# Taxing Wages 

 2008-2009SPECIAL FEATURE: NON-TAX COMPULSORY PAYMENTS AS AN ADDITIONAL BURDEN ON LABOUR INCOME

2009

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2009

## ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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[^1]
## Foreword

This annual publication provides details of taxes paid on wages in all thirty member countries of the OECD.* The information contained in the Report covers the personal income tax and social security contributions paid by employees and their employers and cash benefits received by families. The objective of the Report is to illustrate how personal income taxes and social security contributions 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 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) and social security contributions. 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 (2009). In addition, the Report shows definitive data on the tax/benefit position of employees for the year 2008. It is important to note that, starting from the Report's edition in 2005, the definition of average worker has been broadened from average manual production worker (ISIC Sector D) to average worker (ISIC Sectors C to K) 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 2009. Part I of the Report (International Comparisons) reviews the main results for 2009 and 2008. Part I. 1 reviews the main results for 2009, which are summarised in comparative tables and figures included at the end of that section. Part I. 2 presents a graphical exposition of the estimated tax burden on labour income in 2009 for gross wage earnings between 50 per cent and 250 per cent of the average wage. Part I. 3 reviews the main results for 2008, which are summarized in the comparative tables at the end of that section. Part II of the Report focuses on the historical trends in the tax burden for the period 2000-2009. 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.

[^2]
## This book has...

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## Table of Contents

Overview ..... 11

1. Introduction ..... 11
2. Review of results for 2009 ..... 13
Special Feature: Non-tax Compulsory Payments as an Additional Burden on Labour Income ..... 25
3. Introduction ..... 26
4. Tax and non-tax compulsory payment definitions ..... 26
5. Why calculate compulsory payment indicators? ..... 29
6. Compulsory payment indicators ..... 29
7. Non-tax compulsory payments in OECD countries ..... 30
8. Empirical findings ..... 36
Notes ..... 48
Part I
INTERNATIONAL COMPARISONS
Tax Burdens, 2009 Estimates ..... 52
I.1. Income tax plus employee and employer contributions less cash benefits, (as \% of labour costs), 2009
Table. By family-type and wage level ..... 57
Figure. By family type ..... 58
I.2. Income tax plus employee contributions, (as \% of gross wage earnings), 2009
Table. By family-type and wage level ..... 59
Figure. By family-type ..... 60
I.3. Income tax plus employee contributions less cash benefits (as \% of gross wage earnings), 2009
Table. By family-type and wage level ..... 61
Figure. By family-type ..... 62
I.4. Income tax (as \% of gross wage earnings), 2009
Table. By family-type and wage level ..... 63
Figure. By family-type ..... 64
I.5. Employee contributions (as \% of gross wage earnings), 2009
Table. By family-type and wage level ..... 65
Figure. By family-type ..... 66
I.6. Marginal rate of income tax plus employee and employer contributions less cash benefits (as \% of labour costs), 2009
Table. By family-type and wage level ..... 67
Figure. By family-type ..... 68 ..... 68
I.7. Marginal rate of income tax plus employee contributions less cash benefits (as \% of gross wage earnings), 2009
Table. By family-type and wage level ..... 69
Figure. By family-type ..... 70
I.8. Increase in net income after $1 \%$ increase in gross wage (\%), 2009 Table. By family-type and wage level ..... 71
I.9. Increase in net income after 1\% increase in labour costs (\%), 2009 Table. By family-type and wage level ..... 72
I.10. Annual gross wage and net income (in US dollars using PPP), 2009 Table. By family-type and wage level ..... 73
I.11. Annual labour costs and net income (in US dollars using PPP), 2009
Table. By family-type and wage level ..... 75
Graphical Exposition of the 2009 Estimated Tax Burden ..... 77
Tax Burdens, 2008 Definitive Results ..... 110
I.12. Income tax plus employee and employer contributions, less cash benefits, by family-type and wage level (as \% of labour costs), 2008 ..... 113
I.13. Income tax plus employee contributions, by family-type and wage level (as \% of gross wage earnings), 2008 ..... 114
I.14. Income tax plus employee contributions less cash benefits, by family-type and wage level (as \% of gross wage earnings), 2008 ..... 115
I.15. Income tax, by family-type and wage level (as \% of gross wage earnings), 2008 ..... 116
I.16. Employee contributions, by family-type and wage level (as \% of gross wage earnings), 2008 ..... 117
I.17. Marginal rate of income tax plus employee and employer contributions less cash benefits, by family-type and wage level (as \% of labour costs), 2008 ..... 118
I.18. Marginal rate of income tax plus employee contributions less cash benefits, by family-type and wage level (as \% of gross wage earnings), 2008 ..... 119
I.19. Increase in net income after 1\% in gross wage, by family-type and wage level (\%), 2008. ..... 120
I.20. Increase in net income after $1 \%$ increase in labour costs, by family-type and wage level (\%), 2008. ..... 121
I.21. Annual gross wage and net income, by family-type and wage level (in US dollars using PPP), 2008 ..... 122
I.22. Annual labour costs and net income, by family-type and wage level (in US dollars using PPP), 2008 ..... 124

## Part II <br> TAX BURDEN TRENDS 2000-2009

Historical trends ..... 128
Important trends ..... 128
Tax wedge ..... 128
Average income tax rate ..... 129
Net personal average tax rate ..... 130
Progressivity ..... 131
Families ..... 131
II.1a. Single persons without children at $67 \%$ of average earnings. Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 132
II.1b. Single persons without children at $67 \%$ of average earnings. Income Tax as a \% of gross wage earnings ..... 133
II.1c. Single persons without children at $67 \%$ of average earnings. Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 134
II.2a. Single persons without children at $100 \%$ of average earnings. Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 135
II.2b. Single persons without children at $100 \%$ of average earnings. Income tax as a \% of gross wage earnings ..... 136
II.2c. Single persons without children at $100 \%$ of average earnings. Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 137
II.3a. Single persons without children at $167 \%$ of average earnings. Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 138
II.3b. Single persons without children at $167 \%$ of average earnings. Income tax as a \% of gross wage earnings ..... 139
II.3c. Single persons without children at $167 \%$ of average earnings. Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 140
II.4a. Single parent with two children at $67 \%$ of average earnings. Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 141
II.4b. Single parent with two children at $67 \%$ of average earnings. Income tax as a \% of gross wage earnings ..... 142
II.4c. Single parent with two children at $67 \%$ of average earnings. Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 143
II.5a. One-earner married couple with two children at $100 \%$ of average earnings Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 144
II.5b. One-earner married couple with two children at $100 \%$ of average earnings. Income tax as a \% of gross wage earnings ..... 145
II.5c. One-earner married couple with two children at $100 \%$ of average earnings. Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 146
II.6a. Two-earner married couple with two children, one at $100 \%$ of average earnings and the other at $33 \%$.
Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 147
II.6b. Two-earner married couple with two children, one at $100 \%$ of average earnings and the other at $33 \%$.
Income tax as a \% of gross wage earnings ..... 148
II.6c. Two-earner married couple with two children, one at $100 \%$ of average earnings and the other at $33 \%$.
Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 149
II.7a. Two-earner married couple with two children, one at $100 \%$ of average earnings and the other at $67 \%$.
Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 150
II.7b. Two-earner married couple with two children, one at $100 \%$ of average earnings and the other at $67 \%$.
Income tax as a \% of gross wage earnings ..... 151
II.7c. Two-earner married couple with two children, one at $100 \%$ of average earnings and the other at 67\%.
Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 152
II.8a. Two-earner married couple with no children, one at $100 \%$ of average earnings and the other at $33 \%$.
Income tax plus employee and employer contributions less cash benefits as a \% of labour costs ..... 153
II.8b. Two-earner married couple with no children, one at $100 \%$ of average earnings and the other at $33 \%$.
Income tax as a \% of gross wage earnings ..... 154
II.8c. Two-earner married couple with no children, one at $100 \%$ of average earnings and the other at $33 \%$.
Income tax plus employee contributions less cash benefits as a \% of gross wage earnings ..... 155
II.9. Annual average gross wage earnings, single persons without children, 2000-2009 (US Dollars using PPP) ..... 156
II.10. Annual average gross wage earnings, single persons without children, 2000-2009 (national currency) ..... 157

Part III<br>COUNTRY DETAILS, 2009

Australia ..... 161
Austria ..... 175
Belgium ..... 187
Canada ..... 199
Czech ..... 213
Danemark ..... 221
Finland ..... 231
France ..... 239
Germany ..... 251
Greece ..... 263
Hungary ..... 275
Iceland ..... 285
Ireland ..... 295
Italy ..... 307
Japan ..... 319
Korea ..... 331
Luxembourg ..... 341
Mexico ..... 351
Netherlands ..... 361
New Zealand ..... 373
Norway ..... 381
Poland ..... 391
Portugal ..... 399
Slovak Republic ..... 411
Spain ..... 423
Sweden ..... 433
Switzerland ..... 443
Turkey ..... 455
United Kingdom ..... 463
United States ..... 471
Part IV
METHODOLOGY AND LIMITATIONS
Methodology ..... 482

1. Introduction ..... 482
2. Calculation of gross wage earnings ..... 482
3. Estimating gross wage earnings in 2009 ..... 486
4. Coverage of taxes and benefits ..... 488
5. Taxpayer characteristics ..... 489
6. Calculation of personal income taxes ..... 490
7. State and local income taxes ..... 494
8. Social security contributions ..... 494
9. Payroll taxes ..... 496
10. Church tax ..... 496
11. Family cash benefits from general government ..... 497
12. Payable tax credits ..... 497
13. The calculation of marginal tax rates ..... 498
Limitations ..... 499
14. General limitations ..... 499
15. Some specific limitations on the income tax calculation ..... 500
16. Limitations to time-series comparisons ..... 500
A Note on the Tax Equations ..... 502
Annex A. Overall Tax Levels and Tax Structures in OECD member Countries, 1990-2005 ..... 506
Annex B. Source of Earnings Data ..... 508
Annex C. Exchange Rates and Purchasing Power Parities of National Currencies, 2009 ..... 509
Annex D. Historical Series under the Old Definition of Average Worker ..... 510

## Overview

This 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 families, 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 member countries. The methodology followed in this Report is set out briefly in Section 1 and described in more detail in Part IV of this Report.

The present edition provides estimates of tax burdens and of the tax "wedge" between labour costs and net take-home pay for 2009, summarised in Section 2 below. The Report also presents more detailed results for 2009, definitive results for 2008 and discusses the changes between 2008 and 2009 in Part I. Part II of the Report reviews historical changes in tax burdens from 2000.

## 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 fraction of the average gross wage earnings of adult, full-time both manual and non-manual workers covering 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) of each OECD economy, also referred to as the average wage. Further details are provided 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, as well as all other kinds of taxes - e.g. corporate income tax, net wealth tax and consumption taxes - are not taken into account

[^3]in this Report. The benefits included are those paid by general government as cash transfers, usually in respect of dependent children.

The editions of this Report prior to the edition 2004-2005 have been 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) wage. 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 includes historical figures using the new definition for the average worker since 2000. For Turkey, the gross wage earnings of the average worker under the new definition (AW wage) were not available and therefore, the latest figures under the old definition (APW wage) were used.

For most OECD countries, the tax year matches up with the calendar year. However Australia, New Zealand and the United Kingdom have tax years that do not start on 1 January. The editions of this Report prior to the edition 2004-2005 have applied a "forward looking" approach. This implies that, for example, the tax rates reported for 2005 have been those for the fiscal year 2005-2006. In the case of New Zealand and the United Kingdom this forward looking approach continues to be appropriate as the tax year starts in April. However, the tax year in Australia starts in July and it has been decided to take a "backward looking" approach in order to obtain more reliable results. Thus, for Australia the year 2009 has been defined to mean its fiscal year 2008-2009, and all other years have been treated in the same manner.

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. To determine a measure of total labour costs, employer social security contributions and - in some countries - payroll taxes are added to gross wage earnings of employees. Of course, it should be recognised that this measure may not reflect the true labour costs faced by employers, for instance because employers may also have to make non-tax compulsory payments (see the Special Feature for more information). Average tax wedges show that part of total labour costs which is taken in tax and social security contributions net of cash benefits. Marginal tax wedges show the part of an increase of total labour costs that is paid in these levies.

In addition, attention is paid to the personal average tax rate, which is the term used when personal income tax and/or employee social security contributions are expressed as a percentage of gross wage earnings. 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.

Thus, Taxing Wages seeks to determine the combined effect of personal income taxes, social security contributions (including payroll taxes) and family cash benefits on the net incomes of various illustrative family-types and on the labour costs faced by employers. Information is provided on employees at comparable levels of income. Key results for 2009 are highlighted in the following section. Part I contains detailed results for both 2009 and 2008.

## 2. Review of results for 2009

### 2.1. Tax wedge

In 2009, 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 (see column 1 in Table 0.1). The tax wedge exceeded 50 per cent in Belgium, Hungary and Germany and was lower than 20 per cent in Korea, New Zealand and Mexico.

The increase between 2008 and 2009 of the tax wedge of an average worker (column 2) varied between 1.54 percentage point in Ireland and -2.66 percentage points in New Zealand. Turkey ( -2.29 percentage points), Sweden ( -1.65 percentage points), the Czech Republic ( -1.55 percentage points), Finland ( -1.39 percentage points), Denmark ( -1.28 percentage points), the Slovak Republic ( -1.17 percentage points) and Luxembourg ( -1.16 percentage points) were the only other OECD member countries in which the tax wedge fell by 1 percentage point or more. The tax wedge has increased in six OECD member countries and fell in twenty-four member countries.

To explain these changes it is interesting to look at the constituent components of the tax wedge shown in Table 0.1: the income tax (see column 3), the employee social security contributions (see column 4) and the employer social security contributions (see column 5).

The reduction in the tax wedge is entirely or almost entirely driven by the reduction in income taxes in Belgium, Germany, Austria, Denmark, the Slovak Republic, Poland, Luxembourg, New Zealand and Canada. In the Netherlands, the increase in income taxes is more than offset by the reduction in especially employee SSC. Both income taxes and employer SSC decreased in Sweden and Finland and in the Czech Republic both employee and employer SSC decreased. In Hungary and Turkey, the reduction in the tax wedge is primarily due to a reduction in employer SSC.

