credit for a non-working spouse cannot be capitalized against the tax paid by the principal. This reduction of the transfer of the general tax credit started in 2009. In 2024, the general tax credit can only be capitalized against the tax and premiums paid on own earned income.
- Work credit: this credit is the sum of 1.716 per cent of taxable income from work with a maximum of EUR 158 and 12.152 per cent of taxable income from work with a franchise of EUR 9 209. The work credit is income dependent and will be reduced by 1.25 per cent of taxable income above EUR 44 126; the reduction will be maximised till EUR 77; so the reduction stops at a taxable income of EUR 50286 . The maximum work credit before it is reduced is EUR 1 574; the maximum reduced work credit is EUR 1497.
- Combination credit: the combination credit is abolished in 2009.
- Income dependant combination credit: the additional combination credit is replaced with the income dependent combination credit. A taxpayer who is either a single parent or the partner with the lowest income, who has children below the age of 12 and has his/her taxable income from work exceeding EUR 4734 , is entitled to an income dependent combination credit of EUR 780 plus an extra combination credit of 3.8 per cent of taxable income above EUR 4 734. The maximum total combination credit is EUR 1871.
- Single parent credit: a single parent under certain conditions is entitled to the single parent credit of EUR 931.
- Additional single parent credit: a single parent who is entitled to the single parent credit receives an additional credit of 4.3 per cent of his or her income from work, with a maximum of EUR 1523.

The amount of the tax credit is limited to the amount of tax and premiums payable (non-refundable tax credit). If, however, a taxpayer with insufficient income to fully exploit his/her tax credit has a partner with a surplus of tax and premiums payable over his/her own tax credit, the tax credit of the former taxpayer is increased by (at most) the surplus tax and premiums payable by his/her fiscal partner. As a consequence, the tax credit of the former taxpayer will exceed tax and premiums payable, resulting in a payout of the residual tax credit to the taxpayer by the tax authority.

### 1.2. State and local income taxes

None.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

Schemes for employees:

- Unemployment: 0 per cent of the gross earnings between EUR 16965 and EUR 49297 (this contribution is only for the general unemployment fund); employees do not have to pay an unemployment premium in order to reduce administration costs. Employers pay both an unemployment premium and a premium for invalidity for their employees (see par. 2.2).
- For basic health insurance each adult pays an average amount of EUR 1211 a year to a self-chosen private health insurance company. This premium is a non-tax compulsory payment and is not included in the Taxing Wages calculations but only in the NTCP calculations. Employees might obtain compensation for this nominal contribution, depending on the household's personal situation and taxable income. This is called the health care benefit. This benefit is included in the NTCP calculations as it compensates for the basic health insurance premium of on average EUR 1211 . Also 7.75 per cent of gross earnings net of employees' pension premiums and unemployment social security contributions is paid for health care until a maximum of net earnings of EUR 33 427. For the last health contribution, an employee receives mandatory compensation of his employer for the same amount. This amount is included in the taxpayer's taxable income. This amount is included in the Taxing Wages calculations in order to calculate the taxpayer's personal income tax liabilities. The income dependent health contribution itself, however, is not modelled (either as an employee or employer SSC) in Taxing Wages.
- Employees might obtain compensation for the nominal contribution of on average EUR 1211 for the basic health insurance, depending on the household's personal situation and taxable income. This is called the health care benefit. The care benefit is calculated as follows:
Single parent households: (1375-2.715\%)*(19 891-5.03\%)*(taxable income - 19 891).
Married couples: (number of adults)*(1375-5.015\%)*(19 891-5.03\%)*(taxable income principal and spouse - 19 891).

This health care benefit is a non-tax compulsory payment and is not included in the Taxing Wages calculations but only in the "non-tax compulsory payment" calculations (see www.oecd.org/ctp/taxingwages for more details on non-tax compulsory payments as well as the Special Feature in the 2009 edition of the Taxing Wages Report).

- Old age pension: 17.9 per cent of taxable income in the first and second tax bracket. This scheme does not apply to individuals aged 65 or older.
- Widows and orphans pension: 1.10 per cent of taxable income in the first and second tax bracket.
- Exceptional medical expenses and disability: 12.15 per cent of taxable income in the first and second tax bracket.


### 2.2. Employers' contributions

Schemes for employees:

- Unemployment: 4.20 per cent of gross earnings between EUR 16965 and EUR 49297 for the general unemployment fund and a contribution of 2.24 per cent of gross earnings below EUR 49297 for the industrial insurance associations redundancy payments fund.
- Invalidity: 5.72 per cent of gross earnings below EUR 49297.
- For medical care employers contribute 7.75 per cent of gross earnings net of employees' pension premiums and unemployment social security contributions until a maximum of gross earnings of EUR 33 427. The premium itself, however, is not modelled (either as an employee or employer SSC) in Taxing Wages. Instead, it is modelled as a NTCP from the employer to a public-managed health insurance fund. The spending of this fund mainly compensates private insurance companies for their (public) obligation to insure individuals with a high health risk.


## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

Families with children receive a tax free benefit, depending on the number and age of the children. For a family with two children in the age group of 6 to 12 years, the total benefit amounts to EUR 1894 a year. Indexation of the child benefits is frozen for three years (period 2009-11).

An additional income dependent child benefit was introduced in 2008. As of 2009, this benefit also depends on the number of children per family. A family can only claim the extra child benefit when it has children under the age of 18 years old for whom it also receives the tax free and income independent child benefit. Indexation of the extra child benefit is frozen until 2011 and has still a maximum value of EUR 1011 per year for families with one child. The child credit increases to EUR 1466 a year for families with two children. The benefit is reduced at a rate of 7.6 per cent per euro when the family's yearly taxable income exceeds EUR 28897 and is completely withdrawn for families with two children when the taxable income is at least EUR 48186.

## 4. Main changes in the tax/benefit systems since 2000

In 2001, the tax system was changed thoroughly. The tax rates have been lowered; the basic allowance and its supplements have been transformed into tax credits. The deduction for labour costs has also been replaced by a tax credit. Certain other deductions have been reduced or abolished. Extra tax credits for households with children were introduced.

In 2002 and 2003, the tax system was only slightly changed. The additional combination credit was introduced in 2004. The various child credits were integrated and streamlined in 2006.

Public insurance for medical care has been reformed in 2006. A new standard health insurance system was introduced. Until 2005, no public health insurance contributions were levied on income in excess of EUR 33000 . However, taxpayers earning more than EUR 33000 were obliged to take a private insurance. These private health insurance contributions were not included in the Taxing Wages calculations because they were made to a privately-managed fund (and are therefore not taxes). Since 2006, every individual contributes a nominal contribution to a privately-managed fund (on average EUR 1 064, depending on the competition between insurance companies, a year in 2009) and, in addition for employees, a percentage of gross income ( 6.9 per cent) net of employees' pension premiums and unemployment social security contributions until a maximum of gross income of EUR 32369 (in 2009). For this last contribution, the employee receives mandatory compensation of his employer for the same amount. The premium itself, however, is not modelled (either as an employee or employer SSC) in Taxing Wages. Instead it is modelled as a non-tax compulsory payment from the employer to a public-managed health insurance fund. The spending of this fund mainly compensates private insurance companies for their (public) obligation to insure individuals with a high health risk. Taxpayers might obtain compensation for the nominal contribution to the private insurance company of on average EUR 1064 in 2009, depending on the households personal situation and taxable income. This is called the health care benefit and is part of the NTCP (see Section 2.1).

In 2007, the tax system has not been changed, except for some parameter updates. In 2008 , the child credit has been replaced by an extra child benefit.

In 2009 the general tax credit will be reduced for non-working spouses in order to cut down the capitalization of this tax credit in 2024. A non-working spouse can in 2024 capitalize the general tax credit only against his/her own earned income. In 2009, the employment credit is extended for income exceeding EUR 42 509. This credit will be reduced by maximum EUR 24, whereas the employment credit is increased for lower incomes. The income dependant combination credit is introduced in order to promote the labour participation of single parents or partners of married workers. The incomedependent combination credit has been increased considerably. The extra child benefit depends on the total income of the family and the number of children per family. The income-dependent child benefit is higher when more children under the age of 18 years are member of the family. As from 2009 onwards, employees do not have to pay an unemployment premium mainly to reduce administration costs for employers. Employers pay now both an unemployment premium and a premium for invalidity for their employees (see also par. 2.2).

## 5. Memorandum items

### 5.1. Identification of the AW and calculation of the AW's gross earnings

The calculation of the annual gross earnings of an AW is based upon data on gross earnings of full-time workers in industry C-K. These data have been obtained through a yearly sample survey carried out by the Central Bureau of Statistics. Included in the AW annual salary are irregular payments, such as holiday allowances, loyalty payments and bonuses. Payments for working overtime are not included. However, the CBS has stopped carrying out the "employment and wages" survey in July 2006 due to new legislation. On Inquiry at the Central Bureau of Statistics (CBS) the information from the wage declarations by employers, delivered nowadays at the tax department, will be implemented by the CBS for the new survey about employment and wages. These changes produced a delay in delivery of the information on wages and employment for 2006.

As the AW figure for 2005 and 2006 are not available, the 2004 figure was taken and adjusted for the wage increases in 2005, 2006 and 2007 by the OECD Secretariat based on wage increase estimates from the most recent issue of the OECD Economic Outlook. On the base of new information on wages per industry sector, the AW is delivered to EUROSTAT in November 2009 by the CBS for years 2006 and 2007. The standard classification NACE Rev. 1 for industrial Sectors C-K is used.

The new classification NACE Revision 2 (Sectors B-N) will be applicable as from 2008 onwards. The estimation of the AW for 2008 according to the new classification is applicable at the beginning of May 2010. The AW for 2009 is available since November 2010. For 2008, the average annual gross earnings (full-time NACE Rev. 2) comes to EUR 43.146 and for 2009 EUR 44.412.

### 5.2. Main employers' contributions to private pension, health and related schemes

In addition to the obligatory contributions of employees to private insurance companies, all employers pay contributions to a public-managed health fund. More information is included in the Special Feature where the contributions to the public-managed health funds are also presented.

Employers have to pay at least 70 per cent of the gross wage of their sick employees for two years. Many employers have insured themselves privately for the risks of their employees being sick. This insurance for illness of their employees is not compulsory.

## 2011 Parameter values

|  | Ave_earn | 45904 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Social security contributions | SSC_ceil | 49297 |  |
| Employees' schemes | Unemp_rate1 | 0.0 |  |
|  | Unemp_franchise1 | 16965 |  |
| Medical care | Med_rate | 0.0775 |  |
|  | Med_limit | 999999 |  |
|  | Med_ceil | 33427 |  |
|  | Med_adult | 1211 |  |
|  | Med_child | 0 |  |
|  | Med_compensation1 | 0.02715 |  |
|  | Med_compensation2 | 0.0503 |  |
|  | Med_compensation3 | 0.05015 |  |
|  | Med_compensation4 | 0.0503 |  |
|  | Med_key | 19891 |  |
|  | Med_aldult for care benefit | 1375 |  |
| General schemes | Old_rate | 0.179 |  |
|  | Wid_rate | 0.0110 |  |
|  | Ex_med_rate | 0.1215 |  |
|  | Gen_Schemes_thrsh | 33436 |  |
|  | Unemp_empr1 | 0.042 |  |
|  | Unemp_empr2 | 0.0224 |  |
|  | Unemp_unempr_franchise1 | 16965 |  |
|  | Unemp_unempr_franchise2 | 0 |  |
|  | Inv_empr_rate | 0.0572 |  |
|  | Inv_empr_franchise | 0 |  |
|  | Med_empr | 0.0775 |  |
|  | Med_franchise | 0 |  |
| Tax schedule | Tax_sch | 0.0185 | 18628 |
|  | "tax_sch_lowest" | 0.1080 | 33436 |
|  | "tax_thrsh_1" | 0.42 | 55694 |
|  |  | 0.52 |  |
| Tax credits | Gen_credit | 1987 |  |
|  | Red_gen_credit | 1590 |  |
|  | Emp_credit1 | 158 |  |
|  | Emp_credit2 | 1416 |  |
|  | Emp_credit3 | 1339 |  |
|  | Emp_credit1_thr | 9209 |  |
|  | Emp_credit2_thr | 20861 |  |
|  | Emp_credit3_thr | 44126 |  |
|  | Emp_credit4_thr | 50286 |  |
|  | Comb_credit | Nvt |  |
|  | Comb_credit_franchise | 4734 |  |
|  | add_comb_credit | Nvt |  |
|  | Income_dependant_comb_comb_credit1 | 780 |  |
|  | Income_dependant_comb_credit_max | 1871 |  |
|  | Income_dependant_comb_par_credit_per | 0.038 |  |
|  | Sing_par_credit | 931 |  |
|  | Ex_sing_par_credit_per | 0.043 |  |
|  | Ex_sing_par_credit_max | 1523 |  |
| Family cash transfers | Ch1_trans | 947 |  |
|  | Ch2_trans | 1894 |  |
|  | Child_ben_1child | 1011 |  |
|  | Child_ben_2children | 1466 |  |
|  | Child_ben_redn | 0.076 |  |
|  | Child_ben_ceil | 28897 |  |

## 2011 Tax equations

The equations for the tax system in the Netherlands in 2010 and in 2011 did not change. They are repeated for each individual of a married couple. Tax credits, except a part of the general credit of the spouse, depend also on the tax paid by the principal if the spouse's income is zero or very low, and the cash transfers are calculated only once. The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note on the tax equations. Due to the adjustment of the employment credit in 2009, the function Emp_credit(Value) was altered in 2009; no changes were made in 2010 and in 2011. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affix "_spouse" indicates the value for the spouse. No affix is used for the principal values. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings (gross) | gr_earn |  |  |
| Earnings (net) | earn | B | gr_earn |
| 2. Social security contributions | SSC_al | B | SSC_f(earn,Unemp_rate1,SSC_ceil,Unemp_franchise1) |
| 3. Credits in taxable income | taxbl_cr | B | MIN(earn-SSC_al, Med_ceil)* Med_rate |
| 4. CG taxable income | tax_inc | B | earn-SSC_al+taxbl_cr |
| 5. CG tax before credits | CG_tax_excl/ tax_liable | B | Tax(tax_inc,Tax_sch) |
| 6. Tax credits | tax_cr | P | MIN(CG_tax_excl+SSC_taxinc,Gen_credit+Emp_credit(tax_inc) <br> +IF(AND(Children>0,earn>Comb_credit_franchise),IF(Married=0,Comb_credit+add_co <br> mb_credit,Comb_credit),0) <br> +IF(AND(Children>0,Married=0),Sing_par_credit+MIN(Ex_sing_par_credit_max,Ex_si ng_par_credit_per*tax_inc),0)) |
|  | tax_cr_spouse | S | ```IF(Married>0,MIN(CG_tax_excl_spouse+SSC_taxinc_spouse+ CG_tax_excl+SSC_taxinc-tax_cr,Gen_credit +Emp_credit(tax_inc_spouse)+IF(AND(Children>0,earn_spouse>Comb_credit_franchi se),Comb_credit+add_comb_credit,0)),0)``` |
|  | tax_cr_inc | B | IF(tax_cr>Tax_thrsh_1*SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest),(tax_ sch_2/ <br> SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_2))*(tax_cr-(SUM(Old_rate+Wid_rat e+Ex_med_rate+tax_sch_lowest)*Tax_thrsh_1))+(tax_sch_lowest/ <br> SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest))*(Tax_thrsh_1*SUM(Old_ra te+Wid_rate+Ex_med_rate+tax_sch_lowest)),tax_sch_lowest/ <br> SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*tax_cr) |
| 7. CG tax | CG_tax | B | tax_liable-tax_cr_inc |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security' based on earnings | SSC_earn | P | SSC_f(earn,Unemp_rate1,SSC_ceil,Unemp_franchise1) |
|  | SSC_earn_spouse | S | SSC_f(earn_spouse,Unemp_rate1,SSC_ceil,Unemp_franchise1) |
| based on taxable income | SSC_taxinc | B | (Old_rate+Wid_rate+Ex_med_rate)*MINA(tax_inc,Gen_Schemes_thrsh) |
| Total employees' soc security | SSC_liable | J | SSC_earn+SSC_taxinc+SSC_earn_spouse+SSC_taxinc_spouse |
|  | tax_cr_SSC | B | IF(tax_cr>Tax_thrsh_1*SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest),((Old _rate+Wid_rate+Ex_med_rate)/ <br> SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_2))*(tax_cr-(SUM(Old_rate+Wid_rat e+Ex_med_rate+tax_sch_lowest)*Tax_thrsh_1))+((Old_rate+Wid_rate+Ex_med_rate)/ SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest))* (Tax_thrsh_1*SUM(OId_ra te+Wid_rate+Ex_med_rate+tax_sch_lowest)),SUM(Old_rate+Wid_rate+Ex_med_rate)/ SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*tax_cr) |
| Total | SSC | J | SSC_liable-tax_cr_SSC |
| 10. Total payments | total_payments | J | CG_tax+local_tax+SSC |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 11. Cash transfers | cash_trans | J | IF(Children=1,Ch1_trans, IF(Children=2,Ch2_trans, 0 ))+ (Children>0)*(IF((tax_inc+tax_inc_spouse)<Child_ben_ceil, Child_ben, Positive(Child_ben - Child_ ben_redn*(tax_inc+tax_inc_spouse - Child_ben_ceil)))) |
| 13. Employer's soc security | SSC_empr | B | ```If Value <= 0 Then Emp_credit = 0 Elself Value <= Range("Emp_credit1_thr").Value Then Emp_credit = (Value / Range("Emp_credit1_thr").Value) * Range("Emp_credit1").Value Elself Value <= Range("Emp_credit2_thr").Value Then Emp_credit = Range("Emp_credit1").Value + ((Value - Range("Emp_credit1_thr").Value) / (Range("Emp_credit2_thr").Value - Range("Emp_credit1_thr").Value)) * Range("Emp_credit2").Value Elself Value <= Range("Emp_credit3_thr").Value Then Emp_credit = Range("Emp_credit1").Value + Range("Emp_credit2").Value Elself Value <= Range("Emp_credit4_thr").Value Then Emp_credit = Range("Emp_credit1").Value + Range("Emp_credit2").Value - ((Value - Range("Emp_credit3_thr").Value) / (Range("Emp_credit4_thr").Value - Range("Emp_credit3_thr").Value)) * (Range("Emp_credit2").Value - Range("Emp_credit3").Value) Else Emp_credit = Range("Emp_credit1").Value + Range("Emp_credit3").Value End If``` |

Key to range of equations: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## New Zealand

## (2011-12 income tax year)

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## New Zealand 2011

## The tax/benefit position of single persons



## New Zealand 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 49395 | 65860 | 82325 | 65860 |
|  | Standard tax allowances: |  |  |  |  |
|  | Basic allowance |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes |  |  |  |  |
|  | Work-related expenses |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 49395 | 65860 | 82325 | 65860 |
| 5. | Central government income tax liability (exclusive of tax credits) | 7839 | 9740 | 12621 | 9740 |
| 6. | Tax credits : |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 7. | Central government income tax finally paid (5-6) | 7839 | 9740 | 12621 | 9740 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. Employees' compulsory social security contributio <br> Gross earnings <br> Taxable income |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 10. | Total payments to general government (7+8+9) | 7839 | 9740 | 12621 | 9740 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 8428 | 5135 | 1842 | 0 |
|  | Total | 8428 | 5135 | 1842 | 0 |
| 12. | Take-home pay (1-10+11) | 49985 | 61256 | 71546 | 56120 |
| 13. | Employer's compulsory social security contributions | 0 | 0 | 0 | 0 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 15.9\% | 14.8\% | 15.3\% | 14.8\% |
|  | Employees' social security contributions | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
|  | Total payments less cash transfers | -1.2\% | 7.0\% | 13.1\% | 14.8\% |
|  | Total tax wedge including employer's social security contributions | -1.2\% | 7.0\% | 13.1\% | 14.8\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 50.0\% | 50.0\% | 50.0\% | 30.0\% |
|  | Total payments less cash transfers: Spouse | 31.5\% | 37.5\% | 37.5\% | 17.5\% |
|  | Total tax wedge: Principal earner | 50.0\% | 50.0\% | 50.0\% | 30.0\% |
|  | Total tax wedge: Spouse | 31.5\% | 37.5\% | 37.5\% | 17.5\% |

Thhe national currency is the New Zealand dollar (NZD). In 2011, NZD 1.27 was equal to USD 1. In that year, the average worker earned NZD 49395 (Country estimate).

## 1. Personal income tax system

### 1.1. Central/federal government income taxes

### 1.1.1. Tax unit

Members of the family are taxed separately.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- The Transitional Tax Allowance is available to persons with income under NZD 9880. This rebate is limited to those in full-time employment or who would have been in full-time employment but for sickness or accident. The rebate is NZD 728, reduced by 20 cents on each dollar earned over NZD 6240 - thus the rebate runs out at NZD 9880. The Transitional Tax Allowance is not available if the taxpayer receives an income tested benefit or if any of the universal cash transfers apply. In addition, the amount of the rebate depends on the proportion of weeks in the year where more than 20 hours have been worked.
- Children: no credit to parents. A child under 15 years of age, or under 18 and attending an educational institution, may claim the child rebate against their own earnings. The rebate is calculated as 13.75 per cent of gross earnings from employment, up to a maximum allowance of NZD 321.75 on NZD 2340 of income. Investment earnings are excluded from the calculation of this rebate.


### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

None.

### 1.1.3. Schedule

- Rates of income tax for individuals:
* On so much of the income as does not exceed NZD 14 000: 10.5 per cent.
* On so much of the income as exceeds NZD 14000 but does not exceed NZD 48 000: 17.5 per cent.
* On so much of the income as exceeds NZD 48000 but does not exceed NZD 70000 : 30 per cent.
* On so much of the income as exceeds NZD 70 000: 33 per cent.


### 1.2. State and local income taxes

New Zealand has no state or local income tax.

## 2. Compulsory social security contributions to schemes operated within the government sector

New Zealand has no compulsory social security contributions to schemes operated within the Government sector.

It should be noted that there is an accident compensation scheme administered by the Accident Compensation Corporation for residents and temporary visitors to New Zealand. This scheme is funded in part by premiums paid by employees and employers. For employees, the premium represents $2.0 \%$ of their gross earnings. For employers and the self-employed, the premiums are based on a percentage of the total payroll and the applicable rate varies depending upon the associated accident risk (the average rate is $1.47 \%)$. This scheme is not considered as a compulsory social security contribution for the purposes of the Report.

## 3. Universal cash transfers

### 3.1. Amount for marriage

None.

### 3.2. Amount for children

The Parental Tax Credit provides NZD 150 per week for the first eight weeks of each child's life. This tax credit abates under the same regime as the Family Tax Credit, although it is unaffected until both the Family Tax Credit and In Work Tax Credit have been abated to zero.

### 3.3. Family tax credit

For an eldest child aged 16-18, the rate of the Family Tax Credit is NZD 5303 per year, while the rate of NZD 4578 applies if the eldest child is younger than 16. For subsequent children the rate depends on the age of the child; NZD 4745 per year for 16-18 year-olds, NZD 3629 per year for 13-15 year-olds and NZD 3182 per year for children under 13 years of age. The total credit is abated by 20 cents on each dollar earned over NZD 36827 . The abatement is based on the combined income of the parents.

### 3.4. In work tax credit

The In Work Tax Credit is available to families with dependent children who are not receiving an income-tested benefit, veteran's pension, New Zealand Superannuation or student allowance. The level of assistance it provides is NZD 3120 per family per year, plus an additional NZD 780 per year for fourth and subsequent children. It is only available to couple families working a total of 30 hours or more per week, or to sole parents working 20 hours or more per week. It is also affected by the abatement regime used with the Family Tax Credit, although it is unaffected until the latter has been abated to zero.

### 3.5. Minimum family tax credit

The Minimum Family Tax Credit is a scheme that ensures a guaranteed minimum family net income for all full-time earners with dependent children. The guaranteed minimum after-tax income is NZD 408 per week plus the Family Tax Credit and In Work Tax Credit.

### 3.6. Independent earner tax credit

The Independent Earner Tax Credit of NZD 520 is available to individuals with annual net income between NZD 24000 and NZD 48000 that do not receive other forms of tax credits or benefits. It is abated by 13 cents on each dollar earned over NZD 44000.

## 4. Main changes in tax/benefit systems over 2011/12

Changes to personal tax rates took effect on 1 October 2010; halfway through the 2010/11 tax year. Therefore an average of the old and new rates applied for the 2010/11 income tax year, and the 2011/12 year is the first year in which the new rates will apply for the whole year. The same is true for the Family Tax Credit and the Minimum Family Tax Credit, which also increased on 1 October 2010.

## 5. Memorandum items

### 5.1. Method used to identify AW and to calculate the AW's gross earnings

The Annual Earnings figure is derived from the Quarterly Employment Survey for those employees in the $\mathrm{B}-\mathrm{N}$ industry groups. The annual earnings figure for the average worker is the sum of the four quarterly earnings figures, with each quarterly figure calculated by taking the average total weekly earnings and multiplying it by 13 weeks per quarter.

### 5.2. Employer's contributions to private pension, health schemes, etc.

No information available.

2011 Parameter values

|  | Ave_earn | Country estimate |  |
| :--- | :--- | :--- | :--- |
| Income tax schedule | Tax_sch | 4939 | 14000 |
|  |  | 0.105 | 48000 |
|  |  | 0.175 | 70000 |
|  |  | 0.3 |  |
| Income under NZD 9 880 rebate |  |  |  |
|  |  |  |  |
|  | reb_9880 | 728 |  |
| Working for Families Tax Credits | reb_9880_thrsh | 6240 |  |
|  | reb_9880_redn | 0.20 |  |
|  | Fam_sup_eld | 7760 |  |
| Minimum Family Tax Credit | Fam_sup_oth | 3182 |  |
| Independent Earner Tax Credit | Fam_sup_thrsh | 36827 | 0.20 |
|  | Fam_sup_rate | 21216 |  |
|  | Min_inc | 520 |  |
|  | IETC | 23999 |  |
|  | IETC_thrsh1 | 44000 |  |
|  | IETC_thrsh2 | IETC_rate | 0.13 |

## 2011 Tax equations

The equations for the New Zealand system in 2011 are mostly repeated for each individual of a married couple. But the cash transfer is calculated only once. This is shown by the Range indicator in the table below. The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table andintermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances | tax_al | B | 0 |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | earn |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc, Tax_sch) |
| 6. Tax credits: |  |  |  |
| Guaranteed minimum income | GMI | J | (Children>0)*Min_inc |
| Under 9880 rebate | rebate_9880 | B | MIN(Taper(reb_9880, earn, reb_9880_thrsh, reb_9880_redn), CG_tax_excl-rebate_38000)*(fam_sup_cr=0) |
| Independent Earner Tax Credit | IETC_rebate | B | =AND(Children=0,earn>IETC_thrsh1)*Taper(IETC,earn,IETC_thrsh2,IETC_rate) |
| Total credit | tax_cr | B | rebate_38000+rebate_9880+IETC_rebate |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr |
| 8. Local tax | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | 0 |
| 11. Cash transfers: |  |  |  |
| Working for Families tax credits | fam_sup_cr | J | Taper(Fam_sup_eld*(Children>0)+ Fam_sup_oth*Positive(Children-1), earn_total, Fam_sup_thrsh, Fam_sup_rate) |
| Minimum Family tax credit | fam_tax_cr | J | Positive(GMI-(earn_total-CG_tax_excl_total+ rebate_38000_total+ rebate_9880_total)) |
| Cash transfers | cash_trans | J | fam_sup_cr + fam_tax_cr |
| 13. Employer's soc security | SSC_empr | B | 0 |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Norway

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Norway 2011

## The tax/benefit position of single persons



Norway 2011

## The tax/benefit position of married couples



Thhe national currency is the Kroner (NOK). In 2011, NOK 5.6 was equal to USD 1. In that year, the average worker earned NOK 487324 (Secretariat estimate).

## 1. Personal income tax system

The personal income tax has two tax bases: personal income and ordinary income. Personal income is defined as income from labour and pensions. Personal income is a gross income base from which no deductions are made. Ordinary income includes all types of taxable income from labour, pensions, business and capital. Certain costs and expenses, including interest paid on debt, are deductible in the computation of ordinary income.

### 1.1. Central government income tax

### 1.1.1. Tax unit

The tax unit is in most cases the individual (tax class 1), but joint taxation (tax class 2) is also possible. Single parents are entitled to be taxed under the tax class 2 schedule. Children aged below 17 are generally taxed together with their parents, but they may be taxed individually. All other income earners are taxed on an individual basis (class 1).

### 1.1.2. Tax allowances applicable to an AW

There are no tax allowances applicable to an AW under the central government income tax (surtax). The tax base is personal income from which no deductions are allowed. As part of the overall tax rate of 28 per cent on ordinary income, 14.05 per cent is considered to be the central government income tax.

### 1.1.3. Rate schedule (surtax)

| Rate (\%) | NOK |
| :---: | :---: |
| 0 | $0-471200$ |
| 9.0 | $471200-765800$ |
| 12.0 | 765800 and over |

### 1.2. Local government income tax

The overall tax rate on ordinary income is 28 per cent. The local government (municipal and county) income tax is 13.95 per cent points of the overall rate. Tax on ordinary income is levied after taking into account a standard allowance of NOK 43600 (class 1) and NOK 87200 (class 2) in 2011. The deductions in the computation of ordinary income are:

### 1.2.1. Standard reliefs

- Basic allowance: each individual receives a minimum allowance equal to 36 per cent of personal income, with a minimum of NOK 4000 and a maximum of NOK 75 150. For wage income each individual can choose a separate allowance of NOK 31800 instead of
the basic allowance. Hence, wage earners would opt to choose this separate allowance as long as it exceeds the basic allowance to which they are entitled.


### 1.2.2. Non-standard reliefs

The main non-standard allowances deductible from ordinary income are:

- Parent allowance: documented expenses for child care limited to:
* maximum NOK 25000 for one child;
* plus NOK 15000 for each subsequent child.

The allowance applies in general to the spouse who has the highest income. Unused parent allowance may be transferred to the other spouse. The allowance is also applicable to single parents.

- Travel expenses related to work exceeding NOK 13950.
- Labour union fees up to NOK 3660.
- Donations to voluntary organisations up to NOK 12000.
- Contributions to individual pension agreement schemes, maximum NOK 15000.
- Premiums and contributions to occupational pension schemes in the private and public sector, unlimited.
- Unlimited deduction for interest payments.

The main non-standard tax credits are:

- Home savings scheme (BSU): the BSU scheme aims to encourage young people (under 34 years old) to save for a future home purchase. A wastable tax credit of 20 per cent of annual savings up to NOK 20000 in special accounts is granted. Total savings may not exceed NOK 150000.


## 2. Social security contributions

### 2.1. Contributions to the national insurance scheme

### 2.1.1. Employees' contributions

Employees' contributions to the National Insurance Scheme generally amount to 7.8 per cent of personal wage income. Employees do not make contributions if their wage income is less than NOK 39 600. Once wage income exceeds this floor, an alternative calculation is made where the contributions equal 25 per cent of the wage income in excess of the floor. The actual contributions made would represent the minimum between the alternative calculation and 7.8 per cent of the total wage income.

Contributions from the self-employed are 11.0 per cent of personal income attributable to labour ( 7.8 per cent for the self-employed in primary industries).

### 2.1.2. Employers' contributions

Employer's social security contributions are due for all employees in both the private and the public sector. The contribution is geographically differentiated according to the municipality where the work-place is. The standard rates are $14.1,10.6,7.9,6.4,5.1$ or 0 per cent of gross wages. The highest rate applies to central parts of southern Norway. Lower rates may apply under certain circumstances. The weighted average rate is approximately 13.1 per cent.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children (child support)

The following transfers are available:
NOK 11640 per child aged 0-18 years.
Single parents receive transfers for one more child than their actual number of children. Families living in the northernmost parts of Norway receive extra child support of NOK 3840 per year for each child aged 18 or younger.

## 4. Main changes in tax/benefit systems since 2002

- In 2011, changes to the tax system was made to provide better incentives for people to work when drawing a pension. The tax limitation rule for early-retirement and old-age pensioners was replaced by a new tax allowance for pension income. The allowance ensures that people who only receive the minimum pension will continue not to pay income tax. The allowance is scaled down against pension income, so that the marginal tax on earned income is reduced to the same level as for wage earners. The marginal tax on capital for low-income pensioners is also reduced to the same level as for other taxpayers. The new tax allowance is determined regardless of the spouse's income and married early-retirement and old-age pensioners will each have their own allowance. In addition, the pension income social security contribution is increased and the special allowance for age is discontinued.
- In 2010, a new formula-based system for determining the tax-assessed value of homes was introduced. The new tax-assessed value will be determined by multiplying the floor space of the dwelling by a square metre price based on the geographical location (neighbourhood, municipality, sparsely populated vs. densely populated area), size, age and type (detached, semi-detached, terraced, flat) of the property. For primary homes (owner-occupied), the per square metre rate will be set at 25 per cent of the estimated sale price per square metre, whereas the rate for second homes, i.e. any other dwellings in addition to the primary home that are not defined as business or recreational properties, will be set at 40 per cent of the estimated sale price per square metre. The current "safety valve" system is being continued so that taxpayers can appeal and have the tax-assessed value reduced to 30 per cent of the documented fair market value ( 60 per cent for second homes). In addition, the tax-assessed values of recreational properties are increased by 10 per cent.
- Most important changes in 2009 were the abolition of the 80 per cent rule, which primarily reduced the wealth tax of the richest. The wealth tax on equities for those who fall within the scope of the 80 per cent rule has been more than doubled since 2005.
- The home savings scheme (BSU) was expanded in 2009 by increasing the annual savings amount to NOK 20000 and the maximum aggregate savings amount to NOK 150000.
- The rates of the inheritance tax were reduced and the exempted amount was increased in 2009. The instalment scheme for family businesses was expanded through the abolition of the upper limit, and the payment period was increased from 7 to 12 years.

Other changes in the personal tax base in 2009:

- The fishermen's allowance was increased from NOK 115000 to NOK 150000.
- The reindeer husbandry allowance was increased to the same level as the agriculture allowance.
- The allowance for labour union fees was increased by NOK 450 to NOK 3600 .
- The rate of the travel allowance was increased from NOK 1.40 per km to NOK 1.50 per km.
- The tax-free net income thresholds under the tax limitation rule were increased such as to ensure that singles and couples who receive the minimum state pension will still not be paying tax following the favourable social security settlement they benefited from in 2008.
- A tax favoured contributions to individual pension agreement schemes was reintroduced as of 2008.
- From 1 January 2008, the employees' SSC rate for self-employed was increased from 10.7 per cent to 11.0 per cent.
- The upper threshold in the surtax schedule was substantially reduced from 2006 to 2007.
- The surtax rates were reduced in 2005 and 2006, as part of a reform of the dual income tax system. The basic allowance has been substantially increased.
- From 1 January 2006, the supplementary employer's social security contribution at 12.5 per cent for gross wage income that exceeds 16 times " $G$ " (average " $G$ " is estimated to be NOK 74721 in 2010) was removed.
- From 1 January 2006, the Class 2 in the surtax was removed.
- From 1 January 2005, the ceiling in the parent allowance for two and more children was removed, and the maximum allowance was increased with NOK 5000 for each child after the first. From 2008, the maximum allowance has been increased with NOK 15000 for each child after the first.
- The additional child support of NOK 7884 for children aged 1 and 2 years was abolished as of 1 August 2003.
- An allowance of maximum NOK 6000 for donations to voluntary organisations was introduced as of 1 January 2003. Previously this allowance was coordinated with the allowance for labour union fees (with a combined maximum allowance). The allowance was increased to NOK 12000 as of 1 January 2005.
- As of 1 July 2002, the employer's social security contribution rates for employees aged 62 years or older were reduced by 4 percentage points, although not below zero per cent. From 2007, the reduction was abolished.


## 5. Memorandum items

### 5.1. Identification of an AW and calculation of earnings

The wage series used refers to full time employees in the B-N industry group (ISIC Rev. 4). The calculation of annual wage earnings is as follows:

- Weighted average monthly wage plus overtime times 12.

The average monthly wage is agreed payment for a wage earner working a normal agreed working-year. It includes bonus payments and other allowances, but not payments for overtime, sick leave, and an establishment's indirect wage costs. The sum is weighted with the number of persons employed in the different industry groups.

It should be pointed out that although the wage series is based on the ISIC rev. 4 standard, the corresponding weights have been estimated by using employment data from national accounts. The national accounts still use an older standard, but will upgrade to the newest standard in a few months' time.

### 5.2. Employers' contributions to private health and pension schemes

No information available.

2011 Parameter values

| APW-wage | Ave_earn | 487324 | Secretariat estimate |
| :--- | :--- | :--- | :--- |
| Central rate (pers) | Tax1_sch | 0 | 471200 |
| class 1 |  | 0.09 | 765800 |
| class 2 |  | 0.12 | 471200 |
|  | Tax2_sch | 0 | 765800 |
|  |  | 0.09 |  |
| Central rate (ord) | Cent_rate_ord | 0.12 |  |
| Local rate (ord) | Local_rate | 0.1405 |  |
| Allowances | Class_al_1 | 43600 |  |
|  | Class_al_2 | 87200 | 4000 |
| Basic relief | Basic_min | 75150 |  |
|  | Basic_max | 0.36 |  |
|  | Basic_rel_rate | 31800 |  |
| Soc security contribs | Basic_min_wage | 0.078 |  |
| Employer | SSC_rate | 0.131 |  |
| Trygd. low.lim | SSC_empr | 39600 |  |
| pct.rate | SSC_low_lim | 0.25 |  |
| Ref. Income "G" | SSC_low_rate | 78024 |  |

## 2011 Tax equations

The equations for the system for Norway in 2011 may be calculated on an individual or joint basis for married couples. Social security contributions are calculated on an individual basis. The calculation for Class 2 is always chosen for single parents and is chosen for married couples whenever this gives a lower value of tax than the corresponding Class 1 calculations. The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | $J$ | IF(class=1, tax1_al_princ+tax1_al_spouse, tax2_al) |
| Class 1 tax allowance (ordinary) | tax1_al_princ | P | MIN(MAX(Basic_min_wage, MIN(earn_princ*Basic_rel_rate, Basic_max)) +Class_al_1, earn_princ) |
| Class 1 tax allowance (ordinary) | tax1_al_spouse | S | MIN(MAX(Basic_min_wage, MIN(earn_spouse*Basic_rel_rate, Basic_max)) +Class_al_1, earn_spouse) |
| Class 2 tax allowance (ordinary) | tax2_al | J | MIN(MAX(Basic_min_wage, MIN(earn_princ*Basic_rel_rate, Basic_max)), earn_princ)+MIN(MAX(Basic_min_wage, MIN(earn_spouse* Basic_rel_rate, Basic_max)), earn_spouse)+Class_al_2 |
| 3. Credits in taxable income | taxbl_cr | J | 0 |
| 4. CG taxable income (ordinary) |  |  |  |
| Class 1 taxable income | tax1_inc | B | Positive(earn-tax1_al) |
| Class 2 taxable income | tax2_inc | J | Positive(earn_total-tax2_al) |
| 5. CG tax | CG_tax |  | IF(class=1, CG1_tax, CG2_tax) |
| Class 1 tax (personal+ordinary) | CG1_tax | B | Tax(earn, Tax1_sch)+Cent_rate_ord*tax1_inc |
| Class 2 tax (personal+ordinary) | CG2_tax | $J$ | Tax(earn_total, Tax2_sch)+Cent_rate_ord*tax2_inc |
| 6. Tax credits: | tax_cr | P | 0 |
| 7. CG tax | CG_tax | B | CG_tax |
| 8. State and local taxes | local_tax | J | IF(class=1, local1_tax_total, local2_tax) |
| Class 1 local tax | local1_tax | B | (Local_rate*(tax1_inc_princ+tax1_inc_spouse))-tax_cr |
| Class 2 local tax | local2_tax | J | (Local_rate*tax2_inc)-tax_cr |
| Favourable class | class | J | 1+((CG2_tax_excl+local2_tax)<(CG1_tax_excl_total+local1_tax_total)) |
| 9. Employees' soc security | SSC | B | MIN(earn*SSC_rate, Positive(SSC_low_rate*(earn-SSC_low_lim))) |
| 11. Cash transfers | cash_trans | J | (children>0)*Child_sup |
| 13. Employer's soc security | SSC_empr | B | earn*SSC_empr |

Key to range of equation: $B$ calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Poland

This chapter includes data on the income tax paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Poland 2011 <br> The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 25705 | 38557 | 64262 | 25705 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 2586 | 3879 | 6465 | 2586 |
|  | Work-related expenses | 1335 | 1335 | 1335 | 1335 |
| Other |  |  |  |  |  |
|  | Total | 3921 | 5214 | 7800 | 3921 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 20846 | 31936 | 54116 | 20846 |
| 5. | Central government income tax liability (exclusive of tax credits) | 3752 | 5748 | 9741 | 3752 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 556 | 556 | 556 | 1112 |
| Married or head of family |  |  |  |  |  |
|  | Children | 0 | 0 | 0 | 2224 |
| Other (health insurance) |  | 1719 | 2578 | 4297 | 1719 |
|  | Total | 2275 | 3135 | 4853 | 5055 |
| 7. | Central government income tax finally paid (5-6) | 1477 | 2614 | 4887 | 0 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 2586 | 3879 | 6465 | 2586 |
|  | Taxable income | 1996 | 2994 | 4991 | 1996 |
|  | Total | 4582 | 6873 | 11455 | 4582 |
| 10. | Total payments to general government (7+8+9) | 6059 | 9487 | 16343 | 4582 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 19645 | 29070 | 47919 | 21123 |
| 13. | Employers' compulsory social security contributions | 3799 | 5699 | 9498 | 3799 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 5.7\% | 6.8\% | 7.6\% | 0.0\% |
|  | Employees' social security contributions | 17.8\% | 17.8\% | 17.8\% | 17.8\% |
|  | Total payments less cash transfers | 23.6\% | 24.6\% | 25.4\% | 17.8\% |
|  | Total tax wedge including employer's social security contributions | 33.4\% | 34.3\% | 35.0\% | 28.4\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 26.7\% | 26.7\% | 26.7\% | 17.8\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 36.1\% | 36.1\% | 36.1\% | 28.4\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Poland 2011

## The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage)

| $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: |
| 2 | 2 | 2 | none |
| 38557 | 51409 | 64262 | 51409 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income
4. Central government taxable income (1-2+3)
5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
Married or head of family
Children
Other (health insurance)
Total
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

| Gross earnings |  | 3879 | 5172 | 6465 | 5172 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable income |  | 2994 | 3992 | 4991 | 3992 |
|  | Total | 6873 | 9164 | 11455 | 9164 |
| 10. Total payments to general government (7+8+9) |  | 6873 | 9894 | 13322 | 12119 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 0 |
| 12. Take-home pay (1-10+11) |  | 31684 | 41515 | 50939 | 39291 |
| 13. Employers' compulsory social security contributions |  | 5699 | 7598 | 9498 | 7598 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 0.0\% | 1.4\% | 2.9\% | 5.7\% |
| Employees' social security contributions |  | 17.8\% | 17.8\% | 17.8\% | 17.8\% |
| Total payments less cash transfers |  | 17.8\% | 19.2\% | 20.7\% | 23.6\% |
| Total tax wedge including employer's social security contributions |  | 28.4\% | 29.6\% | 30.9\% | 33.4\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 17.8\% | 26.7\% | 26.7\% | 26.7\% |
| Total payments less cash transfers: Spouse |  | 23.5\% | 26.7\% | 26.7\% | 26.7\% |
| Total tax wedge: Principal earner |  | 28.4\% | 36.1\% | 36.1\% | 36.1\% |
| Total tax wedge: Spouse |  | 33.4\% | 36.1\% | 36.1\% | 36.1\% |

Th
he national currency is the Zloty (PLN). In 2011, PLN 2.96 was equal to USD 1. In that year, the average worker earned PLN 38557 (Secretariat Estimate).