The increase in tax wedges has been minor in all countries except in Ireland where the increase is the result of an increase in employee SSC and a minor increase in income taxes. In Iceland, the increase in employer SSC is almost entirely offset by a decrease in income taxes. In the United States, the withdrawal of the economic stimulus cash payments has more than offset the decrease in income taxes, resulting in a small increase in the tax wedge.

Table 0.2 and Figure 0.1 show the constituent components of the tax wedge for 2009 as percentage of labour costs for a single individual without children at the income level of the average worker. The labour costs in Table 0.2 are expressed in terms of dollars with equivalent purchasing power. The portion of labour costs paid in personal income tax is 3.5 per cent in Mexico and 3.8 per cent in Korea; whereas it exceeds 29 per cent in Denmark (29.1 per cent). The portion representing employee social security contributions also varies widely, ranging from zero per cent in Australia and New Zealand to 15.5 per cent in Poland and 17.3 per cent in Germany. Employers pay 29.7 per cent of total labour costs in social security contributions (including payroll taxes where applicable) in France, 25.4 per cent in the Czech Republic and 24.6 per cent in Hungary. In contrast, employers in New Zealand and Denmark are not subject to these levies.

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. The total of employee and employer social security contributions exceeds one-third of total labour costs in six OECD countries: Belgium, the Czech Republic, France, Germany, Greece and Hungary.

Table 0.1. Comparison of total tax wedge
(as percentage of labour costs) ${ }^{1}$

| Country | Total tax wedge 2009 | Annual change 2009/08 (in percentage points) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Tax wedge | Income tax | Employee SSC | Employer SSC |
|  | (1) | (2) | (3) | (4) | (5) |
| Belgium | 55.2 | -0.54 | -0.50 | 0.00 | -0.04 |
| Hungary | 53.4 | -0.72 | 0.11 | 0.17 | -1.00 |
| Germany | 50.9 | -0.57 | -0.52 | -0.03 | -0.03 |
| France | 49.2 | -0.05 | -0.05 | 0.00 | 0.00 |
| Austria | 47.9 | -0.91 | -1.05 | -0.02 | 0.10 |
| Italy | 46.5 | -0.03 | -0.03 | 0.00 | 0.00 |
| Sweden | 43.2 | -1.65 | -1.11 | 0.04 | -0.57 |
| Finland | 42.4 | -1.39 | -0.88 | 0.14 | -0.66 |
| Czech Republic | 41.9 | -1.55 | 0.05 | -1.05 | -0.55 |
| Greece ${ }^{2}$ | 41.5 | -0.06 | -0.06 | 0.00 | 0.00 |
| Denmark | 39.4 | -1.28 | -1.25 | -0.03 | 0.00 |
| Spain | 38.2 | 0.19 | 0.33 | 0.01 | -0.15 |
| Netherlands | 38.0 | -0.96 | 1.18 | -1.86 | -0.29 |
| Slovak Republic | 37.6 | -1.17 | -1.17 | 0.00 | 0.00 |
| Turkey | 37.5 | -2.29 | -0.01 | 0.40 | -2.68 |
| Norway | 37.4 | -0.12 | -0.12 | 0.00 | 0.00 |
| Portugal | 37.2 | -0.07 | -0.07 | 0.00 | 0.00 |
| Poland | 34.0 | -0.52 | -0.52 | 0.00 | 0.00 |
| Luxembourg | 34.0 | -1.16 | -1.59 | 0.08 | 0.35 |
| United Kingdom | 32.5 | -0.34 | -0.21 | -0.06 | -0.07 |
| Canada | 30.8 | -0.50 | -0.55 | 0.01 | 0.04 |
| United States | 29.4 | 0.22 | -1.15 | 0.00 | 0.02 |
| Switzerland | 29.3 | 0.09 | 0.09 | 0.00 | 0.00 |
| Japan | 29.2 | -0.26 | -0.12 | 0.00 | -0.14 |
| Ireland | 28.6 | 1.54 | 0.35 | 1.18 | 0.00 |
| Iceland | 28.3 | 0.03 | -0.72 | 0.00 | 0.74 |
| Australia | 26.7 | -0.21 | -0.57 | 0.00 | 0.36 |
| Korea | 19.7 | -0.27 | -0.30 | 0.02 | 0.01 |
| New Zealand | 18.4 | -2.66 | -2.66 | 0.00 | 0.00 |
| Mexico | 15.3 | 0.21 | 0.17 | 0.00 | 0.04 |

1. Figures for a single individual without children at the income level of the average worker.
2. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
Source: Country submissions.


### 2.2. Personal average tax rates

Table 0.3 summarises personal average tax rates - defined as income tax plus employee social security contributions as a percentage of gross wage earnings - in 2009.* At the average earnings level, single workers without children pay over 40 per cent of their annual wages in personal income tax and employee social security contributions in Germany and Belgium. In Spain, Korea, New Zealand and Mexico, the personal average tax rate was below 20 per cent.

[^4]Table 0.2. Income tax plus employee and employer social security contributions
As \% of labour costs, $2009^{1}$

| Country ${ }^{2}$ | Total tax wedge ${ }^{3}$ | Income tax | Social security contributions |  | Labour costs ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Employee | Employer |  |
|  | (1) | (2) | (3) | (4) | (5) |
| Norway | 37.4 | 19.1 | 6.9 | 11.3 | 59439 |
| Luxembourg | 34.0 | 12.7 | 10.9 | 10.3 | 58358 |
| Germany | 50.9 | 17.3 | 17.3 | 16.3 | 57207 |
| Belgium | 55.2 | 21.1 | 10.7 | 23.3 | 56816 |
| Netherlands | 38.0 | 15.1 | 13.8 | 9.1 | 56487 |
| United Kingdom | 32.5 | 14.6 | 8.3 | 9.6 | 56442 |
| Austria | 44.7 | 12.1 | 14.8 | 17.8 | 54588 |
| Switzerland | 29.3 | 9.4 | 10.0 | 10.0 | 51437 |
| France | 49.2 | 9.9 | 9.6 | 29.7 | 51325 |
| Sweden | 43.2 | 13.9 | 5.3 | 23.9 | 50151 |
| Korea | 19.7 | 3.8 | 6.9 | 8.9 | 49262 |
| Finland | 42.4 | 18.6 | 5.1 | 18.7 | 48686 |
| Japan | 29.2 | 7.0 | 10.8 | 11.4 | 47789 |
| Ireland | 28.6 | 12.9 | 6.0 | 9.7 | 47026 |
| Australia | 26.7 | 20.7 | 0.0 | 6.0 | 46056 |
| Denmark | 39.4 | 29.1 | 10.3 | 0.0 | 44439 |
| United States | 29.4 | 13.4 | 7.0 | 9.0 | 43852 |
| Greece ${ }^{5}$ | 41.5 | 7.1 | 12.5 | 21.9 | 43533 |
| Spain | 38.2 | 10.3 | 4.9 | 23.0 | 41381 |
| Canada | 30.8 | 13.9 | 6.5 | 10.3 | 40772 |
| Italy | 46.5 | 15.0 | 7.2 | 24.3 | 40691 |
| Iceland | 28.3 | 22.3 | 0.2 | 5.8 | 33366 |
| Portugal | 37.2 | 9.1 | 8.9 | 19.2 | 30840 |
| New Zealand | 18.4 | 18.4 | 0.0 | 0.0 | 30125 |
| Czech Republic | 41.9 | 8.3 | 8.2 | 25.4 | 25542 |
| Hungary | 53.4 | 15.9 | 12.8 | 24.6 | 24267 |
| Turkey | 37.5 | 10.5 | 12.9 | 14.2 | 22220 |
| Poland | 34.0 | 5.6 | 15.5 | 12.9 | 20641 |
| Slovak Republic | 37.6 | 6.3 | 10.6 | 20.8 | 20480 |
| Mexico | 15.3 | 3.5 | 1.2 | 10.5 | 11359 |

1. Single individual without children at the income level of the average worker.
2. Countries ranked by decreasing labour costs.
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 AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
Source: Country submissions; OECD Economic Outlook 86 (December 2009).
StatLink ninist http://dx.doi.org/10.1787/832724381465
Clearly, 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 (see Annex I); 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 varies greatly between countries. Figure 0.2 provides a graphical representation of the personal average tax rate decomposed between income tax and employee social security contributions. Average workers in

A corrigendum has been issued for this page. See: http://www.oecd.org/dataoecd/25/12/45420708.pdf overview

Figure 0.1. Income tax plus employee and employer social security contributions
As \% of labour costs, $2009^{1}$


1. Single individual without children at the income level of the average worker.

StatLink ..insta http://dx.doi.org/10.1787/828837434752

Table 0.3. Income tax plus employee social security contributions ${ }^{1}$
As \% of gross wage earnings, 2009

| Country ${ }^{2}$ | Total payment ${ }^{3}$ | Income tax | Social security contributions | Gross wage earnings ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Norway | 29.3 | 21.5 | 7.8 | 52694 |
| Luxembourg | 26.4 | 14.2 | 12.2 | 52321 |
| Netherlands | 31.8 | 16.6 | 15.2 | 51336 |
| United Kingdom | 25.3 | 16.2 | 9.1 | 51018 |
| Germany | 41.3 | 20.7 | 20.6 | 47882 |
| Switzerland | 21.5 | 10.5 | 11.1 | 46319 |
| Austria | 32.7 | 14.7 | 18.1 | 44881 |
| Korea | 11.8 | 4.2 | 7.6 | 44860 |
| Denmark | 39.4 | 29.1 | 10.3 | 44439 |
| Belgium | 41.5 | 27.5 | 14.0 | 43557 |
| Australia | 22.0 | 22.0 | 0.0 | 43284 |
| Ireland | 20.9 | 14.2 | 6.7 | 42461 |
| Japan | 20.1 | 7.9 | 12.2 | 42327 |
| United States | 22.4 | 14.8 | 7.7 | 39923 |
| Finland | 29.2 | 22.9 | 6.3 | 39582 |
| Sweden | 25.3 | 18.3 | 7.0 | 38161 |
| Canada | 22.8 | 15.5 | 7.3 | 36556 |
| France | 27.7 | 14.0 | 13.7 | 36068 |
| Greece ${ }^{5}$ | 25.1 | 9.1 | 16.0 | 33994 |
| Spain | 19.7 | 13.3 | 6.4 | 31856 |
| Iceland | 23.9 | 23.7 | 0.2 | 31427 |
| Italy | 29.3 | 19.8 | 9.5 | 30808 |
| New Zealand | 18.4 | 18.4 | 0.0 | 30125 |
| Portugal | 22.3 | 11.3 | 11.0 | 24921 |
| Turkey | 27.2 | 12.2 | 15.0 | 19073 |
| Czech Republic | 22.2 | 11.2 | 11.0 | 19061 |
| Hungary | 38.2 | 21.2 | 17.0 | 18285 |
| Poland | 24.3 | 6.4 | 17.8 | 17983 |
| Slovak Republic | 21.3 | 7.9 | 13.4 | 16228 |
| Mexico | 5.3 | 4.0 | 1.4 | 10166 |

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 AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
Source: Country submissions; OECD Economic Outlook 86 (December 2009).
StatLink .inist http://dx.doi.org/10.1787/832771118113
Australia and New Zealand pay only income tax; the amount of employee SSC paid in Iceland is very small. In other countries, as for instance in Poland, average workers pay mainly employee social security contributions.

### 2.3. Family tax rates

In 2009, the tax wedge between total labour costs to the employer and the corresponding net take-home pay for a one-earner married couple with two children, at average earnings levels, varied widely across OECD countries (see column 1 in Table 0.4). The size of the tax wedge is generally lower than the one observed for a single average

Figure 0.2. Percentage of gross wage earnings paid in income tax and employee social security contributions $2009{ }^{1,2}$


1. Countries ranked by decreasing tax burden
2. Single individuals without children at the income level of the average worker.

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Table 0.4. Comparison of total tax wedge by family type
As percentage of labour costs ${ }^{1}$

| Country ${ }^{2}$ | Family total tax wedge 2009 | Annual change 2009/08 (in percentage points) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Family tax wedge | Single tax wedge | Difference between single and family |
|  | (1) | (2) | (3) | (3)-(2) |
| Hungary | 43.7 | -0.3 | -0.7 | -0.4 |
| Greece ${ }^{3}$ | 41.7 | -0.1 | -0.1 | 0.0 |
| France | 41.7 | -0.3 | 0.0 | 0.3 |
| Belgium | 38.8 | -1.1 | -0.5 | 0.6 |
| Sweden | 37.5 | -1.6 | -1.6 | 0.0 |
| Finland | 37.0 | -1.3 | -1.4 | -0.1 |
| Austria | 36.6 | -1.9 | -0.9 | 1.0 |
| Turkey | 36.2 | -2.4 | -2.3 | 0.1 |
| Italy | 35.7 | -0.4 | 0.0 | 0.4 |
| Germany | 33.7 | -1.6 | -0.6 | 1.0 |
| Spain | 32.3 | 0.3 | 0.2 | -0.1 |
| Norway | 30.6 | 0.0 | -0.1 | -0.2 |
| Netherlands | 29.7 | -0.4 | -1.0 | -0.5 |
| Denmark | 28.8 | -0.2 | -1.3 | -1.0 |
| Poland | 28.4 | 0.0 | -0.5 | -0.5 |
| United Kingdom | 26.4 | -0.6 | -0.3 | 0.2 |
| Portugal | 26.3 | -0.4 | -0.1 | 0.4 |
| Japan | 23.7 | -0.3 | -0.3 | 0.1 |
| Slovak Republic | 22.7 | -2.6 | -1.2 | 1.4 |
| Czech Republic | 20.5 | -0.5 | -1.6 | -1.1 |
| Canada | 18.3 | -0.7 | -0.5 | 0.2 |
| Korea | 17.2 | -0.5 | -0.3 | 0.3 |
| Switzerland | 17.2 | 1.0 | 0.1 | -0.9 |
| Mexico | 15.3 | 0.2 | 0.2 | 0.0 |
| Australia | 14.1 | -0.8 | -0.2 | 0.6 |
| United States | 13.7 | -1.4 | 0.2 | 1.7 |
| Ireland | 11.7 | 2.0 | 1.5 | -0.4 |
| Luxembourg | 11.2 | -0.7 | -1.2 | -0.5 |
| Iceland | 8.6 | -1.3 | 0.0 | 1.3 |
| New Zealand | 0.6 | -2.5 | -2.7 | -0.1 |

1. Figures for single individuals without children at the income level of the average worker and for one-earner married couples with 2 children at the income level of the average worker.
2. Countries ranked by decreasing tax wedge.
3. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
Source: Country submissions; OECD Economic Outlook 86 (December 2009).
StatLink (inlst http://dx.doi.org/10.1787/832801360326
worker without children (see column 1 in Table 0.1), since many OECD countries provide a fiscal benefit to families with children relative to single individuals without 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 15 per cent of labour costs in Belgium, Germany, Iceland, Ireland, New Zealand and the United States and greater than 21 per cent of labour costs in the Czech Republic and Luxembourg. In contrast, families are slightly worse off in terms of tax burden in Greece, while the tax burden is the same in Mexico (see column 1 in Tables 0.1 and 0.4).