## 1. Personal income tax system

An individual being a tax resident in Poland is liable to tax on the basis of world-wide income, irrespective of the source and origin of that income. (The term "residency" is understood similarly to Article 4, paragraph 2, point a) of the OECD Model Tax Convention on Income and Capital).

### 1.1. Central government income tax

### 1.1.1. Tax unit

Individuals are taxed on their own income, but couples married during the whole calendar year* can opt to be taxed on their joint income. In the latter case, the "splitting" system applies: the tax bill for a couple is twice the income tax due on half of joint income, provided the joint income does not include capital income taxed at the flat 19 per cent rate. Single individuals with dependent children are also entitled to use the splitting system (their family quotient is two). For the purpose of this report, it is assumed that married couples are taxed on joint income.

### 1.1.1.1. Tax base

## Gross employment income

For taxation purposes, taxable gross employment income in Poland includes both cash income and the value of benefits in kind. More specifically, gross employment income includes base salary, overtime payments, bonuses, awards, compensation for unused holidays, and costs that are paid in full or in part by the employer on behalf of the employee.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Basic relief: a non-refundable tax credit of PLN 556.02 per person.
- Marital status relief: none.
- Relief for children: a tax credit of PLN 1112.04 available for each child.**
- Relief for health insurance contributions: a tax credit is almost equal to health insurance contribution paid to the National Health Fund. The contribution is 9 per cent of the calculation basis whereas the tax credit is 7.75 per cent of this basis.

[^22]- Relief for other social security contributions: an allowance is provided for all social insurance contributions paid by the taxpayer.
- Relief for selected work-related expenses: standard deductions depend on the number of workplaces and on whether place of residence and workplace are within the same town/city or not. The annual amounts in PLN (deductible from income) are:

|  | One workplace | Two/more workplaces |
| :--- | :---: | :---: |
| Workplace in the same town/city as place of residence | $1335.00^{1}$ | 2002.05 |
| Workplace in different town/city as place of residence | 1668.72 | 2502.56 |

Note: If the actual commuting expenses exceed standard deduction, relief can be determined by the actual expenses incurred solely on personal season tickets.

1. For the purpose of the calculations in this publication, it is assumed that the worker has the same town/city as place of residence.

### 1.1.2.2. Main non-standard tax reliefs applicable to an average worker

## Allowances:

- Expenses for the purpose of rehabilitation incurred by a taxpayer who is a disabled person, or a taxpayer, who supports the disabled.
- Equivalent of blood donations, donations made for the purposes of public benefit activity and of religious practice - in the amount of donation, no more than 6 per cent of income.
- Donations made for charity church care - in the amount of the donation.
- Expenses incurred for the use of Internet in a taxpayer dwelling place - up to PLN 760.
- Abolished allowance (since 2007, continued on the acquired right basis) for interests payments on mortgage loans raised no later than in 2006 on acquisition of housing property on the primary market - up to the amount of interests related to the part of loan not exceeding PLN 325990.

Tax credits:

- Donations made to public benefit organisations - up to 1 per cent of due tax.*
- Abolished tax credits (continued on the acquired rights basis), i.e. expenses for saving with the aim of buying a house or flat, the amount of social contributions paid on income of an unemployed person hired by a taxpayer in order to take care of their children and/or house.
- Tax schedule:

The tax schedule is as follows:

| Tax base (in PLN) |  | Tax amount |
| :---: | :---: | :---: |
| Over | Below |  |
| 0 | 85528 | 18\% of the tax base, less a basic tax credit of PLN 556.02 |
| 85528 | PLN $14839.02+32 \%$ of surplus over PLN 85528 |  |

### 1.2. State and local income tax

There are no regional or local income taxes.

[^23]
### 1.3. Wealth tax

There is no wealth tax.

## 2. Social security contributions

### 2.1. Employees' contributions

Employees pay 13.71 per cent of the gross wage. This contribution includes:

- Pension insurance contribution - 9.76 per cent of the gross wage.
- Disability insurance contribution -1.5 per cent of the gross wage.
- Sickness/maternity insurance contribution -2.45 per cent of the gross wage.
- 11.78 per cent of the old age insurance contribution (about 1.15 percentage points*) are transferred by ZUS to a privately-managed fund, which is called an "open pension fund (OPF)" where the savings accumulate at a market conform rate. These pension savings are paid out if the taxpayer dies before reaching the pension age. These pension savings are not included in the Taxing Wages calculations as they are "non-tax compulsory payments"; more information can be found in the online OECD Tax Database (www.oecd.org/ctp/taxdatabase).
- In case of pension and disability insurance, contributions are not paid on the part of the wage that exceeds PLN 100 770.**


### 2.2. Employers' contributions

In respect of income paid under an employment contract with a Polish entity, employers have an obligation to pay social security contributions equal to 18.43 per cent of gross wage. This value consists of:

- 9.76 percentage points are aimed for pension insurance.
- 4.5 percentage points are aimed for disability insurance.
- 4.17 percentage points are aimed for other insurances, i.e. 1.62 percentage points (on average) accident insurance, 2.45 percentage points for Labour Found and 0.1 percentage points for the Guaranteed Employee Benefit Fund.
- 11.78 per cent of the old age insurance contributions (about 1.15 percentage points*) are transferred by ZUS to a privately-managed fund, which is called an "open pension fund (OPF)"; where the savings accumulate at a market conform rate. These pension savings are paid out if the taxpayer dies before reaching the pension age. These pension savings are not included in the Taxing Wages calculation as they are "non-tax compulsory payments"; more information can be found in the online OECD Tax Database (www.oecd.org/ctp/taxdatabase).
- In case of pension and disability insurance, contributions are not paid on the part of the wage that exceeds PLN 100770.

[^24]
## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

Families where the average monthly income per household member for the previous period is no greater than PLN 504 (or PLN 583 when there are one or more disabled children in the household) are entitled to family allowances. Families receive PLN 68 monthly for a child no older than 5 years, PLN 91 monthly for a child of 5 up to 18 years old, and PLN 98 monthly for a child of 18 up to 24 years old. The calculations in this Report are based on the assumption that the children are aged between 5 and 18 years.

Single parents are entitled to a supplement of PLN 170 for each child up to a maximum of PLN 340 for all children (and PLN 250 for a disabled child up to a maximum of PLN 500 for all children).

There are several supplements to family allowances:

- for large families - PLN 80 monthly for the 3rd and next children in the family;
- for education of disabled children - PLN 60 monthly for children not older than 5 years and PLN 80 for children older than 5 years.


## 4. Main changes in tax/benefit systems since 2010

There were no changes in taxation of wages. Tax schedule, work-related expenses, tax allowances, relieves and Social Security Contributions are the same as in previous year.

What was changed is the distribution of old age contributions. Up to May 2011, they were divided into two pillars - ZUS (12.22 per cent of gross salary) and OPF (7.3 per cent of gross salary). Since May 2011, the share of contribution transferred to OPF was decreased to 2.3 per cent of gross salary. Remaining 5 per cent was accumulated on new subaccounts in ZUS. This capital is to be indexed annually by the rate of economic growth (measured in 5 year period) and inflation, not invested at market conform rates as it is in case of OOPFs. Capital subscribed in new subaccounts in ZUS is subject to inheritance (just like in OPF). The share of old pension contribution invested in OPFs and accumulated in new subaccounts in ZUS will change over the next years in favour for OPFs.

## 5. Memorandum items

### 5.1. Identification of AW and valuation of earnings

The Polish Central Statistical Office calculates average monthly wages and salaries for employees on the basis of reports of enterprises. The figures include overtime and bonus payments and also include information for part-time employees converted to full-time equivalents. Male and female workers are included. The information, which includes estimates for different sectors, is published in the monthly Statistical Bulletin.

### 5.2. Employers' contributions to private pension, health and related schemes <br> No information provided.

2011 Parameter values

| AW earnings | Ave_earn | 38557 | Secretariat Estimate |
| :---: | :---: | :---: | :---: |
| Work expenses | work_exp | $1335.00^{1}$ |  |
| Income tax schedule | tax_sch | 0.18 | 85528 |
|  |  | 0.32 |  |
| Tax credits |  |  |  |
| Basic credit | basic_cr | 556.02 |  |
| Health insurance | health_ins | 0.09 |  |
|  | health_ins_credit | 0.0775 |  |
| Children | Child_cr | 1112.04 |  |
| Social security contributions |  |  |  |
| Employers | SSC_empr | 0.1843 |  |
| Old-age pension and disability pension insurance | SSC_old | 0.0976 |  |
|  | SSC_old_ZUS | 0.0610976 |  |
|  | SSC_old_ZUSII | 0.0167 |  |
|  | SSC_old_OPF | 0.0198 |  |
|  | SSC_dis | 0.045 |  |
| Other insurances | SSC_a | 0.0417 |  |
| Employees | SSC | 0.1371 |  |
| Old-age pension and disability pension insurance | SSC_old_e | 0.0976 |  |
|  | SSC_old_e_ZUS | 0.0610976 |  |
|  | SSC_old_e_ZUSII | 0.0167 |  |
|  | SSC_old_e_OPF | 0.0198 |  |
|  | SSC_dis_e | 0.015 |  |
| Sickness insurance | SSC_S | 0.0245 |  |
| Contribution ceiling | SSC_C | 100770 |  |
|  |  |  |  |
| Family benefit | fam_ben | 1092 |  |
| Single parent additional family benefit | fam_ben_Spsup | 170 |  |
| Single parent additional family benefit ceiling | fam_ben_Spsup_lim | 340 |  |
| Income limit | fam_ben_lim | 6048 |  |
| Income limit for single parent | fam_ben_lim_sp | 6048 |  |

1. Lump-sum annual work expenses for an employee having one workplace and living in the place (town, city) where the workplace is; employees living outside the city (town) where their workplace is may deduct PLN 1668.72 annually.

## 2011 Tax equations

The equations for the Polish system are mostly calculated on a family basis.
The standard functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Two additional functions (Tax93 and ftax) have been incorporated to carry out an iterative calculation for central government tax. These allow for the fact that the church tax is calculated as 9 per cent of Central Government tax and is also allowed as a deduction when calculating taxable income. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| Quotient for tax calculation | quotient | J | 1+MAX(Married, (Children>0)) |
| 2. Allowances: | tax_al | J | work_exp+MIN(earn_spouse,work_exp)+SSC+SSC_old_e_OPF*MIN(earn, SSC_c) |
| 3. Credits in taxable income | taxbl_cr | J | 0 |
| 4. CG taxable income | tax_inc | J | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | J | quotient*Tax(tax_inc/quotient,tax_sch) |
| 6. Tax credits: |  |  |  |
| Basic credit | basic_cr | J | basic_cr*quotient |
| Health insurance | health_ins_cr | B | health_ins_credit* ${ }^{\text {(earn-SSC-SSC_old_e_OPF*MIN(earn, SSC_c }}$ ) |
| Child credit | child_cr | J | Child_cr*Children |
| Total tax credits | tax_cr | J | basic_cr+health_ins_cr+child_cr |
| 7. CG tax | CG_tax | J | Positive(CG_tax_excl-tax_cr) |
| 8. State and local taxes | local_tax | J | 0 |
| 9. Employees' soc security | health_ins | B | (earn-(MIN(earn, SSC_c)*(SSC_old_e+SSC_dis_e)+earn*SSC_s))*health_ins |
|  | SSC | B | (SSC_old_e_ZUS+SSC_dis_e)*MIN(earn,SSC_c)+SSC_s*earn |
| 11. Cash transfers | cash_tran | J | ```((earn_total/(1+Married+Children))<(Married*fam_ben_lim+( 1-Married)*fam_ben_lim_sp))*(Children*fam_ben+(1-Married)*(Children>0)*MIN(fam _ben_Spsup*Children;fam_ben_Spsup_lim))``` |
| 13. Employer's soc security | SSC_empr | B | (SSC_old_ZUS+SSC_dis)*MIN(earn,SSC_c)+SSC_a*earn |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Portugal

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Portugal 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 11726 | 17588 | 29314 | 11726 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 4104 | 4104 | 4104 | 4104 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
| Deduction for social security contributions and income taxes |  |  |  |  |  |
|  | Work-related expenses | 0 | 0 | 0 | 0 |
| Other |  |  |  |  |  |
|  | Total | 4104 | 4104 | 4104 | 4104 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 7622 | 13484 | 25210 | 7622 |
| 5. | Central government income tax liability (exclusive of tax credits) | 967 | 2403 | 6028 | 967 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 261 | 261 | 261 | 380 |
| Married or head of family |  |  |  |  |  |
|  | Children | 0 | 0 | 0 | 380 |
| Other |  |  |  |  |  |
|  | Total | 261 | 261 | 261 | 760 |
| 7. | Central government income tax finally paid (5-6) | 735 | 2376 | 6411 | 212 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 1290 | 1935 | 3225 | 1290 |
| Taxable income |  |  |  |  |  |
|  | Total | 1290 | 1935 | 3225 | 1290 |
| 10. | Total payments to general government (7+8+9) | 2024 | 4311 | 9636 | 1501 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 841 |
|  | Total | 0 | 0 | 0 | 841 |
| 12. | Take-home pay (1-10+11) | 9701 | 13278 | 19678 | 11065 |
| 13. | Employer's compulsory social security contributions | 2785 | 4177 | 6962 | 2785 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 6.3\% | 13.5\% | 21.9\% | 1.8\% |
|  | Employees' social security contributions | 11.0\% | 11.0\% | 11.0\% | 11.0\% |
|  | Total payments less cash transfers | 17.3\% | 24.5\% | 32.9\% | 5.6\% |
|  | Total tax wedge including employer's social security contributions | 33.1\% | 39.0\% | 45.8\% | 23.7\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 39.0\% | 39.0\% | 50.0\% | 39.0\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 50.7\% | 50.7\% | 59.6\% | 50.7\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Portugal 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 17588 | 23451 | 29314 | 23451 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 4104 | 8208 | 8208 | 8208 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
| Deduction for social security contributions and income taxes |  |  |  |  |  |
|  | Work-related expenses | 0 | 0 | 0 | 0 |
| Other |  |  |  |  |  |
|  | Total | 4104 | 8208 | 8208 | 8208 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 13484 | 15243 | 21106 | 15243 |
| 5. | Central government income tax liability (exclusive of tax credits) | 1643 | 1934 | 3370 | 1934 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 523 | 523 | 523 | 523 |
|  | Married or head of family |  |  |  |  |
|  | Children | 380 | 380 | 380 | 0 |
| Other |  |  |  |  |  |
|  | Total | 903 | 903 | 903 | 523 |
| 7. | Central government income tax finally paid (5-6) | 950 | 1303 | 2944 | 1707 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1935 | 2580 | 3225 | 2580 |
|  | Taxable income |  |  |  |  |
|  | Total | 1935 | 2580 | 3225 | 2580 |
| 10. | Total payments to general government (7+8+9) | 2885 | 3882 | 6169 | 4287 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
|  | For two children | 701 | 637 | 0 | 0 |
|  | Total | 701 | 637 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 15404 | 20206 | 23145 | 19165 |
| 13. | Employer's compulsory social security contributions | 4177 | 5570 | 6962 | 5570 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 5.4\% | 5.6\% | 10.0\% | 7.3\% |
|  | Employees' social security contributions | 11.0\% | 11.0\% | 11.0\% | 11.0\% |
|  | Total payments less cash transfers | 12.4\% | 13.8\% | 21.0\% | 18.3\% |
|  | Total tax wedge including employer's social security contributions | 29.2\% | 30.4\% | 36.2\% | 34.0\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 28.5\% | 39.0\% | 39.0\% | 39.0\% |
|  | Total payments less cash transfers: Spouse | 18.1\% | 39.0\% | 39.0\% | 39.0\% |
|  | Total tax wedge: Principal earner | 42.2\% | 50.7\% | 50.7\% | 50.7\% |
|  | Total tax wedge: Spouse | 33.8\% | 50.7\% | 50.7\% | 50.7\% |

Th
Lhe national currency is the euro (EUR). In 2011, EUR 0.72 equalled USD 1. The Secretariat has estimated that in that same year, the average worker earned EUR 17588.

## 1. Personal income tax system

### 1.1. Taxes levied by central government

### 1.1.1. Tax unit

The tax unit is the family. Family income includes the income of any dependent children. Tax is computed on aggregate net income in the various categories of income, i.e. after the deductions specific to each category and standard and non-standard reliefs.

### 1.1.2. Standard and non-standard reliefs and tax credits

### 1.1.2.1. Standard reliefs

Standard deduction of 72 per cent of 12 times the Social Benefit Index (the 2010 highest monthly minimum wage until the index reaches this value).. If compulsory contributions to social protection schemes and statutory sub-schemes for health care exceed that limit, the deduction will equal the amount of those contributions.

### 1.1.2.2. Non-standard reliefs

For income received from 1 January 1999 onwards, the majority of the standard reliefs have been replaced by tax credits (see Section 1.1.4).

Non-standard reliefs still in effect:

- A deduction is provided for the portion of trade union dues not constituting consideration for benefits in the realm of health care, education, assistance for the elderly, housing, insurance or social security, up to 1 per cent of the taxpayer's gross income, increased by 50 per cent. These dues are not taken into account in the calculations underlying this Report.
- Alimony payments compulsory under court order or court-approved agreement.


### 1.1.3. Social security contributions

Social security contributions are totally deductible if they exceed EUR 4104.00 per taxpayer, in which case the deduction for the contributions replaces the standard earned income deduction (see Section 1.1.2.1).

### 1.1.4. Tax credits

Basic credits:

- EUR 261.25 for each unmarried taxpayer or for each spouse.

[^25]- EUR 380.00 for a taxpayer in a single-parent family.
- EUR 190.00 for each dependent child. This tax credit is doubled for dependent children whose age does not exceed 3 years old.
- EUR 261.25 for each ascendant whose income does not exceed the minimum pension benefit. When there is only one ascendant, the tax credit is EUR 403.75.

Other tax credits:

- Non-reimbursed health care costs, not covered by Social Security: 30 per cent of health care costs plus interest on loans contracted to meet them, without limit if the expenses are exempt from VAT or subject to the reduced rate of VAT; otherwise, up to EUR 65.00 or 2.5 per cent of expenses that are exempt from VAT or subject to the reduced rate of VAT plus interest on loans contracted to meet them.
- Expenditures for educating the taxpayer or the taxpayer's dependants: 30 per cent of outlays, up to 160 per cent of the social benefits index (EUR 760.00; 160 per cent of 2010 highest minimum wage until this index reaches that value). For households having three or more dependants, the limit is raised by 30 per cent of the social benefits reference value (EUR 142.50; 30 per cent of 2010 highest minimum wage until this index reaches that value) for each dependant, if each of them incurs education costs.
- Costs for sanatoria or retirement homes for taxpayers, their ascendants and collaterals up to the third degree whose income does not exceed the national minimum wage: 25 per cent of expenses up to EUR 403.75.
- Costs for the acquisition, construction or improvement of the taxpayers' primary, permanent residence, or for renting out property for a permanent residence: 30 per cent of interest and principal repayments up to EUR 591.00. Rent paid by a tenant, for his permanent residence under an agreement typified by the law, up to EUR 591.00. These limits are increased by 10 per cent if the building is duly certified as "most efficient" in what concerns energy use (categories A or A+). These limits are also increased by 50 per cent for taxpayers in the first two tax rate brackets, by 20 per cent for taxpayers in the third tax rate bracket and by 10 per cent for taxpayers in the fourth tax rate bracket.

Tax credits from tax benefits:

- Acquisition of new infrastructure for the use of renewable energies: 30 per cent of amounts spent, up to EUR 803.00. This tax credit cannot be combined with tax credits for the costs of acquiring, constructing or improving the taxpayer's primary, permanent residence, or of renting out property to be used as a permanent residence.
- Revoked.
- Health insurance premiums: 25 per cent of premiums paid in the year in which the corresponding income was received, up to EUR 85 for unmarried taxpayers and EUR 170 for a married couple, plus EUR 43 for each dependent child.
- Individual Retirement Savings Plans (PPRs): 20 per cent of amounts invested, for unmarried taxpayers or for each spouse, up to:
* EUR 400 for taxpayers under 35.
* EUR 350 for taxpayers over 35 and under 50.
* EUR 300 for taxpayers over 50.
- Social Security Individual Accounts: 20 per cent of amounts invested, for unmarried taxpayers or for each spouse, up to a limit of EUR 350.
- Donations granted on the conditions stated in the statutes governing charities (grants to central, regional or local government, special "social solidarity institutions", museums, libraries, schools, institutes, educational or research associations, public administrative bodies, etc.): 25 per cent of donations, limited in certain cases to 15 per cent of the donor's tax liability.

However the sum of tax credits related to health care costs, education and formation, retirement homes and house expenses cannot exceed the values of the following amounts:

| Taxable income (EUR) (R) | Limit |
| :--- | :--- |
| Up to 4898 | Without limit |
| Over 4898 up to 7410 | Without limit |
| Over 7410 up to 18375 | Without limit |
| Over 18375 up to 42259 | Without limit |
| Over 42 259 up to 61244 | Without limit |
| Over 61244 up to 66045 | Without limit |
| Over 66045 up to 153300 | $1.666 \%$ of the taxable income with the limit of EUR 1 100 |
| Over 153300 | EUR 1100 |

And the sum of tax credits from tax benefits (which include the tax credits related to Individual Retirement Savings Plans, Social Security Individual Accounts and donations) cannot exceed the following amounts:

| Taxable income (EUR) (R) | Limit |
| :--- | :--- |
| Up to 4898 | Without limit |
| Over 4898 up to 7410 | Without limit |
| Over 7410 up to 18375 | EUR 100 |
| Over 18375 up to 42259 | EUR 80 |
| Over 42259 up to 61244 | EUR 60 |
| Over 61244 up to 66045 | EUR 50 |
| Over 66045 up to 153300 | EUR 50 |
| Over 153300 | EUR 0 |

### 1.1.5. Family status

To take the taxpayer's family status into account, joint taxation of the family unit was introduced, with the use of an income-splitting system to obtain taxable income.

### 1.1.5.1. Determination of taxable income

To determine taxable income, to which the rates listed in the tax schedule are applied, income is divided by 2 .

### 1.1.6. Tax rate schedule (applicable to 2011 income)

| Taxable income (EUR) (R) | Marginal tax rate (\%) (T) | Amount to deduct (EUR) (K) |
| :--- | :---: | :---: |
| Up to 4898 | 11.50 | - |
| Over 4898 up to 7410 | 14.00 | 122.45 |
| Over 7410 up to 18375 | 24.50 | 900.50 |
| Over 18375 up to 42259 | 35.50 | 2921.75 |
| Over 42259 up to 61244 | 38.00 | 3978.23 |
| Over 61244 up to 66045 | 41.50 | 6121.77 |
| Over 66045 up to 153300 | 43.50 | 7442.66 |
| Over 153300 | 46.50 | 12041.67 |

In the case of taxpayers whose income stems primarily from dependent employment (earned income), disposable income after application of the tax rates to taxable income may not be less than 120 per cent of the national minimum wage, (EUR 8148.00 in 2011), nor may it result in income tax of which the taxable base after application of the conjugal quotient is EUR 1911 or less.

For residents in the Autonomous Regions of the Azores and of Madeira, reduced tax rates are applicable. Tax calculation formula ( $\mathrm{I}=$ Income tax due):

- Unmarried taxpayers: I = R x ( $\mathrm{T}-\mathrm{K}-\mathrm{C}$ )

Married taxpayers (with one or two earned incomes/see Section 1.1.5.1):

- $I=\{[(R / 2) \times(T-K)] \times 2\}-C$
where:
$\mathrm{R}=$ Taxable income, after deduction of standard and non-standard reliefs (see Sections 1.1.2 and 1.1.5.1),
$\mathrm{T}=$ Tax rate corresponding to the taxable income bracket,
$\mathrm{K}=$ Amount to be deducted from each bracket,
$C=$ Tax credits (see Section 1.1.4).
Surtax:
A surtax was introduced on 8 September 2011 and is applicable to all 2011 income declared in the income statement. The surtax of $3.5 \%$ is applicable to taxable income with an allowance equivalent to the annual minimum wage (485*14) and a tax credit, per dependant, of $2.5 \%$ the minimum wage $\left(0.025^{*} 485\right)$.


### 1.1.7. Special family situations

### 1.1.7.1. Handicapped taxpayer/spouse, with a disability rating of 60 per cent or more:

- A tax credit corresponding to 4 times the social benefits index (EUR 1 900, 4 times the 2010 minimum wage until the index reaches this value) is granted for each taxpayer or spouse.


### 1.1.7.2. Handicapped dependent children, with a disability rating of 60 per cent or more:

- A tax credit corresponding to 1.5 times the social benefits index (EUR 712.50) is granted for each dependent child.


### 1.1.7.3. Handicapped taxpayer/spouse or dependent children, with a disability rating of 90 per cent or more:

- An additional tax credit corresponding to 4 times the social benefits index (EUR 1 900) is granted for each taxpayer or spouse or dependent child.


### 1.1.8. Non liable income

- Lawfully granted family allowances.
- Living expenses per diem, up to the limits established for national civil servants.
- Meal allowances, up to the amount established for national civil servants, increased by 50 per cent or 70 per cent in the event of a meal allowance in the form of meal vouchers.


## 2. Compulsory social security contributions to schemes operated within the government sector

Rates and ceilings: social security contributions are levied on gross pay and are not subject to any ceiling.

### 2.1. Employee contributions

As a rule, the rate of employee contributions is 11 per cent of gross pay, with no ceiling.

### 2.2. Employer contributions

The employer's rate of social security contributions is 23.75 per cent of gross pay, with no ceiling.

### 2.3. Areas of social protection

- Health (sickness, disability, work accidents, work-related illness).
- Old age, survival.
- Maternity.
- Family (family allowances).
- Unemployment.


## 3. Universal cash benefits

### 3.1. Benefits for dependent children

The basic principle is to grant higher monthly social benefits to lower-income households.

There are six different levels of monthly allowances for dependent children, depending on the family's reference income. This reference income is determined by dividing the family's annual gross income, including vacation and Christmas allowances, by the number of dependent children plus one:

- Level 1: families whose reference income is under 50 per cent of 14 times the reference value (i.e. under EUR 2 934.54).
- Level 2: families whose reference income is over 50 per cent and under 100 per cent of 14 times the reference value (i.e. over EUR 2934.54 and under EUR 5 869.08).
- Level 3: families whose reference income is over 100 per cent and under 150 per cent of 14 times the reference value (i.e. over EUR 5869.08 and under EUR 8 803.62).
- Level 4: families whose reference income is over 150 per cent (i.e. over EUR 8 803.62).

Each level is also divided according to the age of the dependent child. Benefits are higher during the first 12 months of a child's life.

Monthly social benefits per child are as follows:

|  | Child under 12 months | Child over 12 months | Additional benefit per child over <br> 12 months and under 36 months <br> in a family with 2 children | Additional benefit per child over <br> 12 months and under 36 months <br> in a family with 3 or more children |
| :--- | :---: | :---: | :---: | :---: |
| Level 1 | 140.76 | 35.19 | 35.19 | 70.38 |
| Level 2 | 116.74 | 29.19 | 29.19 | 58.38 |
| Level 3 | 92.29 | 26.54 | 26.54 | 53.08 |
| Level 4 | 0 | 0 | 0 | 0 |

Monthly social benefits per child in a single-parent family are increased by $20 \%$.
In September, families with dependent school children aged between 6 and 16 years receiving child benefits in level 1 receive an additional amount equal to the regular monthly benefit.

An amount equal to the cash benefits for dependent children under 12 months is attributed for each unborn child after the first month following that of the 13th week of gestation.

### 3.2. Benefits for handicapped dependent children

There is also a special family allowance scheme for handicapped children.
The above cash benefits (in Sections 3.1 and 3.2) are not taxable.

## 4. Main changes in the tax/benefit system since 2006

- The relief for disabled taxpayers was restructured. Former partial exemptions and allowances were replaced by tax credits.
- The fiscal autonomy of local authorities (municipalities) increased. They may set the level of their share in the revenue from personal income tax, up to 5 per cent of their resident taxpayers' tax liability. If this rate is set below 5 per cent, the difference will be credited against the taxpayers' tax liability.
- Tax credits for handicapped taxpayers and dependants were increased.
- Social benefits for dependent children were increased for low income families, single-parent families and families with 2 or more children.
- Introduction of social benefits for unborn children.


## 5. Memorandum items

### 5.1. Method used to identify and compute gross wages of the average worker

The operative concept of monthly compensation is that of amounts paid to full time staff before deductions for tax and compulsory contributions. It therefore includes wages and basic salaries of staff paid by the hour, by the job, or by tasks; benefits in kind or housing, if they are considered an integral part of compensation; cash subsidies for meals, housing or transport; bonuses for regular night shifts and seniority, as well as incentive pay and rewards for diligence and productivity; family allowances, compensation for overtime
and work on holidays. Benefits, subsidies and bonuses are taken into account only if paid regularly at each pay period.

Payments in kind are incorporated into the concept of compensation. The statistics record such advantages in kind at their taxable value.

All managerial and supervisory workers are included in the computations.
Average annual pay is based on the average of monthly earnings for April and October multiplied by an adjustment coefficient representing the share of annual bonuses and allowances (including vacation subsidies and the Christmas allowance), which is provided by the labour cost survey.

The following formula is applied:

- Average annual pay = (Average monthly pay adjusted by the coefficient) x 12 .


### 5.2. Description of the employer's main contributions to private retirement, health insurance schemes, etc.

Outside the social security system, employers are required to insure their employees against work-related accidents (with private insurance companies). They may also provide their employees with life insurance, although this is optional.

2011 Parameter values

| AW earnings | Ave_earn | 17588 | Secretariat estimate |  |
| :---: | :---: | :---: | :---: | :---: |
| Tax allowances | perc | 1 |  |  |
|  | max_al | 4104 |  |  |
| Tax credits |  |  |  |  |
| Married (basic) | married_cred | 261.25 |  |  |
| Single (basic) | single_cred | 261.25 |  |  |
| Single parent | singlepar_cred | 380 |  |  |
| Each child credit | child_cred | 190 |  |  |
| Tax schedule | tax_sch | 0.1150 | 4898 |  |
|  |  | 0.1400 | 7410 |  |
|  |  | 0.2450 | 18375 |  |
|  |  | 0.3550 | 42259 |  |
|  |  | 0.3800 | 61244 |  |
|  |  | 0.4150 | 66045 |  |
|  |  | 0.4350 | 153300 |  |
|  |  | 0.4650 |  |  |
|  | tax_floor | 1911 |  |  |
| Surtax | surtax_rate | 0.035 |  |  |
| Surtax tax credit for dependant | surtax_cred | 0.025 |  |  |
| Social security contributions | SSC_rate | 0.11 |  |  |
| ceiling | SSC_empr | 0.2375 |  |  |
| Child benefit - Schedule | ch_ben_sch | 0 | 457.47 | 1st echelon |
|  |  | 2934.54 | 350.28 | 2nd echelon |
|  |  | 5869.08 | 318.48 | 3rd echelon |
|  |  | 8803.62 | 0 | 4th echelon |
| Extra child benefit for lone parents | ch_ben_lone | 0.2 |  |  |
| Minimum Wage | MW | 6790 |  |  |
| Minimum Disposable Income | MinDispY | 8148 |  |  |

## 2011 Tax equations

The equations for the Portuguese system in 2011 are mostly calculated on a family basis.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| Divisor for tax calculation | divisor | J | 1+Married |
| 2. Allowances: | tax_al | J | MAX((MIN(perc*earn_princ, max_al)+MIN(perc* earn_spouse, max_al)), SSC_princ+SSC_spouse) |
| 3. Credits in taxable income | taxbl_cr | J | 0 |
| 4. CG taxable income | tax_inc | J | earn-tax_al |
| 5. CG tax before credits | CG_tax_excl | J | IF(tax_inc/divisor>tax_floor, Tax(tax_inc/divisor, tax_sch)*(1+Married), 0) |
| 6. Tax credits: |  | J |  |
| Basic credit | basic_cr | J | IF(Married, 2*married_cred, IF(children, singlepar_cred, single_cred)) |
| Child credit | child_cr | J | Children*child_cred |
| Total | tax_cr | J | basic_cr+child_cr |
| Surtax | surtax | J | surtax_rate*(tax-inc-MW) |
| Surtax credit | surtax_cr | J | surtax_cred*(MW/14)*Children |
| 7. $C G \operatorname{tax}$ | CG_tax | J | IF(earn-CG-tax-excl> <br> MinDispY,Positive(CG_tax_excl-tax_cr),0)+Positive(surtax-surtax_cr) |
| 8. State and local taxes | local_tax | J | 0 |
| 9. Employees' soc security | SSC | B | earn*SSC_rt |
| 11. Cash transfers | cash_trans | J | $\begin{aligned} & \text { =IF(Married=0, VLOOKUP(earn/ } \\ & \text { (Children+1),ch_ben_sch,2.1)*Children*(1+ch_ben_Ione), VLOOKUP(earn/ } \\ & \text { (Children+1),ch_ben_sch,2.1)*Children) } \end{aligned}$ |
| 13. Employer's soc security | SSC_empr | B | earn*SSC_empr |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Slovak Republic

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Slovak Republic 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 6439 | 9658 | 16097 | 6439 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 3559 | 3559 | 3559 | 3559 |
|  | Married or head of family | 0 | 0 | 0 | 0 |
|  | Dependent children | 0 | 0 | 0 | 0 |
|  | Deduction for social security contributions and income taxes | 863 | 1294 | 2119 | 863 |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 4422 | 4853 | 5679 | 4422 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 2017 | 4805 | 10418 | 2017 |
| 5. | Central government income tax liability (exclusive of tax credits) | 383 | 913 | 1979 | 383 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family | 0 | 0 | 0 | 0 |
|  | Children | 0 | 0 | 0 | 486 |
|  | Other (ETC) | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 486 |
| 7. | Central government income tax finally paid (5-6) | 383 | 913 | 1979 | -103 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 863 | 1294 | 2119 | 863 |
|  | Taxable income |  |  |  |  |
|  | Total | 863 | 1294 | 2119 | 863 |
| 10. | Total payments to general government (7+8+9) | 1246 | 2207 | 4099 | 760 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 528 |
|  | Total | 0 | 0 | 0 | 528 |
| 12. | Take-home pay (1-10+11) | 5193 | 7451 | 11998 | 6207 |
| 13. | Employers' compulsory social security contributions | 1687 | 2530 | 4173 | 1687 |
| 14. | Average rates |  |  |  |  |
|  | Income tax | 6.0\% | 9.5\% | 12.3\% | -1.6\% |
|  | Employees' social security contributions | 13.4\% | 13.4\% | 13.2\% | 13.4\% |
|  | Total payments less cash transfers | 19.4\% | 22.9\% | 25.5\% | 3.6\% |
|  | Total tax wedge including employer's social security contributions | 36.1\% | 38.9\% | 40.8\% | 23.6\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 29.9\% | 29.9\% | 28.7\% | 29.9\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 44.4\% | 44.4\% | 42.8\% | 44.4\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Slovak Republic 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 9658 | 12877 | 16097 | 12877 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 3559 | 6347 | 7119 | 6347 |
|  | Married or head of family | 3559 | 771 | 0 | 771 |
|  | Dependent children | 0 | 0 | 0 | 0 |
|  | Deduction for social security contributions and income taxes | 1294 | 1726 | 2157 | 1726 |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 8413 | 8844 | 9276 | 8844 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 1245 | 4033 | 6821 | 4033 |
| 5. | Central government income tax liability (exclusive of tax credits) | 237 | 766 | 1296 | 766 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family | 0 | 0 | 0 | 0 |
|  | Children | 486 | 486 | 486 | 0 |
|  | Other (ETC) | 0 | 50 | 0 | 50 |
|  | Total | 486 | 537 | 486 | 50 |
| 7. | Central government income tax finally paid (5-6) | -250 | 230 | 810 | 716 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1294 | 1726 | 2157 | 1726 |
|  | Taxable income |  |  |  |  |
|  | Total | 1294 | 1726 | 2157 | 1726 |
| 10. | Total payments to general government (7+8+9) | 1044 | 1955 | 2967 | 2442 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 528 | 528 | 528 | 0 |
|  | Total | 528 | 528 | 528 | 0 |
| 12. | Take-home pay (1-10+11) | 9142 | 11450 | 13658 | 10436 |
| 13. | Employers' compulsory social security contributions | 2530 | 3374 | 4217 | 3374 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | -2.6\% | 1.8\% | 5.0\% | 5.6\% |
|  | Employees' social security contributions | 13.4\% | 13.4\% | 13.4\% | 13.4\% |
|  | Total payments less cash transfers | 5.3\% | 11.1\% | 15.1\% | 19.0\% |
|  | Total tax wedge including employer's social security contributions | 25.0\% | 29.5\% | 32.8\% | 35.8\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 29.9\% | 29.9\% | 29.9\% | 29.9\% |
|  | Total payments less cash transfers: Spouse | 28.3\% | 29.9\% | 29.9\% | 29.9\% |
|  | Total tax wedge: Principal earner | 44.4\% | 44.4\% | 44.4\% | 44.4\% |
|  | Total tax wedge: Spouse | 43.2\% | 44.4\% | 44.4\% | 44.4\% |

Asfom 1 January 2009, Slovakia has joined the Euro zone; the national currency became the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year, the average worker earned EUR 9658 (Country estimate).