The increase between 2008 and 2009 of the tax wedge of an average one-earner married couple with two children (column 2 in Table 0.4 ) varied between +2.0 percentage points (Ireland) and -2.6 percentage points (Slovak Republic). New Zealand ( -2.5 percentage points), Turkey ( -2.4 percentage points), Austria ( -1.9 percentage points), Germany and Sweden ( -1.6 percentage points), the United States ( -1.4 percentage points), Iceland and Finland ( -1.3 percentage points) and Belgium ( -1.1 percentage points) were the other OECD member countries in which the changes in the tax wedge did not fall in the range of plus or minus one percentage point. The tax wedge for a one-earner married couple with two children has decreased in twenty-four OECD member countries and increased in five countries.

A comparison of the changes in tax wedges between 2008 and 2009 between oneearner married couples with two children and single persons without children, at the average wage level, is shown in column 4 in Table 0.4. The fiscal preference for families increased in fifteen OECD member countries: Australia, Austria, Belgium, Canada, France, Germany, Iceland, Italy, Japan, Korea, Portugal, Slovak Republic, Turkey, the United Kingdom and the United States. Additionally, the effects of changes in the tax system on the tax wedge were independent of the family type in Greece, Sweden and Mexico.

These tax wedge figures include employer social security contributions, which are independent of the family type. Therefore, the same pattern is seen for the net personal average tax rate across family types - burden of income tax plus employee social security contributions less cash benefits. Figure 0.3 provides the net personal average tax rate for single individuals at 100 per cent of the earnings of an average worker and for a one-earner married couple with two children at the same earnings level. The savings realised by a oneearner married couple are equal to or greater than 20 per cent of earnings in Luxembourg, Iceland, Belgium, Germany and the Czech Republic. In contrast, the burden is the same in Mexico and it is higher in Greece. Employees in Greece receive a taxable cash transfer dependent on their gross basic salary from their employer if they are married and also when they have children. These employees will therefore have to pay more taxes, which is the main reason why the net personal average tax rate for one-earner married couples in Greece exceeds the net personal average tax rate for single individuals at 100 per cent of average earnings (more details on these taxable cash transfers can be found in the country report for Greece in Part III of this report). It is also interesting to note that when cash benefits are taken into account, one-earner married couples face a negative burden in the Czech Republic 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 2008 (column 1) and 2009 (column 2). The gross average wage (AW) earnings for 2009 are estimated by the OECD Secretariat on the basis of the last final average wage values provided by OECD member countries, using the change in the compensation per employee in the private sector figures that are included in the OECD Economic Outlook 86 Database. 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 -2.7 per cent (Ireland and Japan) and +5.9 per cent (Hungary). To a large extent, this significant spread reflects the different inflation levels of individual OECD countries - see column 4 of Table 0.5. The annual change of real wage levels (before personal income tax and employee
social security contributions) is found to be in the -1 to +3 per cent range for most countries; see column 5 of Table 0.5 . Portugal ( +4.4 per cent), Greece ( +3.8 per cent), Spain (+ 3.5 per cent), Australia ( +3.3 per cent), Italy ( -1.1 per cent), Germany ( -1.4 per cent), Japan ( -1.5 per cent), the United Kingdom ( -1.6 per cent), Mexico ( -2.3 per cent), Turkey ( -4.0 per cent) and Iceland ( -7.5 per cent) show a change in real wages before tax outside this range.

Compared to last year (see Taxing Wages 2007-2008), we observe an increase in the number of countries that face a strong reduction in the real wage level. This outcome is a result of the financial and economic crisis. Note however that the economic crisis might also have had an increasing effect on the average wage level as especially low-wage employees have exited the workforce or accepted part-time jobs, which are not included in the AW earnings in most countries (see Table IV.3).

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).

Note also that in the case of Greece, the AW overestimates the actual gross earnings because the AW is calculated on the basis of earnings figures gross of the benefits linked to marriage and children. Married taxpayers may earn up to $10 \%$ of additional income; parents may earn up to $5 \%$ of additional income for each child. These benefits cannot be separated from other gross earnings in Greece and are therefore taken into account when calculating the AW. This implies that all tax burdens for all family types might be overestimated. Note that Taxing Wages models the taxable wage increases linked to marriage and children separately, even though these increases are already considered in calculating the AW value, in order to guarantee the comparability of tax burdens across family types in Greece.

Figure 0.3. Income tax plus employee contributions less cash benefits, by family type
As \% of gross wage earnings, 20091, 2


1. Countries ranked by decreasing rates for single taxpayer without children.
2. Corresponds to Table 4 , column 2 and 5.

Table 0.5. Comparison of wage levels

| Country | Gross wage in national currency |  | Annual change 2009/2008 (in percentage) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 | Gross wage | Inflation ${ }^{1}$ | Real wage before tax | Change <br> in personal average tax rate ${ }^{2}$ |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Australia | 60387 | 63408 | 5.0 | 1.6 | 3.3 | -0.5 |
| Austria | 38843 | 39856 | 2.6 | 0.3 | 2.3 | -1.3 |
| Belgium | 39727 | 39723 | 0.0 | -0.1 | 0.1 | -0.7 |
| Canada | 42950 | 43568 | 1.4 | 0.4 | 1.1 | -0.6 |
| Czech Republic | 274476 | 278717 | 1.5 | 1.1 | 0.4 | 0.0 |
| Denmark | 359300 | 375153 | 4.4 | 1.3 | 3.0 | -1.3 |
| Finland | 37273 | 38219 | 2.5 | 1.7 | 0.8 | -1.3 |
| France | 32663 | 33065 | 1.2 | 0.1 | 1.2 | -0.1 |
| Germany | 41400 | 40929 | -1.1 | 0.2 | -1.4 | -0.6 |
| Greece ${ }^{3}$ | 23934 | 25145 | 5.1 | 1.2 | 3.8 | -0.1 |
| Hungary | 2338752 | 2476768 | 5.9 | 4.5 | 1.4 | -0.1 |
| Iceland | 4068000 | 4209404 | 3.5 | 11.9 | -7.5 | -0.6 |
| Ireland | 40862 | 39772 | -2.7 | -1.7 | -1.0 | 0.4 |
| Italy | 26304 | 26181 | -0.5 | 0.7 | -1.1 | 0.0 |
| Japan | 5000499 | 4866905 | -2.7 | -1.2 | -1.5 | -0.1 |
| Korea | 33467499 | 34696446 | 3.7 | 2.7 | 0.9 | -0.3 |
| Luxembourg | 48372 | 48445 | 0.2 | -0.1 | 0.3 | -1.7 |
| Mexico | 81133 | 83545 | 3.0 | 5.4 | -2.3 | 0.2 |
| Netherlands | 43514 | 44611 | 2.5 | 0.9 | 1.6 | 1.3 |
| New Zealand | 46676 | 47703 | 2.2 | 2.3 | -0.1 | -2.7 |
| Norway | 439991 | 457822 | 4.1 | 2.3 | 1.7 | -0.1 |
| Poland | 33711 | 35468 | 5.2 | 3.5 | 1.6 | -0.6 |
| Portugal | 16093 | 16657 | 3.5 | -0.9 | 4.4 | -0.1 |
| Slovak Republic | 8788 | 8947 | 1.8 | 1.0 | 0.8 | -1.5 |
| Spain | 23218 | 23943 | 3.1 | -0.4 | 3.5 | 0.4 |
| Sweden | 352470 | 356725 | 1.2 | -0.3 | 1.5 | -1.6 |
| Switzerland | 74495 | 75376 | 1.2 | -0.6 | 1.8 | 0.1 |
| Turkey | 18833 | 19209 | 2.0 | 6.3 | -4.0 | -0.4 |
| United Kingdom | 33592 | 33745 | 0.5 | 2.1 | -1.6 | -0.2 |
| United States | 40256 | 39923 | -0.8 | -0.4 | -0.4 | -1.3 |

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 2009 and 2008.
3. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
Source: Country submissions; OECD Economic Outlook 86 (December 2009).
StatLink ..il|st http://dx.doi.org/10.1787/832816630378

# Special Feature: Non-tax Compulsory Payments as an Additional Burden on Labour income 

This Special Feature has been prepared by Bert Brys; it has benefited from comments by Maurice Nettley, Stéphane Buydens and Alastair Thomas. The modelling of the NTCPs in the Taxing Wages country calculation files was undertaken by Bert Brys and Alastair Thomas. This Special Feature also draws on input from Delegates to the Working Party No. 2 on Tax Policy Analysis and Tax Statistics of the Committee on Fiscal Affairs.

## 1. Introduction

It is compulsory for employers in 19 OECD member countries to make payments for their employees which do not qualify as taxes and social security contributions. Also employees might have to pay additional contributions - mainly social insurance contributions - that are not taxes; this is the case in 8 OECD member countries. These "nontax compulsory payments" (NTCPs) will either increase the employer's labour costs or reduce the employee's net take-home pay in a similar way to taxes. There are in total 21 OECD member countries where it is compulsory for employers and/or employees to make nontax compulsory payments in relation to the employee's labour activity.

Non-tax compulsory payments are not modelled in Taxing Wages simply because they are not defined as taxes. However, some OECD member countries indicated an interest in measures that show the combined impact of taxes and non-tax compulsory payments. In addition to the well-known "tax wedges", Working Party 2 of the OECD Committee of Fiscal Affairs therefore decided in 2009 to start calculating "compulsory payment wedges" which combine taxes, non-tax compulsory payments and benefits into overall "compulsory payment indicators". These new indicators will not be presented in the Taxing Wages Report (except for this Special Feature). Instead, the compulsory payment indicators will be included in the OECD online tax database www.oecd.org/ctp/taxdatabase as from the 2010 edition of the Taxing Wages Report onwards.

Section 2 of this Special Feature presents the main tax and non-tax compulsory payment definitions. Section 3 then discusses the reasons for calculating the compulsory payment indicators. Section 4 presents the compulsory payment indicators in more detail. Section 5 then provides an overview of the non-tax compulsory contributions which are levied on labour income in OECD member countries in 2009. Section 6 presents the empirical results; the analysis focuses on average and marginal compulsory payment wedges and rates as well as the change in total labour costs and net take-home pay as a result of NTCPs.

## 2. Tax and non-tax compulsory payment definitions

Taxing Wages models taxes that are levied on wage earnings and which are generally applicable to taxpayers within at least one of the family types that are considered in the publication. These family types are distinguished by income level, marital status and number of children. Benefits that are generally available to such families are also modelled.

## Taxes

The OECD defines taxes as compulsory unrequited payments to general government (OECD Revenue Statistics (2009)).

- Taxes are compulsory in the sense that government imposes an obligation on taxpayers to pay a particular amount (in cash). Government sets the rules that determine the tax base and the rates that are applied to this tax base;
- Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to the payments made by taxpayers. This means that there has to be a redistributive element - implying redistribution across households - in order for a payment to be considered a tax;
- Taxes are paid to general government, which is defined to include:
* the central administration and agencies whose operations are under its effective control;
* state and local governments and their administrations;
* social security funds/schemes;
* autonomous government entities.

Compulsory social security contributions paid to general government are also treated as taxes. Being compulsory to general government they clearly resemble taxes. They may, however, differ from other taxes in that the receipt of social security benefits depends, in most countries, upon appropriate contributions having been made, although the size of the benefits is not necessarily related to the amount of the contributions, which implies that social security contributions are unrequited payments.

## Non-tax compulsory payments

Non-tax compulsory payments (NTCPs) refer to the following compulsory payments made by employers or employees in connection with the employees' labour activity:

- Requited and unrequited compulsory payments to privately-managed funds, welfare agencies or social insurance schemes outside general government and to public enterprises.
The following bodies are considered to be outside general government:
* public enterprises, which are defined as "corporations, quasi-corporations, ${ }^{1}$ non-profit institutions or unincorporated businesses that are subject to control by government units, with control over the enterprise being defined as the ability to determine general enterprise policy by choosing appropriate directors, if necessary";
* non-government bodies;
* welfare agencies and social insurance funds/schemes outside general government;
* trade unions or trade associations (even where such levies are compulsory).

Compulsory payments to general government earmarked for bodies outside general government are also excluded if the government is simply acting in an agency capacity.
Compulsory contributions to social insurance schemes that are not institutions of general government, even though these schemes might have been imposed by government, private insurance companies, provident funds, ${ }^{2}$ pension funds, friendly societies or other private saving schemes are therefore not social security contributions/ taxes but NTCPs.

- Requited compulsory payments to general government made by employees or employers.

Payments are considered to be requited if the value of the benefits is (normally) in proportion to the payments (entitling individuals to receive the benefits) that are made. Compulsory payments to publicly-managed pension funds that entitle individuals to a pension that is an actuarially fair reflection of the contributions made are therefore NTCPs rather than taxes. However, this definition does not imply that requited payments have to accumulate at a market-based return.

Note that compulsory ${ }^{3}$ in the non-tax compulsory payment definition does not necessarily imply that government sets the rate that has to be paid. In the case of workrelated private insurance, for instance, government might oblige the employer to insure its employees against work-related accidents with a private insurance company. The premium/rate of this insurance, however, could be set by the private insurance company.

## Borderline issues regarding the definition of taxes and NTCPs

Although the dividing line between taxes and non-tax compulsory payments is clearly defined, in practice, however, it is not always straightforward to decide whether specific payments are taxes or NTCPs. For instance, compulsory pension savings that are controlled by general government and that accumulate on an individual account earning a market return or a rate that compensates for inflation would at first sight not be categorized as taxes. However, these payments might still be 'unrequited' and therefore classify as taxes instead of NTCPs (for example if these pension savings are not paid out if the taxpayer dies before (s)he reaches the pension age and the funds are then used to provide a minimum pension to all taxpayers that are insured).

The analysis in this Special Feature (see Table S.6) suggests there are currently no compulsory requited payments to general government levied on labour income in OECD countries. This means that all types of compulsory payments to general government to some extent have a redistributional element, implying they are taxes rather than NTCPs. Note however that this conclusion is also the result of the typically broad interpretation of the term "unrequited" in the tax definition.

Borderline issues not only arise because of the "unrequited" definition but complexity arises also with respect to the definition of "general government". Compulsory unrequited payments to funds that are largely controlled by general government, especially with respect to the most important characteristics of these payments, are typically classified as taxes and not as NTCPs, even though a strict interpretation of the "general government" definition would result in the opposite conclusion.

## Standard personal income tax reliefs

Standard tax reliefs are reliefs which are unrelated to actual expenditure 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 (see also Section 6 in Part IV Methodology and Limitations of the Taxing Wages Report). ${ }^{4}$ Tax reliefs allowed for compulsory social security contributions are also considered as standard reliefs since they apply to all wage earners. In this case, the amount of tax relief is related to actual social security contributions paid by the employee - thus in this respect this item deviates from the general definition of standard tax relief under which relief is unrelated to actual expenses incurred.

Contributions can be included as standard (personal income) tax reliefs in the Taxing Wages calculations whether or not they are taxes themselves. However, these tax reliefs do have to be generally available to taxpayers within at least one of the particular family types that are considered in the Report.

This implies that even though non-tax compulsory payments are not modelled in the tax equations that underlie the Taxing Wages results, these payments can be included as
amounts that reduce the personal income tax burden if they qualify as standard personal income tax reliefs. Compulsory pension contributions to privately-managed funds, for instance, might be deductible from taxable personal income and would then qualify as a standard tax relief in Taxing Wages. ${ }^{5}$

## 3. Why calculate compulsory payment indicators?

Taxing Wages does not model NTCPs levied on wage earnings because these payments are not taxes. There are however good reasons to construct "compulsory payment indicators" that combine the burden of taxes and NTCPs:

- One of the objectives of the OECD is to provide comparable data across OECD countries. Employee and employer NTCPs either increase the employer's total labour costs or decrease the employee's net-take home pay in a similar way to taxes. It therefore follows that taxes and NTCPs might be included in the same compulsory payment indicators.
- Employers' labour demand decisions will depend on total labour costs. Whether compulsory social security payments are paid to general government or to privatelymanaged social insurance funds, for instance, will often not be relevant. Also the employees' labour supply decisions might be independent of whether the social security/insurance contributions have to be paid to general government or to a privatelymanaged social insurance fund instead. This seems especially the case for compulsory unrequited payments to privately-managed health funds. ${ }^{6}$
- The inclusion of NTCPs and taxes in compulsory payment indicators might avoid discrete jumps in the tax burden which arise if contributions no longer have to be made to a public (private) fund but to a private (public) fund instead.
- These arguments in favour of compulsory payment indicators gain in importance if we expect to observe an increased shift of tax to NTCPs (or the other way around) in OECD member countries in the future. It is especially the shift of public pension savings towards pension savings through privately-managed funds that might be observed in the future as more and more countries implement (at least partially) a fully-funded pension system.
- On the other hand, however, some of the NTCPs, especially the contributions to privately-managed pension funds, are more likely to be requited than taxes. They might therefore have a different impact on taxpayers' behaviour than taxes. Of course, compulsory social security contributions differ in the extent to which the resulting benefit deviates from what is actuarially fair. However, it can be expected in general that privately-managed funds will provide a return that is more nearly actuarially fair. This argument then implies that taxes and NTCPs should not be combined in the same tax burden measure, as they may have different effects on behaviour. However, the separate calculation of tax burden indicators and compulsory payment indicators will make it possible for researchers to establish whether taxes and NTCPs do have different behavioural effects.


## 4. Compulsory payment indicators

This section introduces the "compulsory payment indicators" that are calculated in Section 6. The compulsory payment indicators include the taxes and the NTCPs that:

- have to be made by employees and employers as a result of the taxpayer's labour activity;
- that are generally applicable to taxpayers within at least one of the family types included in the Taxing Wages methodology; and
- for which a representative rate can be constructed, if necessary.

The following indicators will be calculated (the symbol " $\Delta$ " means "change in"):

## Average net personal compulsory payment rate $=$

$$
\frac{\text { income tax + employee SSC + employee NTCPs - cash benefits }}{\text { gross wage earnings }}
$$

## Average compulsory payment wedge $=$

(income tax + employee SSC + employer SSC + employee NTCPs + employer NTCPs + payroll taxes - cash benefits)
(gross wage earnings + employer SSC + payroll taxes + employer NTCPs)

## Marginal net personal compulsory payment rate $=$

$\frac{\Delta(\text { incometax }+ \text { employeeSSC }+ \text { employee NTCPs }- \text { cash benefits })}{\Delta(\text { gross wageearnings })}$

## Marginal compulsory payment wedge $=$

```
\(\Delta\) (income tax + employee SSC + employer SSC + employee NTCPs + employer NTCPs + payroll taxes - cash benefits)
```

$\Delta$ (gross wage earnings + employer SSC + payroll taxes + employer NTCPs)

## Adjusted net take-home pay =

gross wage earnings - income tax - employee SSC - employee NTCPs + cash benefits

## Augmented total labour costs $=$

gross wage earnings + employer SSC + payroll taxes + employer NTCPs
The sum of total labour costs and employer NTCPs is denoted by the "augmented total labour costs" in order to avoid confusion with the meaning of "total labour costs" in the Taxing Wages Report. The net take-home pay net of employee NTCPs is denoted by "adjusted net take-home pay". Section 6 presents the decrease in the net take-home pay and the increase in the total labour costs, as a result of the NTCPs, in dollars with equal purchasing power in 2009.

The average/marginal compulsory payment wedge measures the average/marginal wedge between augmented total labour costs and adjusted net take-home pay as a result of taxes, SSC, NTCPs and benefits. The net personal average/marginal compulsory payment rate measures the average/marginal wedge between gross wage earnings and adjusted net take-home pay as a result of taxes, employee SSC, employee NTCPs and benefits.

## 5. Non-tax compulsory payments in OECD countries

This section presents the details of the NTCPs that are levied in OECD countries in 2009 and that are modelled in the calculations underlying the results presented in this Special Feature. In some cases, the NTCPs have not been included in the calculations. This is the case for work-related private insurance to cover accidents and occupational diseases. The details of these and other payments that are not included in the compulsory payment calculations are presented at the end of this section.

## NTCPs that are included in the calculations

In Australia, employers are required to make contributions to the private pension plans of their employees under the Superannuation Guarantee scheme. While the Superannuation Guarantee scheme is mandated by the Australian Government, superannuation is provided through private superannuation funds subject to Government regulation. The Superannuation Guarantee requires employers to pay 9 per cent on top of each eligible employee's ordinary time earnings to a complying superannuation fund, where they earn AUD 450 or more in a month. ${ }^{7}$ However, employers may also choose to make contributions for workers earning less than this threshold. This threshold is not indexed. An upper earnings limit also applies. For each quarter, earnings beyond a threshold are not covered by the Superannuation Guarantee. This threshold is indexed to a measure of average earnings. In the 2008-09 tax year this threshold was AUD 38180 per quarter.

In Denmark, it is compulsory for employees who work at least 117 hours per month to pay a fixed contribution to a general Labour Market Supplementary Pension Scheme of DKK 1 080; this contribution also qualifies as a standard personal income tax relief. For workers who work less than 117 hours but not less than 78 hours, the contribution is DKK 720; for workers who work less than 78 hours but not less than 39 hours, the contribution is DKK 360. The employer makes a contribution that is double to the amount paid by the employee. The contributions are made to the employee's personal account within the Labour Market Supplementary Pension Scheme. These fixed employee and employer contributions are therefore NTCPs.

In Iceland, employees are required to make contributions to a private pension fund, which is generally linked to a labour union or another employee association. The employee contribution is generally 4 per cent of wages. Employers are also required to contribute 8 per cent of the employees' wages. Both contributions are deductible from income before tax. Employees and employers may make larger contributions, but the employee deduction is limited to a maximum of 8 per cent of gross wages. An optional additional payment from employees of up to 4 per cent of wages is also tax deductible and goes into an individual retirement account. The employer may match the employee's optional additional payments, but only extra contributions up to 2 per cent of wages are deductible from the employer's taxable income.

The Trattamento di Fine Rapporte (TFR) in Italy is a severance pay. This postponed wage is paid to the employee at the end of the working relationship. Contributions to the TFR consist of the yearly employer contributions equal to 7.4074 per cent ( $1 / 13.5$ ) of the annual gross wage earnings of the employee in 2009. These payments accumulate at a rate that is linked to the inflation rate. This total amount will be paid to the employee at the end of the labour contract. In 1993, a reform was introduced that attempted to stimulate the sector of private pensions in Italy. Workers could now ask their employer to pay the TFR contribution to a private pension fund and save for an additional pension instead of a severance pay. As from 2007, the TFR contribution will be managed either by the company or by a government social security institution (depending on the size of the firm); also the pension fund can be either private or public. These contributions are requited payments and are therefore modelled as NTCPs instead of taxes. ${ }^{8}$

In Luxembourg, employers must make payments to the Employers' Mutual Insurance Scheme. This scheme provides insurance for employers against the financial cost of continued payment of salaries or wages to workers who become incapacitated. (Employers
are required to pay the remuneration of an employee who is unable to work until the end of the month in which the seventy-seventh day of incapacitation occurs within a reference period of twelve successive calendar months). The Scheme is administered by a Board of Directors which is mainly composed of employer representatives (Chamber of Commerce, Chamber of Trade, Chamber of Agriculture and Federation of Independent Intellectual Workers). Employer contributions depend on the rate of "financial absenteeism" within the company, and range from 0.35 to 2.29 per cent. A representative rate of 1.44 per cent is used in the NTCP calculations.

In Mexico, employees and employers must make discharge and old age insurance contributions to a privately-managed fund, while employers are also required to make retirement pension contributions to a privately-managed fund. Employers must additionally make contributions to the INFONAVIT housing fund, a government-owned home loan provider. The base for all these payments is the worker's "base salary", with a ceiling equivalent to 25 times the minimum wage applicable in Mexico City (MXN 500050 in 2009). The "base salary" includes cash payments of daily fees, premiums, non-cash benefits and any other fringe benefits (subject to some exceptions). The employee discharge and old age insurance rate is 1.125 per cent, and is not deductible. The employer discharge and old age insurance rate is 3.15 per cent, while the retirement pension rate is 2 per cent, and the housing fund rate is 5 per cent. These payments are deductible for the employer.

In The Netherlands compulsory contributions under collective labour agreements are paid by employees and employers to privately-managed pension funds (i.e. the second pillar). All company sectors ${ }^{9}$ are obliged to have a pension arrangement for their employees. Capital will be built up and will be invested to create an acceptable rate of return on capital. The pension premiums differ per company. On average employees working in the market sector pay a pension premium in 2009 of 3.76 per cent ${ }^{10}$ of gross earnings net of the pension franchise of EUR 12952 in 2009. These pension premiums are not considered as SSC but as employee NTCPs instead. The pension franchise is built in the pension scheme to prevent that an employee whose wage is too low to obtain a second pillar pension (and so receives only the first pillar pension) would have to pay pension premiums in the second pillar. The employee does not have to pay personal income tax on the pension premiums that are paid but the pension will be taxed when the employee retires. The premiums of the employee qualify as a standard tax relief. On average employers in the market sector pay an pension premium in 2009 of 17.10 per cent of gross earnings of their employees exclusive the pension-franchise of EUR 12952 in 2009. The compulsory pension premiums of employers to privately-managed funds are NTCPs.

For basic health insurance, each adult in the Netherlands pays an average amount of EUR 1064 a year to a privately-managed health insurance company. Employees might obtain compensation for this nominal contribution, depending on the family situation and taxable income. This is called the health care benefit. This benefit and the basic insurance premium are included in the NTCP calculations. The health care benefit compensates for the basic insurance premium of on average EUR 1 064. Also 6.9 per cent of gross earnings net of employees' pension premiums and unemployment social security contributions is paid for health care up to a maximum of net earnings of EUR 32369 . For the last 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. Instead it is modelled as a NTCP from the employer to a publicly-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.

Since January 2006, companies in Norway must have an occupational pension scheme for their employees. It is, however, permitted to exclude employees under the age of 20 and those in part-time employment of less than 20 per cent of a full-time position. Employers can have either a defined contribution or a defined benefit pension scheme. Defined contribution schemes are offered by banks, life insurance companies, pension funds and companies that manage securities funds. Defined benefit schemes are offered by life insurance companies and pension funds. Employers pay contributions of at least 2 per cent of the employee's earnings between 1 G and 12 G ( G is the National Insurance basic amount and the average for 2009 was NOK 72 006) to the pension scheme. Employers are also obliged to cover the costs of administering the pension scheme. In addition to the pension contribution, the pension scheme also contains an insurance element that ensures that employees continue to earn pension entitlements in the event of disability. Employees may be required to also contribute to their own pension; these contributions are however not included in the NTCP calculations.