## 1. Personal income tax system

### 1.1. Central government income taxes

### 1.1.1. Tax unit

The tax unit is the individual.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Basic relief: an allowance for all taxpayers is set at 19.2 times the minimum living standard (MLS) for a basic adult as of 1 January 2011 (EUR 3 559.3). In 2011, the basic personal allowance for taxpayers with gross earnings net of employee social security contributions in excess of the threshold of EUR 18538 per year (18538 = $100 \times$ MLS, which is approximately equal to an employee's monthly gross wage of EUR 1773 ) is gradually withdrawn. If gross earnings net of employee social security contributions exceed EUR 18538 , the personal allowance is calculated as 44.2 times the minimum living standard minus 0.25 times gross earnings net of employee social security contributions. The basic personal allowance reaches 0 if the gross earnings net of employee social security contributions amount to EUR 32775.2 per year (employee's monthly gross wage of approximately EUR 3 074.7). The value of the basic tax allowance cannot become negative.

The degressive tax allowance is taken into account only once a year (when the tax return is filed or when the annual clearing is performed). Monthly tax prepayments during the year are therefore not affected.

- Marital status relief: an additional allowance is given to the principal earner in respect of a spouse living in a common household if the spouse earns no more than EUR 3 559.3. As from 1 January 2007, the value of the spouse allowance depends on the gross earnings net of employee social security contributions of both principal and spouse.
If the principal's gross earnings net of employee social security contributions in 2011 are lower or equal to EUR 32775.2 ( $=176.8$ times MLS) and the spouse's gross earnings net of employee social security contributions are lower than 3559.3 , the spouse allowance is calculated as the difference between 19.2 times MLS and the spouse's gross earnings net of employee social security contributions. If the gross earnings net of employee social security contributions of the spouse exceed 3559.3 , the spouse allowance is 0 . If the principal's gross earnings net of employee social security contributions exceed EUR 32775.2 ( $=176.8$ times MLS), the spouse allowance is calculated as 63.4 times MLS minus 0.25 times the principal's gross earnings net of employee social security
contributions. This amount is reduced by the spouse's gross earnings net of employee social security contributions. The value of the spouse allowance cannot become negative. The degressive tax allowance is taken into account only once a year (when the tax return is filed or when the annual clearing is performed). Monthly tax prepayments during the year are therefore not affected.
- Relief for children: the prior allowance for children has been replaced by a non-wastable tax credit as from January 2004. As from July 2007, the monthly tax credit is indexed as result of a new indexation rule. The tax credit is automatically indexed by MLS growth and is effective as from the 1st July when also the new amount of MLS comes into force. During the period from 1st January to 30 June 2011 monthly tax credit was EUR 20.02 per child, from 1 July 2011 the amount of tax credit was EUR 20.51 (the annual amount was EUR 243.18). The tax credit for each dependent child is deducted from the tax liability; if the credit exceeds the tax liability, the excess will be paid to the taxpayer. In order to receive this credit, the parent must annually earn at least 6 times the minimum monthly wage, which for 2011 is set at EUR 317 (the total annual earnings must therefore be at least EUR 1 902). The credit can be taken only by one partner. It can be taken by one partner for part of the tax period (year) and by the other partner for the rest of the tax period (year); this choice will have to hold for all dependent children (for the purposes of this Report, it is assumed that the credit is claimed by the principal wage earner).
- Relief for social and health security contributions: employee's social security contributions (see Section 2.1) are deductible for income tax purposes.


### 1.1.2.2. Main non-standard tax reliefs applicable to an average wage worker

- Supplementary pension insurance, special-purpose savings and life insurances repealed as from January 2011.


### 1.1.2.3. Non-wastable tax credit: employee tax credit (ETC/zamestnanecká prémia)

The employee tax credit is effective as from 1 January 2009 and is targeted at low-income workers whose wages are subject to the payment of social and health insurance contributions. The amount of tax credit depends upon the employee's earnings and the number of months worked.

In order to receive this tax credit, the employee must fulfil the entitlement criteria which are:

- the employee's earnings over the tax period must be at least 6 times higher than the minimum wage, which for 2011 is set at EUR 317 per month;
- the employee must have worked for at least 6 months over the tax period (the conditions of month worked is considered to be fulfilled when only one hour is worked during that month).

The ETC is a non-wastable tax credit as is the child tax credit. The value of the ETC depends on the level of the employee's earnings. If earnings are between at least 6 times of the minimum wage and 12 times of the minimum wage, the credit is calculated as 19 per cent of the difference between the basic allowance (EUR 3 559.3) and the tax base (gross earnings net of employee SSC), evaluated at the level of the minimum wage (EUR 3 294.36). If earnings exceed 12 times the minimum wage, then the ETC is calculated as 19 per cent of the difference of the basic allowance and the tax base (gross earnings net of employee

SSC). The tax credit is zero when the tax base (gross earnings net of employee SSC) is equal to or higher than the basic allowance.

The highest value of the employee tax credit amounts to EUR 50.34 per year; this maximum value is received by employees with income between one half of the minimum wage and the full minimum wage, provided that the employee has worked for 12 months. As the employee tax credit is designed to benefit working individuals, its amount is adequately reduced for employees that have worked less months in the calendar year. Due to extensive paperwork it was decided that the tax credit will be paid within the framework of the annual clearing of the tax advances or when a tax return is filed.

### 1.1.3. Tax schedule

From 1 January 2004, the progressive personal income tax rates were abolished and replaced by a flat tax rate of 19 per cent.

### 1.2. State and local income tax

No separate state and local income tax exist. Out of the total revenue from the personal income tax (PIT) collected by the State, 70.3 per cent of PIT is transferred into the budget of the municipalities and 23.5 per cent of PIT is transferred into the budget of the self-governing regions. The remaining revenue of the state budget is 6.2 per cent of PIT.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

Compulsory contributions of 13.4 per cent of gross wages and salaries are paid by all employees into government operated schemes. The total is made up as follows:

| Health Insurance |  | 4.0 per cent |
| :--- | :--- | :--- |
| Social Insurance | 9.4 per cent |  |
| of which: | 1.4 per cent |  |
| $\quad$ Sickness | 4.0 per cent |  |
| Retirement | 3.0 per cent |  |
| Disability | 1.0 per cent |  |
| Unemployment |  |  |

There are maximum assessment bases MSSAB (maximum threshold for contributions to apply) that apply to social security contributions. From 2004, these MSSAB are no longer fixed values but depend upon the average wages (AW).

The latest amendment of the Social insurance Law, which is valid from 1st January 2011, adjusted formulae for calculation of MSSAB for retirement, disability and unemployment insurance. Average monthly MSSAB for retirement, disability and unemployment insurance are calculated as: $4 \times \operatorname{AW}(t-2)$. Average monthly MSSAB for sickness insurance is calculated as: $1.5 \times \mathrm{AW}(t-2)$. Average monthly MSSAB for health insurance is calculated as: $3 \times A W(t-2)$. Where $A W(t-2)$ is the average wage two years ago. The average wage (AW) is determined by the Statistical Office of the Slovak Republic - for 2009, it is EUR 744.50 per month.

### 2.2. Employers' contributions

The total contribution for employers is 35.2 per cent of gross wages and salaries. The contribution comprises the health insurance contribution ( 10 per cent of gross wages and salaries) and the social insurance contribution ( 25.2 per cent). The social insurance rate reflects contributions to sickness insurance ( 1.4 per cent), disability insurance ( 3 per cent), retirement insurance ( 14 per cent), the Guaranteed Fund ( 0.25 per cent), accident insurance (the same accident insurance rate of 0.8 per cent is applied to all employers until the end of 2011; the rate will range from 0.3 to 2.1 per cent as from 2012 depending on the category of risk associated with the employer's activities), for unemployment ( 1 per cent) and to the Reserve Fund ( 4.75 per cent). All contributions are rounded down on two decimal places.

Since January 2005, Slovakia has introduced the privately managed fully funded pillar. This means that a given proportion ( 9 percentage points) of social contributions paid by the employer for retirement insurance flows directly to the private pension funds and not to the Social insurance agency as in previous years. Private pension funds are treated outside of general government; these contributions are therefore not taken into account in the calculations of average and marginal tax rates. For the purposes of this Report, the total contribution rate for employers is then 26.2 per cent.

The MSSAB also applies to the employer's SSC. The next table presents the annual values of MSSAB:

|  | Formula for MSSAB | Value of MSSAB |
| :--- | :---: | :---: |
| Health Insurance | $3.0 \times \mathrm{AW}(t-2)$ | 26802.00 |
| Social Insurance |  |  |
| of which: | $1.5 \times \mathrm{AW}(t-2)$ | 13410.00 |
| Sickness | $4.0 \times \mathrm{AW}(t-2)$ | 35760.00 |
| Retirement | $4.0 \times \mathrm{AW}(t-2)$ | 35760.00 |
| Disability | $4.0 \times \mathrm{AW}(t-2)$ | 35760.00 |
| Unemployment | $1.5 \times \mathrm{AW}(t-2)$ | No limit |
| Accident | $4.0 \times \mathrm{AW}(t-2)$ | 13410.00 |
| Guarantee fund | 35760.00 |  |
| Reserve fund |  |  |

1. Official MSSAB in 2011 are slightly lower due to rounding issues.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

The central government pays an allowance in respect of each dependent child in the amount of EUR 22.01 per month. In January 2008, an extra allowance for dependent children whose parents are not eligible for the non-wastable child tax credit was introduced. The monthly amount of this allowance is EUR 10.32. For the purpose of the tax wedge calculations this allowance is not relevant, as only non-workers and taxpayers with annual earnings lower than six times the minimum monthly wage (which is the condition for eligibility for the non-wastable child tax credit) are entitled to the extra allowance.

The non-wastable tax credit mentioned in Section 1.1.2.1 is part of the social support for families with dependent children. However, it is not considered as a transfer for the purposes of this Report.

### 3.3. Transfers related to social status

To determine the claim to state social benefits (for example the allowance for housing costs), the minimum living standard amounts are relevant as they form the basis of the income test. For 2011, these amounts are:

|  | MLS monthly <br> $(1.1 .2011-30.6 .2011)$ | MLS monthly <br> $(1.7 .2011-31.12 .2011)$ |
| :--- | :---: | :---: |
| First adult | 185.38 | 189.83 |
| Second adult | 129.31 | 132.42 |
| Child | 84.61 | 86.65 |

A family is entitled to a social allowance if the total combined net monthly income of the family is less than the calculated MLS for this family. The allowance varies with the family type.

The benefits available to a family in material need (valid on the 1st January 2011) are:

- EUR 60.50 per month for an individual.
- EUR 115.10 per month for an individual with between one and four children.
- EUR 105.20 per month for a couple without children.
- EUR 157.60 per month for a couple with between one and four children.
- EUR 168.20 per month for an individual with more than four children.
- EUR 212.30 per month for a couple with more than four children.

If one family member is pregnant, the social benefits described above are increased by EUR 13.50. The entitlement for this additional benefit arises from the 4th month of the pregnancy and lasts until the child's age of 1 year (benefit for children until age of 1 year does not affect the calculations in this Report).

- activation allowance: EUR 63.07 per month - for people who become active either by accepting qualifying employment opportunities or participating in retraining courses;
- housing allowance: EUR 55.80 per month for individual in material need, EUR 89.20 for a household in material need (if household has more than 1 person);
- protection allowance: EUR 63.07 per month for an individual in material need where employment is not possible due to such circumstances as a disability or old age;
- health care allowance: EUR 2.00 per month.


## 4. Main changes in tax/benefit systems since 2010

The formulae for calculation of the basic and marital status relief has been changed (both were temporarily adjusted to lower the tax burden during 2009 and 2010). The automatic indexation of the formulae for the calculation of the basic and marital status reliefs was renewed. Also the formulae for calculation of the maximum assessment base have been changed. In 2011, the assessment base for social insurance and health insurance was broadened as some types of incomes were not subject to social and health insurance payments.

## 5. Memorandum items

### 5.1. Identification of AW and valuation of earnings

The Ministry of Finance of the Slovak republic estimates the average earnings of the AW based on the data supplied by the Statistical Office of the Slovak republic, Labour Force Survey data (LFS).Earnings data covering also self-employees are based on average wage definition including industries falling under categories B to N inclusive, with reference to International Standard Industrial Classification of All Economic Activities, Revision 4.

2011 Parameter values

|  | Ave_earn | 9658 | Country estimate |
| :---: | :---: | :---: | :---: |
| Minimum living standard (MLS) 2011 | basic_adult | 185.38 |  |
|  | basic_adult1 | 129.31 |  |
|  | basic_child | 84.61 |  |
| Basic allowance | basic_al_mult | 19.2 |  |
|  | basic_al | 3559.29 |  |
|  | basic_al_mult1 | 100 |  |
|  | basic_al_mult2 | 44.2 |  |
|  | basic_al_redn | 0.25 |  |
| Spouse allowance | spouse_al_limit | 3559.29 |  |
|  | spouse_al_mult1 | 176.8 |  |
|  | spouse_al_mult2 | 63.4 |  |
|  | spouse_al_redn | 0.25 |  |
| Income tax rate | tax_rate | 0.19 |  |
| Tax credits - nonwastable | tax_cr | 243.18 |  |
|  | min_wage | 317 |  |
|  | minwage_mult | 6 |  |
|  | etc_thresh | 3294.36 |  |
| Employee social security contributions | SSC_rate | 0.08 |  |
|  | SSC_sick | 0.014 |  |
|  | SSC_ret | 0.04 |  |
|  | SSC_dis | 0.03 |  |
|  | SSC_unemp | 0.01 |  |
|  | SSC_health | 0.04 |  |
|  | SSC_children | 0 |  |
| Employer social security contributions | SSC_empr | 0.1375 |  |
|  | SSC_empsick | 0.014 |  |
|  | SSC_empret | 0.05 |  |
|  | SSC_empdis | 0.03 |  |
|  | SSC_empunemp | 0.01 |  |
|  | SSC_emphealth | 0.1 |  |
|  | SSC_gua | 0.0025 |  |
|  | SSC_acc | 0.008 |  |
|  | SSC_fund | 0.0475 |  |
| Maximum assessment base | MSSAB | 35760 |  |
|  | MSSAB_health | 26802 |  |
|  | MSSAB_sick | 13410 |  |
|  | MSSAB_gua | 13410 |  |
|  | MSSAB_fund | 35760 |  |
| Cash transfers | transf_1 | 264.12 |  |
|  | transf_indiv | 726.00 |  |
|  | transf_indiv_child | 1381.20 |  |
|  | transf_couple | 1262.40 |  |
|  | transf_couple_child | 1891.20 |  |
|  | transf_hous_indiv | 669.60 |  |
|  | transf_hous_couple | 1070.40 |  |
|  | transf_activ | 756.84 |  |
|  | transf_health | 24.00 |  |

## 2011 Tax equations

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: |  |  |  |
| Basic | basic_allce | B | IF(earn-SSC<=basic_al_mult1*basic_adult, basic_al,MAXA(basic_al_mult2*basic_adult-basic_al_redn*(earn-SSC),0)) |
| Spouse | spouse_allce | P | Married*Positive(IF(earn_princ-SSC_princ<=spouse_al_mult1*basic_adult, IF(earn_spouse-SSC_spouse<=spouse_al_limit, (basic_al_mult*basic_adult)-(earn_spouse-SSC_spouse),0),spouse_al_mult2*basic_ad ult-spouse_al_redn*(earn_princ-SSC_princ)-(earn_spouse-SSC_spouse))) |
| Social security contributions | SSC_al | B | SSC |
| Total | tax_al | B | basic_allce+spouse_allce+SSC_al |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | tax_rate*tax_inc |
| 6. Tax credits: |  |  |  |
| Employee tax credit | etc_cr | B | IF(earn>=min_wage*minwage_mult, tax_rate*Positive(basic_al-MAX(etc_thresh, earn-SSC)), 0) |
| Children | child_cr | P | (earn>=min_wage*minwage_mult)*Children*tax_cr |
| Total | tax_cr | B | etc_cr+child_cr |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | $\begin{aligned} & \text { MINA(earn,MSSAB)*(SSC_rate)+ } \\ & \text { MINA(earn,MSSAB_sick)}{ }^{\star} \text { SSC_sick+ } \\ & \text { MINA(earn,MSSAB_health)*SSC_health } \end{aligned}$ |
| 11. Cash transfers | cash_trans | J | Children*transf_1+Positive(IF(0.75*((earn-SSC-CG_tax_excl)/12)<(basic_adult+Married *basic_adult1+ Children*basic_child); ((1-Married)* <br> (IF(Children>0;transf_indiv_child;transf_indiv))+ <br> Married*(IF(Children>0;transf_couple_child;transf_couple))+IF((Married+Children)>0;tra nsf_hous_couple;transf_hous_indiv)+((1+Married+Children)*transf_health)+IF(A7>0;tra nsf_activ;0)+IF(B7>0;transf_activ;0)-0.75*(earn-SSC-CG_tax_excl));0)) |
| 13. Employer's soc security | SSC_empr | B | MINA(earn,MSSAB)*SSC_empr+ <br> MINA(earn,MSSAB_sick)*SSC_empsick+ <br> MINA(earn,MSSAB_health)*SSC_emphealth+ <br> earn*SSC_acc+ <br> MINA(earn,MSSAB_gua)*SSC_gua |

Key to range of equation: $B$ calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Slovenia

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Slovenia 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 11582 | 17373 | 28954 | 11582 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance | 4206 | 3144 | 3144 | 4206 |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  | 4841 |
|  | Deduction for social security contributions and income taxes | 2560 | 3839 | 6399 | 2560 |
|  | Work-related expenses | 0 | 0 | 0 | 0 |
|  | Other |  |  |  |  |
|  | Total | 6765 | 6983 | 9542 | 11606 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 4816 | 10390 | 19412 | 0 |
| 5. | Central government income tax liability (exclusive of tax credits) | 771 | 1965 | 4981 | 0 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children | 0 | 0 | 0 | 0 |
|  | Other |  |  |  |  |
|  | Total | 0 | 0 | 0 | 0 |
| 7. | Central government income tax finally paid (5-6) | 771 | 1965 | 4981 | 0 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 2560 | 3839 | 6399 | 2560 |
|  | Taxable income |  |  |  |  |
|  | Total | 2560 | 3839 | 6399 | 2560 |
| 10. | Total payments to general government (7+8+9) | 3330 | 5805 | 11380 | 2560 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 2723 |
|  | Total | 0 | 0 | 0 | 2723 |
| 12. | Take-home pay (1-10+11) | 8252 | 11568 | 17574 | 11745 |
| 13. | Employer's wage dependent contributions and taxes | 1865 | 2797 | 4662 | 1865 |
|  | Employer's compulsory social security contributions | 1865 | 2797 | 4662 | 1865 |
|  | Payroll taxes | 0 | 0 | 0 | 0 |
| 14. | Average rates |  |  |  |  |
|  | Income tax | 6.7\% | 11.3\% | 17.2\% | 0.0\% |
|  | Employees' social security contributions | 22.1\% | 22.1\% | 22.1\% | 22.1\% |
|  | Total payments less cash transfers | 28.8\% | 33.4\% | 39.3\% | -1.4\% |
|  | Total tax wedge including employer's social security contributions | 38.6\% | 42.6\% | 47.7\% | 12.7\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 34.6\% | 43.1\% | 54.0\% | 22.1\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 43.6\% | 51.0\% | 60.4\% | 32.9\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Slovenia 2011

## The tax/benefit position of married couples

1. Gross wage earnings
2. Standard tax allowances
Basic allowance
Married or head of family
Dependent children
Other dependent family member
Deduction for social security contributions and income taxes
Work-related expenses
3. Tax credits or cash transfers included in taxable income
4. Central government taxable income (1-2+3)
5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

| Gross earnings |  | 3839 | 5119 | 6399 | 5119 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable income |  |  |  |  |  |
|  | Total | 3839 | 5119 | 6399 | 5119 |
| 10. Total payments to general government (7+8+9) |  | 4356 | 6007 | 8057 | 7085 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 2475 | 1513 | 1252 | 0 |
|  | Total | 2475 | 1513 | 1252 | 0 |
| 12. Take-home pay (1-10+11) |  | 15492 | 18670 | 22149 | 16079 |
| 13. Employer's wage dependent contributions and taxes |  | 2797 | 3729 | 4662 | 3729 |
| Employer's compulsory social security contributions |  | 2797 | 3729 | 4662 | 3729 |
| Payroll taxes |  | 0 | 0 | 0 | 0 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 3.0\% | 3.8\% | 5.7\% | 8.5\% |
| Employees' social security contributions |  | 22.1\% | 22.1\% | 22.1\% | 22.1\% |
| Total payments less cash transfers |  | 10.8\% | 19.4\% | 23.5\% | 30.6\% |
| Total tax wedge including employer's social security contributions |  | 23.2\% | 30.6\% | 34.1\% | 40.2\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 34.6\% | 34.6\% | 34.6\% | 43.1\% |
| Total payments less cash transfers: Spouse |  | 45.1\% | 22.1\% | 34.6\% | 22.1\% |
| Total tax wedge: Principal earner |  | 43.6\% | 43.6\% | 43.6\% | 51.0\% |
| Total tax wedge: Spouse |  | 52.7\% | 32.9\% | 43.6\% | 32.9\% |

Th
Lhe Slovenian currency is the euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year, the average worker in Slovenia earned EUR 17373.

## 1. Personal income tax system

### 1.1. Central government income tax

### 1.1.1. Tax unit

The tax unit is the individual.

### 1.1.2. Tax allowances

### 1.1.2.1. Standard tax reliefs

- A general (basic) allowance of EUR 3143.57 is deductible from income in 2011. For lower income groups an additional general allowance of EUR 3062.11 is deductible when taxable income is lower than EUR 10342.80 and of EUR 1062.17 when taxable income is between EUR 10342.80 and EUR 11 965.20.
- Family allowances are also deductible from the tax base in the same way as for the general allowance. The allowances for 2011 are as follows:
* EUR 2319.50 for the first dependent child;
* EUR 2521.59 for the second child;
* EUR 4205.65 for the third child;
* EUR 5889.71 for the fourth child;
* EUR 7573.76 for the fifth child;
* EUR 1684.05 for the sixth and all additional maintained children relative to the level of relief for the preceding maintained child;
* EUR 8404.56 for a dependent child who requires special care;
* EUR 2319.50 for any other dependent family member.
- Relief for social security contributions: employee's compulsory contributions for the social insurance system are deductible for income tax purposes.
- Tax credits: none for employees.


### 1.1.2.2. Non-standard tax reliefs applicable to income from employment

- Additional voluntary pension insurance premiums: premiums paid by a resident to the provider of a pension plan based in Slovenia or in another EU member State according to a pension plan that is approved and entered into a special register in accordance with the pension legislation are deductible from taxable income. In 2011, such deductions are subject to an annual limit of EUR 2683.26 or a sum equal to $24 \%$ of the employee's contribution for compulsory pension and disability insurance if that is a lower figure.
- Reimbursement of expenses associated with work, such as in-work meals, transport to and from work, in-the-field supplements (per diem when an employee works outside his or her working place) and compensation for being away from home, are exempt subject to statutory conditions and upper limits.
- Reimbursement of expenses associated with business travel such as: per diem allowances, transport costs (including the use of the employee's private vehicle for work purposes), and the costs of overnight accommodation, are exempt subject to statutory conditions and upper limits.
- The cost of purchasing and maintaining uniforms and personal protection work equipment defined in special regulations is exempt from income tax.
- Compensation for the use of an employee's own tools and other equipment (except private vehicles) necessary for the performance of work at the workplace, is exempt up to a level of $2 \%$ of the monthly wage or salary of the employee, subject to an upper limit of $2 \%$ of the average gross monthly wage (AGMW).
- Long service bonuses, severance pay upon retirement and payments related to accidents, long term sickness and other unexpected events are exempt subject to statutory conditions and upper limits.
- Severance pay on redundancy is exempt subject to an upper limit of ten times the AGMW.
- Compensation for the use of an employee's own possessions and property when working at home in accordance with statutory regulations is exempt up to a level of $5 \%$ of the monthly wage or salary of the employee, subject to an upper limit of $5 \%$ of the AGMW.


### 1.1.3. Tax schedule

The tax schedule for 2011 is as follows:

| Taxable income (EUR) | Tax rate (\%) |
| :--- | :---: |
| Up to 7634.40 | 16 |
| $7634.40-15268.77$ | 27 |
| Above 15 268.77 | 41 |

### 1.2. Regional and local income tax

There are no regional or local income taxes.

## 2. Compulsory social security insurance system

The compulsory social security insurance system consists of four schemes as follows:

- pension and disability insurance;
- health insurance;
- unemployment insurance;
- parental leave insurance.


### 2.1. Employees' contributions

The taxable base for social security insurance contributions paid by employees is the total amount of the gross wage or salary including vacation payments, fringe benefits and remuneration of expenses related to work above a certain threshold. The assessment
period is the calendar month. Employees contribute an amount as a percentage of their remuneration as follows:

| Scheme name | Rate of contribution (\%) |
| :--- | :---: |
| Pension insurance | 15.50 |
| Health insurance | 6.36 |
| Unemployment insurance | 0.14 |
| Parental leave insurance | 0.10 |
| Total | 22.10 |

### 2.2. Employers' contributions

Social security insurance contributions are also paid by employers on behalf of their employees. The taxable base and the assessment period are the same as for employees' contributions. The employers' contribution rates are as follows:

| Scheme name | Rate of contribution (\%) |
| :--- | :---: |
| Pension insurance | 8.85 |
| Health insurance | 7.09 |
| Unemployment insurance | 0.06 |
| Parental leave insurance | 0.10 |
| Total | 16.10 |

The only change to these rates since 1996 has been the 0.2 per cent increase in the employers' contribution rates for health insurance in 2002.

## 3. Payroll tax

None.

## 4. Universal cash transfers

### 4.1. Transfers related to marital status

None.

### 4.2. Transfers for dependent children

The cash transfers for dependent children are a supplementary family allowance aimed at providing for partial coverage of the expenses for supporting a child (a child allowance).

The allowances are paid at the request of the claimant (one of the parents) who must have at least one dependent child aged under 18, or under 26 if still in education. Applications for the allowance are made on an annual basis and the payments are not taxable.

- The amount of the allowance is calculated for each child separately according to the level of family income per member of the family and the ranking of the child in the family.
- The relevant income is the average monthly income per family member in the calendar year prior to the claim (or one year previous if the claim is made in the month of January, February or March). Income is defined as gross income plus unemployment benefits but excluding family benefits. Each family is assigned to one of 8 income classes on this basis.
- Each child is allocated in one of 3 ranking levels (the level of payments increases with the ranking level - the lowest for the first child, higher for the second child and the highest
for the third and any subsequent child). The allowance for a child older than 18 years is equivalent to the allowance for the first child.
- When a child lives in a one-parent family, the amount of the allowance is increased by $10 \%$. When a pre-school child does not attend kindergarten, the amount of the allowance is increased by $20 \%$.
- The amounts of transfers for dependent children were last adjusted with index of consumer prices in July 2011 by Parenthood and Family Earnings Act (Zakon o staršeuskem varstuu in družinskih prejemkih). The details for the calculation of the average monthly income per family member shall be prescribed by the Minister.
- The monthly amounts of transfers for children in a two-parent family relating to the six months from January to June were the following:

| Family allowance | 1st child | 2nd child | 3rd child |
| :---: | :---: | :---: | :---: |
| Married couples | Monthly (EUR) | Monthly (EUR) | Monthly (EUR) |
| 0.00 | 114.31 | 125.73 | 137.18 |
| 2690.78 | 97.73 | 108.04 | 118.28 |
| 4484.64 | 74.48 | 83.25 | 91.98 |
| 5381.57 | 58.75 | 67.03 | 75.47 |
| 6278.50 | 48.04 | 56.06 | 64.03 |
| 8072.35 | 30.44 | 38.10 | 45.71 |
| 9866.21 | 22.83 | 30.44 | 38.10 |
| 13453.92 | 19.88 | 27.50 | 35.11 |
| 17759.17 | 0.00 | 0.00 | 0.00 |

- The monthly amounts of transfers for children in a two-parent family relating to the six months from July to December were the following:

| Family allowance | 1st child | 2nd child | 3rd child |
| :---: | :---: | :---: | :---: |
| Married couples | Monthly (EUR) | Monthly (EUR) | Monthly (EUR) |
| 0.00 | 114.85 | 126.33 | 137.83 |
| 2690.78 | 98.19 | 108.55 | 118.84 |
| 4484.64 | 74.83 | 83.65 | 92.42 |
| 5381.57 | 59.03 | 67.35 | 75.83 |
| 6278.50 | 48.27 | 56.33 | 64.33 |
| 8072.35 | 30.58 | 38.28 | 45.93 |
| 9866.21 | 22.94 | 30.58 | 38.28 |
| 13453.92 | 19.97 | 27.63 | 35.28 |
| 17759.17 | 0.00 | 0.00 | 0.00 |

- The weighted average of the two sets of amounts for 2011 is as follows. These amounts are used in the modelling.

| Family allowance | 1st child | 2nd child | 3rd child |
| ---: | :---: | :---: | :---: |
| Married couples | Monthly (EUR) | Monthly (EUR) | Monthly (EUR) |
| 0.00 | 114.58 | 126.03 | 137.51 |
| 2690.78 | 97.96 | 108.30 | 118.56 |
| 4484.64 | 74.66 | 83.45 | 92.20 |
| 5381.57 | 58.89 | 67.19 | 75.65 |
| 6278.50 | 48.16 | 56.20 | 64.18 |
| 8072.35 | 30.51 | 38.19 | 45.82 |
| 9866.21 | 22.89 | 30.51 | 38.19 |
| 13453.92 | 19.93 | 27.57 | 35.20 |
| 17759.17 | 0.00 | 0.00 | 0.00 |

In 2011, the maximum annual benefit levels for children in a two-parent family were the following:

- EUR 1374.96 for the first child;
- EUR 1512.36 for the second child;
- EUR 1650.12 for the third or subsequent child.

The amounts decline as the level of income per family member increases. The benefit ceases to be available for families where the average income per member is higher than $99 \%$ of the average wage.

## 5. Main changes in tax/benefit system since 2005

- In 2006, the taxation of income of individuals changed from global tax to a kind of a dual income tax system. Active income (from employment, business, basic agriculture and forestry, rents, royalties and other income) is taxed aggregated at progressive rates and taking into account the allowances and deductions; capital income (interest, dividends and capital gains) is taxed at proportionate rates on a scheduler basis.
- In 2007 , the number of income tax brackets was reduced from five to three. At the same time, some non-standard tax reliefs for certain expenses and for interest paid on loans for housing were abolished.
- In 2008, additional general allowances were introduced for people on low incomes.
- The payroll tax was phased out at the start of 2009.


## 6. Memorandum items

### 6.1. Average gross annual wage earnings calculation

In Slovenia the gross earnings figures cover wages and salaries paid to individuals in formal employment including payment for overtime. They also include bonus payments and other payments such as pay for annual leave, paid leave up to seven days, public holidays, absences due to sickness for up to 30 days, job training, and slowdown through no fault of the person in formal employment.

The average gross wage earnings figures of all adult workers covering industry sectors B-N are provided by the Statistical Office of the Republic of Slovenia.

### 6.2. Employer contributions to private pension and health schemes

Some employer contributions are made to private health and pension schemes but there is no relevant information available on the amounts that are paid.

2011 Parameter values

| Average earnings/yr | Ave_earn | 17372.64 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average earnings/yr-1 | Ave_earn_1 | 16914.72 |  |  |  |  |  |  |
| Average earnings | Ave_earnfam | 17938.56 |  |  |  |  |  |  |
| Family allowances |  |  |  |  |  |  |  |  |
| Allowances | Basic_al | 0 | 6205.68 |  |  |  |  |  |
|  |  | 10342.8 | 4205.74 |  |  |  |  |  |
|  |  | 11965.2 | 3143.57 |  |  |  |  |  |
|  | Child_al1 | 2319.50 |  |  |  |  |  |  |
|  | Child_al2 | 4841.09 |  |  |  |  |  |  |
|  | Child_al3 | 9046.73 |  |  |  |  |  |  |
|  | Child_al4 | 14936.43 |  |  |  |  |  |  |
|  | Child_al5 | 22510.18 |  |  |  |  |  |  |
|  | Depend_al | 2319.50 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Income tax | Tax_sch | 0.16 | 7634.40 |  |  |  |  |  |
|  |  | 0.27 | 15268.77 |  |  |  |  |  |
|  |  | 0.41 |  |  |  |  |  |  |
| Employees SSC | SSC_rate1 | 0.221 |  |  |  |  |  |  |
| Employers SSC | SSC_rate2 | 0.161 |  |  |  |  |  |  |
|  |  |  | Ist child | 2nd child | 3rd child | 1 child-total | 2 children-total | 3 children-total |
|  |  |  | monthly | monthly | monthly | annual | annual | annual |
| Family allowances | Fam_allow_mc | 0 | 114,58 | 126,03 | 137,51 | 1374,96 | 2 887,32 | 4537,44 |
| Married couples |  | 2690,784 | 97,96 | 108,30 | 118,56 | 1175,52 | 2 475,12 | 3897,84 |
|  |  | 4 484,640 | 74,66 | 83,45 | 92,20 | 895,92 | 1897,32 | 3003,72 |
|  |  | 5381,568 | 58,89 | 67,19 | 75,65 | 706,68 | 1512,96 | 2 420,76 |
|  |  | 6278,496 | 48,16 | 56,20 | 64,18 | 577,92 | 1252,32 | 2022,48 |
|  |  | 8072,352 | 30,51 | 38,19 | 45,82 | 366,12 | 824,40 | 1374,24 |
|  |  | 9866,208 | 22,89 | 30,51 | 38,19 | 274,68 | 640,80 | 1099,08 |
|  |  | 13 453,92 | 19,93 | 27,57 | 35,20 | 239,16 | 570,00 | 992,40 |
|  |  | 17759,2 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Family allowances |  |  |  |  |  |  |  |  |
| Single parent uplift | Fam_allow_spup | 0.1 |  |  |  |  |  |  |
|  |  |  | Ist child | 2nd child | 3rd child | 1 child-total | 2 children-total | 3 children-total |
|  |  |  | monthly | monthly | monthly | annual | annual | annual |
| Family allowances | Fam_allow_sp | 0 | 126,04 | 138,63 | 151,26 | 1512,46 | 3 176,05 | 4991,18 |
| Single parents |  | 2690,784 | 107,76 | 119,13 | 130,42 | 1293,07 | 2722,63 | 4287,62 |
|  |  | 4 484,64 | 82,13 | 91,80 | 101,42 | 985,51 | 2087,05 | 3 304,09 |
|  |  | 5381,568 | 64,78 | 73,91 | 83,22 | 777,35 | 1664,26 | 2 662,84 |
|  |  | 6278,496 | 52,98 | 61,82 | 70,60 | 635,71 | 1377,55 | 2 224,73 |
|  |  | 8072,352 | 33,56 | 42,01 | 50,40 | 402,73 | 906,84 | 1511,66 |
|  |  | 9866,208 | 25,18 | 33,56 | 42,01 | 302,15 | 704,88 | 1208,99 |
|  |  | 13453,92 | 21,92 | 30,33 | 38,72 | 263,08 | 627,00 | 1091,64 |
|  |  | 17759,2 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
|  | numdays | 365 |  |  |  |  |  |  |

## 2011 Tax equations

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings |  |  |  |
| Current year | earn |  |  |
| Year-1 | earn_1 |  |  |
| 2. Allowances: |  |  |  |
| Principal | tax_al_princ | P | VLOOKUP(earn;Basic_al;2)+SSC+IF(children=0,0,IF(children=1,child_al1,IF(children=2, child_al2,child_al3)+IF(Married=0,0,IF(S_earn=0,Depend_al,0)) |
| Spouse | Tax_al_ spouse | S | MINA(VLOOKUP(earn;Basic_al;2), earn)+SSC |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc, tax_sch) |
| 6. Tax credits (nonwastable) | Tax_cr | B | 0 |
| 7. $C G \operatorname{tax}$ | CG_tax | B | CG_tax_excl |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | earn* SSC_rate1 |
| 11. Cash transfers | cash_trans | J | ```IF(Children=0,0;VLOOKUP((earn_1)/ (1+married+children),IF(Married=0;Fam_allow_sp,Fam_allow_mc),IF(Children=1,5,IF (Children=2,6,7))))``` |
| 13. Employer's wage dependent contributions and taxes |  |  |  |
| Employer's soc security | SSC_empr | B | earn*SSC_rate2 |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Spain

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Spain 2011

The tax/benefit position of a single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 16815 | 25223 | 42038 | 16815 |
| 2. Standard tax allowances: |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
|  | Married or head of family | 0 | 0 | 0 | 2150 |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 1068 | 1602 | 2461 | 1068 |
|  | Work-related expenses | 2652 | 2652 | 2652 | 2652 |
| Other |  |  |  |  |  |
|  | Total | 3720 | 4254 | 5113 | 5870 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central and state government taxable income (1-2+3) | 13095 | 20969 | 36924 | 10945 |
| 5. | Central and state government income tax liability (exclusive of tax credits) | 3143 | 5163 | 9983 | 2627 |
| 6. | Central and state government tax credits |  |  |  |  |
|  | Basic credit | 1236 | 1236 | 1236 | 2166 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 1236 | 1236 | 1236 | 2166 |
| 7. | Central government income tax finally paid | 953 | 1963 | 4373 | 230 |
| 8. | State income tax finally paid | 953 | 1963 | 4373 | 230 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 1068 | 1602 | 2461 | 1068 |
| Taxable income |  |  |  |  |  |
|  | Total | 1068 | 1602 | 2461 | 1068 |
| 10. | Total payments to general government (7+8+9) | 2974 | 5528 | 11208 | 1423 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 13841 | 19694 | 30830 | 15392 |
| 13. | Employer's compulsory social security contributions | 5028 | 7542 | 11590 | 5028 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 11.3\% | 15.6\% | 20.8\% | 2.1\% |
|  | Employees' social security contributions | 6.35\% | 6.35\% | 5.86\% | 6.35\% |
|  | Total payments less cash transfers | 17.7\% | 21.9\% | 26.7\% | 8.5\% |
|  | Total tax wedge including employer's social security contributions | 36.6\% | 39.9\% | 42.5\% | 29.5\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 28.8\% | 32.6\% | 37.0\% | 38.2\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 45.2\% | 48.1\% | 37.0\% | 52.4\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Spain 2011

The tax/benefit position of married couples

1. Gross wage earnings
2. Standard tax allowances

Basic allowance
Married or head of family
Wage level (per cent of average wage)
Number of children

Dependent children
Deduction for social security contributions and income taxes
Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income
4. Central and state government taxable income (1-2+3)
5. Central and state government income tax liability (exclusive of tax credits)
6. Central and state government tax credits

Basic credit

| $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: |
| 2 | 2 | 2 | none |
| 25223 | 33630 | 42038 | 33630 |

Married or head of family
Children
Other
7. Central government income tax finally paid
8. State income tax finally paid

| Total | 2166 | 2612 | 3403 | 2147 |
| :--- | :--- | :--- | :--- | :--- |
|  | 1025 | 1731 | 2452 | 1963 |
|  | 1025 | 1731 | 2452 | 1963 |
|  |  |  |  |  |
|  | 1602 | 2136 | 2669 | 2136 |
|  |  |  |  |  |
| Total | 1602 | 2136 | 2669 | 2136 |
|  | 3652 | 5597 | 7573 | 6062 |

11. Cash transfers from general government

For head of family
For two children

|  | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| Total | 0 | 0 | 0 | 0 |
|  | 21571 | 28033 | 34465 | 27568 |
|  | 7542 | 10055 | 12569 | 10055 |
|  | 8.1\% | 10.3\% | 11.7\% | 11.7\% |
|  | 6.35\% | 6.35\% | 6.35\% | 6.35\% |
|  | 14.5\% | 16.6\% | 18.0\% | 18.0\% |
|  | 34.2\% | 35.8\% | 36.9\% | 36.9\% |
|  | 28.8\% | 32.6\% | 32.6\% | 32.6\% |
|  | 23.1\% | 6.3\% | 28.8\% | 6.3\% |
|  | 45.2\% | 48.1\% | 48.1\% | 48.1\% |
|  | 40.8\% | 27.9\% | 45.2\% | 27.9\% |

Th
he national currency is the Euro (EUR). In 2011, EUR 0.72 was equal to USD 1. In that year, the average worker earned EUR 25223 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Central government income tax

### 1.1.1. Tax unit

As a general rule, the tax unit is the individual. Nevertheless, families have the options of being taxed:

- As married couples filing jointly on the combined income of both spouses and dependents.
- As heads of households (only unmarried or separated individuals with dependents).


### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Basic reliefs: Married couples filing jointly may claim an allowance of EUR 3 400. This figure amounts to EUR 2150 for heads of households.
- Maternity tax credit: a non-wastable tax credit addressed to working females with children under 3 years of age up to EUR 1200.
- Relief for social security contributions: all social security payments are fully deductible.
- Work related expenses: net work income (gross income less employee social security contributions) may be reduced according to the following rules:
* Taxpayers with net employment income equal or less than EUR 9 180: EUR 4080
* Taxpayers with a net employment income between EUR 9180.01 and EUR 13 260: EUR 4080 less the result of multiplying by 0.35 the difference between net income and EUR 9180.
* Taxpayers with net income over EUR 13260 or non-employment income over EUR 6 500: EUR 2652.
- Extending labour market participation allowance: taxpayers extending their labour market participation beyond the retirement age (65 years) may increase the work-related expense allowance by 100 per cent.
- Geographic mobility allowance: unemployed taxpayers accepting a job in a different location may also increase the work related allowance by 100 per cent.
- Disabled workers allowance: an allowance of EUR 3264 for disabled salary earners. Those with reduced mobility may claim an augmented allowance of EUR 7242.

As a result of the application of the above rules, net income cannot become negative.

- Work related tax deduction: working taxpayers with a tax base under EUR 8000 may deduct EUR 400. The amount is phased-out as taxpayer's tax base increases according to the following formula: EUR 400-0.1 [(tax base) - EUR 8 000.01], reaching a zero value when
taxpayer's tax base reaches EUR 12000 . Prior amount will not exceed the result of applying the average tax rate to net work income less work related expenses allowance.


### 1.1.2.2. Main non-standard reliefs applicable to an AW

- Contributions to approved Mutual, Superannuation Funds and Mutual Insured Plans. Contributions made by each member of the household may reduce taxable income up to a maximum of the following amounts:
* 30 per cent of net income; 50 per cent of net income for taxpayers aged over 50 years;
* EUR 10 000; EUR 12500 for taxpayers aged over 50 years.

Moreover, those households whose second earner has net labour income below EUR 8000 may reduce taxable income up to a maximum of EUR 2000 on a yearly basis if the principal earner contributes to a Pension Fund for the spouse.

- Relief for subscriptions paid in respect of membership of a trade union and business or professional associations (last item is limited to mandatory membership) up to EUR 500.
- Relief for expenses made for the legal defence of the taxpayer for labour-related conflicts up to a maximum limit of EUR 300.

Other non-standard reliefs provided as deductions are:

- Investment in the acquisition and rehabilitation of own-housing: as a general rule, taxpayers with an annual tax base below EUR 24107.20 are allowed to deduct from their tax liability 15 per cent of the investment made during the year according to the following rules:
* taxpayers with a tax base up to EUR 17 707.20: EUR 9 040;
* taxpayers with a tax base between EUR 17707.20 and EUR 24 107.20: EUR 9040 less the result of multiplying by 1.4125 the difference between taxpayer's tax base and EUR 17 707.20.
- Furthermore, disabled taxpayers with a tax base below EUR 24107.20 are allowed to deduct from their tax liability $20 \%$ of the investment expenses incurred in the repairs carried out for housing adaptation to the handicapped personal needs according to the following rules:
* taxpayers with a tax base up to EUR 17 707.20: EUR 12 080;
* taxpayers with a tax base between EUR 17707.20 and EUR 24 107.20: EUR 12080 less the result of multiplying by 1.8875 the difference between taxpayer's tax base and EUR 17 707.20.
- Said that, taxpayers also may claim a temporary tax credit (2010-12) addressed to specific restoration works carried out in taxpayer's housing such as:
* improvement of energy efficiency and environmental protection;
* improvement of telecommunication infrastructure.

Taxpayers may claim a 20\% tax credit on the incurred investment expenses (up to EUR 6750 per year, not exceeding EUR 20000 throughout the whole period and not in cash) according to the following rules:

* taxpayers with a tax base up to EUR 53 007.20: EUR 6 750;
* taxpayers with a tax base between EUR 53007.20 and 71 007.20: EUR $6750-0.375^{*}$ [(tax base) - EUR 53 007.20].
Unused payments may be carried forward up to four years within the same above limits.
- Renting out property for own-housing: taxpayers with a tax base below EUR 24107.20 may deduct a 10.05 per cent of the payments made by renting out property to be used as a permanent residence, on a yearly basis. The maximum amount to be deducted is:
* EUR 9040 where taxpayer's the tax base is equal or below EUR 17 707.20;
* EUR 9040 less the result of multiplying by 1.4125 the difference between taxpayer's tax base and EUR 17 707.20.
- Gifts: 10 per cent of the amounts donated to foundations and associations declared of public benefit. 25 per cent if these amounts are donated to some special legally approved foundations and associations and other private and public institutions.
- Investments and expenses in goods of cultural interest: 15 per cent of the amounts granted to the importation, restoration, exhibition, etc., of certain goods listed in the General Register of Goods of Cultural Interest.

Each of these last two amounts cannot exceed 10 per cent of taxable income.

### 1.1.2.3. Exempt income

- The base amount is EUR 5151 per taxpayer. The same amount is granted for family units filing jointly. Taxpayers aged over 65 years may add EUR 918 to the former amount. Those aged over 75 years may claim additionally EUR 1122.
- Dependent children (under 25 years): EUR 1836 for the first dependent child; EUR 2040 for the second one; EUR 3672 for the third, and EUR 4182 for the fourth child.
- Child care allowance: an additional allowance of EUR 2244 for each of the above dependent children under 3 years of age.
- In case of disabled workers and additional amount of EUR 2316 also applies. In case of great disability prior amount reaches EUR 7038.

Child allowances have to be shared equally between spouses when they file separately.

### 1.1.3. Tax schedule

General rates of tax - resident individuals:

| Taxable income (EUR) | Tax at the lower limit (EUR) | Tax rate on taxable income in excess <br> of the lower limit (\%) |
| :--- | :---: | :---: |
| $0-17707.20$ | 0 | 12.00 |
| $17707.20-33007.20$ | 2124.86 | 14.00 |
| $33007.20-53407.20$ | 4266.86 | 18.50 |
| $53407.20-120000.20$ | 8040.86 | 21.50 |
| $120000.20-175000.20$ | 22358.36 | 22.50 |
| Over 175 000.20 | 34733.36 | 23.50 |

### 1.2. State and local income taxes

Regional rates of tax - resident individuals:

| Taxable income (EUR) | Tax at the lower limit (EUR) | Tax rate on taxable income in excess <br> of the lower limit (\%) |
| :--- | :---: | :---: |
| $0-17707.20$ | 0 | 12.00 |
| $17707.20-33007.20$ | 2124.86 | 14.00 |
| $33007.20-53407.20$ | 4266.86 | 18.50 |
| Over 53 407.20 | 8040.86 | 21.50 |

## 2. Compulsory social security contributions to schemes operated within the government sector

Social Security contributions are assessed on the basis of employees' gross earnings taking into account certain ceilings of gross employment income. In 2011, these ceilings are:

- Lower ceiling: EUR 8 978.4.
- Upper Ceiling: EUR 38 761.2.

These ceilings are based on a full-time job. For part-time workers, ceilings are proportional to the real hours worked (the tax equations used for this Report do not take into account the lower ceiling).

### 2.1. Employees' contributions

- Old age pension/sickness and disability
- Unemployment
- Professional Training


### 2.2. Employers' contributions

- Old age pension/sickness and disability
- Unemployment/Work injuries
- Wages fund
- Professional Training
4.7 per cent.
1.55 per cent.
0.1 per cent.
23.6 per cent.
5.50 per cent.
0.2 per cent.
0.6 per cent.


## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

EUR 291 for 1-child families with annual gross earnings below EUR 11 264.01; the child transfer decreases with income between EUR 11264.01 and EUR 11 530.76; the value is 0 for gross earnings exceeding EUR 11 530.76. EUR 582 for families with 2 children with annual gross earnings below EUR 12 953.61; the child transfer decreases with income between EUR 12953.61 and EUR 13 487.11; the value is 0 for gross earnings exceeding EUR 13 487.11.

## 4. Main changes in tax/benefit systems in 2011

In 2010, the following changes apply:

- The Birth or Children Adoption tax credit will be suppressed as of 1 January 2011 (Royal Decree 8/2010).
- Since January 2010, the Work related tax credit is entirely granted for working taxpayers under EUR 8 000, and then it is phased-out up to a working taxpayer's taxable base of EUR 12000.
- A new temporary tax credit (2010-12) for refurbishing works in taxpayer's own dwelling entered into force in 14 April 2010, subsequently amended in 6 May 2011, covering now all taxpayer's dwellings.


## 5. Memorandum items

### 5.1. Identification of an AW and calculation of earnings

Refer to the information provided in Part V and Annex B of this Report.

## 2011 Parameter values

| AW earnings | Ave_earn | 25223 | Secretariat estimate |  |
| :---: | :---: | :---: | :---: | :---: |
| Work related allowance | wr_rate | 0.35 |  |  |
|  | wr_lim_max | 13260 |  |  |
|  | wr_lim_min | 9180 |  |  |
|  | wr_lim_min_1 | 9180.01 |  |  |
|  | wr_allow_max | 4080 |  |  |
|  | wr_allow_min | 2652 |  |  |
| Personal \& family exempt income | Per_fam_exempt_inc | 5151 |  |  |
| Joint taxation allowance | Joint_tax_allow_fam1 | 3400 |  |  |
|  | Joint_tax_allow_fam2 | 2150 |  |  |
| Dependent children | dep_child | 1836 |  |  |
|  | dep_child2 | 2040 |  |  |
|  | dep_child3 | 3672 |  |  |
|  | dep_child4 | 4182 |  |  |
|  |  |  |  |  |
| Tax Rebate (new) | TC_NUEVO | 400 |  |  |
|  | tc_rate | 0.1 |  |  |
|  | Tc_lim_max | 12000 |  |  |
|  | Tc_lim_min | 8000 |  |  |
|  |  |  |  |  |
| Tax Schedule | tax_sch_sg | 0 | 0 | 12.00\% |
|  |  | 17707.2 | 2124.86 | 14.00\% |
|  |  | 33007.2 | 4266.86 | 18.50\% |
|  |  | 53407.2 | 8040.86 | 21.50\% |
|  |  | 120000 | 22358.36 | 22.50\% |
|  |  | 175000 | 34733.36 | 23.50\% |
|  |  |  |  |  |
|  | tax_sch_sa | 0 | 0 | 12.00\% |
|  |  | 17707.2 | 2124.86 | 14.00\% |
|  |  | 33007.2 | 4266.86 | 18.50\% |
|  |  | 53407.2 | 8040.86 | 21.50\% |
|  |  |  |  |  |
| Social security contributions |  |  |  |  |
| Employee: |  |  |  |  |
| Pension | pension_rate | 0.047 |  |  |
| Unemployment | unemp_rate | 0.0155 |  |  |
| Other | oth_rate | 0.001 |  |  |
| Employer |  |  |  |  |
| Pension | pension_empr | 0.236 |  |  |
| Unemployment | unemp_empr | 0.055 |  |  |
| Other | oth_empr | 0.008 |  |  |
|  |  |  |  |  |
| Ceiling and Floor | min_lim | 0 | 8978.4 |  |
|  | top_lim | 38761.2 |  |  |
| Child benefit | SS_child_benefit | 291 |  |  |
|  | SS_child_table | 1 | 11264.01 | 11530.76 |
|  |  | 2 | 12953.61 | 13487.11 |
|  |  | 3 | 16953.05 | 17753.30 |
|  |  | 4 | 19698.98 | 20765.98 |
|  |  | 5 | 22444.91 | 23778.66 |

## 2011 Tax equations

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_sp" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_sp" values taken as 0 .

|  | Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: | :---: |
| 1. | . Earnings | earn | B | for individual taxation: earn=earn_princ, or earn=earn_sp for joint (family) taxation: earn=earn_princ+earn_sp |
| 2. Allowances: |  |  |  |  |
|  | Work related, individual | work_ind | B | IF(earn-SSC<=wr_lim_min, wr_allow_max, IF(earn-SSC<=wr_lim_max, wr_allow_max-wr_rate*((earn-SSC)-(wr_lim_min_1)), wr_allow_min)) |
|  | Work related, family | work_fam | J | IF(AND(earn_sp=0, Married=0, Children=0), 0 , IF(earn_total-SSC_fam<=wr_lim_min, wr_allow_max, IF(earn_total-SSC_fam<=wr_lim_max, wr_allow_max-wr_rate*((earn_total-SSC_fam)-(wr_lim_min_1)), wr_allow_min))) |
|  | Joint taxation allowance | joint_allow_fam | J | IF(AND(Married=0,Children=0),0,IF(AND(Married=0,Children>0),joint_tax_allow_fam2,joint_t ax_allow_fam1)) |
|  | Personal and family exempt income, individual | ex_inc_ind | B | per_fam_exempt_inc |
|  | Personal and family exempt income, family | ex_inc_fam | $J$ | IF(AND(Married=0,Children=0),0,per_fam_exempt_inc) |
| Children exempt income, individual |  | child_ex_inc_ind | P | IF(earn_sp=0, <br> (children>0)* $\left(\text { dep_child }+(\text { children }>1)^{\star} \text { dep_child2 } 2+(\text { children }>2)^{*} \text { dep_child3+(children }>3\right)^{\star}($ c <br> hildren-3)*dep_child4), <br> (children>0)* $($ dep_child+(children>1)*dep_child2+(children>2)*dep_child3+(children>3)* $($ c <br> hildren-3)*dep_child4)/2) |
|  |  | S | IF(earn_sp=0, 0 , (children>0)* $\left(\text { dep_child }+(\text { children }>1)^{\star} \text { dep_child2 }+(\text { children }>2)^{\star} \text { dep_child3+(children }>3\right)^{\star}($ c hildren-3)*dep_child4)/2) |
|  | Children exempt income, family |  | child_ex_inc_fam | J | (children>0)* $\left(\text { dep_child }+(\text { children }>1)^{\star} \text { dep_child2 } 2+(\text { children }>2)^{*} \text { dep_child3+(children }>3\right)^{\star}($ c hildren-3)*dep_child4) |
|  | 3. Credits in taxable income | taxbl_cr | B, J | 0 |
| 4. CG taxable income |  | tax_inc | B, J | IF(AND(Married=0, Children=0), tax_inc_princ, MINA(tax_inc_princ+tax_inc_sp, tax_inc_fam)) |
|  |  | tax_inc_ind | B | Positive(earn-(work_ind+SSC)) |
|  |  | tax_inc_fam | J | IF(AND(Married=0, Children), 0 , <br> Positive(earn-(work_fam+joint_allow_fam+SSC_princ+SSC_sp))) |
| 5. | 5. CG tax before credits | CG_tax_ind_excl | B | MAXA(0, VLOOKUP(tax_inc_ind, tax_sch_sg, 2)+(tax_inc_ind-VLOOKUP(tax_inc_ind, tax_sch_sg, 1))*VLOOKUP(tax_inc_ind, tax_sch_sg, 3)) |
|  |  | CG_tax_fam_excl | J | MAXA(0, VLOOKUP(tax_inc_fam, tax_sch_sg, 2)+(tax_inc_fam-VLOOKUP(tax_inc_fam, tax_sch_sg, 1))*VLOOKUP(tax_inc_fam, tax_sch_sg, 3)) |
| 6. | CG tax credits: | CG_tax_cr_ind | B | MAXA(0,VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sg,2)+ <br> ((ex_inc_ind+child_ex_inc_ind)-VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sg,1))* <br> VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sg,3)+IF(earn>0,MINA(taper(TC_NUEVO,ta <br> x_inc_ind, tc_lim_min, tc_rate),CG_tax_ind_excl),0)) |
|  |  | CG_tax_cr_fam | J | MAXA(0,VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sg,2)+ ((ex_inc_fam+child_ex_inc_fam)-VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sg,1))* VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sg,3)+IF(AND(married=1,earn_sp>0),(MI NA(taper(TC_NUEVO,tax_inc_fam, tc_lim_min, tc_rate),CG_tax_fam_excl)) |
| 7. CG tax |  | CG_tax_ind | B | Positive(CG_tax_ind_excl-CG_tax_cr_ind) |
|  |  | CG_tax_fam | $J$ | Positive(CG_tax_fam_excl-CG_tax_cr_fam) |
| 8. State and local tax before credits |  | local_tax_ind_excl | B | MAXA(0, VLOOKUP(tax_inc_ind, tax_sch_sa, 2)+(tax_inc_ind-VLOOKUP(tax_inc_ind, tax_sch_sa, 1))*VLOOKUP(tax_inc_ind, tax_sch_sa, 3)) |
|  |  | local_tax_fam_excl | J | MAXA (0, VLOOKUP(tax_inc_fam, tax_sch_sa, 2)+(tax_inc_fam-VLOOKUP(tax_inc_fam, tax_sch_sa, 1))*VLOOKUP(tax_inc_fam, tax_sch_sa, 3)) |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| Local tax credits | local_tax_cr_ind | B | MAXA(0,VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sa,2)+ ((ex_inc_ind+child_ex_inc_ind)-VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sa,1))* VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sa,3)) |
|  | local_tax_cr_fam | J | MAXA(0,VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sa,2)+ ((ex_inc_fam+child_ex_inc_fam)-VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sa,1))* VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sa,3)) |
| State and local tax | local_tax_ind | B | Positive(local_tax_ind_excl-local_tax_cr_ind) |
|  | local_tax_fam | J | Positive(local_tax_fam_excl-local_tax_cr_fam) |
| 9. Employees' soc security | SSC | B | IF(AND(earn>0, earn<=min_lim), min_lim *(pension_rate+unemp_rate+oth_rate), IF(earn>=top_lim, top_lim*(pension_rate+unemp_rate+oth_rate), earn* (pension_rate+unemp_rate+oth_rate))) |
|  | SSC_fam | J | SSC_princ+SSC_sp |
| 11. Cash transfers | Child_transf |  | IF(Children=0.0,IF(earn<=VLOOKUP(Children, SS_child_table,2),SS_child_benefit ${ }^{*}$ Children, IF(earn<=VLOOKUP(Children, SS_child_table, 3), VLOOKUP(Children, SS_child_table, 3)-earn, 0))) |
| 13. Employer's SSC | SSC_empr |  | IF(AND(earn>0, earn<=min_lim), min_lim*(pension_empr+unemp_empr+ oth_umpr), IF(earn>=top_lim, top_lim*(pension_empr+unemp_empr+oth_empr), earn*(pension_empr+unemp_empr+oth_empr))) |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only; S calculated for spouse only; J calculated once only on a joint basis.

## Sweden

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Sweden 2011

## The tax/benefit position of single persons



## Sweden 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 375436 | 500581 | 625726 | 500581 |
| 2. Standard tax allowances: |  |  |  |  |  |
|  | Basic allowance | 12600 | 45600 | 33900 | 45600 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 0 | 0 | 0 | 0 |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 12600 | 45600 | 33900 | 45600 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 362800 | 454900 | 591700 | 454900 |
| 5. | Central government income tax liability (exclusive of tax credits) | 0 | 0 | 0 | 0 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other | 47548 | 65925 | 82066 | 65925 |
|  | Total | 47548 | 65925 | 82066 | 65925 |
| 7. | Central government income tax finally paid (5-6) | -47548 | -65925 | -82066 | -65925 |
| 8. | State and local taxes | 114463 | 143520 | 186680 | 143520 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 26300 | 35100 | 43800 | 35100 |
| Taxable income |  |  |  |  |  |
|  | Total | 26300 | 35100 | 43800 | 35100 |
| 10. | Total payments to general government (7+8+9) | 93215 | 112695 | 148414 | 112695 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 27000 | 27000 | 27000 | 0 |
|  | Total | 27000 | 27000 | 27000 | 0 |
| 12. | Take-home pay (1-10+11) | 309221 | 414886 | 504312 | 387886 |
| 13. Employer's wage dependent contributions and taxes |  |  |  |  |  |
|  | Employer's compulsory social security contributions | 83309 | 111079 | 138849 | 111079 |
|  | payroll taxes | 34652 | 46202 | 57753 | 46202 |
|  | Total | 117961 | 157281 | 196602 | 157281 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 17.8\% | 15.5\% | 16.7\% | 15.5\% |
|  | Employees' social security contributions | 7.0\% | 7.0\% | 7.0\% | 7.0\% |
|  | Total payments less cash transfers | 17.6\% | 17.1\% | 19.4\% | 22.5\% |
|  | Total tax wedge including employer's social security contributions | 37.3\% | 36.9\% | 38.7\% | 41.0\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 31.5\% | 31.5\% | 31.5\% | 31.5\% |
|  | Total payments less cash transfers: Spouse | 15.6\% | 28.6\% | 28.6\% | 28.6\% |
|  | Total tax wedge: Principal earner | 47.9\% | 47.9\% | 47.9\% | 47.9\% |
|  | Total tax wedge: Spouse | 35.8\% | 45.6\% | 45.6\% | 45.6\% |

Thhe national currency is the Swedish Kroner (SEK). In 2011, SEK 6.48 was equal to USD 1. In that year, the average worker earned SEK 375436 (Secretariat estimate).

## 1. Personal income tax systems

### 1.1. Central government income taxes

### 1.1.1. Tax unit

Spouses are taxed separately.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Basic reliefs: a basic allowance is given for assessed earned income and varies between SEK 12600 and SEK 33000 , depending on income. When individuals pay central government income tax, the basic allowance is at its lowest level, which equals SEK 12 600. The basic allowance depends on the assessed earned income and the basic amount, which equals SEK 42800.

| Assessed-earned-income (SEK) <br> relative to basic amount (BA) | Share of BA at lower bracket | For exceeding income |
| :--- | :---: | :---: |
| $0-0.99$ | 0.423 |  |
| $0.99-2.72$ | 0.423 | +0.2 |
| $2.72-3.11$ | 0.77 |  |
| $3.11-7.88$ | 1.081 | -0.1 |
| $7.88-$ | 0.293 |  |

- Standard marital status reliefs: none.
- Relief(s) for children: none.
- Work-related expenses: none.
- Other: none.


### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Interest on qualifying loans: interest payments are offset against capital income. The resulting net capital income is the tax base. A tax credit is given in the case of negative capital income.
- Contributions to pensions, life insurance, superannuation schemes: a deduction of maximum SEK 12000 can be claimed for premiums paid to private pension arrangements. Medical expenses: none.
- Other allowances are given for:
* the amount of commuting expenses exceeding SEK 9 000;
* other types of work-related expenses exceeding SEK 5 000; examples are the costs of tools, work-related phone calls using the taxpayer's private telephone;
* increased living expenses while on business trips, e.g. such as the use of a private car if these costs are not reimbursed by the employer;
* double housing expenses due to temporary work at other geographical locations (too far from home for commuting), or if the family for some reason can't move, even if the job is of a permanent nature;
* travelling expenses for travelling home if the taxpayer works in another place than his/her place of residence.


### 1.1.3. Tax schedule

| Taxable income (SEK) | Tax (SEK) at lower bracket | For exceeding income, \% |
| :--- | :---: | :---: |
| $0-383000$ | 0 | 0 |
| $383000-548300$ | 0 | 20 |
| Over 548 300 | 33060 | 25 |

### 1.1.4. Tax credits

A tax credit equal to 100 per cent of the compulsory social security contributions paid by the employee is granted.

For a person aged under 65, an annual Earned Income Tax Credit (EITC) worth up to SEK 21249 at the average local tax rate is granted on labour income. For those aged 65 or more, a higher credit worth up to SEK 30000 is granted. For a person aged under 65 the EITC is calculated as follows: EITC = [(Special Amount) - (Basic Allowance)] * (local tax rate). For those older than 65 a simplified EITC was introduced in 2009 so that it is no longer connected to the local tax rate, the basic allowance or the basic amount. The Basic Allowance is determined in Section 1.1.2.1; the local tax rate is discussed in Section 1.2. The Basic Amount (BA) in 2011 is SEK 42 800. The Special Amount is based on the taxpayer's (gross) earned income.

For taxpayers younger than 65, the Special Amount is calculated as follows:

| Earned income (EI) | Special amount |
| :--- | :--- |
| -0.91 BA | EI |
| $0.91 \mathrm{BA}-2.72 \mathrm{BA}$ | $0.91 \mathrm{BA}+0.304^{*}(\mathrm{EI}-0.91 \mathrm{BA})$ |
| $2.72 \mathrm{BA}-7.00 \mathrm{BA}$ | $1.461 \mathrm{BA}+0.095$ * $(\mathrm{EI}-2.72 \mathrm{BA})$ |
| $7.00 \mathrm{BA}-$ | 1.868 BA |

BA = SEK 42800

For taxpayers older than 65, the EITC is calculated differently:

| Earned income (EI) | EITC |
| :--- | :--- |
| -100000 SEK | $0.2^{\star}$ EI |
| $100000-300000$ SEK | 15000 SEK $+0.05^{\star E I}$ |
| 300000 SEK- | 30000 SEK |

### 1.2. Local government income taxes

### 1.2.1. General description of the systems

Sweden has both a central government and a local government personal income tax. They are completely coordinated in the assessment process and refer to the same period, i.e. the income year coincides with the calendar year.

### 1.2.2. Tax base

The tax base is the same as for the central government income tax. The basic allowance for individuals paying local government tax varies between SEK 12600 and SEK 33 000; it depends on the taxpayer's income. For a taxpayer earning the AW, this basic allowance amounts to SEK 12600 (based on an AW equal to SEK 365930 - subject to revision with the AW).

### 1.2.3. Tax rates

The local government personal income tax is proportional and differs between municipalities. The average rate amounts to 31.55 per cent in 2011 , with the maximum and minimum rates being 34.17 per cent and 28.89 per cent, respectively.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

A general pension contribution of 7 per cent of personal income is paid by employees and the self-employed when income is equal to or greater than 42.3 per cent of the basic amount underlying the basic allowance (see Section 1.1.2.1). The contribution cannot exceed SEK 29400 since the general pension contributions are not paid for income over SEK 420400 (= $8.07^{*} 52$ 100). The employees' contribution is offset with a tax credit.

### 2.2. Employers' contributions

The employers' contributions are calculated as a percentage of the total sum of salaries and benefits in a year. For the self-employed, the base is net business income. The rates for 2011 are listed below.

| Program | Employer (\%) | Self-employed (\%) |
| :--- | :---: | :---: |
| Retirement pension | 10.21 | 10.21 |
| Survivor's pension | 1.17 | 1.17 |
| Parental insurance | 2.20 | 2.20 |
| Health insurance | 5.02 | 5.11 |
| Labour market | 2.91 | 0.37 |
| Occupational health | 0.68 | 0.68 |
| General wage tax | 9.23 | 9.23 |
| Total | 31.42 | 28.97 |

In certain regions, a reduction of 10 per cent of the base, maximum SEK 7100 per month, is granted (SEK 18000 per year for self-employed) (it is not included in the calculations underlying this Report). For employees aged under 26 a reduced SSC rate of 15.49 per cent is applied ( 14.88 per cent for self-employed). For employees who are over 65 years old and born after 1937 only the retirement pension contribution (10.21 per cent)
is applicable. For persons born in 1937 or earlier no employers' social security contributions are applied. On premiums for occupational pensions paid by the employer a reduced SSC rate ( 24.26 per cent) is applied.

For self-employed a general reduction of 5 per cent on the SSC is applicable if the income exceeds SEK 40000 per year. The maximal reduction is SEK 10000 per year.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

The transfers are tax exempt and independent of the parents' income. The transfers for each child are as follows:

| First child | 12600 |
| :--- | :--- |
| Second child | 14400 |
| Third child | 18048 |
| Fourth child | 24720 |
| Fifth and subsequent child | 27600 |

## 4. Main changes in tax/benefit systems since 1998

A tax credit of SEK 1320 was introduced for low- and average income earners in 1999. The credit is reduced by 1.2 per cent of taxable income above SEK 135000 . This reduction was abolished in 2003 and was replaced by an increase in the basic allowance.

A tax credit of 25 per cent of the social security contribution paid by employees and the self-employed was introduced in 2000. The tax credit has been gradually increased to 100 per cent in 2006.

In 2004, a special tax credit equal to SEK 200 was provided for the statutory minimum local income tax. The special tax credit was abolished in 2005 as was the statutory minimum state income tax (a lump sum tax) of SEK 200. The central government income tax bracket is indexed with the consumer price index plus 2 per cent. In order to reduce the number of people paying the central income tax, there have been additional increases of the tax bracket in 2009. However, in 2004, 2005 and 2006 the central government income tax bracket was restricted to be indexed with the consumer price index plus 1 per cent.

The child allowance was raised by SEK 1200 per year in 2000, 2001 and 2006.
Maximum fee for childcare was introduced in 2002.
The basic allowance has been increased in 2001, 2002, 2003, 2005 and 2006.
The maximum number of days with unemployment benefit was increased from 564 to 580 days in 1998. The maximum number of days with unemployment benefit was set to 300 days ( 450 days for persons with children under the age of 18) in 2007. The unemployment benefit was raised in 2001 by SEK 100 to SEK 680 per day. The compensation in the sick leave was raised from 75 to 80 per cent in 1998. In 2003, the compensation was lowered to 77.6 per cent and, at the same time, the number of days for which the employer is responsible was increased from 14 to 21 days. In 2005, the compensation in the sick leave and the number of days for which the employer is responsible were set to their before-2003 level.

The lowest level compensation in the parental leave was raised on 1 July 2006 from SEK 60 to SEK 180 per day.

An earned income tax credit was introduced in 2007 with the purpose of making work economically more rewarding relative to unemployment or inactivity. The earned income tax credit was increased in 2008, 2009 and 2010.

In 2007 , the social security contributions for 18-24-year-old employees and selfemployed were reduced. In 2009, the reduction were increased and expanded to include all aged under 26. A special wage tax for persons older than 65 was abolished in 2007 for persons born after 1937 and in 2008 for persons born in 1937 or earlier.

An increased basic allowance for persons older than 65 was introduced in 2009 and extended in 2010 and 2011.

## 5. Memorandum items

### 5.1. Identification of an AW and calculation of earnings

Basic data for gross earnings are taken from the series Official Statistics of Sweden, published by Statistics Sweden. The calculation is based upon total average monthly or hourly earnings, primarily in September of the calendar year. To arrive at the annual earnings, data have been multiplied by the normal amount of hours worked during the year or the stipulated monthly salary has been multiplied by a factor of 12.2. The figures are representative for the country as a whole. The branch classification is NACE Rev. 2 B-N according to the OECD recommendation.

### 5.2. Employer contributions to private health, pension, etc. schemes

There are a handful of widespread private social security schemes. The employers' contributions to these systems for the blue-collar workers in the private sector equalled to 6.3 per cent of wage earnings in 2007. For white-collar workers in the private sector the employers' contributions to private social security schemes was 14 per cent in 2007. These figures are based on the statistics of labour costs in the private sector, published by Statistics Sweden.

2011 Parameter values

| Average wage | Ave_earn | 375436 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Central income tax |  |  |  |
|  | tax_rate | 0.2 |  |
|  | tax_rate2 | 0.05 |  |
|  | tax_thrsh | 383000 |  |
|  | tax_thrsh2 | 548300 |  |
| Basic Allowance |  |  |  |
|  | gr1 | 0.99 |  |
|  | gr2 | 2.72 |  |
|  | gr3 | 3.11 |  |
|  | gr 4 | 7.88 |  |
|  | gp1 | 0.423 |  |
|  | gp2 | 0.2 |  |
|  | gp3 | 0.1 |  |
|  | gp4 | 0.293 |  |
|  | gp5 | 0.77 |  |
| Local income tax |  |  |  |
|  | local_rate | 0.3155 |  |
|  | min_tax | 0 |  |
| Soc. security amount |  |  |  |
|  | basic_amt | 42800 |  |
|  | basic_ant | 52100 |  |
| Soc. security contributions |  |  |  |
| employee | SSC_rate | 0.07 |  |
| employer | SSC_empr | 0.3142 |  |
| ceiling | SSCC | 8.07 |  |
| Child benefit |  |  |  |
|  | Child 1 | 12600 |  |
|  | Child 2 | 14400 |  |
|  | CB | 13500 |  |
| Tax credits |  |  |  |
|  | TC1 | 0 |  |
|  | TC1gr1 | 0 |  |
|  | TC1gp1 | 0 |  |
|  | TC2gp1 | 1 |  |
| EITC | er_1 | 0.91 |  |
|  | er_2 | 2.72 |  |
|  | er_3 | 7.00 |  |
|  | ep_1 | 1.461 |  |
|  | ep_2 | 0.304 |  |
|  | ep_3 | 0.095 |  |
|  | ep_4 | 1.868 |  |
| Employer payroll tax | PRT | 0.0923 |  |

## 2011 Tax equations

The equations for the Swedish system are mostly repeated for each individual of a married couple. But the cash transfer is calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| 1. Earnings | earn |  |  |
| :---: | :---: | :---: | :---: |
|  | truncearn | B | TRUNC(earn, -2) |
| 2. Allowances: | basic_al | B | IF(truncearn<=gr_2*basic_amt, MINA(ROUNDUP(MAXA(gp_1*basic_amt, (gp_1+gp_2*(gr_2-gr_1))*basic_amt-gp_2*MAXA(gr_2*basic_amt-truncearn, 0)), -2), truncearn), MINA(ROUNDUP(MAXA(gp_4*basic_amt, gp_5*basic_amt-gp_2*MAXA(gr_2*basic_amt-truncearn, 0 )-gp_3*MAXA(truncearn-gr_3*basic_amt, 0)), -2), truncearn)) |
|  | ssc_al | B | 0 |
| Total | tax_al | B | basic_al+ssc_credit |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-basic_al-ssc_credit) |
| 5. CG tax before credits | CG_tax_excl | B | tax_rate*Positive(tax_inc-tax_thrsh)+ tax_rate2* Positive(tax_inc-tax_thrsh2) |
| 6. Tax credits: | ssc_credit | B | Trunc(SSC, -2) |
|  | localtax_credit | B | 0 |
|  | eitc | B | =TRUNC(MAX(()(TRUNC(IF(earned_income>er_2*basic_amt; <br> IF(earned_income>er_3*basic_amt;ep_4*basic_amt;ep_1*basic_amt+ep_3*(earned_inc ome-er_2*basic_amt));MIN(earned_income;er_1*basic_amt+ep_2*(earned_income-er_ 1*basic_amt)));0))-basic_allowance)*local_rate);0);0) |
|  | tax_cr | B | ssc_credit+localtax_credit+eitc |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr |
| 8. State and local taxes | local_tax | B | IF(tax_inc>0, TRUNC(local_rate*tax_inc, 0)+min_taxl, 0) |
| 9. Employees' soc security | SSC | B | (truncearn>=gp_1*basic_amt)*MINA(ROUNDSSC(truncearn*SSC_rate), ROUNDSSC(SSCC*basic_ant*SSC_rate)) |
| 11. Cash transfers | cash_trans | J | Children*CB |
| 13. Employer's contributions |  | B |  |
| Employer's SSC | SSC_empr | B | TRUNC(earn*SSC_empr)-Payroll_empr |
| Employer's payroll tax | Payroll_empr | B | TRUNC(earn*PRT) |
| Total | Cont_empr | B | SSC_empr+Payroll_empr |

Key to range of equation: $B$ calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Switzerland

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Switzerland 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 51609 | 77414 | 129023 | 51609 |
|  | Standard tax allowances |  |  |  |  |
|  | Basic allowance |  |  |  |  |
|  | Married or head of family | 0 | 0 | 0 | 0 |
|  | Dependent children | 0 | 0 | 0 | 12800 |
|  | Deduction for social security contributions and income taxes | 7122 | 10683 | 17802 | 7122 |
|  | Work-related expenses | 2000 | 2180 | 3633 | 2000 |
|  | Other | 1700 | 1700 | 1700 | 3100 |
|  | Total | 10822 | 14563 | 23135 | 25022 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 6000 |
| 4. | Central government taxable income (1-2 + 3) | 40700 | 62800 | 105800 | 32500 |
| 5. | Central government income tax liability (exclusive of tax credits) | 213 | 813 | 3335 | 44 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children | 0 | 0 | 0 | 500 |
|  | Other |  |  |  |  |
|  | Total | 0 | 0 | 0 | 500 |
| 7. | Central government income tax finally paid (5-6) | 213 | 813 | 3335 | 0 |
| 8. | State and local taxes | 3311 | 6920 | 15455 | 1161 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 3174 | 4761 | 7932 | 3174 |
|  | Taxable income |  |  |  |  |
|  | Total | 3174 | 4761 | 7932 | 3174 |
| 10. | Total payments to general government (7+8+9) | 6698 | 12494 | 26722 | 4335 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 6000 |
|  | Total | 0 | 0 | 0 | 6000 |
| 12. | Take-home pay (1-10+11) | 44912 | 64920 | 102302 | 53275 |
| 13. | Employer's compulsory social security contributions | 3174 | 4761 | 7932 | 3174 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 6.8\% | 10.0\% | 14.6\% | 2.2\% |
|  | Employees' social security contributions | 6.2\% | 6.2\% | 6.1\% | 6.2\% |
|  | Total payments less cash transfers | 13.0\% | 16.1\% | 20.7\% | -3.2\% |
|  | Total tax wedge including employer's social security contributions | 18.0\% | 21.0\% | 25.3\% | 2.8\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 18.2\% | 23.2\% | 31.7\% | 13.7\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 23.0\% | 27.7\% | 35.6\% | 18.7\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Switzerland 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 77414 | 103219 | 129023 | 103219 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
|  | Married or head of family | 2600 | 14709 | 15800 | 14709 |
|  | Dependent children | 12800 | 12800 | 12800 | 0 |
|  | Deduction for social security contributions and income taxes | 10683 | 14244 | 17805 | 14244 |
|  | Work-related expenses | 2180 | 4180 | 4180 | 4180 |
|  | Other | 4900 | 4900 | 4900 | 3500 |
|  | Total | 33163 | 50833 | 55485 | 36633 |
| 3. | Tax credits or cash transfers included in taxable income | 6000 | 6000 | 6000 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 50200 | 58300 | 79500 | 66500 |
| 5. | Central government income tax liability (exclusive of tax credits) | 221 | 385 | 1069 | 631 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children | 500 | 500 | 500 | 0 |
|  | Other |  |  |  |  |
|  | Total | 500 | 500 | 500 | 0 |
| 7. | Central government income tax finally paid (5-6) | 0 | 0 | 569 | 631 |
| 8. | State and local taxes | 3390 | 5510 | 8970 | 7043 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 4761 | 6348 | 7935 | 6348 |
|  | Taxable income |  |  |  |  |
|  | Total | 4761 | 6348 | 7935 | 6348 |
| 10. | Total payments to general government (7+8+9) | 8151 | 11858 | 17474 | 14022 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 6000 | 6000 | 6000 | 0 |
|  | Total | 6000 | 6000 | 6000 | 0 |
| 12. | Take-home pay (1-10+11) | 75263 | 97361 | 117549 | 89197 |
| 13. | Employer's compulsory social security contributions | 4761 | 6348 | 7935 | 6348 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 4.4\% | 5.3\% | 7.4\% | 7.4\% |
|  | Employees' social security contributions | 6.2\% | 6.2\% | 6.2\% | 6.2\% |
|  | Total payments less cash transfers | 2.8\% | 5.7\% | 8.9\% | 13.6\% |
|  | Total tax wedge including employer's social security contributions | 8.4\% | 11.1\% | 14.2\% | 18.6\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 17.1\% | 18.9\% | 24.1\% | 21.4\% |
|  | Total payments less cash transfers: Spouse | 14.4\% | 19.4\% | 24.7\% | 20.5\% |
|  | Total tax wedge: Principal earner | 21.9\% | 23.6\% | 28.5\% | 26.0\% |
|  | Total tax wedge: Spouse | 19.4\% | 24.0\% | 29.1\% | 25.1\% |

Thhe national currency is the Swiss franc (CHF). In 2011, CHF 0.89 equalled USD 1. The Secretariat has estimated that in that same year, the average worker earned CHF 77414.