Individuals in Poland that are subject to social insurance (i.e. due to employment) are obliged to pay pension contributions. Half of these contributions are paid by the employee ( 9.76 per cent of gross wage earnings) and are deductible from taxable personal income. The equivalent amount is paid by the employer. Those amounts ( 19.52 per cent of gross wage earnings) are collected by the Social Insurance Institution (Zaklad Ubezpieczen Spolecznych - ZUS), which is a government agency. The earnings ceiling for contributions was PLN 95790 in 2009.

Part of the pension contributions ( 62.60 per cent, hence about 12.22 per cent of gross wage earnings) is controlled by ZUS. The amount of paid pension contributions is filed (recorded) on an individual account for each insured person by ZUS. These pension contributions do not accumulate at market conform rates but increase at a return that reflects the increase in prices of goods and services (annual indexation). These savings are not paid out if the taxpayer dies before reaching the pension age; these funds are then used to finance the minimum amount of pension that is guaranteed by ZUS. This redistributional element implies that these payments are taxes.

The other part of the contribution ( 37.40 per cent, hence about 7.3 per cent of gross wage earnings) is transferred by ZUS to a privately-managed pension fund, which is called an "open pension fund (OPF)". These contributions are NTCPs. The pension contributions controlled by OPF do accumulate at market conform rates. The pension savings are paid out if the taxpayer dies before reaching the pension age (i.e. as long as the taxpayer is a member of OPF). Capital accumulated by the taxpayer in OPF is transferred to the Pension Institution (ZUS) when the taxpayer reaches the pension age ( 65 years for men and 60 for women). The insured person can choose the private pension fund through which (s)he saves for a pension. If the individual does not make a choice between one of the privatelymanaged funds that are currently on the market in Poland, ZUS will choose instead. ${ }^{11}$

Since January 2005, the Slovak Republic has introduced a privately-managed fullyfunded pension pillar. In 2009, employees that enter the labour market have the option to either join the private pension scheme or not. If the employee joins the scheme, the employer will pay contributions of 9 per cent of earnings to the privately-managed pension
fund. The employer will also pay contributions of 5 per cent of earnings to the Social Insurance Agency within general government. If the employee decides not to join the private pension scheme, the employer will pay contributions of 14 per cent of earnings to the Social Insurance Agency. As employers are not obliged to pay the 9 per cent of earnings to the general government (depending on whether the employee decides to participate in the privately-managed fully funded pension scheme or not), these payments are not considered to be taxes. Because these payments are compulsory - in fact, most employees ( 60 per cent) participate in the private pension scheme - these pension contributions are considered to be NTCPs instead. The non-tax compulsory pension payments are levied on the same tax base as the pension social security contributions.

Employers in the Slovak Republic are obliged to create Social Funds (SFs) as a social policy tool for their employees. The compulsory contribution rate to the SF ranges from 0.6 to 1.0 per cent of all gross wages payable to employees during the calendar year. The exact rate depends on the employer's profit in the previous year. All resources in the SFs have to be distributed to the employees. Employers have to provide the employees with a benefit from the SFs in cash or in kind with respect to:

- catering for the employees beyond the scope specified in the special regulations;
- travel to work and back;
- participation in cultural and sports events;
- recreation and services utilized to regenerate the labour force;
- healthcare;
- social aid and money loans;
- supplementary pension savings excluding the contribution to the supplementary pension savings for which the employer is obliged to pay pursuant to a special regulation;
- further implementation of the corporate social policy in the area of employee care.

These contributions to SFs increase total labour costs for employers in the Slovak Republic. There is no financial link with general government because SFs are managed by employers, so these compulsory payments can be qualified as NTCPs. The calculations assume a rate of 0.6 per cent.

In Sweden, employees must pay a burial fee to the Church of Sweden. This fee is levied as an additional 0.22 per cent on top of the local tax rate. If the taxpayer is a member of the Church of Sweden then this burial fee is included in the higher membership fee.

## Employer work-related private insurance to cover accidents and occupational diseases are not modelled

In 11 OECD countries (Australia, Belgium, the Czech Republic, Denmark, Germany, New Zealand, ${ }^{12}$ Poland, Portugal, Spain, Switzerland and the United States), it is compulsory for employers to insure their employees against work-related accidents and occupational diseases with a private insurance company (see Table S.6). Governments typically do not impose a premium/rate that has to be paid. Instead, the premium/rate that insurance companies charge typically depends on the risk characteristics of the insured jobs involved.

These insurance premiums/rates are NTCPs. However, in order to present data that is comparable across countries, NTCPs have been included in the compulsory payment
calculations and indicators only if they are generally applicable to taxpayers within at least one of the family types that are included in the Report or if these payments are representative of the actual payments that these taxpayers or their employers make on average.

An ideal representative insurance rate would be obtained by calculating a weighted average premium/rate where the weights depend on the share of workers in the total labour force (in sectors C-K in ISIC Rev. 3.1) whose employer pays that particular premium/ rate. This requires the availability of detailed information on the labour force (number and types of insured workers within each country) and the work-related insurance premium/ rate that their employer pays. Note that this premium/rate would then depend on the country's actual industry structure.

In practice, most OECD countries face difficulties in calculating this representative insurance premium/rate. In order to ensure data comparability across OECD countries, it was therefore decided not to include compulsory work-related private insurance to cover accidents and occupational diseases in the NTCP calculations. The overview table (Table S.6) included at the end of the text does however provide information on the countries that have compulsory work-related private insurance to cover accidents and occupational diseases.

## Other NTCPs that are not modelled

In Austria, a new program was introduced in 2001 that replaced the system of severance payments ("Abfertigung") which the employer had to pay when an employee was fired or retired. As of 1 January 2001, employers are required to pay 1.53 per cent of gross wages to the Social Health Security Fund ("Krankenkassen") for those whose employment started after that date. It can also apply to taxpayers who started working before 2001 if the employer and employee opt to participate in the new program. The Social Health Security Fund then transfers the contributions to a privately-managed fund, which is now responsible to distribute the severance payments in case the employee is fired or retires. Because these contributions are not generally applicable to all taxpayers taxpayers who started working before 2001 are not obliged to enter the new system - these NTCPs are not included in the calculations.

In Hungary, workers are required to either join a private pension fund, or contribute to the public social security scheme. Either way they are required to make the same total payment of 9.5 per cent of wages. For taxpayers choosing to join a private pension scheme, 8 per cent of wages is paid to the pension fund while the remaining 1.5 per cent goes to the public social security scheme. For non-members the entire 9.5 per cent goes to the public scheme. Neither payment is deductible against personal income tax. The Taxing Wages publication assumes workers are not members of a private pension fund and therefore includes the 9.5 per cent as social security contributions (taxes) in the Taxing Wages calculations.

## Other payments that do not qualify as NTCPs

In Korea, it is compulsory for employers to pay an additional payment or pension to an employee who is fired or retires, but it is not compulsory for employers to accumulate funds to pay for these future pensions or severance payments. As a result, any contributions that employers may make during the period that the employee is hired - for instance to a privately-managed pension fund or an internal fund within the firm - in order
to pay for the severance payments or pension at the end of the working relationship are not modelled as NTCPs.

Employers in New Zealand will also be required to make KiwiSaver payments where the employee has joined the KiwiSaver scheme. KiwiSaver is a government initiated retirement savings scheme. Given that KiwiSaver is voluntary for employees to join, the payments are not considered to be NTCPs. Where an employee is a member of KiwiSaver, and is contributing to the scheme, compulsory employer contributions are 2 per cent of an employee's gross wage. However, employers are exempt from contributions if they are already paying into another eligible registered superannuation scheme for an employee, the employee is under 18 or over 65 , or the employee is not contributing themselves (e.g. on a payments holiday). KiwiSaver is administered directly through the tax system.

## 6. Empirical findings

There are 21 OECD member countries that have NTCPs that are levied on wage earnings. 11 OECD countries (Australia, Denmark, Iceland, Italy, Luxembourg, Mexico, the Netherlands, Norway, Poland, the Slovak Republic and Sweden) levy NTCPs that are generally applicable to taxpayers; these NTCPs have been included in the calculations underlying the compulsory payment indicators. There are also 11 OECD countries (Australia, Belgium, the Czech Republic, Denmark, Germany, New Zealand, Poland, Portugal, Spain, Switzerland and the United States) where it is compulsory for employers to insure their employees against work-related accidents and occupational diseases with a private insurance company (Table S.6). These NTCPs have not been included in the compulsory payment indicators as most of these countries face difficulties in calculating a representative insurance premium/rate. Also the NTCPs in Austria, Hungary and the employee contributions to the Accident Compensation Corporation in New Zealand have not been modelled.

Tables S. 1 and S. 3 present, respectively, average and marginal compulsory payment wedges by family-type and wage level as a percentage of augmented total labour costs in 2009. Tables S. 2 and S. 4 present corresponding figures for average and marginal net personal compulsory payment rates respectively.

Figure S. 1 compares average compulsory payment wedges and average tax wedges for single taxpayers without children at average earnings in 2009. Figure S. 2 compares marginal compulsory payment wedges and marginal tax wedges for single taxpayers without children at average earnings in 2009.

Note that the average and marginal compulsory payment wedges and tax wedges included in Figures S. 1 and S. 2 are not additive because of the differences in the denominators of the different ratios. The tax wedge shows all taxes paid net of benefits received as a percentage of total labour costs. The compulsory payment wedge shows all taxes and non-tax compulsory payments net of benefits received as a percentage of "augmented" total labour costs, which equals total labour costs plus the employer NTCPs. ${ }^{13}$

Figure S. 1 shows that, for single taxpayers at average earnings without children, the impact of NTCPs on average wedges is the strongest in the Netherlands, Iceland, Mexico, Australia, Poland, the Slovak Republic, Italy and Norway. For this family type, Figure S. 2 shows that the impact of NTCPs on the marginal wedges is the strongest in the Netherlands, Mexico and Iceland. These Figures also indicate that the inclusion of NTCPs has a considerable impact on the respective country rankings.

Table S. 5 presents the increase in total labour costs and the reduction in net takehome pay as a result of NTCPs by family-type and wage level in 2009. The amounts are expressed in US dollars using PPP in order to ensure comparability. The highest amount of employer NTCPs has to be paid in (in decreasing order):

- The Netherlands;
- Australia;
- Iceland;
- Italy;
- The Slovak Republic;
- Mexico;
- Norway;
- Luxembourg;
- Poland;
- Denmark.

The highest amount of employee NTCPs has to be paid in (in decreasing order); the amounts are very small in Mexico, Denmark and Sweden:

- The Netherlands;
- Iceland;
- Poland;
- Mexico;
- Denmark;
- Sweden.

NTCPs are relatively small in Denmark, Luxembourg and Sweden. The other countries levy larger amounts of NTCPs (combined employee and employer NTCPs exceeding US dollars 1000 using PPP for most family types). This is the case for Australia, Iceland, Italy, Mexico, the Netherlands, Norway, Poland and the Slovak Republic. In all of these countries, the NTCPs are mainly pension contributions.

The results also show that NTCPs are mostly paid by employers - thereby increasing total labour costs - and not by employees. ${ }^{14}$ Only in Iceland, the Netherlands and Poland do employees pay a considerable amount of non-tax compulsory payments.

Finally, the analysis suggests there are currently no compulsory requited payments to general government levied on labour income in OECD countries. This means that all types of compulsory payments to general government to some extent have a re-distributional element, implying they are taxes rather than NTCPs.

Table S.1. Average compulsory payment wedge by family-type and wage level (as \% of augmented total labour costs), 2009

| Family-type: | Single no ch | Single no ch | Single no ch | Single <br> 2 ch | Married <br> 2 ch | Married <br> 2 ch | Married $2 \mathrm{ch}$ | Married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | 67 <br> (1) | $100$ (2) | $167$ (3) | 67 <br> (4) | $100-0$ <br> (5) | $100-33^{1}$ <br> (6) | $100-67^{1}$ <br> (7) | $100-33^{1}$ <br> (8) |
| Australia | 26.9 | 32.4 | 37.8 | 0.9 | 20.8 | 24.3 | 28.3 | 29.1 |
| Austria | 43.3 | 47.9 | 50.1 | 26.4 | 36.6 | 36.8 | 40.0 | 44.3 |
| Belgium | 48.9 | 55.2 | 60.5 | 33.7 | 38.8 | 40.3 | 47.4 | 47.3 |
| Canada | 26.3 | 30.8 | 32.9 | -7.7 | 18.3 | 23.5 | 26.9 | 27.6 |
| Czech Republic | 38.6 | 41.9 | 44.6 | 15.0 | 20.5 | 30.0 | 33.9 | 39.8 |
| Denmark | 38.5 | 39.9 | 48.9 | 14.2 | 29.4 | 34.1 | 35.7 | 38.7 |
| Finland | 37.0 | 42.4 | 48.2 | 25.4 | 37.0 | 35.1 | 37.0 | 39.1 |
| France | 45.2 | 49.2 | 53.1 | 36.8 | 41.7 | 38.6 | 44.0 | 44.0 |
| Germany | 46.0 | 50.9 | 53.0 | 31.3 | 33.7 | 39.1 | 43.1 | 46.0 |
| Greece ${ }^{2}$ | 36.8 | 41.5 | 46.2 | 36.0 | 41.7 | 39.9 | 40.7 | 40.4 |
| Hungary | 46.3 | 53.4 | 58.4 | 30.1 | 43.7 | 42.5 | 44.7 | 49.8 |
| Iceland | 31.6 | 36.8 | 41.0 | 15.1 | 18.5 | 26.9 | 31.8 | 31.6 |
| Ireland | 22.5 | 28.6 | 39.1 | -9.5 | 11.7 | 13.7 | 19.8 | 20.5 |
| Italy | 46.0 | 49.3 | 54.1 | 29.0 | 39.1 | 41.3 | 44.4 | 45.8 |
| Japan | 27.8 | 29.2 | 32.3 | 21.5 | 23.7 | 24.9 | 25.9 | 28.4 |
| Korea | 17.0 | 19.7 | 21.9 | 16.4 | 17.2 | 17.3 | 17.4 | 18.8 |
| Luxembourg | 28.4 | 34.8 | 42.1 | 1.6 | 12.3 | 16.6 | 21.9 | 26.9 |
| Mexico | 20.0 | 23.2 | 28.4 | 20.0 | 23.2 | 21.4 | 21.9 | 21.4 |
| Netherlands | 46.3 | 50.3 | 53.5 | 27.2 | 44.8 | 42.3 | 44.9 | 46.5 |
| New Zealand | 15.6 | 18.4 | 24.9 | -16.5 | 0.6 | 8.8 | 15.3 | 17.2 |
| Norway | 34.9 | 38.3 | 43.9 | 21.6 | 31.7 | 32.4 | 34.3 | 35.8 |
| Poland | 38.1 | 39.1 | 39.9 | 33.7 | 33.7 | 34.1 | 35.5 | 38.1 |
| Portugal | 32.3 | 37.2 | 43.0 | 20.6 | 26.3 | 28.4 | 32.5 | 32.3 |
| Slovak Republic | 38.9 | 42.1 | 44.3 | 26.8 | 28.1 | 31.7 | 35.9 | 37.8 |
| Spain | 34.2 | 38.2 | 41.6 | 28.4 | 32.3 | 34.5 | 34.8 | 35.6 |
| Sweden | 41.3 | 43.3 | 51.0 | 32.9 | 37.7 | 37.3 | 39.1 | 41.5 |
| Switzerland | 26.3 | 29.3 | 33.6 | 11.4 | 17.2 | 20.0 | 23.0 | 26.9 |
| Turkey ${ }^{3}$ | 35.2 | 37.5 | 40.4 | 34.0 | 36.2 | 37.2 | 37.7 | 37.8 |
| United Kingdom | 29.2 | 32.5 | 37.0 | 8.9 | 26.4 | 24.6 | 28.2 | 29.2 |
| United States | 26.9 | 29.4 | 34.6 | 4.2 | 13.7 | 21.7 | 24.2 | 27.6 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 34.2 | 38.1 | 42.7 | 19.0 | 27.9 | 30.0 | 33.0 | 34.9 |
| EU15 | 38.4 | 42.7 | 48.1 | 22.9 | 32.6 | 33.5 | 36.9 | 38.5 |
| EU19 | 38.8 | 43.0 | 47.8 | 23.6 | 32.4 | 33.7 | 37.0 | 39.1 |

Note: ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
3. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3).