Cantonal and communal income taxes are very substantial in relation to direct federal tax. Here, the canton and commune of Zurich have been selected as an example of the tax system of the 26 cantons. Local income tax is not deductible when calculating federal income tax.

## 1. Personal income tax systems

### 1.1. Income tax collected by the federal government (Confederation)

### 1.1.1. Tax unit

The income of spouses living together is taxed jointly, regardless of the property regime under which they were married. Income of children living under parental authority is added to the income of their custodian. Children's labour income is taxed separately and in some cases, as in Zurich, is exempt from tax.

### 1.1.2. Tax reliefs and tax credits

### 1.1.2.1. Standard reliefs for "post-numerando" taxation [i.e. annual taxation on the basis of actual earned income, assessed at the end of the year].

- Basic deduction

There is a basic deduction of CHF 2600 for married couples for direct federal tax.

- Deduction for children

A CHF 6400 deduction is allowed for each child under 18 years of age; the deduction is allowed for older children if they are apprentices or still in school.

- Tax credit for children

A CHF 250 deduction from the tax liability is allowed for each child under 18 years, the deduction is allowed for older children if they are apprentices or still in school.

- Deductions for social insurance contributions and other taxes

Premiums for old age and disability insurance ( $5.05 \%$ of gross earned income) and for unemployment insurance (1.1\% for income up to CHF $126000,1 \%$ for income between CHF 126000 and CHF 315000 ) are deductible in full. Compulsory contributions of approximately $7.65 \%$ to private pension funds are also fully deductible. Health and life insurance premiums are deductible up to CHF 3500 for married persons and CHF 1700 for taxpayers who are widow(er)s, divorced or single (such premiums are not considered social contributions). These amounts are increased by CHF 700 for each dependent child.

- Work-related expenses

Taxpayers are allowed a deduction corresponding to $3 \%$ of net income (i.e. gross income less contributions for old age and disability insurance, unemployment insurance and work-related provident funds). This deduction may be no less than CHF 2000 and no more than CHF 4000.

- Deduction for two-income couples
$50 \%$ of the smaller income can be deducted, but no less than CHF 8100 and no more than CHF 13200.


### 1.1.2.2. Main non-standard reliefs available to the average worker

- Interest payments on qualifying loans

This is the main non-standard relief available to the average worker. It is allowed for all sorts of loans.

- Medical expenses

Expenses incurred as a result of illness, accidents or disability of the taxpayer or one of its dependants are deductible if the taxpayer bears the expenses personally and they exceed $5 \%$ of his or her net income.

### 1.1.3. Tax base

| Allowable deductions from gross income | Single taxpayer <br> (CHF) | Married taxpayer, <br> 2 children (CHF) |
| :--- | :---: | :---: |
| Work-related expenses ${ }^{1}$ | $2000-4000$ | $2000-4000$ |
| Personal deduction | - | 2600 |
| Deduction for 2 dependent children | - | $12800\left(6400^{*} 2\right)$ |
| Social contributions | $5.05 \%$ |  |
| $\quad$ Old age insurance | $1.1 \%{ }^{2}$ | $5.05 \%$ |
| $\quad$ Unemployment insurance | $7.65 \%$ | $1.1 \%{ }^{2}$ |
| $\quad$ Pension fund | 1700 plus 700 per child | 3500 plus 700 per child |
| Maximum deductions for health insurance premiums and loan interest ${ }^{3}$ |  | $8100-13200$ |
| Deduction for two-income couples ${ }^{4}$ |  |  |

1. $3 \%$ of net income, minimum CHF 2000 , maximum CHF 4000.
2. $1.1 \%$ of income up to CHF $126000 ; 1 \%$ of income between CHF 126000 and CHF 315000.
3. For the purposes of this publication, taxpayers are assumed to always receive the relevant maximum deduction.
4. $50 \%$ of smaller income, minimum CHF 7 600, maximum CHF 12500.

In addition, for the married taxpayer with 2 children, there is a tax credit for 2 dependent children amounting to CHF 500, thus reducing the tax liability by CHF 500.

### 1.1.4. Tax schedules

### 1.1.4.3. Rates for persons living alone

| Taxable income (CHF) |  |  |  |
| :--- | :---: | ---: | ---: |
| Up to 14400 | Base amount (CHF) | Plus \% of excess (CHF) |  |
| 14400 to 31500 | - | - | - |
| 31500 to 41200 |  | 0.77 | 14400 |
| 41200 to 55000 | 217.65 | 0.88 | 31500 |
| 55000 to 72200 | 581.30 | 2.64 | 41200 |
| 72200 to 77700 | 1092.10 | 2.97 | 55000 |
| 77700 to 103000 | 1418.80 | 5.94 | 72200 |
| 103000 to 133900 | 3088.60 | 6.60 | 77700 |
| 133900 to 175000 | 5807.80 | 8.80 | 103000 |
| 175000 to 751200 | 10328.80 | 11.00 | 133900 |
| Over $751300^{2}$ | - | 13.20 | 175000 |

1. Fractions of less than CHF 100 are disregarded.
2. The calculation model disregards this part of the schedule.
1.1.4.4. Rates for spouses living together and for widowed, separated, divorced taxpayers or unmarried taxpayers living with their own children.

| Taxable income (CHF) ${ }^{1}$ | Base amount (CHF) | Plus \% of the excess (CHF) |
| :--- | :---: | :---: |
| Up to 28100 | - | - |
| 28100 to 50400 |  | 1 |
| 50400 to 57900 | 223 | 2 |
| 57900 to 74700 | 373 | 3 |
| 74700 to 89700 | 877 | 4 |
| 89700 to 102700 | 1477 | 5 |
| 102700 to 113900 | 2127 | 6 |
| 113900 to 123300 | 2799 | 7 |
| 123300 to 130800 | 3457 | 8 |
| 130800 to 136300 | 4057 | 9 |
| 136300 to 140200 | 4552 | 10 |
| 140200 to 142100 | 4942 | 11 |
| 142100 to 144000 | 5151 | 12 |
| 144000 to 889400 | 5379 | 13 |
| Over $889400^{2}$ | - | 11.5 of total income |

1. Fractions of less than CHF 100 are disregarded.
2. The calculation model disregards this part of the schedule.

### 1.2. Taxes levied by decentralised authorities (canton and commune of Zurich)

### 1.2.1. General description of the system

The system of cantonal and communal taxation has the same features as that of direct federal tax.

The tax base is comprised of income from all sources.
Once the basic amount of tax is set, cantons, communes and churches levy their taxes by applying a multiple, which may change from year to year. In 2010, for example, the canton applied a multiple of 1.0 , the commune of Zurich 1.19 and the reformed church 0.10 . The basic amount of tax is therefore multiplied by a total of 2.29 . However, following the decision no longer to include church tax in Revenue Statistics, it is no longer included in the calculations for Taxing Wages. The basic amount of tax is therefore multiplied by a total of 2.19.

### 1.2.2. Tax base

| Allowable deductions from gross income | Single taxpayer <br> (CHF) | Married taxpayer, <br> 2 children (CHF) |
| :--- | :---: | :---: |
| Work-related expenses ${ }^{1}$ | $2000-4000$ | $2000-4000$ |
| Personal deduction | - | - |
| Deduction for 2 dependent children | - | $13600\left(6800^{*} 2\right)$ |
| Social contributions | $5.05 \%$ | $5.05 \%$ |
| $\quad$ Old age insurance | $1.1 \%^{2}$ | $1.1 \%{ }^{2}$ |
| $\quad$ Unemployment insurance | $7.65 \%$ | $7.65 \%$ |
| $\quad$ Pension fund | 2400 plus 1200 per child | 4800 plus 1200 per child |
| Maximum deductions for health insurance premiums and loan interest ${ }^{3}$ |  | 5400 |
| Deduction for two-income couples |  |  |

1. $3 \%$ of net income, minimum CHF 2000 CHF , maximum CHF 4000.
2. $1.1 \%$ of income up to CHF $126000 ; 1 \%$ of income between CHF 126000 and CHF 315000.
3. For the purposes of this publication, taxpayers are assumed to always receive the relevant maximum deduction.

### 1.2.3. Post-numerando tax rates

## Cantonal income tax (Zurich)

a) Basic income tax rates for married, divorced, widowed or single taxpayers living with children:

| Taxable income (CHF) | Base amount (CHF) | Plus \% of the excess (CHF) |  |
| :--- | :---: | :---: | ---: |
| Up to 12400 | - | 0 | - |
| 12400 to 18100 | - | 2 | 12400 |
| 18100 to 25200 | 113 | 3 | 18100 |
| 25200 to 33800 | 326 | 4 | 25200 |
| 33800 to 43700 | 670 | 5 | 33800 |
| 43700 to 56500 | 1165 | 6 | 43700 |
| 56500 to 84900 | 1933 | 7 | 56500 |
| 84900 to 113300 | 3921 | 8 | 84900 |
| 113300 to 156000 | 6192 | 9 | 113300 |
| 156000 to 207100 | 10035 | 10 | 156000 |
| 207100 to 262500 | 15145 | 11 | 207100 |
| 262500 to 326400 | 21238 | 12 | 262500 |
| Over 326 400 | 28905 | 13 | 326400 |

b) Basic income tax rates for other taxpayers (single without children).

| Taxable income (CHF) | Base amount (CHF) | Plus \% of the excess (CHF) |  |
| :--- | :---: | :---: | ---: |
| Up to 6200 | - | 0 | - |
| 6200 to 10500 | - | 2 | 6200 |
| 10500 to 14800 | 85 | 3 | 10500 |
| 14800 to 21800 | 214 | 4 | 14800 |
| 21800 to 30400 | 494 | 5 | 21800 |
| 30400 to 40300 | 924 | 6 | 30400 |
| 40300 to 51700 | 1518 | 7 | 40300 |
| 51700 to 67300 | 2316 | 8 | 51700 |
| 67300 to 97200 | 3564 | 9 | 67300 |
| 97200 to 126900 | 6255 | 10 | 97200 |
| 126900 to 173900 | 9225 | 11 | 126900 |
| 173900 to 234900 | 14395 | 12 | 173900 |
| Over 234900 | 21714 | 13 | 234900 |

1. Fractions below CHF 100 are disregarded.
c) Annual multiple as a percentage of basic tax rates:

| Canton of Zurich | 100 |
| :--- | :--- |
| Commune of Zurich | 119 |
| Roman Catholic church tax | 12 (for info.) |
| Reformed Church tax | 10 (for info.) |

A personal tax of CHF 24 is added.

### 1.2.4. Tax rates used for this study

This study uses the rates of tax levied by the federal, cantonal and communal tax authorities.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employee contributions

### 2.1.1. Retirement pensions

$5.05 \%$ of gross income for old age insurance.

### 2.1.2. Health insurance

-.

### 2.1.3. Unemployment

$1.1 \%$ on the portion of income up to CHF 126 000; 1\% for income between CHF 126000 and CHF 315000.

### 2.1.4. Work-related accidents

-.

### 2.1.5. Family allowances

### 2.1.6. Other

-.

### 2.2. Employer contributions

### 2.2.1. Retirement pensions

$5.05 \%$ of gross income for old age insurance.

### 2.2.2. Health insurance

-.

### 2.2.3. Unemployment

### 2.2.4. Work-related accidents

-.

### 2.2.5. Family allowances

The employer pays a benefit for dependent children of an employee. The effective benefits paid depend on the Canton of residence and the respective employer. As of 1 January 2009, a new Swiss-wide minimum amount of CHF 2400 has been established. In most cases, the benefit paid exceeds this minimum. The average family benefit is estimated to amount to CHF 3000 per child per year.

This benefit is taxable along with other components of income.
The family allowance contributions are not included in the Taxing Wages results either as they are paid to a privately-managed fund. These contributions therefore qualify as non-tax compulsory payments (see also Section 5.3).

### 2.2.6. Other

## 3. Universal cash benefits

### 3.1. Benefits linked to marital status

No such benefits are paid.

### 3.2. Benefits for dependent children

The employer pays a benefit of, on average, approximately CHF 3000 per year for each dependent child of an employee. This benefit is taxable along with other components of income. See 2.25.

## 4. Main changes in the tax/benefit system since 1998

On 1 January 1999, the canton of Zurich switched from biennial pre-numerando taxation to annual post-numerando taxation on individual income. As a result, the direct federal tax is based on annual post-numerando taxation as well.

As of 1 January 2008, the basic deduction for married couples and the deduction for two-income couples were introduced. These measures are intended to minimise the
marriage penalty and to reduce the high taxation of secondary earners, thereby increasing labour force participation of skilled secondary earners.

As of 1 January 2011, a tax credit for children has been introduced. This tax credit reduces the tax liability by CHF 250 per child.

## 5. Memorandum item

### 5.1. Identification of the average worker

The population includes men and women working in industry, arts and crafts. The stated income is for the average of workers in the same sector. The geographical scope is the entire country, whereas the amount of tax is computed in respect of the canton and commune of Zurich.

### 5.2. Method of calculation used

- Unemployment benefits: not included.
- Sick leave payments: not included.
- Paid leave allowances: included.
- Overtime: included.
- Periodic cash bonuses: included.
- Fringe benefits: not included.
- Basic method used for calculation: monthly wages are multiplied by 12.
- Close of the income tax year: 31 December.
- Reference period for computing wages: from 1 January to 31 December of the year in question.


### 5.3. Calculation of non-tax compulsory payments

Switzerland imposes some important non-tax compulsory payments (NTCPs). These NTPCs are not included in the Taxing Wages models except when they qualify as standard personal income tax reliefs. Compulsory payments indicators, which combine the effect of taxes and NTCPs, are calculated by the OECD Secretariat and presented in the OECD Tax Database (See: www.oecd.org/ctp/taxdatabase). Switzerland levies the following employee and/or employer NTCPs:

- Contributions to the second pillar of the pension system (occupational pension funds): occupational pension funds are mandatory for salaried persons earning at least CHF 20880 annually. Old age insurance is based on individual savings. The savings assets accumulated by the insured person on his individual savings account over the years serve to finance the old age pension. The constituted capital is converted into an annual old age pension on the basis of a conversion factor. Contribution rates depend on the occupation and the pension fund. An estimated representative rate amounts to 7.65\% for employees and 9.75\% for employers in 2011.
- Health insurance is compulsory for all persons domiciled in Switzerland. Every family member is insured individually, regardless of age. Health insurance contributions are lump sum contributions per capita depending on age, sex, canton of residence and insurer. The national average rates for 2011 amount to CHF 4486 for adults and CHF 1072 for children per year. Health insurance premiums can be reduced depending
on the contributor's income level and his family situation. Each canton has its own definition of the income thresholds and the reduction regime. The health insurance premium and reduction rates of the Canton of Zurich are used in the calculations.
- Family allowance: employers have to make family allowance contributions. The contribution rates differ among cantons and family contribution funds. A representative rate has to be estimated, for 2011 it amounts to 1.2\%.
- Accident insurance: accident insurance is compulsory for every employee. Employees are automatically insured by their employer, whereas the employers are more or less automatically assigned to a particular insurance company depending on their branch of trade. The risk and associated costs of the respective business activity determines the insurance premiums. A representative rate would have to be estimated.

| 2011 Parameter values |  |  |  |
| :---: | :---: | :---: | :---: |
| AW earnings | Ave_earn | 77414 | Secretariat estimate |
| Tax allowances | Child_al | 6400 |  |
| Tax credit | Child_cred | 250 |  |
| Partner Allowance | partner_rate | 0.5 |  |
|  | partner_min | 8100 |  |
|  | partner_max | 13200 |  |
| Basic deduction for married couples | Married_ded | 2600 |  |
| Partner income local | partner_local | 5400 |  |
| Single parent | sing_par_al | 0 |  |
| Workrelated | work_exp | 0.03 |  |
|  | work_exp_min | 2000 |  |
|  | work_exp_max | 4000 |  |
| Allowances for local tax | local_basic | 0 |  |
|  | local_child | 6800 |  |
| Federal tax | IFD_min_s | - |  |
| Single | IFD_sch_s | 0 | 14400 |
|  |  | 0.0077 | 31500 |
|  |  | 0.0088 | 41200 |
|  |  | 0.0264 | 55000 |
|  |  | 0.0297 | 72200 |
|  |  | 0.0594 | 77700 |
|  |  | 0.066 | 103000 |
|  |  | 0.088 | 133900 |
|  |  | 0.11 | 175000 |
|  |  | 0.132 | 751200 |
|  |  | 0.132 |  |
| Married | IFD_min_m | - |  |
|  | IFD_sch_m | 0 | 28100 |
|  |  | 0.01 | 50400 |
|  |  | 0.02 | 57900 |
|  |  | 0.03 | 74700 |
|  |  | 0.04 | 89700 |
|  |  | 0.05 | 102700 |
|  |  | 0.06 | 113900 |
|  |  | 0.07 | 123300 |
|  |  | 0.08 | 130800 |
|  |  | 0.09 | 136300 |
|  |  | 0.1 | 140200 |
|  |  | 0.11 | 142100 |
|  |  | 0.12 | 144000 |
|  |  | 0.13 | 889400 |

2011 Parameter values (cont.)

|  |  | 0.13 |  |
| :---: | :---: | :---: | :---: |
| Cantonal tax | Zurich_min | 24 |  |
| Single | Zurich_sch_s | 0 | 6200 |
|  |  | 0.02 | 10500 |
|  |  | 0.03 | 14800 |
|  |  | 0.04 | 21800 |
|  |  | 0.05 | 30400 |
|  |  | 0.06 | 40300 |
|  |  | 0.07 | 51700 |
|  |  | 0.08 | 67300 |
|  |  | 0.09 | 97200 |
|  |  | 0.1 | 126900 |
|  |  | 0.11 | 173900 |
|  |  | 0.12 | 234900 |
|  |  | 0.13 |  |
| Married | Zurich_sch_m | 0 | 12400 |
|  |  | 0.02 | 18100 |
|  |  | 0.03 | 25200 |
|  |  | 0.04 | 33800 |
|  |  | 0.05 | 43700 |
|  |  | 0.06 | 56500 |
|  |  | 0.07 | 84900 |
|  |  | 0.08 | 113300 |
|  |  | 0.09 | 156000 |
|  |  | 0.1 | 207100 |
|  |  | 0.11 | 262500 |
|  |  | 0.12 | 326400 |
|  |  | 0.13 |  |
| Canton and Commune Tax Mutiple | statetax_mult | 2.19 |  |
| Social security contributions | old_age | 0.0505 |  |
| Pension | pension_rate | 0 |  |
| Unemployment | unemp_rate | 0.011 |  |
|  | unemp_rate2 | 0.01 |  |
| income ceiling | unemp_ciel | 126000 |  |
|  | unemp_ciel2 | 315000 |  |
| Cantonal deductible limit | local_dedn | 2400 |  |
| deductible extra for child | local_dedn_c | 1200 |  |
| Max other insurance deduction |  |  |  |
| single | max_dedn_s | 1700 |  |
| married couples | max_dedn_m | 3500 |  |
| child | max_dedn_c | 700 |  |
| Child cash transfer | child_ben | 3000 |  |

## 2011 Tax equations

The equations for the Swiss system in 2011 are mostly calculated on a family basis.
Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | partner_al | J | IF(earn_spouse>0,(Married*MAX(partner_min,MIN(partner_max,partner_rate*MIN(earn _princ,earn_spouse)))),0)+Married*Married_ded |
| Children | children_al | J | Children*Child_al+ (Children>0)* (Married=0)*sing_par_al |
| Soc sec contributions | SSC_al | B | SSC + NTCP_pension_ee*earn |
| Work related | work_al | B | MAX(work_exp_min, MIN(work_exp_max, work_exp*(earn-SSC_al))) |
| Other | oth_al | J | IF(Married,IF(Children>0,max_dedn_m+Children*fed_dedn_c,max_dedn_m),IF(Children $>0$,max_dedn_s+Children*fed_dedn_c,max_dedn_s)) |
| Total | tax_al | J | partner_al+children_al+SSC_al+work_al+oth_al |
| 3. Credits in taxable income | taxbl_cr | J | Cash_tran |
| 4. CG taxable income | tax_inc | J | positive(earn_total-tax_al+taxbl_cr) |
| 5. CG tax before credits | CG_tax_excl | J | IF(Married+Children=0, Tax(tax_inc, IFD_sch_s)+IFD_min_s*(Tax(tax_inc, IFD_sch_s)>0), Tax(tax_inc, IFD_sch_m)+IFD_min_m*(Tax(tax_inc, IFD_sch_m)>0)) |
| 6. Tax credits: | Children_cred | J | Child_cred*Children |
| 7. CG tax | CG_tax | J | Positive(CG_tax_excl- Children_cred) |
| 8. State and local taxes | local_tax_inc | J | MAX(earn_total+taxbl_cr-local_basic*(1+Married)-Children*local_child-work_al-SSC-(lo cal_dedn* ${ }^{*} 1+$ Married) + Children*local_dedn_c)-(earn_spouse>0)*partner_local,0) |
|  | local_tax |  | IF((Married+Children) $>0$, Tax(local_tax_inc, <br> Zurich_sch_m) ${ }^{*}$ statetax_mult+(1+Married) ${ }^{\star}$ Zurich_min*(Tax(local_tax_inc, Zurich_sch_m)>0), Tax(local_tax_inc, Zurich_sch_s) *statetax_mult+(Tax(local_tax_inc, Zurich_sch_s)>0)*Zurich_min) |
| 9. Employees' soc security | SSC | B | ```(old_age)*earn+IF(earn<=unemp_ciel, earn*unemp_rate, IF(earn<=unemp_ciel2, unemp_ciel*unemp_rate+(earn-unemp_ciel)*unemp_rate2, unemp_ciel*unemp_rate+unemp_ciel2*unemp_rate2))``` |
| 11. Cash transfers | Cash_tran | J | Children*child_ben |
| 13. Employer's soc security | SSC_empr | B | SSC |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## Turkey

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## Turkey 2011

## The tax/benefit position of single persons



## Turkey 2011

## The tax/benefit position of married couples



ThLhe national currency is the Türk Lirasi (TL). Turkey has changed its national currency unit in 2005 (after 1 January 2005, 1 YTL = 1 million TRL, after 1 January 2009, 1 TL = 1 YTL ). In 2011, TL 1.67 was equal to USD 1. For 2011, the average production worker earned 22636 TL (Country estimate).

## 1. Personal income tax systems

### 1.1. Central government income tax

### 1.1.1. Tax unit

Spouses are taxed separately on earned income. This rule has applied since 1 January 1999.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs:

- Reliefs for social security contributions: employee's social security contributions are deductible from gross earnings. These contributions are 15 per cent of gross income as stated by the Social Insurance Act. The contribution to the unemployment fund is included in this amount and equals 1 per cent of gross income.
- Contributions to public pension funds established by law are deductible.
- Work-related expenses: none.
- Minimum Living Relief: the calculation of the minimum living allowance is based on the annual gross amount of the minimum wage for employees older than 16 at the beginning of the calendar year in which the income is obtained multiplied by the following rates:
* 50 per cent for the taxpayer him or herself;
* 10 per cent for the spouse who neither works nor has an income;
* 7.5 per cent for each of the first two children;
* 5 per cent for each additional child.

This total amount is then multiplied by the rate ( 15 per cent) which is applied to the first income bracket of PIT Schedule stated in Article 103 of PIT Law, and then minimum living relief is calculated by offsetting $1 / 12$ of the allowance amount against monthly calculated tax due on employment income. Any excess is non-refundable.

- Reliefs for disabled: law 4842 regulates tax relief for disabled persons. The employee who lost his/her working capacity with at least 80 per cent is considered to be disabled in the 1st degree; employees are disabled in the 2nd and 3rd degree respectively, if they lost their working capacity with at least 60 and 40 per cent respectively. In these cases, the following amounts are deductible from monthly wages:
* disabled in the 1st degree: 700 TL ;
* disabled in the 2nd degree: 350 TL;
* disabled in the 3rd degree: 170 TL.


### 1.1.2.2. Main non-standard tax reliefs applicable to an APW

- Legal deductions for public institutions such as OYAK (Social Aid Institution for Military Officers).
- Contributions to private pension funds and premiums paid by the wage-earner for himself (or herself), the spouse and dependent children to personal insurance schemes covering death, illness, accident, disablement, maternity, birth and education, provided that the insurance is contracted with a company established in or with a main office in Turkey. The total amount of deductible contributions to the private pension funds cannot exceed 10 per cent ( 5 per cent with respect to premiums that are paid to personal insurance schemes) of the wage that is earned in the month when the premiums or contributions are actually paid. The annual amount cannot exceed the annual minimum wage either.
- Membership payments made to labour unions.


### 1.1.3. Tax schedule

The tax schedule in 2011 is as follows:

| Taxable income (TL) | Tax on lower threshold (TL) | Tax on excess amount above lower threshold (\%) |
| :--- | :---: | :---: |
| Up to 9.400 |  | 15 |
| 9400 up to 23000 | 1410 | 20 |
| 23000 up to 80000 | 4130 | 27 |
| 80000 and over | 19520 | 35 |

### 1.2. State and local income taxes

Income tax is levied only by the central government.

### 1.3. Stamp tax

The stamp tax base is gross earnings. The tax rate is 0.66 per cent in 2011.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

2.1.1. Pensions (disability, old age and death insurance): 9 per cent.
2.1.2. Sickness: 5 per cent.
2.1.3. Unemployment: 1 per cent.

### 2.2. Employers' contributions

2.2.1. Pensions (disability, old age and death insurance): 6 per cent.
2.2.2. Sickness: 6 per cent.
2.2.3. Unemployment: 2 per cent.
$\begin{array}{ll}\text { 2.2.4. Work injury: } & \text { The industry-dependent rate varies between } 1.5 \text { and } 7.0 \text { per cent. } \\ & \text { The rate includes occupational disease insurance. In this Report, the } \\ & \text { lowest rate is used (1.5 per cent). }\end{array}$
2.2.5. Others (maternity insurance): 1 per cent.

There is no distinction by marital status or sex and the contributions apply to gross earnings. Compulsory social security contributions of employees and their employers are calculated according to the schemes presented above.

For employees whose gross earnings are below the base or above ceiling earnings, which are determined at least twice a year, these contribution rates are applied to the base or ceiling amounts respectively. In 2011, the ceiling amount is TL 63707.40 and the base amount is TL 9 801.00. Under the Law No. 5510 (Social Security and General Health Insurance Law), the base wage for social security contributions is equal to the minimum wage. Because employees cannot earn less than the minimum wage, the base wage is not considered in this publication. However, the ceiling earnings are considered for the purposes of this Report.

## 3. Universal cash transfers

Employees obtain universal cash transfers according to the collective labour agreements that are signed between their employer and the labour union(s). These agreements vary with the bargaining power of the different parties in the different sectors in the economy. This explains why there is no standard amount reflecting these general transfers.

## 4. Main changes in tax/benefit system since 2004

Changes were made under Laws 4967, 4842, 5510 and 5615: see Section 1.1.2. By the Law No. 5763 as of 1 October 2008, employers' social security contributions have been reduced: see Section 2.2.

## 5. Memorandum items

### 5.1. Identification of an APW

The earnings figure refers to all production workers in the manufacturing sector. The APW figure has been calculated using monthly data and it refers to the calendar year.

### 5.2. Contribution to private pension and health schemes

Business enterprises (employers) are permitted to make additional contributions for pension savings of their employees, but only in addition to the obligatory contributions to the national retirement schemes. Such additional pension arrangements, which are optional, are not widely used.

2011 Parameter values

| Average earnings/yr | Ave_earn | 22636 | Country estimate |
| :--- | :--- | :--- | :--- |
|  |  |  | 9400.00 |
| Income tax | Tax_sch | 0.15 | 23000.00 |
|  |  | 0.20 | 8000.00 |
|  |  | 0.27 |  |
| Stamp tax | 0.35 |  |  |
| Employees SSC | Stamp_rate | 0.0066 |  |
|  | SSC_rate | 0.15 |  |
| Employers SSC | SSC_ceil | 63707.4 |  |
| Minimum living relief | SSC_empr | 0.165 |  |
|  | credit_rate | 0.15 |  |
|  | basic_allow | 0.5 |  |
|  | spouse_allow | 0.1 |  |
|  | child_allow | 0.075 |  |
|  | add_child_allow | 0.05 |  |
|  | min_wage | 9558.00 |  |

## 2011 Tax equations

The equations for the Turkish system are on an individual basis.
The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | B | SSC |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| Stamp tax | stamp_tax | B | earn*stamp_rate |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc,tax_sch) |
| 6. Tax credits: | tax_cr | B | credit_rate*min_wage*(basic_allow+spouse_allow*(IF(Wife=0,Married,0))+IF(OR (Children=1,Children=2),Children*child_allow,0)+IF(Children>2.2*child_allow+ (Children-2)* add_child_allow,0)) |
| 7. $C G \operatorname{tax}$ | CG_tax | B | positive(CG_tax_excl-tax_cr)+stamp_tax |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | Min(earn,SSC_ceil)*SSC_rate |
| 11. Cash transfers | cash_trans | B | 0 |
| 13. Employer's soc security | SSC_empr | B | Min(earn,SSC_ceil)* ${ }^{\text {SSC_empr }}$ |

Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## United Kingdom

## (2011-12 income tax year)

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## United Kingdom 2011

## The tax/benefit position of single persons



## United Kingdom 2011

## The tax/benefit position of married couples

1. Gross wage earnings
2. Standard tax allowances

| Basic allowance | 7475 | 14950 | 14950 | 14950 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Married or head of family
Dependent children
Deduction for social security contributions and income taxes
Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income
4. Central government taxable income (1-2 + 3)

| Total | 7475 | 14950 | 14950 | 14950 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 26811 | 30765 | 42193 | 30765 |
|  |  |  |  |  |
|  | 5362 | 6153 | 8439 | 6153 |

6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

| Gross earnings |  | 3247 | 3752 | 5123 | 3752 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable income |  |  |  |  |  |
|  | Total | 3247 | 3752 | 5123 | 3752 |
| 10. Total payments to general government (7+8+9) |  | 8062 | 9905 | 13562 | 9905 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 1757 | 1757 | 1757 | 0 |
|  | Total | 1757 | 1757 | 1757 | 0 |
| 12. Take-home pay (1-10+11) |  | 27981 | 37567 | 45339 | 35810 |
| 13. Employer's compulsory social security contributions |  | 3756 | 4357 | 5934 | 4357 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 14.0\% | 13.5\% | 14.8\% | 13.5\% |
| Employees' social security contributions |  | 9.5\% | 8.2\% | 9.0\% | 8.2\% |
| Total payments less cash transfers |  | 18.4\% | 17.8\% | 20.7\% | 21.7\% |
| Total tax wedge including employer's social security contributions |  | 26.4\% | 25.0\% | 28.1\% | 28.5\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 32.0\% | 32.0\% | 32.0\% | 32.0\% |
| Total payments less cash transfers: Spouse |  | 16.1\% | 32.0\% | 32.0\% | 32.0\% |
| Total tax wedge: Principal earner |  | 40.2\% | 40.2\% | 40.2\% | 40.2\% |
| Total tax wedge: Spouse |  | 20.3\% | 40.2\% | 40.2\% | 40.2\% |

Thhe national currency is the Pound Sterling (GBP). In May 2011, GBP 0.62 was equal to USD 1. In 2011-12, the Average Worker is estimated to earn GBP 34286 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Central government income taxes

### 1.1.1. Tax unit

The tax unit is the individual, but certain reliefs depend on family circumstances (see Section 1.1.2.1).

### 1.1.2. Tax allowances and tax credits

All figures shown are those applying at the start of the tax year in April.

### 1.1.2.1. Standard reliefs

- Basic reliefs: a personal allowance of GBP 7475 is granted to each individual with income below GBP 100 000. The personal allowance is then tapered away by GBP 1 for every GBP 2 of income above GBP 100000.
- Standard marital status reliefs: none.
- Working Tax Credit (WTC): a non-wastable tax credit available to low income families with or without children. It is available for families with children where one person works at least 16 hours a week. It is also available for people with a disability who work at least 16 hours a week and for families without children where one person works at least 30 hours a week. The amount depends upon the hours worked, the ages of children, eligible childcare costs, and gross income. A family with a child 16 or under where the claimant (or, where applicable, their partner, or both claimants jointly) works at least 30 hours a week, would get a maximum credit of GBP 4660 per year before taking into account eligible childcare costs.* This credit is reduced by 41 pence for each GBP 1 of net income above a threshold of GBP 6420 per year. Extra amounts are available where one or, where applicable, both claimants are disabled. WTC was introduced on 6 April 2003.
- Relief for social security contributions and other taxes: none.
- Child Tax Credit (CTC): a non-wastable tax credit available to low and middle income families with children. It provides support for children until 1st September following their 16th birthday, and beyond that date to the age of 19 for those who continue in full-time non-advanced education. The amount depends on gross income and the number and age of the children. A family with two children would get a maximum credit

[^26]GBP 5650 per year, which is reduced by 41 pence for each GBP 1 of gross income above a threshold of GBP 15860 if the family is not working. A higher threshold applies if the family is working; their CTC is reduced at the same rate once their WTC has been tapered to zero. There is a minimum value to the award of GBP 545 for all families with children and gross income up to GBP 40000 . A taper of 41 per cent is applied for incomes exceeding GBP 40 000. Extra amounts are available for children less than one year old and for children with disabilities. CTC was introduced on 6 April 2003.

### 1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Work-related expenses: flat rate expenses for tools and special clothing are allowed to certain occupational categories. Since this provision is not applicable to all manufacturing occupations, and hence average workers, and because the rates vary slightly across categories, this relief is considered here as non-standard.
- Contributions to approved superannuation schemes or personal pension schemes are deducted when calculating taxable income. Premiums on approved life assurance policies payable to life assurance companies attract 12.5 per cent tax relief for policies entered into force before 13 March 1984.


### 1.1.3. Tax schedule

In 2011-12 all taxpayers are liable on taxable income other than savings and dividend income at the basic rate of 20 per cent on the first GBP 35000,40 per cent over the basic rate limit of GBP 35000 and 50 per cent over the higher rate limit of GBP 150000 . (Taxable Income is defined as gross income for income tax purposes less allowances and reliefs available at the marginal rate.) Dividend income is charged at 10 per cent up to the basic rate limit of GBP 35000 , 32.5 per cent above GBP 35000 and 42.5 per cent above GBP 150000 . Savings income is charged at 10 per cent up to the starting rate limit on the first GBP 2560 , at 20 per cent up to GBP 35000 , 40 per cent above GBP 35000 and 50 per cent above GBP 150000.

| Taxable income (GBP) | Rate \% |
| :--- | :---: |
| $0-35000$ | 20 |
| $35000-150000$ | 40 |
| Over 150 000 | 50 |

### 1.2. State and local income tax

There are no regional or local income taxes.
2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

National Insurance contributions are payable by employees earning more than GBP 139 in any week. These are 12 per cent of earnings between GBP 139 and GBP 817 and 2 per cent of earnings above GBP 817 for employees not contracted out of the state second pension scheme (additional state pension which supplements the basic retirement pension). For employees who are contracted out, there is a rebate of 1.6 per cent on earnings between GBP 102 and GBP 770. Depending on eligibility, members of the National Insurance scheme qualify for pensions, sickness, industrial injury, unemployment
benefits, etc. All employees earning under GBP 139 per week have no National Insurance contribution liability but a notional contribution will be deemed to have been paid in respect of earnings between GBP 102 and GBP 139 to protect benefit entitlement.

### 2.2. Employers' contributions

Employer's contributions are not payable for employees earning less than GBP 136 per week. The rate of employers' contributions for employees not contracted out of the additional (earnings related) scheme is 13.8 per cent of earnings above GBP 136 per week. For employees who are contracted out, there is a rebate of 3.7 per cent on earnings between GBP 102 and GBP 770 per week.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None (widows' benefit is covered by the government pensions scheme noted above).

### 3.2. Transfers for dependent children

A child benefit of GBP 20.30 per week is paid in respect of the first child in the family up to the age of 19 (if the child aged 16-19 is in education or training) with GBP 13.40 per week paid for each subsequent child.

## 4. Memorandum items

### 4.1. Identification of AW and valuation of earnings

A new Annual Survey of Hours and Earnings (ASHE) has been developed to replace the New Earnings Survey (NES) (results of which are published in Labour Market Trends) and shows the average weekly earnings of full-time employees in April each year. It covers men and women at adult rates in the United Kingdom (excluding Northern Ireland). The annual figure used for the gross earnings of the AW in the United Kingdom is the annual equivalent of the arithmetic average of the weekly earnings figures for April at the beginning and end of the fiscal year, as published in Labour Market Trends.

The earnings figures exclude the earnings of those whose pay was affected by absence (due to sickness, etc.). They include overtime, payment by results and shift payments. But they do not include benefits in kind (which could in some circumstances be included in the employee's taxable income in the United Kingdom).

### 4.2. Employers' contributions to private pension, health etc. schemes

In 2008, there were 9.0 million active members of occupational pension schemes with two or more members in the UK, of whom 3.6 million were in the private sector and 5.4 million in the public sector.

## 2011 Parameter values

| Average earnings/yr | Ave_earn | 34286 | Secretariat Estimate |  |
| :---: | :---: | :---: | :---: | :---: |
| Allowances | Basic_al | 7475 |  |  |
|  | PA taper start | 100000 |  |  |
|  | Married_al | 0 |  |  |
|  | Married_rate | 0 |  |  |
| Income tax | Tax_sch | 0.2 | 35000 |  |
|  |  | 0.4 | 150000 |  |
|  |  | 0.5 |  |  |
| Employees SSC |  |  |  |  |
| Primary threshold | SSC_sch | 0 | 7225 | PT |
| Upper earnings limit |  | 0.12 | 42475 | UEL |
|  |  | 0.02 |  |  |
| Employers SSC | SSC_rate2 | 0.138 |  |  |
|  | ST | 7072 |  |  |
| Child benefit (first) | CB_first | 20.30 |  |  |
| Child benefit (others) | CB_others | 13.40 |  |  |
| NEW TAX CREDITS |  |  |  |  |
| WTC |  |  |  |  |
| Basic element | WTC_Basic | 1920 |  |  |
| Couple/Lone parent | WTC_couple_or_Ion |  |  |  |
|  | e | 1950 |  |  |
| 30 Hour element | WTC_30hr | 790 |  |  |
| CTC |  |  |  |  |
| Family element | CTC_family | 545 |  |  |
| Child element | CTC_child | 2555 |  |  |
| Baby element | CTC_baby |  |  |  |
| Threshold | NTC_1 ${ }^{\text {st }}$ _thres | 6420 |  |  |
|  | NTC_1 ${ }^{\text {st }}$-taper | 0.41 |  |  |
|  | NTC_2 ${ }^{\text {nd }}$ _thres | 40000 |  |  |
|  | NTC_2 ${ }^{\text {nd }}$ _taper | 0.41 |  |  |
| Days in tax year | Numdays | 365 |  |  |

## 2011 Tax equations

The equations for the UK system are mostly on an individual basis. But Child and Working tax credits are calculated on a family basis and child benefit is calculated only once. This is shown by the Range indicator in the table below.

The functions which are used in the equations (Taper, MIN, Tax, etc.) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0 .

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | Earn |  |  |
| 2. Allowances: | tax_al | B | $\begin{aligned} & \text { Tax_al } \\ & =\text { IF(earn<PA_taper,Basic_al,IF(earn>(PA_taper+(Basic_al*2)),0,MAX(0,(Basic_al-((earn- } \\ & \text { PA_taper)/2))))) } \end{aligned}$ |
| 2. PA Start | PA_taper | B | $\begin{aligned} & \text { IF(earn<PA_taper,Basic_al,IF(AA7>(PA_taper+(Basic_al*2)),0,MAX(0,(Basic_al-((AA7-PA } \\ & \text { _taper)/2))))) } \end{aligned}$ |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | Positive(earn-tax_al) |
| 5. CG tax before credits | CG_tax_excl | B | Tax(tax_inc, tax_sch) |
| 6. Tax credits (nonwastable) | tax_cr | J | IF(Children>0, IF((earn_total)>NTC_2nd_thres, Taper(ROUNDUP(CTC_family/numdays, 2)*numdays, earn_total, NTC_2 ${ }^{\text {nd }}$ _thres, NTC_2nd_taper), <br> MAX(Taper(ROUNDUP(CTC_family/numdays, <br> 2)*numdays+Children*ROUNDUP(CTC_child/numdays, <br> 2)*numdays+ROUNDUP(WTC_Basic/numdays, 2)*numdays+ROUNDUP(WTC_30hr/ numdays, 2)*numdays+ROUNDUP(WTC_couple_or_lone/numdays, 2)*numdays, earn_total, NTC_1st_thres, NTC_1st_taper), ROUNDUP(CTC_family/numdays, <br> 2)*numdays)), Taper(ROUNDUP(WTC_Basic/numdays, <br> 2)*numdays+ROUNDUP(WTC_30hr/numdays, 2)*numdays+IF(Married=1, <br> ROUNDUP(WTC_couple_or_lone/numdays, 2)*numdays, 0), earn_total, NTC_1st_thres, NTC_1st_taper)) |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr |
| 8. State and local taxes | local_tax | B | 0 |
| 9. Employees' soc security | SSC | B | Tax(earn, SSC_sch) |
| 11. Cash transfers | cash_trans | J | Numdays $/ 7^{\star}(($ CB_first* $($ Children $>0)+$ CB_others*Positive (Children-1))+ (Married=0)* (Children>0)*CB_onepar)) |
| 13. Employer's soc security | SSC_empr | B | (earn>ST)* ${ }^{\text {(earn-ST)*}}$ *SC_rate2 |
| Memorandum item: Non-wastable tax credit |  |  |  |
| tax expenditure component | Taxexp | J | Tax_cr-transfer |
| cash transfer component | Transfer | J | IF(CG_tax_excl<0, -CG_tax_excl, 0) |

Key to range of equation: $B$ calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## United States

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.
Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

## United States 2011

## The tax/benefit position of single persons

|  | Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 31200 | 46800 | 77999 | 31200 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 9500 | 9500 | 9500 | 12200 |
| Married or head of family |  |  |  |  |  |
|  | Dependent children | 0 | 0 | 0 | 7400 |
| Deduction for social security contributions and income taxes |  |  |  |  |  |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 9500 | 9500 | 9500 | 19600 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 21700 | 37300 | 68499 | 11600 |
| 5. | Central government income tax liability (exclusive of tax credits) | 2830 | 5450 | 13250 | 1160 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 2056 |
| Married or head of family |  |  |  |  |  |
|  | Children | 0 | 0 | 0 | 2000 |
|  | Other | 378 | 378 | 378 | 378 |
|  | Total | 378 | 378 | 378 | 4434 |
| 7. | Central government income tax finally paid (5-6) | 2452 | 5072 | 12872 | -3274 |
| 8. | State and local taxes | 1905 | 2955 | 5053 | 1092 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1763 | 2644 | 4407 | 1763 |
|  | Taxable income |  |  |  |  |
|  | Total | 1763 | 2644 | 4407 | 1763 |
| 10. | Total payments to general government (7+8+9) | 6120 | 10671 | 22331 | -420 |
| 11. Cash transfers from general governmen For head of family |  |  |  |  |  |
|  |  |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 25079 | 36129 | 55668 | 31620 |
| 13. | Employer's compulsory social security contributions | 3262 | 4455 | 6842 | 3262 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 14.0\% | 17.2\% | 23.0\% | -7.0\% |
|  | Employees' social security contributions | 5.7\% | 5.7\% | 5.7\% | 5.7\% |
|  | Total payments less cash transfers | 19.6\% | 22.8\% | 28.6\% | -1.3\% |
|  | Total tax wedge including employer's social security contributions | 27.2\% | 29.5\% | 34.4\% | 8.2\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 27.4\% | 37.4\% | 37.4\% | 47.6\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 32.5\% | 41.8\% | 41.8\% | 51.4\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## United States 2011

## The tax/benefit position of married couples

|  | Wage level (per cent of average wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 46800 | 62399 | 77999 | 62399 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 19000 | 19000 | 19000 | 19000 |
| Married or head of family |  |  |  |  |  |
|  | Dependent children | 7400 | 7400 | 7400 | 0 |
| Deduction for social security contributions and income taxes |  |  |  |  |  |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 26400 | 26400 | 26400 | 19000 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 20400 | 35999 | 51599 | 43399 |
| 5. | Central government income tax liability (exclusive of tax credits) | 2210 | 4550 | 6890 | 5660 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 0 | 0 | 0 | 0 |
|  | Married or head of family |  |  |  |  |
|  | Children | 2000 | 2000 | 2000 | 0 |
|  | Other | 378 | 378 | 378 | 378 |
|  | Total | 2378 | 2378 | 2378 | 378 |
| 7. | Central government income tax finally paid (5-6) | -168 | 2172 | 4512 | 5282 |
| 8. | State and local taxes | 2377 | 3426 | 4475 | 3828 |
| 9. Employees' compulsory social security contribu |  |  |  |  |  |
|  | Gross earnings | 2644 | 3526 | 4407 | 3526 |
| Taxable income |  |  |  |  |  |
|  | Total | 2644 | 3526 | 4407 | 3526 |
| 10. | Total payments to general government (7+8+9) | 4853 | 9123 | 13394 | 12636 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 0 |
|  | Total | 0 | 0 | 0 | 0 |
| 12. | Take-home pay (1-10+11) | 41947 | 53276 | 64605 | 49763 |
| 13. | Employer's compulsory social security contributions | 4455 | 6524 | 7717 | 6524 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 4.7\% | 9.0\% | 11.5\% | 14.6\% |
|  | Employees' social security contributions | 5.7\% | 5.7\% | 5.7\% | 5.7\% |
|  | Total payments less cash transfers | 10.4\% | 14.6\% | 17.2\% | 20.3\% |
|  | Total tax wedge including employer's social security contributions | 18.2\% | 22.7\% | 24.6\% | 27.8\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 27.4\% | 27.4\% | 27.4\% | 27.4\% |
|  | Total payments less cash transfers: Spouse | 27.4\% | 27.4\% | 27.4\% | 27.4\% |
|  | Total tax wedge: Principal earner | 32.5\% | 32.5\% | 32.5\% | 32.5\% |
|  | Total tax wedge: Spouse | 35.9\% | 32.5\% | 32.5\% | 32.5\% |

Thhe national currency is the dollar (USD). In 2011, the average worker earned USD 46800 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Central/federal government income taxes

### 1.1.1. Tax unit

Families are generally taxed in one of three ways:

- as married couples filing jointly on the combined income of both spouses;
- as married individuals filing separately and reporting actual income of each spouse; or
- as heads of households (only unmarried or separated individuals with dependents).

All others, including dependent children with sufficient income, file as single individuals.

### 1.1.2. Tax allowances and tax credits

### 1.1.2.1. Standard reliefs

- Basic reliefs: in 2011, a married couple filing a joint tax return is entitled to a standard deduction of USD 11 600. The standard deduction is USD 8500 for heads of households and USD 5800 for single individuals. This relief is indexed for inflation. More liberal standard deductions are available for taxpayers who are age 65 or older and taxpayers who are blind. Special rules apply to children who have sufficient income to pay tax and are also claimed as dependents by their parents.
In addition to the standard deduction, in 2011 a USD 3700 personal exemption is given to every taxpayer (including both husband and wife filing a joint return). The personal exemption is indexed annually for inflation. In 2011, there is no phase out for personal exemptions.
- Standard marital status reliefs: married couples generally benefit from a more favourable schedule of tax rates for joint returns of spouses (see Section 1.1.3). There are no other general tax reliefs for marriage.
- Relief for children: for each child and other person claimed as a dependent on a taxpayer's return, the taxpayer is entitled to a dependency exemption of USD 3700 in 2011. Low income workers with dependants are allowed a refundable (non-wastable) earned income credit. For taxpayers with one child, the credit is 34 per cent of up to USD 9100 of earned income in 2011. The credit phases down when income exceeds USD 16690 (21770 for married taxpayers) and phases out when it reaches USD 36052 (41 132 for married taxpayers). The earned income threshold and the phase-out threshold are indexed for inflation. For taxpayers with two children, the credit is 40 per cent of up to USD 12780 of earned income in 2011. The credit phases down when income exceeds USD 16690 (21 770 for married taxpayers) and phases out when it reaches USD 40964
(46044 for married taxpayers). For 2011, an increase in the earned income tax credit is available for taxpayers with three or more children. The credit is 45 per cent of up to USD 12780 of earned income. The credit phases down when income exceeds USD 16690 (21770 for married taxpayers) and phases out when it reaches USD 43998 (49 078 for married taxpayers).

Since 1998, taxpayers are permitted a tax credit for each qualifying child under the age of 17 . In 2011, the maximum credit is USD 1000 . The maximum credit is reduced for taxpayers with income in excess of certain thresholds. The credit is reduced by USD 50 for each USD 1000 of income in excess of USD 110000 for married taxpayers (USD 75000 for single and head of household taxpayers). These threshold amounts are not indexed for inflation. The child credit is refundable (non-wasteable) to the extent of 15 per cent of earned income in excess of USD 3000 . A taxpayer with three or more qualifying children may be allowed a supplemental refundable (non-wasteable) child credit, subject to certain restrictions. The refundable credit is the excess of the taxpayer's share of social security (including Medicare) taxes over his earned income tax credit for the year not used to offset income tax liability.

- Relief for low income workers without children: in 1994 and thereafter, low income workers without children are eligible for the earned income credit. In 2011, low income workers without children are permitted a non-wastable earned income credit of 7.65 per cent of up to USD 6070 of earned income. The credit phases down when income exceeds USD 7590 (12 670 for married taxpayers) and phases out when income reaches USD 13660 (18 740 for married taxpayers). This credit is available for taxpayers at least 25 years old and under 65 years old.
- Relief for social security and other taxes: in 2011, the withholding rate for Social Security taxes for employees is reduced from 6.2 per cent to 4.2 per cent. The earned income credits described above are sometimes considered an offset to social security contributions made by eligible employees. Furthermore, only a portion of social security benefits are subject to tax.


### 1.1.2.2. Main non-standard reliefs applicable to an AW

The basic non-standard relief is the deduction of certain expenses to the extent that, when itemised, they exceed in aggregate the standard deduction. For the purposes of this Report, it is assumed that workers claim the standard deduction. The principal itemised deductions claimed by individuals where the standard deduction is not being claimed are:

- medical and dental expenses that exceed 7.5 per cent of income;
- State and local income taxes, real property taxes, and personal property taxes; home mortgage interest;
- investment interest expense up to investment income with an indefinite carry forward of disallowed investment interest expense;
- contributions to qualified charitable organisations (including religious and educational institutions);
- casualty and theft losses to the extent that each loss exceeds USD 100 and that all such losses combined exceed 10 per cent of income; and
- miscellaneous expenses such as non-reimbursed employee business expenses (union dues, work shoes, etc.), investment expenses, tax return preparation fees and
educational expenses required by employment, to the extent that, in aggregate; they exceed 2 per cent of income.

In 2008, the most recent year for which such statistics are available, the 38 per cent of taxpayers with income between USD 40000 and USD 50000 (the AW range) who itemised their deductions claimed average deductions as follows: medical expenses, USD 1854 ; taxes paid, USD 1 764; charitable contributions, USD 1 706; interest expense, USD 7075.

Contributions to pension and life insurance plans. No relief is provided for employee contributions to employer sponsored pension plans or for life insurance premiums. However, tax relief is provided for certain retirement savings.

### 1.1.3. Tax schedule

Table 0.1. Federal income tax rates

|  | Taxable income bracket (USD) ${ }^{1}$ | Marginal tax rate (\%) |  |
| :--- | :--- | :--- | :---: |
| Single individual | Joint return of married couple |  |  |
| 0 to 8500 | 0 to 17000 | 0 to 12150 | 10 |
| 8500 to 34500 | 17000 to 69000 | 12150 to 46250 | 15 |
| 34500 to 83600 | 69000 to 139350 | 46250 to 119400 | 25 |
| 83600 to 174400 | 139350 to 212300 | 119400 to 193350 | 28 |
| 174400 to 379150 | 212300 to 379150 | 193350 to 379150 | 33 |
| 379150 and over | 379150 and over | 379150 and over | 35 |

1. The taxable income brackets are indexed for inflation.

### 1.2. State and local income taxes

### 1.2.1. General description of the system

The District of Columbia and 43 of the 50 States impose some form of individual income tax. In addition, some local governments (cities and counties) impose an individual income tax, although this is not generally the case. State individual income tax structures are usually related to the federal tax structure by the use of similar definitions of taxable income, with some appropriate adjustments. This linkage is not a legal requirement but a practical convention that functions for the convenience of the taxpayer who must fill out both federal and State income tax returns.

The AW calculations assume that the average worker lives in Detroit, Michigan. The state of Michigan permits a personal exemption of USD 3700 for the taxpayer, the taxpayer's spouse and each child, an additional USD 600 exemption for each child 18 years old and younger, and taxes income at the rate of 4.35 per cent. Michigan allows taxpayers who are eligible to claim the federal earned income tax credit to claim a Michigan earned income tax credit. The Michigan earned income tax credit is a refundable (non-wasteable) credit equal to 20 per cent of the federal earned income tax credit.

The city of Detroit permits a personal exemption of USD 600 and taxes income at the rate of 2.5 per cent. Michigan provides a credit for city taxes paid. If the city income tax paid is USD 100 or less, the credit is 20 per cent of the city income tax paid. If the city income tax paid is over USD 100 but not over USD 150, the credit is 10 per cent of the excess of the city income tax paid over USD 100 plus USD 20. If the city income tax paid is over USD 150, the credit is 5 per cent of the excess of the city income tax paid over USD 150 plus USD 25.

## 2. Compulsory social security contributions to schemes operated within the government sector

### 2.1. Employees' contributions

### 2.1.1. Pensions

In 2011, the rate for employee contributions is 5.65 per cent ( 4.2 per cent for old age, survivors, and disability insurance, and 1.45 per cent for old age hospital insurance). The 4.2 per cent rate applies to earnings up to USD 106800 . Beginning in 1994, there is no limit on the amount of earnings subject to the 1.45 per cent rate.

There is no distinction by marital status or sex.

### 2.1.2. Other

No compulsory employee contributions exist.

### 2.2. Employers' contributions

### 2.2.1. Pensions

The rate for employers' contributions is 6.2 per cent on earnings up to USD 106800 and 1.45 per cent of all earnings (without limit).

### 2.2.2. Unemployment

Employers are required by the federal government to pay unemployment tax of 6.2 per cent on earnings up to USD 7000 . Taxes are also paid to various state-sponsored unemployment plans which may generally be credited against the required federal percentage. In 2007, the average unemployment insurance tax rate in Michigan was 4.9 per cent of the first USD 9000 of wages. The model considers that the Federal government allows employers to take a credit for state unemployment taxes of up to 5.4 per cent, resulting in a net Federal tax of 0.8 per cent on earnings up to USD 7000.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

None.

### 3.2. Transfers for dependent children

No general cash transfers exist, although low-income mothers qualifying for categorical welfare grants may receive cash transfers.

## 4. Principal changes since 2009

The phase out for personal exemptions and the limitations on itemised deductions for high income taxpayers do not apply in 2010 and 2011.

## 5. Memorandum items

### 5.1. Identification of an AW at the wage calculation

- The AW is identified from monthly data compiled from establishment questionnaires covering more than 40 million non-agricultural full- and part-time workers. Beginning in March 2006, data on average weekly hours and average hourly earnings cover all employees rather than solely production or non-supervisory workers. To obtain average
annual wages, the product of average weekly hours (including overtime) and average hourly earnings (including overtime) is multiplied by 52 and is adjusted to reflect a full-time equivalent worker. The AW wage is estimated to be USD 45688 for 2010.


### 5.2. Employer contributions to private social security arrangements

Employers commonly contribute to private pension plans, health insurance and life insurance. Data for these contributions are available only on a total workforce basis. It is not possible to state with accuracy the levels applicable to the AW. The following are estimates for 2010 for employees in private industry:

|  | Pension | Health | Life |
| :--- | :---: | :---: | :---: |
| Per cent of workers covered | 50 | 56 | 56 |
| USD per covered employee | n.a. | 9629 (family) | 4031 (single) |

## 2011 Parameter values

| APW earnings | Ave_earn | 46800 | Secretariat estimate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Standard deductions | Married_al | 11600 |  |  |  |  |
|  | hh_al | 8500 |  |  |  |  |
|  | single_al | 5800 |  |  |  |  |
| Personal exemption | pers_ex | 3700 |  |  |  |  |
| Dependency exemption | dep_ex | 3700 |  |  |  |  |
| Federal tax schedules | Fed_sch_s | 0.1 | 8500 |  |  |  |
|  |  | 0.15 | 34500 |  |  |  |
| Single individuals |  | 0.25 | 83600 |  |  |  |
|  |  | 0.28 | 174400 |  |  |  |
|  |  | 0.33 | 379150 |  |  |  |
|  |  | 0.35 |  |  |  |  |
| Married filing jointly | Fed_sch_m | 0.1 | 17000 |  |  |  |
|  |  | 0.15 | 69000 |  |  |  |
|  |  | 0.25 | 139350 |  |  |  |
|  |  | 0.28 | 212300 |  |  |  |
|  |  | 0.33 | 379150 |  |  |  |
|  |  | 0.35 |  |  |  |  |
| Head of household | Fed_sch_h | 0.1 | 12150 |  |  |  |
|  |  | 0.15 | 46250 |  |  |  |
|  |  | 0.25 | 119400 |  |  |  |
|  |  | 0.28 | 193350 |  |  |  |
|  |  | 0.33 | 379150 |  |  |  |
|  |  | 0.35 |  |  |  |  |
| Earned income credit | EIC_sch | rate | income limit | threshold | thresh-married | phase-out |
|  | no children | 0.0765 | 6070 | 7590 | 12670 | 0.0765 |
|  | 1 child | 0.34 | 9100 | 16690 | 21770 | 0.1598 |
|  | 2 children | 0.4 | 12780 | 16690 | 21770 | 0.2106 |
|  | 3 or more children | 0.45 | 12780 | 16690 | 21770 | 0.2106 |
| Child credit | cherd_max | 1000 |  |  |  |  |
|  | cherd_rdn | 50 |  |  |  |  |
|  | chcrd_thrsh_m | 110000 |  |  |  |  |
|  | chcrd_thrsh_oth | 75000 |  |  |  |  |
|  | chcrd_ref_perct | 0.15 |  |  |  |  |
|  | chard_ref_thresh | 3000 |  |  |  |  |
| Detroit | Detroit_ex | 600 |  |  |  |  |
|  | Detroit_rate | 0.025 |  |  |  |  |
| Michigan | Mich_ex | 3700 |  |  |  |  |
|  | Mich_ex_child | 600 |  |  |  |  |
|  | Mich_rate | 0.0435 |  |  |  |  |
| Michigan's earned income tax credit | Mich_EIC_rate | 0.2 |  |  |  |  |
| credit schedule on city tax | Mich_cr_sch | 0.2 | 100 |  |  |  |
|  |  | 0.1 | 150 |  |  |  |
|  |  | 0.05 |  |  |  |  |
| maximum | Mich_cr_max | 10000 |  |  |  |  |
| Pension contributions | pens_rate_er | 0.062 |  |  |  |  |
|  | pens_rate_ee | 0.042 |  |  |  |  |
|  | hosp_rate | 0.0145 |  |  |  |  |
| Ceiling for employers | pens_ceil | 106800 |  |  |  |  |
| Unemployment insurance tax | Unemp_rate | 0.062 |  |  |  |  |
|  | Unemp_dedn_rate | 0.054 |  |  |  |  |
|  | Unemp_max | 7000 |  |  |  |  |
| Michigan unemploy insur | Mich_unemp_rate | 0.049 |  |  |  |  |
|  | Mich_unemp_max | 9000 |  |  |  |  |

## 2011 Tax equations

The equations for the US system in 2011 are mostly calculated on a family basis. There is a special function EIC which is used to calculate the earned income credit. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 1. Earnings | earn |  |  |
| 2. Allowances: | tax_al | J | IF(Married, Married_al, IF(Children=0, single_al, hh_al))+ (1+Married) ${ }^{*}$ pers_ex+ Children*dep_ex |
| 3. Credits in taxable income | taxbl_cr | J | 0 |
| 4. CG taxable income | tax_inc | J | positive(earn-tax_al+taxbl_cr) |
| 5. CG tax before credits | CG_tax_excl | J | Tax(tax_inc, IF(Married, Fed_sch_m, IF(Children, Fed_sch_h, Fed_sch_s))) |
| 6. Tax credits : | EIC | J | EIC(Children, earn_total, EIC_sch) |
|  | Unemp | J | Unemp_dedn_rate*(MIN(earn,Unemp_max)) |
|  | ch_crd_max | J | Children*Positive((chcrd_max-chcrd_rdn*Positive(TRUNC(earn, -3)-IF(Married>0, chcrd_thrsh_m, chcrd_thrsh_oth))/1000)) |
|  | ch_crd_tax | J | IF(ch_crd_tax $>0$, MIN(ch_crd_max, CG_tax_excl), 0) |
|  | ch_crd_ref |  | IF(ch_crd_tax<ch_crd_max, MIN(ch_crd_max-ch_crd_tax, MAX(chcrd_ref_perct* (earn-chcrd_ref_thresh), 0)), 0) |
|  | tax_cr | J | EIC+Unemp+ch_crd_tax+ch_crd_ref |
| 7. CG tax | CG_tax | J | CG_tax_excl-tax_cr |
| 8. State and local taxes | local_tax | J | Detroit_rate* Positive(earn_total-Detroit_ex*(1+Married+Children))+ Mich_rate*Positive(earn_total - Mich_ex*(1+Married+Children) Mich_ex_child*Children) -MIN(Mich_cr_max, Tax(AJ7, Mich_cr_sch)) -Mich_EIC_rate*EIC |
| 9. Employees' soc security | SSC | B | pens_rate_ee*MIN(earn, pens_ceil)+hosp_rate*earn |
| 11. Cash transfers | Cash_tran | J |  |
| 13. Employer's soc security | SSC_empr | B | pens_rate_er*MIN(earn, pens_ceil) <br> +hosp_rate*earn+MIN(earn,Unemp_max)*Unemp_rate <br> +MIN(earn,Mich_unemp_max)*Mich_unemp_rate |
| Memorandum item: non-wastable tax credits |  |  |  |
| tax expenditure component | taxexp |  | (rate_rd_crd+EIC)-transfer |
| cash transfer component | transfer |  | IF(CG_tax<0, -CG_tax, 0) |

Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

## PART IV

## Methodology and limitations

## Methodology

## 1. Introduction

The personal circumstances of taxpayers vary greatly. To identify representative taxpayers and to calculate the amount of their taxes, this Report uses a specific methodology. The focus is on employees. It is assumed that their annual income from employment is equal to a given fraction of the average gross wage earnings of adult, full-time workers in a broad range of industry sectors of each OECD economy. Additional assumptions are made regarding other relevant personal circumstances of these wage earners to enable their tax/benefit position to be determined. Table IV. 1 sets out the terminology used in this Report, while Table IV. 2 provides information on the industry sectors covered.

Taxes paid and cash transfers received by employees are presented for one-earner and two-earner families at various fractions of average gross wage earnings. The number of taxpayers with the defined characteristics and the wage level of the average workers differ between OECD economies.

The guidelines described in the following paragraphs form the basis for the calculations shown in Parts O, I, II and III. Where a country has had to depart from the guidelines, this is noted in the text and/or in the country chapters contained in Part III of the Report.

## 2. Calculation of gross wage earnings

This section sets out the standard definition of "the average worker" for which average earnings figures are then determined. Table IV. 3 indicates how countries have implemented the standard definition. Levels of gross wage earnings have been established using statistical data. Further information on the calculation of the earnings figure is provided in the country chapters in Part III. The sources of the earnings data are provided in Annex A. Earnings levels for the edition year 2011 had to be estimated (except for Australia and Slovenia), as relevant statistical data are not yet available. The estimation procedures followed are explained in Section 3 below.

It should be noted that, as a result of data limitations, the average wage figures reported by Turkey depart from the common "average worker" definition. The relevant differences are set out below and should be taken into account when comparing Taxing Wages results across countries. At the same time, potential comparability problems are limited by the fact that Taxing Wages compares tax rates and tax wedges, and not earnings levels as such.

## Industry sectors covered

A new definition of the average worker was adopted in the 2005 edition of Taxing Wages, and from that time average wages were calculated using a broad set of industry sectors including categories C to K inclusive as defined in the International Standard Industrial Classification of All Economic Activities (ISIC Revision 3.1, United Nations). ${ }^{1}$ The reasons for moving to a broadened average wage definition were set out in the Special Feature of Taxing Wages 2003-04.

Recently, many countries have started calculating average wage earnings on the basis of Revision 4 of the International Standard Industrial Classification of All Economic Activities. Many countries (for more detailed country information, see Table 0.6) now calculate average wage earnings for Sectors B to N inclusive of the ISIC Rev. 4 industry classification, which broadly corresponds to Sectors C to K inclusive of the ISIC Rev. 3.1 classification (see Table IV.2).

As stated in Part I, Section 1 of this Report, only Turkey has not yet moved to this broadened industry definition. The average wage figures reported for Turkey therefore still refer to manual workers in manufacturing (industry sector D). These differences may affect the comparability of the data.

Table IV.1. Terminology

|  | General terms |
| :--- | :--- |
| Average worker (AW) | An adult full-time worker in the industry sectors covered whose wage earnings represent the average <br> for workers. |
| Single persons | Unmarried men and women. |
| Married couple with two dependent children between six to eleven years of age inclusive. |  |
| Labour costs | The sum of Gross wage earnings, employers' social security contributions and payroll taxes. |
| Get take-home pay | Gross wage earnings less the sum of personal income tax and employee social security contributions, <br> plus cash transfers received from general government. |
| Personal average tax rate (tax burden) | The sum of Personal income tax and employee social security contributions expressed <br> as a percentage of gross wage earnings. |
| Tax wedge | The sum of personal income tax, employee and employer social security contributions plus any <br> payroll tax less cash transfers, expressed as a percentage of labour costs. |
| Elasticity of income after tax | Percentage change in "after-tax" income following an increase in one currency unit of income before <br> tax (defined more precisely as one minus a marginal tax rate divided by one minus a corresponding <br> average tax rate). |
| Terms used under the income tax |  |

Table IV.2. International standard industrial classification of all economic activities

| Revision 3.1 (ISIC Rev. 3.1) |  |
| :---: | :---: |
| A | Agriculture, hunting and forestry |
| B | Fishing |
| C | Mining and quarrying |
| D | Manufacturing |
| E | Electricity, gas and water supply |
| F | Construction |
| G | Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods |
| H | Hotels and restaurants |
| 1 | Transport, storage and communications |
| $J$ | Financial intermediation |
| K | Real estate, renting and business activities |
| L | Public administration and defence; compulsory social security |
| M | Education |
| N | Health and social work |
| 0 | Other community, social and personal service activities |
| P | Activities of private households as employers and undifferentiated production activities of private households |
| Q | Extraterritorial organisations and bodies |
| Revision 4 (ISIC Rev. 4) |  |
| A | Agriculture, forestry and fishing |
| B | Mining and quarrying |
| C | Manufacturing |
| D | Electricity, gas, steam and air conditioning supply |
| E | Water supply; sewerage, waste management and remediation activities |
| F | Construction |
| G | Wholesale and retail trade; repair of motor vehicles and motorcycles |
| H | Transportation and storage |
| 1 | Accommodation and food service activities |
| $J$ | Information and communication |
| K | Financial and insurance activities |
| L | Real estate activities |
| M | Professional, scientific and technical activities |
| N | Administrative and support service activities |
| 0 | Public administration and defence; compulsory social security |
| P | Education |
| Q | Human health and social work activities |
| R | Arts, entertainment and recreation |
| S | Other service activities |
| T | Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use |
| U | Activities of extraterritorial organizations and bodies |

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## Geographical coverage

The data relate to average earnings in the industry sectors covered for the country as a whole.

## Type of worker

The calculations are based on an adult worker (including both manual and non-manual). Some countries are not able to provide averages that include supervisory and/ or management employees (see Table IV.3). In such countries, the reported averages are lower than would otherwise be the case (for instance, OECD Secretariat analysis of available Eurostat earnings data for selected European countries has shown that excluding this type of
workers can reduce average earnings by $10 \%$ to $18 \%$ ). In the case of Turkey that has not yet been able to move to the broadened industry definition, the definition includes only manual workers and minor shop-floor supervisory workers in the manufacturing industry.

## Sex

The earnings data refer to the average earnings of all workers, both male and female.

## Full-time worker

The worker is assumed to be full-time employed during the entire year, although several countries are unable to separate and exclude part-time workers from the earnings figures (see Table IV.3). Most of them report full-time equivalent wages in these cases. In four countries (Chile, Ireland, Slovak Republic and Turkey), the wages of part-time workers can be neither excluded nor converted into full-time equivalents because of the ways in which the earnings samples are constructed. As a result, average wages reported for these countries will be lower than an average of full-time workers (for instance, Secretariat analysis of available Eurostat earnings data for selected European countries has shown that including part-time workers reduces average earnings by around $10 \%$ ).

Two of the household types include a second earner at 33 per cent of average earnings. Such individuals are more likely to be working part-time rather than full-time (as shown in the Special Feature of the 2005 edition). However, it is also shown that the assumption that all employees are working full-time does not significantly affect the tax rates calculated in Taxing Wages, except in the case of Belgium for married couples where the spouse is earning 33 per cent of the average wage level. This is because any special provisions made for part-time workers tend to be either of minor importance or not applicable for the household types currently presented in Taxing Wages.

## Determination of earnings

The methodologies for calculating the earnings data in each country are set out in Table IV.3. The earnings calculation includes all cash remuneration paid to workers in the industries covered taking into account average amounts of overtime, cash supplements (e.g. Christmas bonuses, thirteenth month) and vacation payments typically paid to workers in the covered industry sectors.

Profit-sharing schemes which take the form of dividend distributions and are often subject to special tax treatments should be excluded from the calculations.

However, not all countries are able to include overtime pay, vacation payments and cash bonuses according to the definition. Furthermore, several countries are unable to exclude fringe benefits from the earnings figures.

## Sickness and unemployment

The worker is assumed not to be sick or unemployed during the year, although some countries are not able to exclude sickness payments from the earnings figures.

In most of the OECD countries where sickness payments are made by the employer, either on behalf of the government or on behalf of private sickness schemes, these amounts are included in the wage calculations. It is unlikely that this has a marked impact on the results since employers usually make these payments during a short period and the amounts usually correspond very closely to normal hourly wages.

## The treatment of (non-cash) fringe benefits

Fringe benefits - which include, for example, provision of food, housing or clothing by the employer either free of charge or at below market-price - are, where possible, excluded from the calculation of average earnings. This decision has been taken because:

- These types of benefits are difficult to evaluate in a consistent way (they may be valued at the actual cost to the employer, their value to the employee or their fair market value).
- In most countries are of minimal importance for workers at the average wage level.
- The tax calculations would be significantly more complicated if the tax treatment of fringe benefits were to be incorporated.

As fringe benefits are a part of the total remuneration of employees, excluding them from the earnings definition may affect comparability of tax wedges - as the reliance on fringe benefits may vary between countries and over time. On the other hand, the lack of comparability is probably limited as fringe benefits rarely account for more than 1-2 per cent of labour costs and are normally more common among high-income employees than in the income ranges covered by Taxing Wages ( $33 \%$ to $167 \%$ of average earnings). Table IV. 3 shows that some member countries are not able to exclude fringe benefits from the earnings figures reported and used in Taxing Wages.

In the case of employers' contributions to private pension, family allowance or health and life insurance schemes, the amounts involved can be significant. In the United States, for example, these contributions can account for more than 5 per cent of the earnings of employees. Although these contributions are excluded from the earnings base (and therefore do not affect the tax calculations), the country chapters in Part III indicate of the existence of schemes which may be relevant for an average worker.

## Calculation method used

Table IV. 3 indicates the basic calculation method used in each country while more details are, where relevant, provided in the country chapters in Part III. In principle, countries are recommended to calculate annual earnings by referring to the average of hourly earnings in each week, month or quarter, weighted by the hours worked during each period, and multiplied by the average number of hours worked during the year, assuming that the worker is neither unemployed nor sick and including periods of paid vacation. A similar procedure was recommended to calculate overtime earnings. For countries unable to separate out part-time employees from the data, it is recommended that earnings of part-time employees should if possible be converted into their full-time equivalents (see section "full-time worker" above).

## 3. Estimating gross wage earnings in 2011

Statistical data on average gross wage earnings in 2011 are not presently available (except for Australia and Slovenia). Still, it is felt that including estimates of the tax/benefit position of employees in the edition year increases the relevance of the Report for policy-making. Therefore the Report presents preliminary data for the 2011 edition year. Estimates of gross wage earnings of average workers in 2011 were derived by the Secretariat on the basis of a uniform approach: all year 2010 earnings levels (or the earnings level in the most recent year for which final average wage earnings country information is available) are multiplied by the country-specific annual percentage change of wages reported in the most recently published edition of the OECD Economic Outlook. ${ }^{2}$

Table IV.3. Method used to calculate average earnings

|  | Items included and exluded from the earnings base |  |  |  |  | Types of worker included and excluded in the average wage measure |  |  | Basic method of calculation used | Income tax year ends | Period to which the earnings calculation refers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sickness ${ }^{1}$ | Vacations | Overtime | Recurring cash payments | Fringe Benefits | Supervisory workers | Managerial workers | Part-time workers |  |  |  |
| Australia | Inc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Average weekly earnings $\times 52$ | 30th June | Fiscal year |
| Austria | Exc | Inc | Inc | Inc | Taxable value Inc | Inc | Inc | Exc | Average annual earnings | 31st December | Calendar year |
| Belgium | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Monthly earnings in October $\times 12$ (plus recurring bonuses) | 31st December | Calendar year |
| Canada | Exc | Inc | Inc | Inc | Exc | Inc | Inc | $1 \mathrm{nc}{ }^{6}$ | Average weekly hours x average hourly earnings $\times 52$ | 31st December | Calendar year |
| Chile | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Inc | Hourly earnings x hours worked | 31st December | Calendar year |
| Czech Republic | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Inc ${ }^{6}$ | Average monthly earnings $\times 12$ | 31st December | Calendar year |
| Denmark | Exc | Inc | Exc | Inc | Exc | Inc | Inc | Inc ${ }^{6}$ | Hourly earnings $x$ hours worked | 31st December | Calendar year |
| Estonia | Inc | Inc | Inc | Inc | Exc | Inc | Inc | Inc | Average earnings | 31st December | Calendar year |
| Finland | Exc | Inc | Inc | Inc | Exc | Inc | Inc ${ }^{5}$ | Exc | Hourly wages $x$ usual working time or (monthly earnings $x$ months) + vacation payments+ end of year bonuses | 31st December | Calendar year |
| France | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Annual earnings | 31st December | Calendar year |
| Germany | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Annual earnings | 31st December | Calendar year |
| Greece | Exc | Inc | Inc | Inc ${ }^{2}$ | Inc | Inc | Inc | Exc | Hourly earnings x hours worked | 31st December | Calendar year |
| Hungary | Exc | Inc | Inc | Inc | Exc | Inc | $1 \mathrm{Ic}^{5}$ | Exc | Average monthly earnings $\times 12$ | 31st December | Calendar year |
| Iceland | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Hourly earnings x hours worked x 12 | 31st December | Calendar year |
| Ireland | Exc | Inc | Inc | Inc | Exc | Exc | Exc | Inc | Average weekly earnings in each quarter for four quarters/4*52 | 31st December | Calendar year |
| Israel | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Average earnings | 31st December | Calendar year |
| Italy | Exc ${ }^{3}$ | Inc | Inc | Inc | Exc ${ }^{4}$ | Inc | Inc | Inc ${ }^{6}$ | Average monthly earnings $\times 12$ | 31st December | Calendar year |
| Japan | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Monthly earnings in June $\times 12$ | 31st December | Calendar year |
| Korea | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Average monthly earnings $\times 12$ | 31st December | Calendar year |
| Luxembourg | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Aggregate annual earnings divided by annual average number of full-time employees. Any parts of earnings that exceed the upper social contribution limit (7 times the minimum wage) are not recorded. | 31st December | Calendar year |
| Mexico | Exc | Inc | Exc | Inc | Exc | Inc | Inc | Exc | Average monthly earnings $\times 12$ | 31st December | Calendar year |
| Netherlands | Exc | Inc | Exc | Inc | Exc | Inc | Inc | Exc | Annual gross earnings | 31st December | Calendar year |
| New Zealand | Exc | Inc | Inc | Inc | Exc | Inc | Inc ${ }^{5}$ | Inc ${ }^{6}$ | Average weekly earnings in each quarter $\times 13$ | 31st March | Tax year |
| Norway | Exc | Exc | Inc | Inc | Exc | Inc | Inc | $1 \mathrm{nc}{ }^{6}$ | Annual wages + estimated overtime | 31st December | Calendar year |

Table IV.3. Method used to calculate average earnings (cont.)

|  | Items included and exluded from the earnings base |  |  |  |  | Types of worker included and excluded in the average wage measure |  |  | Basic method of calculation used | Income tax year ends | Period to which the earnings calculation refers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sickness ${ }^{1}$ | Vacations | Overtime | Recurring cash payments | Fringe Benefits | Supervisory workers | Managerial workers | Part-time workers |  |  |  |
| Poland | Inc | Inc | Inc | Inc | Exc | Inc | Inc | $1 \mathrm{Inc}^{6}$ | Average monthly earnings $\times 12$ | 31st December | Calendar year |
| Portugal | Exc | Inc | Inc | Inc | Inc | Inc | Inc | Exc | Weighted monthly average $\times 12$ | 31st December | Calendar year |
| Slovak Republic | Exc | Inc | Inc | Inc | Inc | Inc | Inc | Inc | Average monthly earnings $\times 12$ | 31st December | Calendar year |
| Slovenia | Inc | Inc | Inc | Inc | Exc | Inc | Inc | Inc | Average monthly earnings * 12 | 31st December | Calendar year |
| Spain | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Weighted monthly average $\times 12$ | 31st December | Calendar year |
| Sweden | Exc | Inc | Inc | Inc | Actual value Inc | Inc | Inc | $1 \mathrm{Ic}^{6}$ | Average hourly earnings in September $x$ hours worked; and monthly earnings in September * 12 | 31st December | Calendar year |
| Switzerland | Exc | Inc | Inc | Inc | Exc | Inc | Inc | $1 \mathrm{ln}{ }^{6}$ | Monthly earnings $\times 12$ | 31st December | Calendar year |
| Turkey | Exc | Inc | Inc | Inc | Actual value inc | Exc | Exc | Inc | Average annual earnings | 31st December | Calendar year |
| United Kingdom | Exc | Inc | Inc | Inc | Exc | Inc | Inc | Exc | Average gross annual earnings | 5th April | Fiscal year |
| United States | Exc | Inc | Inc | $1 \mathrm{Ic}^{2}$ | Exc | Inc | Inc | $1 \mathrm{Ic}^{6}$ | Average weekly earnings $\times 52$ | 31st December | Calendar year |

Note: Exc = Excluded; Inc = Included; "-" = information not available.

1. Usually includes compensation paid by employer whether paid on behalf of the government or as part of a private sickness scheme.
2. In Greece and the United States, end of the year bonuses and profit sharing bonuses are excluded
3. Sickness payments are only included to the extent that they are paid by the employer. For manual workers, this is only the case during the first three days of sick leave, while payments for the fourth day onwards are made by INPS.
4. Partly: the (small) taxable part of fringe benefits is included.
5. Except for top management (Finland); except if income from profits exceeds $50 \%$ of total income (Hungary); except for proprietors (New Zealand).
6. Part-time wages are converted to full-time equivalents before calculating the average wage measure.

This transparent procedure is intended to avoid any bias in the results. Only in the cases of the Czech Republic, Estonia, Korea, Mexico, New Zealand, the Slovak Republic, Slovenia and Turkey are national estimates used as the necessary inputs for Secretariat estimates do not sufficiently reflect wage changes in the covered industry sector. For Australia, the final 2011 gross wage earnings were used. Average wage earnings were also estimated for prior years for Belgium (2009, 2010), Finland (2010), France (2010) and Switzerland (2007, 2009,2010 ) as no country information on average wage earnings levels was available for these years in these countries.

There are gaps between wage levels reported in this publication and those contained in the OECD Analytical Database (ADB) corresponding to what is shown in the Economic Outlook. This is due to the different definitions used. Data in the ADB include: 1) all employees in the business sector; 2) wages in cash and in kind; 3) fringe benefits and profit sharing schemes; and 4) allowances to cover certain costs, notably to commute to work. In contrast, this Report includes: 1) only employees in industry sectors C-K (ISIC Rev. 3.1) or B-N (ISIC Rev. 4); 2) cash wages; 3) generally, no fringe benefits and no profit sharing schemes; and 4) generally, no allowances to cover costs. In addition, for a number of countries the methodology for determining the average wage level is different.