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Figure S.1. Average compulsory payment wedge and average tax wedge for single taxpayers without children at average earnings, $2009^{1}$


1. Countries are ranked by decreasing average compulsory payment wedge.
2. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3).

Table S.2. Average net personal compulsory payment rate by family-type and wage level (as \% of gross wage earnings), 2009

| Family-type: | Single no ch | Single no ch | Single no ch | Single <br> 2 ch | Married $2 \mathrm{ch}$ | Married $2 \text { ch }$ | Married $2 \text { ch }$ | Married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | 67 <br> (1) | $100$ (2) | $167$ <br> (3) | 67 <br> (4) | $100-0$ | $100-33^{1}$ <br> (6) | $100-67^{1}$ <br> (7) | $100-33^{1}$ <br> (8) |
| Australia | 15.6 | 22.0 | 28.3 | -14.4 | 8.6 | 12.7 | 17.2 | 18.2 |
| Austria | 26.8 | 32.7 | 37.2 | 5.0 | 18.1 | 18.4 | 22.6 | 28.1 |
| Belgium | 34.4 | 41.5 | 48.5 | 14.9 | 20.2 | 25.2 | 31.8 | 34.0 |
| Canada | 17.9 | 22.8 | 26.8 | -20.0 | 8.8 | 14.8 | 18.5 | 19.4 |
| Czech Republic | 17.7 | 22.2 | 25.8 | -13.9 | -6.5 | 6.2 | 11.5 | 19.4 |
| Denmark | 38.0 | 39.6 | 48.8 | 13.5 | 29.0 | 33.5 | 35.2 | 38.2 |
| Finland | 22.5 | 29.2 | 36.3 | 8.2 | 22.6 | 20.2 | 22.5 | 25.1 |
| France | 25.7 | 27.7 | 33.1 | 14.4 | 17.1 | 16.7 | 21.9 | 23.9 |
| Germany | 35.5 | 41.3 | 45.5 | 17.9 | 20.8 | 27.3 | 32.1 | 35.5 |
| Greece ${ }^{2}$ | 19.1 | 25.1 | 31.1 | 18.0 | 25.4 | 23.1 | 24.1 | 23.6 |
| Hungary | 28.9 | 38.2 | 44.7 | 7.4 | 25.3 | 23.6 | 26.7 | 33.2 |
| Iceland | 21.9 | 27.9 | 32.6 | 3.0 | 7.0 | 16.5 | 22.1 | 21.9 |
| Ireland | 14.2 | 20.9 | 32.5 | -21.3 | 2.2 | 4.9 | 11.1 | 12.4 |
| Italy | 24.7 | 29.3 | 36.0 | 1.0 | 15.1 | 18.1 | 22.5 | 24.4 |
| Japan | 18.5 | 20.1 | 24.0 | 11.4 | 13.8 | 15.3 | 16.3 | 19.1 |
| Korea | 8.9 | 11.8 | 15.2 | 8.2 | 9.1 | 9.2 | 9.3 | 10.8 |
| Luxembourg | 19.1 | 26.4 | 34.6 | -11.2 | 0.9 | 5.8 | 11.7 | 17.5 |
| Mexico | 0.7 | 6.4 | 13.9 | 0.7 | 6.4 | 2.3 | 4.2 | 2.3 |
| Netherlands | 32.4 | 36.8 | 42.4 | 8.4 | 29.8 | 28.2 | 30.3 | 33.3 |
| New Zealand | 15.6 | 18.4 | 24.9 | -16.5 | 0.6 | 8.8 | 15.3 | 17.2 |
| Norway | 25.6 | 29.3 | 35.7 | 10.4 | 21.8 | 22.7 | 24.8 | 26.6 |
| Poland | 26.7 | 27.9 | 28.9 | 21.5 | 21.5 | 22.0 | 23.7 | 26.7 |
| Portugal | 16.2 | 22.3 | 29.5 | 1.7 | 8.7 | 11.4 | 16.4 | 16.2 |
| Slovak Republic | 17.0 | 21.3 | 24.5 | 0.6 | 2.4 | 7.3 | 13.0 | 15.5 |
| Spain | 14.6 | 19.7 | 25.0 | 6.9 | 12.0 | 14.9 | 15.3 | 16.3 |
| Sweden | 22.9 | 25.5 | 35.7 | 11.8 | 18.1 | 17.6 | 20.0 | 23.1 |
| Switzerland | 18.2 | 21.5 | 26.4 | 1.6 | 8.1 | 11.1 | 14.5 | 18.9 |
| Turkey ${ }^{3}$ | 24.5 | 27.2 | 30.5 | 23.1 | 25.7 | 26.8 | 27.4 | 27.5 |
| United Kingdom | 22.4 | 25.3 | 29.8 | 0.2 | 18.5 | 17.4 | 20.8 | 22.4 |
| United States | 18.9 | 22.4 | 28.7 | -6.3 | 5.2 | 13.1 | 16.4 | 19.7 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 21.5 | 26.1 | 31.9 | 3.5 | 13.9 | 16.5 | 20.0 | 22.3 |
| EU15 | 24.6 | 29.6 | 36.4 | 6.0 | 17.2 | 18.8 | 22.5 | 24.9 |
| EU19 | 24.2 | 29.1 | 35.3 | 5.5 | 15.9 | 18.0 | 21.7 | 24.7 |

Note: ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
3. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3)

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Figure S.2. Marginal compulsory payment wedge and marginal tax wedge for single taxpayers without children at average earnings, 2009 ${ }^{1}$


1. Countries are ranked by decreasing marginal compulsory payment wedge.
2. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3).

Table S.3. Marginal compulsory payment wedge by family-type and wage level (as \% of augmented total labour costs), $2009^{1}$

| Family-type: | Single no ch | Single no ch | Single no ch | Single <br> 2 ch | Married <br> 2 ch | Married 2 ch | Married <br> 2 ch | Married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{aligned} & 67 \\ & \text { (1) } \end{aligned}$ | $\begin{aligned} & 100 \\ & (2) \end{aligned}$ | $\begin{gathered} 167 \\ (3) \end{gathered}$ | $\begin{aligned} & 67 \\ & (4) \end{aligned}$ | $100-0$ <br> (5) | $100-33^{2}$ <br> (6) | $100-67^{2}$ <br> (7) | $100-33^{2}$ <br> (8) |
| Australia | 44.1 | 40.6 | 49.3 | 44.1 | 58.0 | 40.6 | 66.6 | 40.6 |
| Austria | 56.3 | 59.9 | 41.4 | 56.3 | 59.9 | 59.9 | 59.9 | 59.9 |
| Belgium | 71.3 | 66.5 | 68.4 | 71.3 | 66.5 | 66.5 | 66.5 | 66.5 |
| Canada | 34.2 | 40.7 | 35.9 | 60.4 | 68.0 | 44.4 | 44.4 | 40.7 |
| Czech Republic | 48.6 | 48.6 | 48.6 | 55.7 | 54.0 | 54.0 | 54.0 | 48.6 |
| Denmark | 42.1 | 43.5 | 62.8 | 42.1 | 43.5 | 43.5 | 43.5 | 43.5 |
| Finland | 52.8 | 56.9 | 56.9 | 52.8 | 56.9 | 56.9 | 56.9 | 56.9 |
| France | 63.2 | 52.0 | 59.7 | 57.7 | 46.2 | 46.2 | 52.0 | 52.0 |
| Germany | 58.1 | 63.3 | 44.3 | 56.2 | 54.4 | 57.8 | 60.4 | 58.1 |
| Greece ${ }^{3}$ | 50.8 | 50.8 | 57.4 | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 |
| Hungary | 57.3 | 71.5 | 64.8 | 57.3 | 71.5 | 71.5 | 71.5 | 71.5 |
| Iceland | 47.2 | 47.2 | 47.2 | 51.4 | 51.4 | 51.4 | 51.4 | 47.2 |
| Ireland | 35.9 | 54.8 | 54.8 | 67.1 | 35.9 | 35.9 | 35.9 | 35.9 |
| Italy | 56.0 | 56.1 | 63.6 | 56.5 | 57.0 | 57.0 | 56.5 | 56.1 |
| Japan | 29.9 | 34.2 | 33.6 | 29.9 | 31.2 | 31.2 | 31.2 | 34.2 |
| Korea | 19.3 | 29.1 | 23.4 | 18.0 | 25.1 | 25.1 | 25.1 | 29.1 |
| Luxembourg | 41.8 | 53.1 | 53.1 | 39.4 | 37.0 | 40.2 | 46.7 | 40.2 |
| Mexico | 25.6 | 26.7 | 34.3 | 25.6 | 26.7 | 26.7 | 26.7 | 26.7 |
| Netherlands | 64.6 | 56.6 | 60.6 | 66.2 | 65.2 | 56.6 | 56.6 | 56.6 |
| New Zealand | 21.0 | 34.0 | 38.0 | 21.0 | 41.0 | 41.0 | 41.0 | 34.0 |
| Norway | 44.1 | 51.9 | 54.5 | 44.1 | 51.9 | 51.9 | 51.9 | 51.9 |
| Poland | 41.2 | 41.2 | 41.2 | 33.7 | 33.7 | 41.2 | 41.2 | 41.2 |
| Portugal | 47.1 | 47.1 | 55.6 | 47.1 | 38.6 | 47.1 | 47.1 | 47.1 |
| Slovak Republic | 48.3 | 48.3 | 46.9 | 48.3 | 36.2 | 48.3 | 48.3 | 48.3 |
| Spain | 45.2 | 48.1 | 37.0 | 33.9 | 45.2 | 48.1 | 48.1 | 48.1 |
| Sweden | 46.5 | 48.1 | 67.1 | 46.5 | 48.1 | 48.1 | 48.1 | 48.1 |
| Switzerland | 32.5 | 35.8 | 42.6 | 27.7 | 31.7 | 34.1 | 36.6 | 34.1 |
| Turkey ${ }^{4}$ | 42.1 | 42.1 | 47.3 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 |
| United Kingdom | 38.8 | 38.8 | 47.7 | 73.4 | 38.8 | 38.8 | 44.7 | 38.8 |
| United States | 34.4 | 34.4 | 43.7 | 49.3 | 49.3 | 34.4 | 34.4 | 34.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 44.7 | 47.4 | 49.4 | 47.5 | 47.2 | 46.4 | 48.0 | 46.1 |
| EU15 | 51.4 | 53.0 | 55.4 | 54.5 | 49.6 | 50.2 | 51.6 | 50.6 |
| EU19 | 50.8 | 52.9 | 54.3 | 53.3 | 49.4 | 51.0 | 52.0 | 51.0 |

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. Two-earner family.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3).