Seventeen of the OECD member countries have opted to provide national estimates of the level of gross wage earnings of average workers in 2011. These estimates were not used (except for the countries listed above where no reliable OECD Secretariat estimate could be determined) because of potential inconsistency with the Secretariat estimates derived for other countries. However they are included in Table IV. 4 to enable comparisons to be made between the estimates obtained by applying the Secretariat formula and those from national sources. In all cases, the two categories are fairly close.

Table IV.4. Estimated gross wage earnings, 2010-11 (in national currency)

|  | Average wage $2010$ | Average wage 2011 <br> (Secret. estimates) | Average wage 2011 <br> (Country estimates) | E090 forecasted Rates for 2011 |
| :---: | :---: | :---: | :---: | :---: |
| Australia ${ }^{2}$ | 66724 |  | 69903 | 5.6 |
| Austria | 38504 | 39263 | 39543 | 2.0 |
| Belgium | 41499 | 42740 | 42844 | 3.0 |
| Canada | 44717 | 46163 |  | 3.2 |
| Chile | 5508104 | 5907326 | 5803457 |  |
| Czech Republic ${ }^{2}$ | 287320 |  | 290481 | 2.9 |
| Denmark | 376073 | 382850 | 383594 | 1.8 |
| Estonia ${ }^{2}$ | 9580 |  | 9916 |  |
| Finland | 39982 | 41445 |  | 3.7 |
| France | 34849 | 35859 |  | 2.9 |
| Germany | 42400 | 43855 |  | 3.4 |
| Greece ${ }^{3}$ | 20457 |  |  |  |
| Hungary | 2511852 | 2624088 |  | 4.5 |
| Iceland | 5256000 | 5577213 |  | 6.1 |
| Ireland | 32308 | 32841 |  | 1.7 |
| Israel | 113280 | 119016 | 117264 | 5.1 |
| Italy | 28224 | 29030 |  | 2.9 |
| Japan | 4773076 | 4781406 |  | 0.2 |
| Korea ${ }^{2}$ | 36929183 |  | 36154826 |  |
| Luxembourg | 49317 | 49890 |  | 1.2 |
| Mexico ${ }^{2}$ | 87324 |  | 89944 |  |
| Netherlands | 45215 | 45904 |  | 1.5 |
| New Zealand ${ }^{2}$ | 48007 |  | 49395 |  |
| Norway | 469247 | 487324 | 488017 | 3.9 |
| Poland | 36121 | 38557 | 36952 | 6.7 |
| Portugal | 17352 | 17588 |  | 1.4 |
| Slovak Republic ${ }^{2}$ | 9325 |  | 9658 | 3.2 |
| Slovenia ${ }^{2}$ | 16915 |  | 17373 |  |
| Spain | 24786 | 25223 |  | 1.8 |
| Sweden | 368208 | 375436 | 378150 | 2.0 |
| Switzerland | 75331 | 77414 |  | 2.8 |
| Turkey ${ }^{2}$, 4 | 21661 |  | 22636 |  |
| United Kingdom | 34297 | 34286 |  | 0.0 |
| United States | 45688 | 46800 |  | 2.4 |

1. Increase of compensation per employee in the business sector (Economic Outlook No. 90).
2. The country AW estimate is used instead of the OECD Secretariat's AW estimate in the Taxing Wages calculations.
3. The 2011 average earnings figure for Greece was not available at the final compilation stage.
4. Turkey wage figures under the old definition of average worker (ISIC D, Rev. 3).

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## 4. Coverage of taxes and benefits

The Report is concerned with personal income tax and employee and employer social security contributions payable on wage earnings. In addition, payroll taxes (see Section 9 below) and in one case church tax (see Section 10 below) are included in the calculation of the total wedge between labour costs to the employer and the corresponding net take-home pay of the employee.

The calculation of the after-tax income includes family benefits paid by general government as cash transfers (see Section 11 below). Income tax due on capital income and non-wage labour income, several direct taxes (net wealth tax, corporate income tax) and all indirect taxes are not considered in this Report. However, all central, state and local government income taxes are included in the data. ${ }^{3}$

In this study, compulsory social security contributions paid to general government are treated as tax revenues. Being compulsory payments to general government they clearly resemble taxes. They may, however, differ from taxes in that the receipt of social security benefits depends upon appropriate contributions having been made, although the size of the benefits is not necessarily related to the amount of the contributions. Countries finance compulsory public social security programmes to a varying degree from general tax and non-tax revenue and earmarked contributions, respectively. Better comparability between countries is obtained by treating social security contributions as taxes, but they are listed under a separate heading so that their amounts can be identified in any analysis.

## 5. Taxpayer characteristics

Further assumptions are required to calculate the tax/benefit position of employees. The present Report identifies eight types of households, as set out in Table IV.5:

In cases of families with children, the children are assumed to be aged between six and eleven inclusive.

The family is assumed to have no income source other than employment and cash benefits.

Table IV.5. Characteristics of taxpayers

| Marital status | Children | Principal earner | Secondary earner |
| :--- | :--- | :--- | :--- |
| Single individual | No children | $67 \%$ of average earnings |  |
| Single individual | No children | $100 \%$ of average earnings |  |
| Single individual | No children | $167 \%$ of average earnings |  |
| Single individual | 2 children | $67 \%$ of average earnings |  |
| Married couple | 2 children | $100 \%$ of average earnings |  |
| Married couple | 2 children | $100 \%$ of average earnings | $33 \%$ of average earnings |
| Married couple | 2 children | $100 \%$ of average earnings | $67 \%$ of average earnings |
| Married couple | No children | $100 \%$ of average earnings | $33 \%$ of average earnings |

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## 6. Calculation of personal income taxes

The method by which income tax payments are calculated is described in the country tables in Part III. First, the tax allowances applicable to a taxpayer with the characteristics and income level related to gross annual wage earnings of an average worker are determined. Next, the schedule of tax rates is applied and the resulting tax liability is reduced by any relevant tax credits. An important issue arising in the calculation of the personal income tax liability involves determining which tax reliefs should be taken into account. Two broad categories of reliefs may be distinguished:

- Standard tax reliefs: reliefs which are unrelated to actual expenditures incurred by the taxpayer and are automatically available to all taxpayers who satisfy the eligibility rules specified in the legislation. Standard tax reliefs are usually fixed amounts or fixed percentages of income and are typically the most important set of reliefs in the determination of the income tax paid by workers. These reliefs are taken into account in the calculations - they include:
- the basic relief which is fixed and is available to all taxpayers or all wage earners, irrespective of their marital or family status;
- the standard relief which is available to taxpayers depending on their marital status;
- the standard child relief granted to a family with two children between the ages of six to eleven inclusive;
- the standard relief in respect of work expenses, which is usually a fixed amount or fixed percentage of (gross) wage earnings; and
- tax reliefs allowed for social security contributions and other (sub-central government) income taxes are also considered as standard reliefs since they apply to all wage earners and relate to compulsory payments to general government. ${ }^{4}$
- Non-standard tax reliefs: these are reliefs which are wholly determined by reference to actual expenses incurred. They are therefore neither fixed amounts nor fixed percentages of income. Examples of non-standard tax reliefs include reliefs for interest on qualifying loans (e.g. for the purchase of a house), private insurance premiums, contributions to private pension schemes, and charitable donations. These are not taken into account in calculating the tax position of employees.

Standard reliefs are separately identified and their impact on average tax rates is calculated in the results tables shown in the Country chapters. The latter include a brief description of the main non-standard reliefs in most cases.

## 7. State and local income taxes

Personal income taxes levied by sub-central levels of government - state, provincial, cantonal or local - are included in the scope of this study. State income taxes exist in Canada, Switzerland and the United States. Since 1997, Spain has an income tax for the Autonomous Regions. Local income taxes are imposed in Belgium, Denmark, Finland, Iceland, Italy, Japan, Korea, Norway, Sweden, Switzerland and the United States. In Belgium, Canada (other than Québec), Denmark, Iceland, Italy, Korea, Norway and Spain they are calculated as a percentage of taxable income or of the tax paid to central government. In Finland, Japan, Sweden and Switzerland, local government provides different tax reliefs from central government. In the United States, the sub-central levels of government operate a separate system of income taxation under which they have discretion over both the tax base and tax rates. Except for Canada, Japan, Spain and Switzerland, the rate schedule of these sub-central taxes consists of a single rate.

When tax rates and/or the tax base of sub-central government income taxes vary within a country, it is sometimes assumed that the average worker lives in a typical area. The income taxes (and benefits) applicable in this area are presented. This is the procedure followed in Canada, Italy, Spain, Switzerland and the United States where the tax base and tax rates vary very widely throughout the country. Denmark, Finland, Iceland and Sweden have preferred to select the average rate of sub-central government income taxes for the country as a whole. No problem arises in Norway and Korea where the local rates in practice do not vary. Japan has used the widely prevalent standard schedule and Belgium the widely prevalent rate of local income tax.

## 8. Social security contributions

Compulsory social security contributions paid by employees and employers to general government or to social security funds under the effective control of government are included in the coverage of this Report. In most countries, contributions are levied on gross earnings and earmarked to provide social security benefits. In Finland, Iceland and the

Netherlands, some contributions are levied as a function of taxable income (i.e. gross wage earnings after most/all tax reliefs). Australia and New Zealand do not levy social security contributions.

Contributions to social security schemes outside the general government sector are not included in the calculations. However, information on "non-tax compulsory payments" as well as "compulsory payment indicators" is included in the OECD Tax Database, which is accessible at www.oecd.org/ctp/taxdatabase.

## 9. Payroll taxes

The tax base of payroll taxes is either a proportion of the payroll or a fixed amount per employee. In the OECD Revenue Statistics payroll taxes are reported under heading 3000. Twelve OECD countries report revenue from payroll taxes: Australia, Austria, Canada, Denmark, France, Hungary, Ireland, Korea, Mexico, New Zealand, Poland and Sweden.

Payroll taxes are included in total tax wedges reported in this publication, given that they increase the gap between gross labour costs and net take-home pay in the same way as income tax and social security contributions do. The main difference with the latter is that the payment of payroll taxes does not confer an entitlement to social security benefits. Also, the tax base of payroll taxes may differ from the tax base of employer social security contributions. For example, certain fringe benefits may only be liable to payroll tax. Because this Report presents the standard case, the payroll tax base is - depending on the relevant legislation - gross wage (excluding fringe benefits and other items of compensation that vary per employee), gross wage plus employer social security contributions, or a fixed amount per employee.

Four of the OECD member countries include payroll taxes in the Taxing Wages calculations: Australia, Austria, Hungary and Sweden. For a variety of reasons, several countries reporting payroll tax revenue in Revenue Statistics have not included these taxes in the calculations for the present Report.

In the case of the Greece, Ireland and Poland revenues reported in Revenue Statistics are of no quantitative importance or are linked to taxes that are no longer imposed.

In Denmark, employers pay a fixed amount per employee. Tax revenues thus collected are fed into a fund. This fund provides subsidies to employers hiring medium and low-skilled trainees. This payroll tax is not included in the tax equations for Denmark.

Hungary does take into account the employer lump sum health insurance contribution. However, the communal tax on corporations is not included, since not all municipalities levy the tax.

Korea does not take into account the Business Office Tax that is imposed on employers with over 150 employees.

New Zealand has not included its payroll taxes in the tax calculations, mainly because its Fringe Benefit Tax is not a function of the employee's income and the authorities have inadequate information to allocate the tax to all employees, pro-rated by income. An added argument is that probably not all employees in the manufacturing sector receive taxable fringe benefits. It follows that the Fringe Benefit Tax is not a "standard" item; therefore, it should not be included in the tax/benefit calculations.

## 10. Church tax

Several OECD member countries impose a levy known as "Church tax". With one exception, countries do not report revenues from the Church tax in the OECD Revenue Statistics. Denmark does report revenues from its Church tax since the Danish State Church is classified as a part of general government. Denmark argues that this inclusion of the church in general government is appropriate because of the high degree of control that the government exercises over the church. Since the Working Party on Tax Policy Analysis and Tax Statistics has agreed that Church taxes should be treated consistently in its two main statistical publications, only the Danish Church tax is included in the calculations for Taxing Wages.

## 11. Family cash benefits from general government

Tax reliefs and family cash transfers universally paid in respect of dependent children between thef ages of six to eleven inclusive who are attending school are included in the scope of the study. If tax reliefs or cash transfers vary within this age range, the most generous provisions are adopted. The case of twins is explicitly disregarded. Suppose the child benefit programme of a country is structured as follows:

| Age group | Benefits per child |
| :---: | :---: |
| Children 6-8 | 100 units |
| Children $9-10$ | 120 units |
| Children 11-14 | 150 units |

The most favourable outcome arises in the case of 11-year old twins: 300 units. However, as the case of twins is excluded, the best outcome now becomes 270 units (one child 11 years old, one child 9 or 10 years old). This amount would be included in the country table. Often, the amount in benefits is raised once children become one year older. By assuming that children have been born on 1 January, the annual amount received in child benefits may be calculated from the benefit schedule that is in place at the start of the year. Revisions of these amounts during the year are taken into account.

Relevant cash payments include those made by central, state and local governments. For most of the families in this study, these constitute the only major cash transfer received from general government. In some cases, the cash benefits include amounts that are paid without consideration to the number of children.

## 12. Payable tax credits

Payable (non-wastable) tax credits are included in Taxing Wages. Payable tax credits are tax credits that can exceed tax liability, where the excess, if any, can be paid as a cash transfer to the taxpayer. In principle, these credits can be treated in different ways according to whether they are regarded as tax provisions or cash transfers or a combination of these. A Special Feature in the 2001 edition of Revenue Statistics discusses these alternative treatments and the conceptual and practical difficulties that arise in deciding which is the most appropriate approach for the purpose of reporting internationally comparable tax revenue figures. ${ }^{5}$ Based on this review and assessment, editions of the Revenue Statistics from 2002 continue to follow the Interpretative Guide which requires that only the tax expenditure component of payable tax credits be taken into account when measuring tax revenues (see below). However, additional information is provided in

Revenue Statistics on aggregate tax expenditure components and aggregate transfer components of payable tax credits to show the effect of alternative treatments. ${ }^{6}$

The treatment of payable tax credits in Taxing Wages includes a memorandum item reporting of tax expenditure and cash transfer components. The taxpayer calculations in the country tables apply the full amount of payable tax credits against personal income tax. As noted above, the Interpretative Guide of the Revenue Statistics requires that:

- only the portion of a payable tax credit that is claimed to reduce or eliminate a taxpayer's liability (the "tax expenditure" component) ${ }^{7}$ should be deducted in the reporting of tax revenues;
- the part of the tax credit that exceeds a taxpayer's tax liability and is paid to him (the "cash transfer" component) should be treated as an expenditure item and not deducted in the reporting of tax revenues.

Strict consistency with the Interpretative Guide to the Revenue Statistics would require that only the tax expenditure component derived in Taxing Wages be offset against derived income tax, with the excess (if any) treated as a cash transfer. However, this approach would diminish rather than strengthen the informational content of the derived results. In particular, limiting tax credit claims to tax expenditure amounts would yield a zero income tax liability and zero average income tax rate where cash refunds are provided. Where tax credits claims are not constrained in this way, negative income tax liabilities and negative average income tax rates would result where cash transfers are provided. Arguably, these negative amounts more clearly convey the taxpayer's position (which is improved relative to the no-tax situation). Also, not including the cash transfer portion of payable tax credits in the section (11) of the country tables focusing on "pure" cash transfers permits greater transparency of the latter amounts.

Thus, in order to improve the informational content of country tables as regards payable tax credits, the memorandum item reporting at the bottom of the relevant country tables shows tax expenditure amounts on one line, with a second line showing cash transfer amounts. Where more than one payable tax credit program applies, the figures show aggregate tax expenditure and aggregate cash transfer amounts (rather than separate amounts for each program). Total program costs in each of the household cases considered can be derived by adding the tax expenditure and cash transfer amounts.

## 13. The calculation of marginal tax rates

In most cases, the marginal tax rates are calculated by considering the impact of a small increase in gross earnings on personal income tax, social security contributions and cash benefits. However, in the case of a non-working spouse, the move from a zero to a small positive income is unrepresentative of income changes and therefore of little interest. So, for this case, the marginal rates for the spouse are calculated by considering the impact of an income increase from zero to 33 per cent of the average wage.

## Notes

1. Not all national statistical agencies use ISIC Rev. 3.1 or ISIC Rev. 4 to classify industries. However, the Statistical Classification of Economic Activities in the European Community (NACE), the North American Industry Classification System (NAICS) and the Australian and New Zealand Standard Industrial Classification (ANZSIC) include a classification which is broadly in accordance with industries C-K in ISIC Rev. 3.1 or industries B-N in ISIC Rev. 4.
2. Wage estimates reported in the Economic Outlook are consistent with information in the Analytical Database (ADB) of the Economics Department (ECO) of the OECD. These estimates are prepared by the ECO country desks. Data in the ADB/EO90 are consistent with the December 2011 issue of the Economic Outlook.
3. Information on the fiscal powers of sub-central governments may be found in the publication "Taxing Powers of State and Local Government", OECD Tax Policy Studies, No. 1 (Paris, 1999).
4. In this case, the amount of tax relief is related to actual social security contributions paid by the employee or withheld from his wage - thus in this respect this item deviates from the general definition of standard tax relief under which relief is unrelated to actual expenses incurred.
5. OECD, Revenue Statistics 1965-2000, p. 28-31.
6. See Table D in the latest edition of OECD, Revenue Statistics.
7. This characterisation must be viewed as informal, as the determination of tax expenditures requires the identification of a benchmark tax system for each country, or preferably, a common international benchmark. In practice, it has not been possible to reach agreement on a common international benchmark for such purposes.

## Limitations

## 1. General limitations

The simple approach of comparing the tax/benefit position of example families avoids many of the conceptual and definitional problems involved in more complex international comparisons of tax burdens and transfer programmes. However, a drawback of this methodology is that the earnings of an average worker will usually occupy a different position in the overall income distribution in different economies, although the earnings relate to workers in similar jobs in various OECD member countries.

Because of the limitations on the taxes and benefits covered in the Report, the data cannot be taken as an indication of the overall impact of the government sector on the welfare of taxpayers and their families. Complete coverage would require studies of the impact of indirect taxes, the treatment of non-wage labour income and other income components under personal income taxes and the effect of other tax allowances and cash benefits. Complete coverage would also require that consideration be given to the effect on welfare of services provided by the state, either free or below cost, and the incidence of corporate and other direct taxes on earnings and prices. Such a broad coverage is not possible in an international comparison of all OECD countries. The differences between the results shown here and those of a full study of the overall impact on employees of government interventions in the economy would vary from one country to another. They would depend on the relative shares of different kinds of taxes in government revenues and on the scope and nature of government social expenditures.

The Report shows only the formal incidence of taxes on employees and employers. The final, economic incidence of taxes may be quite different, because the tax burden may be shifted from employers onto employees and vice versa by market adjustments to gross wages.

The income left at the disposal of a taxpayer may represent different standards of living in various countries because the range of goods and services on which the income is spent and their relative prices differ as between countries. In those countries where the general government sector provides a wide range of goods and services (generous basic old age pension, free health services, public housing, university education, etc.), the taxpayer may be left with less cash income but may enjoy the same living standards as a taxpayer receiving a higher cash income but living in a country where there are fewer publicly provided goods and services.

As mentioned in Part 0 and detailed in the Special Feature of the 2005 edition of Taxing Wages, second earners who are earning 33 per cent of the average wage are very likely to be working part-time, although the Taxing Wages methodology generally assumes that they are working full-time. However, this only affects the accuracy of the results in Taxing Wages for one family type in Belgium (married couple where a second earner is earning 33 per
cent of average wages). Therefore, one should be cautious when interpreting the results for this family type for Belgium. In addition, for all countries with hour-based rules, (see the 2005 Special Feature), caution should be used in applying the results in this Report to other household types.

## 2. Some specific limitations on the income tax calculation

The exclusion of non-wage income and the limited number of tax reliefs covered imply that the average rates of income tax in the tables in this publication will not necessarily reflect the actual rates confronting taxpayers at these levels of earnings. Actual rates may be lower than the calculated rates because the latter do not take into account non-standard expense-related reliefs. On the other hand, actual rates may be higher than calculated rates because the latter do not take into account tax on non-wage income received by employees.

The decision not to calculate separately average rates of income tax taking into account the effect of non-standard tax reliefs was taken because:

- In many cases, expense-related reliefs are substitutes for direct cash subsidies. To take into account these reliefs while ignoring any corresponding direct subsidies would distort comparisons of take-home pay plus cash transfers.
- The special tax treatment of certain expenses may be linked to special treatment of any income associated with these expenses (e.g. the tax treatment of social security contributions and pension income) which is beyond the scope of this study.
- A few countries were unable to estimate the value of these reliefs and even those countries which could do so could not limit their estimates to taxpayers with the characteristics assumed in the above part on methodology. And
- Not all countries could calculate separately the reliefs available to different family-types. Where a split is provided between single individuals and families with children, there are large differences in the value of the reliefs typically received by these two categories of households.


## 3. Limitations to time-series comparisons

The Calculations of the tax burden on labour income in OECD countries reported in previous editions of Taxing Wages, including the 2004 edition, are based on an average earnings measure calculated for manual full-time workers in the manufacturing sector (the "average production worker"). From 1996 onwards there are time-series results covering all 8 family types, whereas there are results from 1979 onwards for two of these family-types: single individuals without children and married one-earner couples with two children with earnings equal to those of an average production worker.

Any analysis of the results has to take into account the fact that the earnings data do not necessarily relate to the same taxpayer throughout the period. The average earnings are calculated for each year. As such, the results do not reflect the changing earnings and tax position of particular individuals over time but rather to the position of workers earning a wage equal to average earnings in the covered industry sectors in each particular year. This, in turn, may mean that the earnings levels referred to may be at different points in the income distribution over the period covered and changes in tax rates may be influenced by these trends.

From the 2005 edition, Taxing Wages has reported tax calculations under a broadened average worker definition that includes all full-time employees covering industry sectors C-K (reference to ISIC Rev. 3.1). The implications of adopting this new definition for time-series comparisons are discussed in the 2005 edition of Taxing Wages. As of the 2010 edition of the Taxing Wages Report, many countries have started reporting average wage earnings for full-time employees covering industry sectors B-N of the ISIC Rev. 4 industry classification (which broadly corresponds to sectors C-K in ISIC Rev. 3.1).

Despite the focus on the years since 2000 in the main body of the Report, Annex C also reports figures since 1979 for single individuals without children and married one-earner couples with two children with earnings equal to those of an average production worker under the old definition of average worker.

It should, however, be noted that there are a number of additional limitations which apply to the interpretation of the results for the period from 1979-2004 (Tables in Annex C).

- For technical reasons, the procedures countries follow to determine the benchmark earnings level of the national average production worker may change over time. For instance, in the time-series from 1979 onwards on needs to be aware of the fact that the average worker wage level in France as of 1997 is based on improved statistical data, which lead to a one-off additional increase in the average worker's wage level of 5 to 7 per cent in that year. In the same vein, starting with the 1999 edition, the Netherlands assumes that the wage for manual workers in industry is on average equal to 90 per cent of the wage for all industrial workers, including white collar workers and supervisors.
- In certain cases, the taxes covered for a given country may differ over the years. For example, in the time-series from 1979 onwards on needs to be aware of the fact that Korea extended the coverage of its social security contributions as of 1997. This extended coverage largely explains why the wedge between labour costs and net take-home pay of a single average production worker in the case of Korea doubles from 6.3 per cent (1996) to 12.4 per cent (1997). Another example is the reporting of payroll taxes. In Australia, the payroll taxes are only included in the calculations from 2003; and in Austria from 1998.
- In some of the countries with state and/or local income taxes, the rates of tax applied to an average worker refer to a typical region. Consequently, if movements in tax rates in this region are unrepresentative of changes in income taxes elsewhere in the country, they will provide a poor indication of how country-wide average rates of taxes are evolving.

Particular care is required in interpreting the results where many of the limitations set out above apply to one particular country since, while taken individually, each limitation may not significantly distort the results, but cumulatively the impact may be important.

To conclude, the data are comparable for the specific situations referred to and the results show the proportion of gross wage earnings retained. This net cash income (including universal cash benefits) is the amount over which the household is able to exercise a free choice in the allocation of its expenditure.

## A note on the tax equations

Each country chapter contains a section describing in a standard format the equations under-pinning the calculations required to derive the amounts of income tax, social security contributions and cash transfers. These algorithms represent in algebraic form the legal provisions described in the chapter and are consistent with the figures shown in the country and comparative tables. This section describes the conventions used in the definition of the equations and how they could be used by those wishing to implement the equations for their own research.

The earlier sections of the country chapters describe how the tax and other systems work and present the values of the parameters of those systems such as the levels of allowances and credits, and the schedule of tax rates.

In the first part of the equations section is a table showing a brief description of each parameter (such as "Basic tax credit"), the name of the parameter as used in the algebraic equation ("Basic_cred") and the actual value for the relevant year (such as "1098"). Where there is a table of values - for example a schedule of tax rates and the associated thresholds of taxable income - a name is given to the entire table (for example "tax_sch"). These variable names are those used in the equations.

After the table of parameters is the table of equations. The four columns contain information as follows:

- The first two columns give a description and a variable name for the result of the equation on that row of the table. These always include the thirteen main financial value entries in the country tables. Additional rows define any intermediate values which are calculated either to show the detail included in the tables (such as the subdivision of total tax allowances into the different categories) or values which make the calculation clearer.
- The third column shows the range of the calculation in that row. This is necessary to allow for the different way that tax may be calculated for married couples. The options are:
- B: the calculation is carried out separately for both the principal earner and the spouse using their individual levels of earnings. This applies in the case of independent income tax and usually also in respect of social security contributions.
- P: the calculation applies for the principal earner only. An example is where the principal earner can use any of the basic tax allowance of the spouse which cannot be set against the income of the spouse.
- S: the calculation applies for the lower earning spouse only.
- J: the calculation is carried out only once on the basis of joint income. This applies to systems of joint or family taxation and is also usual for the calculation of cash transfers in respect of children.
- The final column contains the equation itself. The equation may refer to the variables in the parameters table and to variables which result from one of the rows of the equations table itself. Use is also made of the two standard variables "Married", which has the value 1 if the family consists of a married couple and 0 in the case of a single individual, and "Children" which denotes the number of children. Sometimes there is a reference to a variable with the affix "_total" which indicates the sum of the relevant variable values for the principal earner and the spouse. Similarly, the affixes "_princ" and "_spouse" indicate the value for the principal earner and spouse, respectively.

In the equations, a number of functions are used. Some of these are used in the same way as in a number of widely available "spreadsheet" computer packages. For example, $\operatorname{MAX}(X, Y)$ and $\operatorname{MIN}(X, Y)$ find the maximum and minimum of the two values, respectively. IF (condition $\mathrm{X}, \mathrm{Y}$ ) chooses the expression X if the condition is true and the expression Y if it is false. Boolean expressions are also used and are taken to have the value 1 if true and 0 if false. As an example, (Children=2*CB_2) is equivalent to IF(Children=2, CB_2,0).

There are also three special functions commonly used which denote calculations often required in tax and social security systems. These are:

- Tax (taxinc, tax_sch): this calculates the result of applying the schedule of tax rates and thresholds in "tax_sch" to the value of taxable income represented by "taxinc". This function may be used in any part of the equations, not just in the income tax calculation. For some countries it is used for social security contributions or even for allowance levels which may be income dependent.
- Positive (X): this gives the result X when this value is positive and zero otherwise. It is therefore equivalent to $\operatorname{MAX}(0, \mathrm{X})$.
- Taper (value, income, threshold, rate): this gives the amount represented by "value" if "income" is less than "threshold". Otherwise, it gives "value" reduced by "rate" multiplied by (income-threshold), unless this produces a negative result in which case zero is returned. This provides the calculation which is sometimes required when a tax credit, for example, is available in full provided that total income is below a threshold but is then withdrawn at a given rate for each currency unit in excess of the threshold until it is withdrawn completely.

In some circumstances, there are country specific special functions. These functions involve programming that is designed to simplify the tax calculations. The programming underlying these functions is based on the description of the particular measure given in the relevant country chapter found in Part III. For example, the Earned Income Credit in the United States is calculated using the function called EIC.

Anyone wishing to make their own implementation of the equations will have to write functions corresponding to these special functions or make appropriate modifications to any equations that use them.

## Annexes

Annex A. Source of earnings data ..... 566
Annex B. Exchange rates and purchasing power parities of national currencies, 2011 ..... 568
Annex C. Historical series under the old definition of average worker, 1979-2004 ..... 569

## ANNEX A

Source of earnings data

Table A.1. Source of earnings data, 2011

| Country | Type of sample | Source |
| :---: | :---: | :---: |
| Australia | Quarterly survey of firms resulting in a representative sample of wage and salary earners in each industry. | Australian Bureau of Statistics "Average Weekly Earnings, Australia" and "Labour Force, Australia". |
| Austria | Annual Wage Tax Statistics. | "Lohnsteuerstatistik". |
| Belgium | Data collected or estimated on the basis of an annual establishment survey and social insurance registers of employees. | Statistics Division of the Ministry of Economy (Federal Public Service, Economy, SMEs, Self-employed and Energy). Same source as for Eurostat "Annual gross earnings" data. |
| Canada | Monthly survey of all firms. | Statistics Canada, "Survey of Employment Payrolls and Hours". |
| Chile | Monthly sample of businesse with 10+ employees. | National Statistics Institute of Chile (INE). |
| Czech Republic | Employer survey data. | National Statistical Office. |
| Denmark | Danish Employers Confederation survey of earnings. | Annual Report Danish Employers Confederation (Dansk Arbejds Giverforening). |
| Estonia | - | Statistics Estonia/Ministry of Finance. |
| Finland | (1) Finnish Employers Federation survey of hourly and monthly earnings; <br> (2) Survey for unorganised employers "Structure of Earnings Statistics" published by the Central Statistical Office. | "Wages Statistics" published by the Central Statistical Office. |
| France | Social insurance registers covering all employers. | INSEE, "Déclarations Annuelles des Données Sociales" (DADS). |
| Germany | Survey carried out by the Federal Statistical Office. | National Statistical Office. |
| Greece ${ }^{1}$ | Survey carried out by National Statistics Service and Social Security Institutions. | National Statistical Service Labour Statistics. Same source as for Eurostat "Annual gross earnings" data. |
| Hungary | Monthly surveys among enterprises with at least five employees. | Central Statistical Office. |
| Iceland | Monthly survey of earnings in the private sector market. | Statistics Iceland. |
| Ireland | Quarterly surveys of industrial employment, earnings and hours worked. | Central Statistics Office. |
| Israel | - | Central Bureau of Statistics. |
| Italy | Quarterly indicators of wages in industry and services (OROS). | National Institute of Statistics. |
| Japan | Basic survey on wage structure of all establishments with more than 10 employees. | Ministry of Health, Labour and Welfare, Annual Report. |
| Korea | Major Labour Statistics. | Ministry of Labour. |
| Luxembourg | Monthly aggregated files of Social security services. | National Statistical Office and Social Security Services. |
| Mexico | Administrative data from the Mexican Social Security Institute (Instituto Mexicano del Seguro Social [IMSS]). | The National Minimum Wage Commission (Comisión Nacional de Salarios Mínimos [CONASAMI]). |
| Netherlands | Survey "Employment and Wages". | Central Bureau of Statistics, Statline. |
| New Zealand | The quarterly employment survey is a sample survey of significant business with an employment count of 1 or more. | Statistics New Zealand INFOS. |
| Norway | Sample of enterprises based on published sector statistics for 3rd quarter - except agriculture, forestry and fishing and private households. | Statistics Norway Wage. |
| Portugal | April and October survey of earnings carried out by the Ministry of Labour. | Ministry of Labour. |
| Poland | Estimates for different sectors. | Monthly Statistical Bulletin. |
| Slovak Republic | Quarterly and annual statistical data. | Slovak Statistical Office. |
| Slovenia | Monthly survey of employees. | Statistical Office of the Republic of Slovenia. |
| Spain | Quarterly survey of firms. | Instituto Nacional de Estadistica "Encuesta Trimestral de Coste Laboral" (Labour Cost Survey). |
| Sweden | September survey of Swedish employers. | Statistics Sweden. |
| Switzerland | Swiss Statistics Office. Personnes actives occupées selon la branche économique. | La vie économique, SECO (Secrétariat d'État à l'économie) table B.8.1, www.bfs.admin.ch/bfs/portal/fr/index/themen/03/04.html. |
| Turkey | Annual Manufacturing Industry Survey. | Turkish Statistical Institute. |
| United Kingdom | 1\% sample of PAYE earnings. | Office for National Statistics, Annual Survey of Hours and Earnings (ASHE). |
| United States | Monthly surveys by Department of Labour on the basis of a questionnaire covering more than 40 million non-agricultural wage and salary-workers. | Employment, Hours, and Earnings from the Current Employment Statistics Survey |

[^27]
## ANNEX B

## Exchange rates and purchasing power parities of national currencies, 2011

Table B.1. Exchange rates

|  | Monetary unit | Exchange <br> rates ${ }^{1}$ | Purchasing power parities |
| :---: | :---: | :---: | :---: |
| Australia | AUD | 0.97 | 1.56 |
| Austria | EUR | 0.72 | 0.85 |
| Belgium | EUR | 0.72 | 0.87 |
| Canada | CAD | 0.99 | 1.23 |
| Chile | CLP | 483.54 | 406.55 |
| Czech Rep. | CZK | 17.66 | 13.92 |
| Denmark | DKK | 5.36 | 7.81 |
| Estonia | EUR | 0.72 | 0.53 |
| Finland | EUR | 0.72 | 0.95 |
| France | EUR | 0.72 | 0.87 |
| Germany | EUR | 0.72 | 0.80 |
| Greece | EUR | 0.72 | 0.71 |
| Hungary | HUF | 200.57 | 129.89 |
| Iceland | ISK | 115.97 | 137.69 |
| Ireland | EUR | 0.72 | 0.84 |
| Israel | ILS | 3.57 | 3.71 |
| Italy | EUR | 0.72 | 0.80 |
| Japan | JPY | 79.84 | 106.88 |
| Korea | KRW | 1107.81 | 822.78 |
| Luxembourg | EUR | 0.72 | 0.93 |
| Mexico | MXN | 12.43 | 8.15 |
| Netherlands | EUR | 0.72 | 0.83 |
| New Zealand | NZD | 1.27 | 1.52 |
| Norway | NOK | 5.60 | 9.62 |
| Poland | PLN | 2.96 | 1.87 |
| Portugal | EUR | 0.72 | 0.63 |
| Slovak republic | EUR | 0.72 | 0.52 |
| Slovenia | EUR | 0.72 | 0.63 |
| Spain | EUR | 0.72 | 0.71 |
| Sweden | SEK | 6.48 | 8.91 |
| Switzerland | CHF | 0.89 | 1.50 |
| Turkey | TRL | 1.67 | 1.04 |
| United Kingdom | GBP | 0.62 | 0.66 |
| United States | USD | 1.00 | 1.00 |

1. Average of 12 months daily rates.

## ANNEX C

# Historical series under the old definition of average worker, 1979-2004 

## Warning

The tables contained in this annex reproduce data published in Taxing Wages 2003-2004, for the convenience of the reader as the main body of this Report only presents data for 2000-08. However, any user of the data should be aware of its limitations. First, it is based on the previous definition of the wage - the average production worker (APW) wage. Second, there were changes in the reporting practices of some countries over the period 1979-2004 and so the times series cannot be regarded as completely consistent. The most important breaks in the series for recent years are the following:

- Australia: from 2002, payroll taxes included in calculations. They are excluded in earlier years.
- Austria: from 1998, payroll taxes included in calculations. They are excluded in earlier years.
- France: from 1997, earning figure based on improved statistical data.
- Japan: from 2002, improvements were made in the reporting of social security contributions.
- Korea: from 1997, the coverage of social security contributions is extended.
- The Netherlands: from 1999, average wage level for manual workers assumed to be equal to $90 \%$ of the wage for all industrial workers, including white collar workers and supervisors.

|  |  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2000 | 2001 | 2002 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note: For Australia, from 1996 to 2001, data have been revised to include payroll taxes and so produce a consistent series. Data for earlier years are not available on the same basis.

1. Employers' social security contributions not reported by France for period 1979 to 1993.
2. As from 1990 on, data on wages have been revised to include only production workers.
3. A submission for 2004 was not received from this country and consequently the tax/benefit structure for this country has been updated using external sources. Given the potential for error,
the reader should use caution in interpreting the results for this country.

Table C.2. Income tax (in \% of gross wage), 1979-2004, single persons without children

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | - | - | - | - | - | - | - | - | - | 24.8 | 25.9 | 22.8 | 23.3 | 24.0 | 24.0 | 24.3 |
| Austria | 9.3 | 10.2 | 9.4 | 10.2 | 9.5 | 7.0 | 7.5 | 8.6 | 8.9 | 10.2 | 10.8 | 9.8 | 10.2 | 10.5 | 10.8 | 10.8 |
| Belgium | 15.2 | 18.7 | 25.5 | 26.4 | 25.9 | 25.3 | 25.9 | 26.1 | 27.2 | 27.6 | 27.9 | 27.9 | 27.8 | 27.2 | 26.7 | 26.6 |
| Canada | 18.3 | 19.0 | 18.8 | 19.4 | 21.4 | 20.0 | 20.4 | 21.1 | 21.7 | 22.1 | 20.8 | 21.1 | 19.3 | 17.9 | 18.0 | 17.8 |
| Czech Republic | - | - | - | - | - | - | - | 8.5 | 10.0 | 10.4 | 10.2 | 10.1 | 10.0 | 10.4 | 10.8 | 11.4 |
| Denmark | 35.7 | 37.8 | 39.4 | 40.0 | 44.0 | 44.0 | 44.2 | 44.4 | 37.4 | 35.1 | 33.0 | 32.4 | 32.6 | 31.7 | 31.7 | 30.6 |
| Finland | 26.7 | 27.3 | 29.5 | 30.5 | 30.8 | 30.8 | 28.3 | 28.6 | 29.3 | 28.0 | 26.3 | 26.6 | 25.9 | 25.4 | 24.9 | 24.2 |
| France | 8.5 | 8.6 | 8.4 | 7.4 | 6.8 | 6.7 | 8.1 | 8.5 | 8.8 | 10.5 | 14.3 | 13.4 | 13.5 | 13.6 | 13.2 | 13.1 |
| Germany | 16.0 | 16.4 | 17.1 | 18.1 | 18.6 | 18.6 | 18.4 | 18.3 | 20.8 | 21.2 | 21.2 | 21.5 | 20.1 | 20.4 | 20.8 | 19.6 |
| Greece | 1.4 | 1.3 | 3.0 | 3.2 | 3.5 | 5.8 | 3.6 | 1.7 | 1.7 | 2.0 | 1.9 | 2.2 | 1.8 | 0.4 | 0.0 | 0.6 |
| Hungary | - | - | - | - | - | - | - | - | 16.4 | 17.8 | 17.6 | 18.9 | 19.2 | 16.9 | 12.9 | 12.4 |
| Iceland | - | 16.8 | 16.9 | 14.5 | 12.0 | 17.5 | 17.9 | 19.7 | 20.4 | 21.2 | 22.3 | 23.1 | 23.5 | 24.8 | 25.2 | 25.5 |
| Ireland | 23.7 | 23.4 | 24.6 | 26.8 | 27.9 | 25.5 | 24.7 | 23.9 | 22.4 | 20.5 | 19.3 | 15.2 | 12.0 | 11.4 | 11.1 | 10.6 |
| Italy ${ }^{1}$ | 11.6 | 14.1 | 16.3 | 18.4 | 18.4 | 18.1 | 16.3 | 15.8 | 17.5 | 18.8 | 20.0 | 19.3 | 18.6 | 19.1 | 18.2 | 18.6 |
| Japan | 7.6 | 8.5 | 9.0 | 8.8 | 8.5 | 7.9 | 8.5 | 8.4 | 6.4 | 8.0 | 6.1 | 6.2 | 6.2 | 5.6 | 5.9 | 5.9 |
| Korea | - | - | - | - | - | - | - | - | 2.5 | 1.7 | 2.1 | 2.5 | 2.5 | 2.2 | 2.3 | 2.2 |
| Luxembourg | 17.4 | 16.8 | 17.4 | 16.7 | 14.0 | 13.5 | 11.8 | 12.7 | 13.1 | 13.8 | 12.1 | 12.6 | 10.8 | 8.3 | 8.5 | 8.9 |
| Mexico | - | - | - | - | - | 6.6 | 6.1 | 6.5 | 2.5 | -1.2 | 0.0 | 1.3 | 1.9 | 2.1 | 2.8 | 3.0 |
| Netherlands | 14.8 | 13.5 | 12.0 | 11.3 | 11.9 | 12.1 | 11.5 | 12.2 | 6.7 | 6.5 | 6.3 | 7.6 | 8.8 | 7.0 | 6.0 | 8.5 |
| New Zealand | 26.0 | 26.8 | 26.6 | 27.9 | 26.1 | 23.4 | 23.8 | 24.0 | 24.5 | 21.6 | 19.4 | 19.5 | 19.5 | 20.1 | 20.3 | 20.7 |
| Norway | 25.7 | 24.7 | 23.3 | 22.7 | 22.7 | 25.9 | 24.4 | 20.9 | 21.8 | 21.7 | 21.6 | 21.4 | 21.0 | 21.0 | 20.9 | 20.9 |
| Polamd ${ }^{2}$ | - | - | - | - | - | - | - | 17.2 | 18.1 | 16.9 | 6.6 | 6.6 | 6.0 | 6.1 | 6.0 | 6.1 |
| Portugal | 4.4 | 4.9 | 7.1 | 6.9 | 7.5 | 6.5 | 5.9 | 6.8 | 7.0 | 7.2 | 6.6 | 6.7 | 5.4 | 5.5 | 5.6 | 5.6 |
| Slovak Republic | - | - | - | - | - | - | - | - | - | - | - | 6.0 | 6.8 | 5.9 | 6.3 | 7.9 |
| Spain | 10.1 | 11.3 | 12.2 | 10.6 | 12.7 | 10.4 | 11.3 | 12.3 | 13.2 | 13.8 | 11.8 | 12.1 | 12.6 | 13.0 | 12.3 | 12.7 |
| Sweden | 36.5 | 36.1 | 35.5 | 35.6 | 36.6 | 37.0 | 28.0 | 28.5 | 28.7 | 28.5 | 27.2 | 25.8 | 24.6 | 23.4 | 23.8 | 24.0 |
| Switzerland | 10.6 | 11.6 | 11.4 | 11.2 | 10.8 | 10.8 | 9.6 | 11.1 | 11.0 | 10.3 | 10.2 | 9.8 | 9.9 | 9.9 | 9.7 | 9.8 |
| Turkey | 42.0 | 35.2 | 30.2 | 22.9 | 22.4 | 23.5 | 27.1 | 27.4 | 25.2 | 23.9 | 15.2 | 14.7 | 14.9 | 15.1 | 14.8 | 15.4 |
| United Kingdom | 23.2 | 23.4 | 22.7 | 22.3 | 20.3 | 19.0 | 18.7 | 18.0 | 18.2 | 16.7 | 16.3 | 15.8 | 15.5 | 15.6 | 15.7 | 15.9 |
| United States | 20.6 | 23.5 | 23.0 | 21.8 | 18.4 | 18.4 | 18.4 | 18.3 | 18.1 | 18.2 | 18.2 | 17.9 | 16.8 | 16.6 | 16.4 | 16.5 |

Note: For Australia, from 1996 to 2001, data have been revised to include payroll taxes and so produce a consistent series. Data for earlier years are not available on the same basis.