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Table S.4. Marginal net personal compulsory payment rate by family-type and wage level (as \% of gross wage earnings), 2009 ${ }^{1}$

| Family-type: | Single no ch | Single no ch | Single no ch | Single <br> 2 ch | Married $2 \text { ch }$ | Married 2 ch | Married $2 \mathrm{ch}$ | Married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $67$ (1) | $100$ (2) | $167$ <br> (3) | 67 <br> (4) | 100-0 <br> (5) | $100-33^{2}$ <br> (6) | $100-67^{2}$ <br> (7) | $100-33^{2}$ <br> (8) |
| Australia | 35.5 | 31.5 | 41.5 | 35.5 | 51.5 | 31.5 | 61.5 | 31.5 |
| Austria | 43.6 | 48.2 | 37.0 | 43.6 | 48.2 | 48.2 | 48.2 | 48.2 |
| Belgium | 61.4 | 54.9 | 59.4 | 61.4 | 54.9 | 54.9 | 54.9 | 54.9 |
| Canada | 26.3 | 35.1 | 33.0 | 55.7 | 64.9 | 39.1 | 39.1 | 35.1 |
| Czech Republic | 31.1 | 31.1 | 31.1 | 40.7 | 38.4 | 38.4 | 38.4 | 31.1 |
| Denmark | 42.1 | 43.5 | 62.8 | 42.1 | 43.5 | 43.5 | 43.5 | 43.5 |
| Finland | 42.0 | 47.0 | 47.0 | 42.0 | 47.0 | 47.0 | 47.0 | 47.0 |
| France | 31.7 | 31.7 | 42.3 | 21.5 | 23.5 | 23.5 | 31.7 | 31.7 |
| Germany | 50.0 | 56.1 | 44.3 | 47.6 | 45.5 | 49.6 | 52.7 | 50.0 |
| Greece ${ }^{3}$ | 37.0 | 37.0 | 45.4 | 37.0 | 37.0 | 37.0 | 37.0 | 37.0 |
| Hungary | 44.0 | 62.0 | 53.0 | 44.0 | 62.0 | 62.0 | 62.0 | 62.0 |
| Iceland | 39.7 | 39.7 | 39.7 | 44.5 | 44.5 | 44.5 | 44.5 | 39.7 |
| Ireland | 29.0 | 50.0 | 50.0 | 63.6 | 29.0 | 29.0 | 29.0 | 29.0 |
| Italy | 38.7 | 38.7 | 49.2 | 39.3 | 40.0 | 40.0 | 39.4 | 38.7 |
| Japan | 20.8 | 25.7 | 30.1 | 20.8 | 22.3 | 22.3 | 22.3 | 25.7 |
| Korea | 11.3 | 22.1 | 19.3 | 10.0 | 17.8 | 17.8 | 17.8 | 22.1 |
| Luxembourg | 34.3 | 47.0 | 47.0 | 31.5 | 28.8 | 32.4 | 39.7 | 32.4 |
| Mexico | 13.2 | 13.6 | 22.6 | 13.2 | 13.6 | 13.6 | 13.6 | 13.6 |
| Netherlands | 52.1 | 44.2 | 53.8 | 54.4 | 55.2 | 44.2 | 44.2 | 44.2 |
| New Zealand | 21.0 | 34.0 | 38.0 | 21.0 | 41.0 | 41.0 | 41.0 | 34.0 |
| Norway | 35.8 | 44.8 | 47.8 | 35.8 | 44.8 | 44.8 | 44.8 | 44.8 |
| Poland | 30.3 | 30.3 | 30.3 | 21.5 | 21.5 | 30.3 | 30.3 | 30.3 |
| Portugal | 34.5 | 34.5 | 45.0 | 34.5 | 24.0 | 34.5 | 34.5 | 34.5 |
| Slovak Republic | 29.9 | 29.9 | 28.7 | 29.9 | 13.4 | 29.9 | 29.9 | 29.9 |
| Spain | 28.8 | 32.6 | 37.0 | 14.2 | 28.8 | 32.6 | 32.6 | 32.6 |
| Sweden | 29.7 | 31.7 | 56.7 | 29.7 | 31.7 | 31.7 | 31.7 | 31.7 |
| Switzerland | 25.1 | 28.7 | 36.8 | 19.7 | 24.1 | 26.9 | 29.6 | 26.9 |
| Turkey ${ }^{4}$ | 32.6 | 32.6 | 38.6 | 32.6 | 32.6 | 32.6 | 32.6 | 32.6 |
| United Kingdom | 31.0 | 31.0 | 41.0 | 70.0 | 31.0 | 31.0 | 37.7 | 31.0 |
| United States | 29.4 | 29.4 | 39.4 | 45.4 | 45.4 | 29.4 | 29.4 | 29.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 33.7 | 37.3 | 41.6 | 36.8 | 36.9 | 36.1 | 38.0 | 35.8 |
| EU15 | 39.1 | 41.9 | 47.9 | 42.2 | 37.9 | 38.6 | 40.2 | 39.1 |
| EU19 | 38.0 | 41.1 | 45.3 | 40.4 | 37.0 | 38.9 | 40.2 | 38.9 |

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. Two-earner family.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3).


Table S.5. Increase in total labour costs and reduction in net take-home pay as a result of NTCPs by family-type and wage level (in US dollars using PPP), 2009

| Wamily-type | Single <br> no ch |  | Single no ch |  | Single no ch |  | Single <br> 2 ch |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  | 67 |  | 100 |  | 167 |  | 67 |  |
|  | Gross <br> (1) | Net <br> (2) | Gross <br> (3) | Net <br> (4) | Gross <br> (5) | Net <br> (6) | Gross <br> (7) | Net <br> (8) |
| Australia | 2566 | 0 | 3849 | 0 | 6415 | 0 | 2566 | 0 |
| Austria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Belgium | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Canada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Czech Republic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Denmark | 251 | -84 | 251 | -84 | 251 | -84 | 251 | -84 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Greece ${ }^{1}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iceland | 1795 | -897 | 2692 | -1346 | 4487 | -2 244 | 1795 | -897 |
| Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Italy | 1539 | 0 | 2309 | 0 | 3848 | 0 | 1539 | 0 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Korea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Luxembourg | 489 | 0 | 734 | 0 | 1223 | 0 | 489 | 0 |
| Mexico | 723 | -80 | 1085 | -120 | 1808 | -200 | 723 | -80 |
| Netherlands | 5528 | -1815 | 8664 | -2 554 | 14425 | -3 821 | 5528 | -1815 |
| New Zealand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Norway | 512 | 0 | 848 | 0 | 1518 | 0 | 512 | 0 |
| Poland | 447 | -447 | 670 | -670 | 1117 | -1117 | 447 | -447 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Slovak Republic | 1020 | 0 | 1529 | 0 | 2549 | 0 | 1020 | 0 |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sweden | 0 | -41 | 0 | -68 | 0 | -125 | 0 | -41 |
| Switzerland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Turkey ${ }^{2}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| United States | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 496 | -112 | 754 | -161 | 1255 | -253 | 496 | -112 |
| EU15 | 521 | -129 | 797 | -180 | 1316 | -269 | 521 | -129 |
| EU19 | 488 | -126 | 745 | -178 | 1232 | -271 | 488 | -126 |

Note: ch = children.

1. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3).

Table S.5. Increase in total labour costs and reduction in net take-home pay as a result of NTCPs by family-type and wage level (in US dollars using PPP), 2009 (cont.)

| Family-type: | Married <br> 2 ch |  | Married <br> 2 ch |  | married <br> 2 ch |  | married <br> no ch |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100-0 |  | 100-33 ${ }^{1}$ |  | 100-671 |  | 100-33 ${ }^{1}$ |  |
|  | Gross <br> (9) | $\begin{aligned} & \text { Net } \\ & \text { (10) } \end{aligned}$ | Gross <br> (11) | $\begin{aligned} & \text { Net } \\ & \text { (12) } \end{aligned}$ | Gross <br> (13) | Net <br> (14) | Gross <br> (15) | Net <br> (16) |
| Australia | 3849 | 0 | 5132 | 0 | 6415 | 0 | 5132 | 0 |
| Austria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Belgium | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Canada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Czech Republic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Denmark | 251 | -84 | 503 | -167 | 503 | -167 | 503 | -167 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Greece ${ }^{2}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iceland | 2692 | -1346 | 3590 | -1795 | 4487 | -2 244 | 3590 | -1795 |
| Ireland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Italy | 2309 | 0 | 3078 | 0 | 3848 | 0 | 3078 | 0 |
| Japan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Korea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Luxembourg | 734 | 0 | 978 | 0 | 1223 | 0 | 978 | 0 |
| Mexico | 1085 | -120 | 1447 | -160 | 1808 | -200 | 1447 | -160 |
| Netherlands | 8664 | -3606 | 10192 | -3841 | 14191 | -4 475 | 10192 | -3841 |
| New Zealand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Norway | 848 | 0 | 1025 | 0 | 1360 | 0 | 1025 | 0 |
| Poland | 670 | -670 | 894 | -894 | 1117 | -1117 | 894 | -894 |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Slovak Republic | 1529 | 0 | 2039 | 0 | 2549 | 0 | 2039 | 0 |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sweden | 0 | -68 | 0 | -82 | 0 | -109 | 0 | -82 |
| Switzerland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Turkey ${ }^{3}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| United States | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 754 | -196 | 963 | -231 | 1250 | -277 | 963 | -231 |
| EU15 | 797 | -251 | 983 | -273 | 1318 | -317 | 983 | -273 |
| EU19 | 745 | -233 | 931 | -262 | 1233 | -309 | 931 | -262 |

Note: ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
3. Turkey wage figures are based on the old definition of average production worker (Sector D in ISIC Rev. 3).


Table S.6. Non-tax compulsory payments in OECD countries in 20091, 2

|  | Compulsory (requited and unrequited) payments to privately-managed funds, to other bodies, welfare agencies or social insurance schemes outside general government and to public enterprises |  |  |  | Compulsory requited payments to general government |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employer work-related private insurance (to cover accidents, occupational diseases, etc. $)^{3}$ | Compulsory pension payments |  | Other compulsory payments |  |
|  |  | Employee contributions | Employer contributions |  |  |
| Australia | Yes |  | 9\% on gross earnings up to AUD 152 720, subject to a minimum threshold of AUD 5400 (2008-09) | - | - |
| Austria | - | - | - | - | - |
| Belgium | Average rate of 1.2\% | - | - | - | - |
| Canada | - | - | - | - | - |
| Czech Republic | $0.28 \%-5.4 \%$ of AW: <br> Until 31 December 2009 | - | - | - | - |
| Denmark | Yes | DKK 1080 contribution to Labour Market Supplementary Pension Scheme (amount for full-time employees) | DKK 2160 contribution to Labour Market Supplementary Pension Scheme (amount for full-time employees) |  |  |
| Finland | - | - | - | - | - |
| France | - | - | - | - | - |
| Germany | Yes | - | - | - | - |
| Greece | - | - | - | - | - |
| Hungary | - | Employees pay either public pension contributions (tax) at a rate of $9.5 \%$ of the AW or combined private/public pension contributions at a rate of $8 \%$ for a private pension (NTCP) and a rate of $1.5 \%$ of the AW for a public pension (tax) | - | - | - |
| Iceland | - | $4 \%$ of gross earnings | 8\% of gross earnings | - | - |
| Ireland | - | - | - | - | - |
| Italy | - | - | TFR contributions equal to $1 / 13.5$ of annual gross wage earnings | - | - |
| Japan | - | - | - | - | - |
| Korea | - | - |  | - | - |
| Luxembourg | - | - | - | Employers: contributions to the employers' mutual insurance scheme; rates range from $0.35 \%-2.29 \%$ | - |

Table S.6. Non-tax compulsory payments in OECD countries in 2009 ${ }^{1,2}$ (cont.)

|  | Compulsory (Requited And Unrequited) Payments To Privately-managed Funds, To Other Bodies, Welfare Agencies Or Social Insurance Schemes Outside General Government And To Public Enterprises |  |  |  | Compulsory Requited Payments To General Government |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employer Work-related Private Insurance (To Cover Accidents, Occupational Diseases, Etc.) ${ }^{3}$ | Compulsory Pension Payments |  | Other Compulsory Payments |  |
|  |  | Employee contributions | Employer contributions |  |  |
| Mexico | - |  | 2.0\% of AW (earnings ceiling that applies to all contributions separately: 25 times minimum wage in Mexico City, which in 2009 is MXN 500 050) | Employees: 1.125\% of AW for discharge and old age insurance <br> Employers: 3.15\% of AW for discharge and old age insurance $+5.0 \%$ for housing fund INFONAVIT |  |
| Netherlands | - | On average 3.76\% of gross earnings net of the pension franchise of EUR 12952 | $17.10 \%$ on gross earnings exceeding EUR 12952 | Employees: health insurance premium of EUR 1 064; employees possibly receive a corresponding health care benefit Employers: health contribution at a rate of $6.9 \%$ up to maximum of net earnings of EUR 32369 |  |
| New Zealand | Average employer rate 1.26\% levied on "liable payroll" | - | - | Employees: 1.244\% of AW for no-fault personal (non-work related) injury insurance | - |
| Norway | - | - | 2.0 \% of AW for earnings between NOK 72006 and NOK 864072 | - | - |
| Poland | Yes | 3.65\% of average earnings | $3.65 \%$ of average earnings | - |  |
| Portugal | Yes | - | - | - | - |
| Slovak Republic | - | - | 9.0\% of AW; earnings ceiling: EUR 33402 | Employers: contribution to Social Funds; rate ranges from $0.6 \%-1 \%$ of all gross wages payable | - |
| Spain | $1 \%-8.15 \%$ of AW for gross earnings between EUR 8398.48 and EUR 36889.2 to either public or private firm (2008 information) | - | - | - | - |
| Sweden | - | - | - | Employees: burial fee of $0.22 \%$ on top of the local tax rate to the Chuch of Sweden | - |
| Switzerland | Yes | - | - |  | - |
| Turkey | - | - | - | - | - |
| United Kingdom | - | - | - | - | - |
| United States | Yes | - | - | - | - |

1. The table shows information for the 2009 fiscal year except when indicated otherwise.
2. Non-tax compulsory payments that are not generally applicable to taxpayers within at least one family type included in the Taxing Wages Report are NOT included in the table. However, the table does show the NTCPs that are generally applicable but for which no representative rate can be included as, for instance, accident insurance contributions. This table therefore contains information on all NTCPs, including the NTCPs that have not been included in the compulsory payments calculations.
3. Accident insurance premiums are not included in the calculations underlying the compulsory payments indicators because no representative rate could be calculated in most countries.