1. As from 1990 on, data on wages have been revised to include only production workers.
2. A submission for 2004 was not received from this country and consequently the tax/benefit structure for this country has been updated using external sources. Given the potential for error,
the reader should use caution in interpreting the results for this country.

Table C.3. Income tax plus employee contributions (in \% of gross wage), 1979-2004, single persons without children

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | - | - | - | - | - | - | - |  | - | 24.8 | 25.9 | 22.8 | 23.3 | 24.0 | 24.0 | 24.3 |
| Austria | 23.5 | 25.1 | 24.5 | 26.6 | 25.9 | 23.8 | 24.7 | 25.9 | 27.0 | 28.3 | 28.8 | 27.9 | 28.3 | 28.6 | 28.9 | 28.8 |
| Belgium | 25.3 | 28.8 | 37.0 | 38.5 | 38.0 | 37.4 | 37.9 | 39.2 | 41.1 | 41.5 | 41.9 | 41.9 | 41.7 | 41.2 | 40.7 | 40.5 |
| Canada | 20.8 | 22.0 | 22.3 | 23.3 | 25.4 | 23.8 | 25.0 | 26.3 | 27.1 | 27.7 | 26.5 | 27.1 | 25.5 | 24.4 | 24.6 | 24.7 |
| Czech Republic | - | - | - | - | - | - | - | 22.0 | 23.2 | 22.9 | 22.7 | 22.6 | 22.5 | 22.9 | 23.3 | 23.9 |
| Denmark | 40.1 | 42.2 | 44.8 | 46.3 | 46.0 | 46.6 | 46.7 | 47.0 | 45.2 | 44.9 | 44.2 | 44.1 | 43.3 | 42.3 | 42.3 | 41.2 |
| Finland | 29.4 | 30.0 | 32.2 | 34.2 | 34.2 | 34.0 | 31.7 | 35.7 | 38.0 | 35.8 | 33.7 | 33.6 | 32.4 | 31.5 | 31.0 | 30.3 |
| France | 20.3 | 20.5 | 22.6 | 22.6 | 23.5 | 25.0 | 25.2 | 26.9 | 27.4 | 28.1 | 27.7 | 26.8 | 27.0 | 26.8 | 26.8 | 26.7 |
| Germany | 31.6 | 32.6 | 33.9 | 35.0 | 35.7 | 36.0 | 36.6 | 36.6 | 40.5 | 42.3 | 41.9 | 42.0 | 40.7 | 41.0 | 41.8 | 40.5 |
| Greece | 11.6 | 11.5 | 16.2 | 16.4 | 16.8 | 19.1 | 17.4 | 17.5 | 17.6 | 17.9 | 17.8 | 18.1 | 17.7 | 16.3 | 16.0 | 16.6 |
| Hungary | - | - | - | - | - | - | - |  | 27.9 | 29.3 | 30.1 | 31.4 | 31.7 | 29.4 | 25.4 | 25.9 |
| Iceland | - | 17.0 | 17.2 | 14.7 | 12.2 | 17.5 | 18.1 | 20.0 | 20.6 | 21.5 | 22.5 | 23.2 | 23.7 | 25.1 | 25.4 | 25.7 |
| Ireland | 28.1 | 28.1 | 33.1 | 35.3 | 35.7 | 33.3 | 32.4 | 32.7 | 29.2 | 26.0 | 24.3 | 20.3 | 16.9 | 16.4 | 16.0 | 15.7 |
| Italy ${ }^{1}$ | 20.0 | 22.6 | 25.8 | 27.0 | 27.3 | 26.7 | 25.3 | 25.8 | 27.5 | 29.0 | 29.1 | 28.5 | 27.8 | 28.3 | 27.4 | 27.8 |
| Japan | 12.5 | 13.2 | 13.1 | 15.8 | 15.5 | 14.9 | 15.5 | 15.4 | 13.4 | 15.0 | 16.1 | 16.2 | 16.2 | 19.3 | 17.5 | 17.4 |
| Korea | - | - | - | - | - | - | - | - | 4.8 | 5.6 | 8.8 | 9.2 | 9.2 | 8.9 | 9.2 | 9.3 |
| Luxembourg | 29.3 | 28.8 | 29.5 | 28.9 | 26.2 | 25.9 | 24.1 | 25.2 | 25.6 | 26.4 | 25.8 | 26.6 | 24.8 | 22.1 | 22.3 | 22.7 |
| Mexico | - | - | - | - | - | 11.1 | 10.9 | 11.3 | 7.7 | 1.4 | 1.6 | 2.9 | 3.4 | 3.7 | 4.4 | 4.5 |
| Netherlands | 35.5 | 35.8 | 40.4 | 38.0 | 37.4 | 35.6 | 40.4 | 41.8 | 40.5 | 39.3 | 35.4 | 36.2 | 32.9 | 28.6 | 29.0 | 34.4 |
| New Zealand | 26.0 | 26.8 | 26.6 | 27.9 | 26.1 | 23.4 | 23.8 | 24.0 | 24.5 | 21.6 | 19.4 | 19.5 | 19.5 | 20.1 | 20.3 | 20.7 |
| Norway | 34.4 | 33.8 | 33.0 | 32.7 | 33.6 | 33.8 | 32.2 | 28.7 | 29.6 | 29.5 | 29.4 | 29.2 | 28.8 | 28.8 | 28.7 | 28.7 |
| Poland ${ }^{2}$ | - | - | - | - | - | - | - | 17.2 | 18.1 | 16.9 | 31.4 | 31.4 | 31.0 | 31.1 | 31.2 | 31.5 |
| Portugal | 14.4 | 15.4 | 18.1 | 18.4 | 18.5 | 17.4 | 17.6 | 16.9 | 18.0 | 18.2 | 17.6 | 17.7 | 16.4 | 16.5 | 16.6 | 16.6 |
| Slovak Republic | - | - | - | - | - | - | - | - | - | - | - | 18.8 | 19.6 | 18.7 | 19.1 | 21.3 |
| Spain | 15.7 | 16.9 | 18.1 | 16.9 | 18.7 | 16.4 | 17.3 | 18.4 | 19.6 | 20.2 | 18.2 | 18.5 | 18.9 | 19.3 | 18.6 | 19.0 |
| Sweden | 36.5 | 36.1 | 35.5 | 35.6 | 36.6 | 37.0 | 28.0 | 29.5 | 32.6 | 34.5 | 34.1 | 32.8 | 31.7 | 30.4 | 30.7 | 31.0 |
| Switzerland | 20.9 | 21.9 | 21.5 | 21.5 | 21.1 | 21.2 | 19.9 | 21.4 | 22.5 | 21.9 | 21.7 | 21.3 | 21.4 | 21.4 | 21.0 | 20.9 |
| Turkey | 49.0 | 42.2 | 38.2 | 31.3 | 31.8 | 32.6 | 34.8 | 34.3 | 30.5 | 33.1 | 22.9 | 28.7 | 30.9 | 30.1 | 29.8 | 30.4 |
| United Kingdom | 29.7 | 31.2 | 31.7 | 31.3 | 29.3 | 27.3 | 26.2 | 25.6 | 26.7 | 25.2 | 24.4 | 23.6 | 23.1 | 23.2 | 24.2 | 24.4 |
| United States | 26.8 | 30.2 | 29.7 | 28.9 | 25.6 | 26.0 | 26.0 | 26.0 | 25.8 | 25.8 | 25.8 | 25.5 | 24.4 | 24.3 | 24.1 | 24.2 |

Note: For Australia, from 1996 to 2001, data have been revised to include payroll taxes and so produce a consistent series. Data for earlier years are not available on the same basis.

1. As from 1990 on, data on wages have been revised to include only production workers.
2. A submission for 2004 was not received from this country and consequently the tax/benefit structure for this country has been updated using external sources. Given the potential for error,
the reader should use caution in interpreting the results for this country.

Table C.4. Income tax plus employee and employer contributions less cash benefits (as \% of labour costs), 1979-2004 one-earner family with two children

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | - | - | - | - | - | - | - | - | - | 21.2 | 22.4 | 18.6 | 19.2 | 20.4 | 16.1 | 17.2 |
| Austria | 20.5 | 23.9 | 24.3 | 25.6 | 24.4 | 23.3 | 24.7 | 24.3 | 27.2 | 32.2 | 31.6 | 29.5 | 29.0 | 29.5 | 29.5 | 28.8 |
| Belgium | 33.1 | 36.0 | 35.3 | 38.4 | 41.6 | 36.1 | 37.3 | 38.6 | 40.3 | 40.8 | 41.2 | 40.5 | 40.3 | 39.7 | 39.1 | 35.6 |
| Canada | 11.7 | 13.5 | 13.3 | 15.2 | 17.4 | 15.7 | 18.5 | 20.6 | 21.7 | 23.4 | 21.2 | 22.2 | 20.4 | 23.1 | 23.1 | 23.0 |
| Czech Republic | - | - | - | - | - | - | - | 23.1 | 28.5 | 31.2 | 24.4 | 22.7 | 24.5 | 24.5 | 27.1 | 29.5 |
| Denmark | 30.9 | 33.6 | 37.5 | 37.7 | 35.5 | 32.4 | 32.5 | 32.5 | 30.9 | 31.3 | 31.1 | 31.0 | 30.7 | 30.1 | 30.1 | 29.8 |
| Finland | 32.4 | 33.2 | 32.7 | 35.6 | 35.8 | 34.8 | 32.5 | 38.1 | 42.1 | 40.8 | 39.6 | 39.9 | 38.8 | 38.3 | 37.6 | 36.8 |
| France ${ }^{1}$ | - | - | - | - | - | - | - | - | 39.5 | 39.5 | 38.9 | 39.8 | 39.4 | 39.5 | 39.9 | 39.0 |
| Germany | 30.7 | 30.9 | 33.3 | 34.2 | 32.7 | 34.0 | 34.3 | 33.6 | 37.3 | 35.6 | 34.4 | 33.3 | 32.7 | 32.2 | 33.4 | 32.2 |
| Greece | 9.3 | 9.3 | 14.5 | 22.9 | 30.3 | 32.0 | 30.5 | 34.3 | 34.9 | 36.2 | 35.8 | 36.1 | 35.9 | 35.0 | 34.4 | 34.9 |
| Hungary | - | - | - | - | - | - | - | - | 37.4 | 40.8 | 35.9 | 35.0 | 32.8 | 33.9 | 30.3 | 31.3 |
| Iceland | - | 6.2 | 4.6 | -3.0 | -4.8 | -11.4 | -14.0 | -11.2 | -10.9 | -2.8 | 5.8 | 7.6 | 7.8 | 9.5 | 10.4 | 11.7 |
| Ireland | 20.4 | 22.7 | 27.4 | 30.0 | 30.6 | 30.0 | 29.4 | 29.9 | 26.8 | 23.8 | 20.1 | 15.5 | 12.8 | 9.1 | 6.4 | 5.9 |
| Italy ${ }^{2}$ | 40.9 | 41.1 | 42.3 | 43.9 | 44.6 | 43.9 | 40.7 | 42.4 | 44.9 | 43.3 | 37.0 | 36.5 | 35.4 | 36.0 | 35.7 | 36.2 |
| Japan | 11.2 | 11.9 | 12.3 | 16.0 | 15.9 | 14.8 | 15.3 | 16.0 | 15.1 | 15.6 | 19.8 | 20.2 | 20.4 | 26.2 | 22.9 | 23.8 |
| Korea | - | - | - | - | - | - | - | - | 6.0 | 11.6 | 15.4 | 15.8 | 15.9 | 15.5 | 15.8 | 15.8 |
| Luxembourg | 20.1 | 19.5 | 18.1 | 18.1 | 15.3 | 14.0 | 14.3 | 12.5 | 12.7 | 13.0 | 10.7 | 11.4 | 11.5 | 9.2 | 9.2 | 9.3 |
| Mexico | - | - | - | - | - | 23.5 | 24.4 | 26.6 | 27.2 | 20.8 | 14.1 | 15.4 | 14.4 | 16.1 | 17.2 | 15.4 |
| Netherlands | 39.4 | 39.7 | 43.6 | 41.2 | 41.1 | 38.7 | 40.1 | 35.7 | 34.9 | 33.0 | 34.1 | 35.5 | 33.0 | 25.1 | 24.5 | 34.3 |
| New Zealand | 10.4 | 16.8 | 17.5 | 15.5 | 24.3 | 18.0 | 20.8 | 22.2 | 22.4 | 16.2 | 14.1 | 15.5 | 16.7 | 18.8 | 19.4 | 20.7 |
| Norway | 32.6 | 30.1 | 28.5 | 28.0 | 28.4 | 28.0 | 26.4 | 23.0 | 24.4 | 24.9 | 26.2 | 26.9 | 26.9 | 27.3 | 27.5 | 27.8 |
| Poland ${ }^{3}$ | - | - | - | - | - | - | - | 36.8 | 39.3 | 38.9 | 38.1 | 38.2 | 37.8 | 41.2 | 37.9 | 41.5 |
| Portugal | 24.3 | 25.8 | 27.5 | 31.4 | 29.7 | 26.5 | 25.4 | 25.3 | 26.6 | 26.8 | 26.0 | 26.2 | 24.1 | 23.6 | 23.7 | 22.5 |
| Slovak Republic | - | - | - | - | - | - | - | - | - | - | - | 25.2 | 28.5 | 28.2 | 32.3 | 27.2 |
| Spain | 31.9 | 32.7 | 33.4 | 32.4 | 34.1 | 31.6 | 32.6 | 32.9 | 33.3 | 33.7 | 30.4 | 30.6 | 31.1 | 31.5 | 30.9 | 31.6 |
| Sweden | 42.5 | 42.9 | 43.2 | 42.5 | 43.0 | 45.5 | 37.7 | 37.7 | 42.2 | 45.2 | 44.4 | 42.6 | 41.1 | 40.3 | 40.8 | 41.2 |
| Switzerland | 19.2 | 20.6 | 19.9 | 19.0 | 18.3 | 18.6 | 18.0 | 17.3 | 18.9 | 17.7 | 17.8 | 17.7 | 17.9 | 18.1 | 17.5 | 17.2 |
| Turkey | 53.9 | 47.7 | 44.8 | 37.0 | 40.2 | 40.1 | 41.2 | 40.0 | 35.3 | 40.7 | 30.3 | 40.4 | 43.6 | 42.5 | 42.2 | 42.7 |
| United Kingdom | 25.2 | 26.8 | 26.6 | 26.2 | 25.6 | 25.1 | 24.3 | 23.8 | 26.1 | 24.8 | 23.3 | 21.4 | 18.1 | 17.3 | 17.4 | 18.0 |
| United States | 23.5 | 26.8 | 27.7 | 26.7 | 25.5 | 24.7 | 24.8 | 24.7 | 24.4 | 24.1 | 21.1 | 21.3 | 18.3 | 17.8 | 15.6 | 16.4 |

Note: For Australia, from 1996 to 2001, data have been revised to include payroll taxes and so produce a consistent series. Data for earlier years are not available on the same basis.

1. Employers' social security contributions not reported by France for period 1979 to 1993
2. As from 1990 on, data on wages have been revised to include only production workers.
3. A submission for 2004 was not received from this country and consequently the tax/benefit structure for this country has been updated using external sources. Given the potential for error,
the reader should use caution in interpreting the results for this country.

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | - | - | - | - | - | - | - | - | - | 23.7 | 24.9 | 22.8 | 23.3 | 24.0 | 24.0 | 24.3 |
| Austria | 6.5 | 7.6 | 6.6 | 7.6 | 6.4 | 3.1 | 3.8 | 2.8 | 3.5 | 5.0 | 9.2 | 8.2 | 8.7 | 9.0 | 9.3 | 8.1 |
| Belgium | 8.0 | 11.6 | 18.4 | 19.3 | 19.1 | 14.2 | 15.0 | 15.5 | 16.1 | 16.5 | 17.0 | 17.1 | 17.1 | 16.7 | 15.9 | 15.2 |
| Canada | 9.7 | 10.6 | 9.0 | 10.3 | 12.3 | 10.9 | 12.1 | 10.3 | 11.2 | 12.6 | 10.2 | 16.9 | 15.3 | 14.1 | 14.2 | 13.9 |
| Czech Republic | - | - | - | - | - | - | - | 2.5 | 4.5 | 5.2 | 4.3 | 4.2 | 4.0 | 4.5 | 4.9 | 5.3 |
| Denmark | 30.3 | 32.6 | 33.8 | 34.3 | 35.7 | 35.6 | 36.0 | 36.2 | 29.4 | 27.8 | 26.2 | 25.7 | 26.2 | 25.7 | 25.7 | 25.4 |
| Finland | 20.9 | 21.9 | 23.8 | 25.3 | 25.2 | 23.7 | 21.8 | 23.3 | 29.3 | 28.0 | 26.3 | 26.6 | 25.9 | 25.4 | 24.9 | 24.2 |
| France | 0.4 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 | 1.0 | 1.7 | 1.9 | 3.7 | 7.6 | 7.6 | 7.0 | 7.1 | 7.1 | 7.1 |
| Germany | 9.9 | 9.7 | 10.5 | 10.9 | 8.6 | 9.2 | 8.7 | 7.9 | 9.6 | 1.0 | 0.0 | -0.9 | -1.7 | -2.4 | -1.6 | -2.8 |
| Greece | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 3.7 | 0.5 | 0.5 | 0.8 | 2.5 | 1.9 | 2.3 | 2.0 | 0.9 | 0.0 | 0.6 |
| Hungary | - | - | - | - | - | - | - | - | 16.4 | 17.8 | 12.0 | 12.6 | 9.2 | 8.0 | 4.6 | 4.7 |
| Iceland | - | 10.2 | 9.4 | 6.4 | 4.8 | 1.3 | 0.3 | 2.5 | 3.6 | 6.8 | 11.3 | 12.0 | 12.6 | 13.3 | 13.3 | 14.0 |
| Ireland | 11.5 | 13.0 | 14.0 | 16.2 | 17.9 | 17.0 | 16.2 | 15.9 | 15.4 | 14.1 | 10.1 | 5.0 | 2.9 | 2.5 | 2.2 | 2.2 |
| Italy ${ }^{1}$ | 9.4 | 10.8 | 12.5 | 16.2 | 15.2 | 14.8 | 12.7 | 11.9 | 14.0 | 15.3 | 15.8 | 14.9 | 13.4 | 11.9 | 11.3 | 11.9 |
| Japan | 1.8 | 2.8 | 3.3 | 2.8 | 2.7 | 1.9 | 2.4 | 2.8 | 1.6 | 2.6 | 1.5 | 2.0 | 2.0 | 1.4 | 1.6 | 2.7 |
| Korea | - | - | - | - | - | - | - | - | 1.5 | 0.9 | 1.3 | 1.7 | 1.8 | 1.6 | 1.7 | 1.4 |
| Luxembourg | 3.4 | 3.1 | 2.7 | 2.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mexico | - | - | - | - | - | 6.6 | 6.1 | 6.5 | 2.5 | -1.2 | 0.0 | 1.3 | 1.9 | 2.1 | 2.8 | 3.0 |
| Netherlands | 12.5 | 11.2 | 9.6 | 8.4 | 8.9 | 9.2 | 10.1 | 9.5 | 4.4 | 3.5 | 4.8 | 4.9 | 8.3 | 6.4 | 5.7 | 8.3 |
| New Zealand | 17.0 | 21.5 | 21.7 | 24.8 | 24.3 | 20.3 | 20.8 | 22.2 | 22.4 | 16.2 | 14.1 | 19.5 | 19.5 | 20.1 | 20.3 | 20.7 |
| Norway | 17.5 | 17.0 | 15.6 | 15.0 | 15.2 | 18.6 | 17.8 | 15.9 | 17.0 | 17.1 | 17.4 | 17.1 | 18.1 | 18.2 | 18.0 | 18.0 |
| Poland ${ }^{2}$ | - | - | - | - | - | - | - | 15.3 | 16.1 | 14.7 | 4.6 | 4.7 | 4.0 | 4.2 | 4.0 | 4.1 |
| Portugal | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 2.1 | 1.2 | 1.1 | 3.3 | 3.1 | 2.4 | 2.7 | 0.1 | 0.3 | 0.3 | 0.4 |
| Slovak Republic | - | - | - | - | - | - | - | - | - | - | - | 2.0 | 3.5 | 2.6 | 3.1 | -5.3 |
| Spain | 6.1 | 6.7 | 7.5 | 5.9 | 8.3 | 5.3 | 6.4 | 5.6 | 6.4 | 6.8 | 2.5 | 3.0 | 3.6 | 4.2 | 3.5 | 4.3 |
| Sweden | 33.7 | 33.7 | 33.3 | 33.9 | 35.0 | 35.7 | 28.0 | 28.5 | 28.7 | 28.5 | 27.2 | 25.8 | 24.6 | 23.4 | 23.8 | 24.0 |
| Switzerland | 6.3 | 7.2 | 6.1 | 6.4 | 6.0 | 5.8 | 5.4 | 5.7 | 5.7 | 5.1 | 5.0 | 4.9 | 5.0 | 5.1 | 5.0 | 5.1 |
| Turkey | 42.0 | 35.2 | 30.2 | 22.9 | 22.4 | 23.5 | 27.1 | 27.4 | 25.2 | 23.9 | 15.2 | 14.7 | 14.9 | 15.1 | 14.8 | 15.4 |
| United Kingdom | 19.3 | 19.8 | 18.6 | 17.9 | 16.5 | 15.5 | 15.4 | 15.0 | 16.6 | 15.1 | 15.2 | 13.3 | 10.2 | 9.3 | 7.9 | 8.1 |
| United States | 11.6 | 14.4 | 15.2 | 14.5 | 13.0 | 11.5 | 11.3 | 11.3 | 11.0 | 10.7 | 7.4 | 7.6 | 4.3 | 3.9 | 1.5 | 2.4 |

Note: For Australia, from 1996 to 2001, data have been revised to include payroll taxes and so produce a consistent series. Data for earlier years are not available on the same basis.

1. As from 1990 on, data on wages have been revised to include only production workers.
2. A submission for 2004 was not received from this country and consequently the tax/benefit structure for this country has been updated using external sources. Given the potential for error,
the reader should use caution in interpreting the results for this country.

Table C.6. Income tax plus employee contributions less cash benefits (as \% of gross wage), 1979-2004 one-earner family with two children

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | - | - | - | - | - | - | - | - | - | 15.8 | 17.5 | 13.5 | 14.2 | 15.6 | 11.1 | 12.2 |
| Austria | 4.2 | 7.1 | 7.8 | 8.6 | 7.3 | 5.6 | 6.9 | 6.5 | 9.5 | 10.7 | 10.0 | 7.6 | 8.2 | 8.9 | 8.9 | 8.0 |
| Belgium | 5.0 | 9.1 | 19.8 | 22.6 | 22.1 | 14.5 | 16.0 | 17.8 | 19.5 | 20.2 | 20.7 | 21.1 | 21.6 | 21.0 | 20.4 | 16.4 |
| Canada | 9.0 | 10.4 | 9.4 | 11.0 | 13.1 | 11.8 | 14.0 | 15.5 | 16.6 | 18.2 | 15.9 | 16.9 | 14.8 | 14.3 | 14.2 | 14.4 |
| Czech Republic | - | - | - | - | - | - | - | -4.5 | 3.3 | 7.1 | -2.1 | -4.3 | -2.0 | -1.9 | 1.5 | 4.9 |
| Denmark | 30.3 | 33.1 | 35.5 | 35.9 | 33.5 | 32.4 | 32.5 | 32.5 | 30.9 | 31.1 | 30.7 | 30.7 | 30.2 | 29.7 | 29.7 | 29.4 |
| Finland | 18.2 | 18.9 | 19.7 | 22.6 | 22.5 | 20.0 | 17.0 | 21.5 | 26.3 | 25.7 | 23.9 | 24.3 | 23.5 | 22.8 | 22.6 | 21.7 |
| France | 6.8 | 6.6 | 6.4 | 7.7 | 9.3 | 10.9 | 11.2 | 13.1 | 13.8 | 15.3 | 15.0 | 15.0 | 14.4 | 14.6 | 15.0 | 15.1 |
| Germany | 19.9 | 19.8 | 22.2 | 23.1 | 21.2 | 22.5 | 22.4 | 21.5 | 25.0 | 22.1 | 20.7 | 19.6 | 18.9 | 18.3 | 19.4 | 18.1 |
| Greece | -7.7 | -7.7 | -4.1 | -4.1 | 15.1 | 16.9 | 14.2 | 16.3 | 16.7 | 18.4 | 17.8 | 18.2 | 17.9 | 16.8 | 16.0 | 16.6 |
| Hungary | - | - | - | - | - | - | - | - | 7.3 | 12.9 | 9.1 | 11.6 | 9.9 | 8.5 | 4.4 | 6.1 |
| Iceland | - | 4.5 | 2.7 | -5.2 | -6.8 | -14.2 | -16.9 | -14.0 | -14.5 | -6.8 | 1.3 | 3.2 | 3.0 | 4.7 | 5.3 | 6.6 |
| Ireland | 13.4 | 14.9 | 19.0 | 21.5 | 22.1 | 21.5 | 20.8 | 21.3 | 17.9 | 14.6 | 10.5 | 5.4 | 2.3 | -0.7 | -3.7 | -4.2 |
| Italy ${ }^{1}$ | 12.1 | 11.5 | 13.6 | 18.1 | 20.3 | 15.8 | 15.5 | 15.9 | 19.6 | 17.0 | 15.5 | 14.8 | 13.5 | 14.9 | 14.4 | 15.2 |
| Japan | 6.7 | 7.6 | 8.0 | 9.8 | 9.7 | 8.9 | 9.4 | 9.8 | 8.6 | 9.6 | 11.5 | 12.0 | 12.0 | 15.1 | 13.2 | 14.3 |
| Korea | - | - | - | - | - | - | - | - | 3.8 | 4.7 | 8.0 | 8.4 | 8.5 | 8.3 | 8.7 | 8.4 |
| Luxembourg | 8.1 | 7.3 | 5.9 | 5.5 | 2.8 | 1.2 | 1.6 | -0.6 | 1.2 | 1.3 | -1.3 | -0.8 | -0.7 | -3.0 | -3.0 | -2.9 |
| Mexico | - | - | - | - | - | 11.1 | 10.9 | 11.3 | 7.7 | 1.4 | 1.6 | 2.9 | 3.4 | 3.7 | 4.4 | 4.5 |
| Netherlands | 24.8 | 25.1 | 29.9 | 27.2 | 27.0 | 25.5 | 33.2 | 31.1 | 29.8 | 27.9 | 23.6 | 25.0 | 22.1 | 17.1 | 17.3 | 23.6 |
| New Zealand | 10.4 | 16.8 | 17.5 | 15.5 | 24.3 | 18.0 | 20.8 | 22.2 | 22.4 | 16.2 | 14.1 | 15.5 | 16.7 | 18.8 | 19.4 | 20.7 |
| Norway | 21.8 | 18.8 | 17.0 | 16.7 | 17.1 | 16.8 | 15.2 | 13.1 | 14.9 | 15.4 | 16.8 | 17.6 | 17.5 | 18.0 | 18.2 | 18.4 |
| Poland ${ }^{2}$ | - | - | - | - | - | - | - | 6.4 | 10.1 | 9.5 | 25.4 | 25.6 | 25.0 | 29.2 | 25.3 | 29.5 |
| Portugal | 9.9 | 10.5 | 12.3 | 13.9 | 12.5 | 8.6 | 7.1 | 7.0 | 9.2 | 9.4 | 8.4 | 8.7 | 6.1 | 5.4 | 5.6 | 4.1 |
| Slovak Republic | - | - | - | - | - | - | - | - | - | - | - | -3.2 | 1.4 | 0.9 | 6.6 | 1.2 |
| Spain | 9.8 | 10.6 | 12.0 | 11.3 | 13.8 | 10.8 | 12.2 | 11.7 | 12.8 | 13.2 | 8.9 | 9.3 | 10.0 | 10.5 | 9.8 | 10.6 |
| Sweden | 25.9 | 25.9 | 25.9 | 24.6 | 25.2 | 27.5 | 17.0 | 19.1 | 23.1 | 27.2 | 26.0 | 23.7 | 21.8 | 20.8 | 21.4 | 21.9 |
| Switzerland | 11.0 | 12.5 | 11.7 | 10.6 | 9.9 | 10.1 | 9.6 | 8.8 | 9.5 | 8.2 | 8.4 | 8.2 | 8.4 | 8.6 | 8.1 | 8.0 |
| Turkey | 49.0 | 41.4 | 38.2 | 31.3 | 31.8 | 32.6 | 34.8 | 34.3 | 30.5 | 33.1 | 22.9 | 28.7 | 30.9 | 30.1 | 29.8 | 30.4 |
| United Kingdom | 17.7 | 19.4 | 19.0 | 18.5 | 17.8 | 17.3 | 16.5 | 15.9 | 18.6 | 17.3 | 16.2 | 14.1 | 10.7 | 9.9 | 9.3 | 9.8 |
| United States | 17.7 | 21.0 | 21.9 | 21.6 | 20.2 | 19.0 | 19.0 | 18.9 | 18.6 | 18.3 | 15.0 | 15.3 | 12.0 | 11.5 | 9.2 | 10.0 |

Note: For Australia, from 1996 to 2001, data have been revised to include payroll taxes and so produce a consistent series. Data for earlier years are not available on the same basis.

1. As from 1990 on, data on wages have been revised to include only production workers.
2. A submission for 2004 was not received from this country and consequently the tax/benefit structure for this country has been updated
using external sources. Given the potential for error, the reader should use caution in interpreting the results for this country.

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Taxing Wages provides unique information on the taxes paid on wages in OECD countries. It covers personal income taxes and social security contributions paid by employees; social security contributions and payroll taxes paid by employers and cash benefits paid to in-work families. The purpose is to illustrate how these taxes and benefits are calculated in each member country and to examine how they impact on household incomes. The results also enable quantitative cross-country comparisons of labour cost levels and the overall tax and benefit position of single persons and families on different levels of earnings.

The publication shows this information for eight household types which vary by income level and household composition and the results reported include the marginal and average tax burdens for one and two earner families and the total labour costs of employers. These data are widely used in academic research and in the preparation and evaluation of social and economic policy making.
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## 2011


[^0]:    1. Standard reliefs generally available to all taxpayers (work-related standard reliefs are excluded). These may be higher for taxpayers with a spouse or dependent children. Additional reliefs may further raise the income threshold at which a single taxpayer becomes subject to central tax.
    2. When the relief varies with income, the amount shown refers to the relief available to a taxpayer with one unit of earnings. For comparability with zero-rate brackets and basic allowances, the amounts shown for basic tax credits refer to the value of the tax credit divided by the bottom central statutory rate, as a percentage of the average wage. For the Czech Republic the value is also adjusted to reflect the inclusion of employer SSC in the tax base.
    3. The average wage refers to annual average gross earnings for a single worker as shown in Table II. 10 of the Taxing Wages report.
    4. Applies to the basic income tax but not to the Universal Social Contribution or the Contribution to the Reimbursement of Social Debt.
    5. Although no standard relief is generally available to all taxpayers, a wastable employment-based lump-sum tax credit is provided.
    6. Assumes no deductions from gross income are claimed in the calculation of total income.
    7. Although no standard relief is generally available to all taxpayers, a non-wastable employment-based lump-sum tax credit is provided.
    8. Refers to the portion of the general tax credit that is corresponds to PIT (rather than SSC).
    (t) Amount is tapered with income.
    (i) Amount increases with income (up to a limit).

    Sources: Tax Database, Table I. 1 (www.oecd.org/ctp/taxdatabase); OECD Calculations.

[^1]:    1. Income threshold ignoring sub-central taxes.
    2. Income threshold ignoring central taxes.
    3. Income threshold where the combined central and sub-central liability first becomes positive. Source: OECD calculations, Taxing Wages model.
[^2]:    * The marginal tax wedges in the graphs are calculated in a slightly different manner than the marginal tax rates that are included in the rest of the Taxing Wages publication. In Taxing Wages, marginal rates are usually calculated by increasing gross earnings by one currency unit (except for the spouse in the one-earner married couple whose earnings increase by $1 / 3$ of the average wage). However, the " +1 currency unit" approach requires the calculation of marginal rates for every single currency unit within the income range included in the graphs. It otherwise would not be correct to draw a line through the different data points because the data for the income levels in between the different points would be missing. In order to reduce the required number of calculations, the marginal rates that are shown in the graphs are calculated by increasing gross earnings by 1 percentage point - each line in the graph therefore consists of 200 data points - instead of 1 currency unit.

[^3]:    1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
[^4]:    1. The 2011 average earnings figure for Greece was not available at the final compilation stage.
[^5]:    * The payments that relate to the 2011 tax year are payable between July 2012 and June 2013. The amounts shown in this Report assume indexation of $2.3 \%$ for the 2011 tax year (and 2012-13 benefit year); the actual indexation parameter was announced in December 2011.

[^6]:    * Enrollement in the private health system during 2010 amounted to $16.5 \%$ of all beneficiaries.

[^7]:    * Average cost in 2011 was $2.3 \%$ of income.
    ** Since July 2011.

[^8]:    * In the Revenue Statistics, this payment is not reported as a social security contribution, but as a separate type of personal income tax. For presentational reasons it is included here as a social security contribution.

[^9]:    Key to range of equation: B calculated separately for both principal earner and spouse; P calculated for principal only (value taken as 0 for spouse calculation); J calculated once only on a joint basis.

[^10]:    * Income tax calculations in this report for 2011 are based on rules for the taxation of 2010 income and projected gross earnings for 2011. The timing difference in relation to the other OECD countries stems from the specificity of the French tax system, which does not collect taxes on income received in 2010 (withholding tax) but taxes the 2010 income reported by French taxpayers in March 2011 (reporting system). Insofar as tax legislation covering 2011 income is not known until a year later (early 2012), this report cannot apply to 2011 income the rules that will be applicable thereto. In this version, after-tax income nonetheless remains very close economically for comparisons with that of other OECD countries.

[^11]:    * This is the 2011 tax schedule which is assumed to apply to 2011 estimated income in the calculations of this report.

[^12]:    * The definition of average worker in Iceland includes workers in five categories. See Section 5.1.

[^13]:    * The local tax rate and the central government income tax rate were changed in the FY 2006 tax reform. Also a new local income tax credit regime was introduced in order to alleviate the tax burden increase arising from the changes in the tax rates and from the difference between the personal reliefs (Basic Allowance, Allowance for Spouse, Allowance for Dependents, Special Allowance for dependents, etc.) for national income tax purposes and for inhabitant tax purposes.

[^14]:    * The calculations for Korea assume that the husband is the principal and that the wife is the spouse.

[^15]:    Key to range of equation: B calculated separately for both principal earner and spouse; $P$ calculated for principal only (value taken as 0 for spouse calculation); S calculated for spouse only; J calculated once only on a joint basis.

[^16]:    * (Monthly allowance: EUR $439.39=0.25^{*}$ social minimum salary/12). The social minimum salary in 2011 is equal to EUR 21 090.72.

[^17]:    * There are three minimum wage rates established in Mexico depending upon geographical location (in Zone A, the minimum wage is equal to MXN 59.82 on a daily basis; in Zone B, it is MXN 58.13; and in Zone C, it is MXN 56.70). For the purposes of this Report, the calculations are either based on the minimum wage that applies within the Federal District of Mexico City (Zone A) or a representative value for the country as a whole (the average minimum wage is equal to MXN 58.06). The latter is used in the evaluation of the holiday bonus and the end-of-year bonus.

[^18]:    * Since 2010, this exemption is applicable only if in the immediate previous five years the taxpayer has not sold any other house for which he/she obtained this exemption.

[^19]:    * The income tax schedule and the employment subsidy credit table are updated every time the accumulated inflation reaches 10 per cent.

[^20]:    * The amount of the work injury fee depends on the risk level in which the company is classified. The Mexican Institute of Social Security provided a weighted average rate that considers the economic activities from C to K of the International Standard Classification.

[^21]:    * The Dutch labour market is characterised by a substantial share of part-time employees. As explained in the methodological section of this volume, the average wage measure used in the tax burden calculations refer to full-time employees only. If the wages of part-timers were taken into account, the average wage would be substantially lower.

[^22]:    * However, a widowed spouse is entitled to apply the join income taxation.
    ${ }^{* *}$ It concerns a child of 18 years old or younger or a child up to 25 years old provided they are students or a disabled child irrespecitve of their age.

[^23]:    * This relief is distinct from an allowance for donations deducted from income.

[^24]:    * From May 2011, 2.3 per cent of gross earnings (which is 11.78 per cent of old age contribution paid both by employee and employer). This percentage will increase in future years.
    ** The contribution ceiling of pension and disability insurance funds for a given calendar year may not exceed thirty times the amount of the projected average monthly remuneration in the national economy for that year, as set forth in the Budgetary Act.

[^25]:    * The corresponding amount equals EUR 4104.00 ( $72 \%$ x 12 x EUR 475.00).

[^26]:    * The amount of credit received is calculated by dividing separately each element of the credit by the number of days in the tax year and rounding up to the nearest penny to give a daily rate. These daily rates are then multiplied by the number of days in the relevant period (for the purposes of this Report, the tax year) and added together.

[^27]:    1. Refers to earnings data for 2010.