## Notes

1. Quasi-corporations are unincorporated enterprises that function as if they were corporations, and which have complete sets of accounts, including balance sheets.
2. Provident funds are arrangements under which the contributions of each employee and of the corresponding employer on his/her behalf are kept in a separate account earning interest and are withdrawable under specific circumstances.
3. Quasi-compulsory payments - payments that mainly arise by virtue of agreement with professional organisations and union organisations - are not included in the analysis. The same holds for payments that are not compulsory but are made by most employers within a country on a voluntary basis. These assumptions have an impact on the data comparability, especially with respect to nontax pension contributions that are compulsory in some countries but not in other countries although many employers in the latter might pay similar contributions to privately-managed pension funds. The modelling of these "non-tax non-compulsory payments" is left for future work.
4. Non-standard tax reliefs are not included in the Taxing Wages equations. Non-standard tax reliefs are reliefs which are wholly or partially determined by reference to actual expenses incurred. They are 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), voluntary private insurance premiums, voluntary contributions to private pension schemes and charitable donations.
5. The tax treatment of compulsory pension payments to privately-managed funds differs across countries. In some countries, these non-tax pension payments cannot be deducted from the personal income tax base. However, the pension that will be received in the future might not be taxed again (TEE (taxed-exempt-exempt) treatment). In other countries, the non-tax compulsory pension payments can be deducted from the personal income tax base. However, the pension that will be received in the future might then be taxed under the personal income tax (EET (exempt-exempt-taxed) treatment). Because the Taxing Wages Report studies the current tax burden on labour income and does not model the tax burden on pensions that will be received in the future, it has been decided to model the deduction of the non-tax compulsory (pension) payments from the taxable personal income tax base if these payments qualify as standard tax reliefs. This approach ensures that the presented tax burden indicators in the Taxing Wages Report reflect the actual taxes paid as closely as possible.
6. Given the strong resemblance with taxes, one might argue that compulsory "unrequited" payments to privately-managed (health) funds - although these payments are not taxes because they are not paid to general government - could be included in the tax burden indicators presented in Taxing Wages. This line of reasoning has not been followed by Working Party 2 of the OECD Committee of Fiscal Affairs, which decided to include only "taxes" into the Taxing Wages calculations and Report. Although the compulsory unrequited payments to privately-managed (health) funds are redistributive, it was argued that a deviation from the tax definition might lead to even more difficult/arbitrary choices about payments that should or should not be included in the tax burden measures that are presented in the Taxing Wages Report.
7. Ordinary time earnings is the total of the employee's earnings in respect of ordinary hours of work, including over-award payments, shift loading or commission but not including most overtime or lump-sum payments made on termination of employment in lieu of unused annual leave, long service leave, or sick leave. See Superannuation Guarantee Ruling SGR 2009/2 for further details: http://law.ato.gov.au/atolaw/view.htm.
8. The tax treatment of the severance pay or pension that the employee receives at the end of the working relationship is not considered in the compulsory payments indicators or Taxing Wages.
9. Very small companies do not have pension arrangements for their employees. If a company offers a pension arrangement to one of its employees, it has to offer the same arrangement to all of its employees. Nearly all SME's (approximately 95 per cent) have pension arrangements for their employees.
10. Final information regarding the pension premium contributions for employees and employers in Sectors C-K (ISIC Rev. 3.1), as a percentage of average earnings, becomes definitive only after three years. This implies that currently only definitive information regarding the contribution rates for the year 2006 and prior years is available. An estimated non-tax compulsory employees' and employers' pension contribution rate for 2009 has been used in the 2009 NTCP calculations.
11. There is a small group of the insured that are not obliged to save for a pension through an OPF. These are persons that are born before 1949. Also persons that are born between 1949 and 1968 could have
chosen not to enter the new pension system. They pay their contributions exclusively to ZUS and they will receive their pension based only on the indexed savings filed (recorded) by ZUS.
The total amount of indexed savings filed (recorded) by ZUS and capital accumulated in OPF are pooled by the Pension Institution when the taxpayer reaches his/her pension age; the total amount of funds are used to calculate the value of the monthly pension. It is calculated by dividing the amount of pooled savings by the average length of life (after the pension age). A minimum monthly pension is guaranteed (PLN 675.10 in 2009).
12. As part of New Zealand's broader Accident Insurance Scheme, both employer and employee contributions must be made to the Accident Compensation Corporation, a wholly state owned company.
13. This comparison issue could be resolved by dividing the non-tax compulsory payments by total labour costs.
14. This conclusion ignores the possible incidence effects; employer NTCPs could be borne by employees through lower gross wage earnings.

## Part I

## International Comparisons

This Part 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 eight different family types. 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 its thirty member countries. This Part provides detailed results for 2009; definitive results for 2008 and discusses the changes between 2008 and 2009.

## Tax Burdens, 2009 estimates

## T

his Section continues by commenting on Tables I.1-I. 11 and Figures I.1-I.6, which can be found at the end of this Section. All these summary tables show results for eight familytypes, 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 exhibit 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 15.3 per cent (Mexico) and 18.4 per cent (New Zealand) to 53.4 per cent (Hungary) and 55.2 per cent (Belgium). For a one-earner married couple with two children at the same wage level the wedge is lowest in New Zealand ( 0.6 per cent) and Iceland (8.6 per cent) and highest in Greece (41.7 per cent) and Hungary (43.7 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 (except in the case of Greece). 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 less than zero in Australia ( -7.5 per cent), Canada ( -7.7 per cent), Ireland ( -9.5 per cent) and New Zealand ( -16.5 per cent). This result is due to the fact that the cash benefits received by these families as well as the value of any applicable non-wastable tax credits exceed the sum of the tax due and the total social security contributions.

Table I. 2 and Figure I. 2 present the combined burden of the personal income tax (shown in Table I.4) and employee social security contributions (shown in Table I.5), expressed in the form of personal average tax rates (combined burden as a percentage of gross wage earnings). 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 Germany ( 41.3 per cent) and Belgium ( 41.5 per cent). At the other extreme, the personal average tax rate is below 20 per cent in Mexico ( 5.3 per cent), Korea (11.8 per cent), New Zealand (18.4 per cent) and Spain (19.7 per cent).

Table I. 3 exhibits the combined burden of income tax and employee social security contributions, in the form of net personal average tax rates as the levies due have been reduced by the amount of cash benefits each specific family-type is entitled to. Table I. 3 illustrates this burden for single individuals without children and one-earner married couples with two children, 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 only in the case of Canada as this person is entitled a cash transfer as a way of mitigating the
burden imposed by the federal consumption tax (further details can be found in the country chapter contained in Part III of this Report).

Cash benefits are provided in a majority of OECD countries. For the case of single parents with two children earning 67 per cent of the average wage level, 22 countries provide benefits that range from 33.8 per cent of income (New Zealand) to 3.7 per cent (Japan). The benefits are at least 25 per cent of income in 3 other countries: Canada ( 27.8 per cent), Australia ( 28.3 per cent) and Ireland ( 29.3 per cent). 22 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 17.9 per cent (New Zealand) to 2.5 per cent (Japan). This reduction in the importance of cash benefits 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 wage level of an average worker (average wage) - see column 2 of the table - the income tax burden varies between 4.0 per cent (Mexico) and 29.1 per cent (Denmark). 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 oneearner married couple with two children is less than half that faced by a single individual (the Czech Republic, Germany, Iceland, Ireland, Korea, Luxembourg, Poland, Portugal, the Slovak Republic, Spain, Switzerland and the United States). In contrast, there is no difference in Finland, Hungary, Mexico and Sweden. The tax burden for one-earner married couples with two children is higher than for single earners without children in Greece.

The United States, the Slovak Republic and the Czech Republic are the only OECD member countries where a married average worker with 2 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 -2.4 per cent in the United States, -5.3 per cent in the Slovak Republic and -5.4 per cent in the Czech Republic. Similarly, in six countries - the United Kingdom, Mexico, Germany, the Slovak Republic, the Czech Republic and the United States - single parents with two children earning two-thirds of the average wage receive payments corresponding to the portion of their non-wastable credits exceeding the taxes otherwise due. As a consequence, for these cases column 4 of Table I. 4 also shows a negative tax burden. In eight other countries - Canada, Greece, Ireland, Korea, Luxembourg, Poland, Portugal, and Spain - this family-type pays almost no income tax.

A comparison of columns 5 and 6 in Table I. 4 demonstrates that if the previously nonemployed spouse finds a job which pays one-third 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 in seventeen countries (slightly) rise. However, the tax burden actually falls in thirteen countries: Norway ( -0.2 percentage points), Italy ( -1.1 percentage points), New Zealand ( -1.2 percentage points), United Kingdom ( -1.5 percentage points), France ( -1.6 percentage points), Austria ( -2.0 percentage points), Sweden and Greece ( -2.3 percentage points), Australia ( -3.6 percentage points), the Netherlands ( -3.7 percentage points), Finland ( -3.9 percentage points), Mexico ( -4.1 percentage points) and Hungary ( -5.0 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. By comparing columns 1, 2, and 3 in Table I.4, one can gain an insight into how progressive the income tax system is. When one compares the income tax burden of single individuals at 100 per cent of the average wage level with their counterparts at 167 per cent (columns 2 and 3), the lower paid worker always faces a lower tax burden. Similarly, single individuals at 67 per cent of the average wage level pay an even lower percentage of their income in income tax (columns 1 and 2). Finally, when one compares the lowest paid single person with the highest paid, 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: Mexico (the burden is eliminated), Korea ( 85 per cent of the burden is eliminated), the Netherlands ( 81 per cent of the burden is eliminated) and Greece (79 per cent of the burden is eliminated).

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 Tables I. 2 and I.4). The OECD average tax burden of single individuals at 67 per cent of the average wage level is only 35 per cent lower than their counterparts at 167 per cent compared to the OECD average savings of 54 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 45 per cent to 24 per cent. These reductions are not unexpected given the observation that the average social security contribution rates tend to be the same across all family types, as shown in Table I.5.

Table I. 5 shows employees' social security contributions as a percentage of their 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 20.6 per cent (Germany). Only Australia and New Zealand levy no social security contributions at all on employees, though they are very low for employees in Iceland ( 0.2 per cent) and Mexico (1.4 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 particular rate structure is reflected in a roughly constant average burden of employee social security contributions for most countries over the whole range of 33 per cent to 167 per cent of average wage earnings as indicated in Table I.5. Some typical examples of the proportional burden of employee social security contributions for all familytypes at all wage levels considered here, are Poland ( 17.8 per cent), Hungary ( 17 per cent), Greece ( 16 per cent), Turkey ( 15 per cent), the Czech Republic and Portugal ( 11 per cent), Norway ( 7.8 per cent) and the United States ( 7.65 per cent).

Also, with the exception of the Netherlands and Germany, at the 100 per cent average wage level all OECD member countries 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 ends up in the public sector 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 five OECD countries these
individuals face higher marginal wedges - Hungary ( 71.5 per cent), Belgium ( 66.5 per cent), Germany ( 63.3 per cent), Austria ( 59.9 per cent) and Finland ( 56.9 per cent). Mexico ( 18.7 per cent) and Korea ( 29.1 per cent) have the lowest marginal tax rates.

In seventeen of the OECD member countries, the marginal tax wedge for one-earner married couples at the average wage level is the same as for single persons with no children, or is within 5 percentage points. The marginal wedge is more than 5 percentage points lower for the one-earner married couples in seven countries: Ireland (18.9 percentage points), Luxembourg ( 16.4 percentage points), the Slovak Republic (13 percentage points), Germany ( 8.9 percentage points), Portugal ( 8.5 percentage points), Poland ( 7.7 percentage points) and France ( 5.8 percentage points). By contrast, in the Czech Republic ( 5.4 percentage points), the Netherlands ( 5.6 percentage points), New Zealand (7 percentage points), the United States (14.9 percentage points), Australia (18.8 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 Mexico ( 12.5 per cent) and Korea ( 22.1 per cent) and it exceeds 50 per cent in Germany ( 56.1 per cent) and Hungary ( 62 per cent).

As in the case of the tax wedge, in more than half of the OECD member countries (17), the marginal personal tax rate for one-earner married couples at the average wage level is the same as for single persons with no children, or is within 5 percentage points. The marginal rate is more than 5 percentage points lower for the one-earner married couples in seven countries: France ( 8.2 percentage points), Poland ( 8.9 percentage points), Portugal (10.5 percentage points), Germany (10.6 percentage points), the Slovak Republic (16.5 percentage points), Luxembourg (18.2 percentage points) and Ireland (21 percentage points). By contrast, in the Netherlands ( 6.3 percentage points), New Zealand ( 7 percentage points), the Czech Republic ( 7.3 percentage points), the United States ( 16 percentage points), Australia ( 20 percentage points) and Canada ( 29.8 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 per cent, i.e. the elasticity of after-tax income. ${ }^{1}$ Under a proportional tax system, net income would also increase by 1 per cent, in which case the elasticity is equal to 1 . The elasticity is measured as 0.8 when an increase of gross wage by 1 per cent 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 Canada (0.38), Hungary (0.51), Australia (0.53), Belgium (0.56), the

United States and the Czech Republic (0.58) and New Zealand (0.59) have, on this measure, the most progressive system of income tax plus employee social security contributions at this income level. At the other extreme, Poland (1.00), France and Mexico (0.92), Turkey (0.91) and Japan and Korea (0.90) either implement or are close to a proportional system of income tax plus employee social security contributions - at least at the wage level of average workers.

It is interesting to note that the elasticity exceeds one for a single individual at 167 per cent of the average earnings in Germany (1.02), indicating that the income tax system at this point in the income scale is regressive. In other words, a 1 per cent increase in gross pay leads to an increase in net income in excess of 1 per cent.

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) rise by 1 per cent. ${ }^{2}$ In this case social security contributions paid by employers have also been included in the analysis. In most OECD member countries the value of this elasticity lies between 0.5 and 0.97 for most of the family-types considered. This elasticity is below 0.5 for single parents earning two-thirds of the average wage level in Canada (0.37), Ireland (0.3) and the United Kingdom (0.29) and, for one-earner married households at the average wage level in Canada (0.39), and for two-earner married couples where the spouse is earning two-thirds of the average wage level in Australia (0.47). In contrast, the elasticity is greater than or equal to 0.97 for some family types in Germany, Japan, Korea, Poland 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 Germany (1.19) and Spain (1.08).

Table I. 10 specifies gross wage earnings and net income for the eight selected familytypes after all amounts have been converted into U.S. dollars with the same purchasing power. Single workers with the average wage take home (see Table I.10, column 4) over USD 35000 in five countries: Korea (USD 40 190), the United Kingdom (USD 38 054), Luxembourg (USD 37 523), Switzerland (USD 36 012) and Norway (USD 35 543). Average workers receive less than USD 12000 after taxes in Mexico (USD 10 121) and in Hungary (USD 11430 ). In the case of a one-earner married couple at the average earnings level, families take home over USD 40000 in four countries - Korea, Luxembourg, Switzerland and the United Kingdom; while families receive net less than USD 12000 only in Mexico (USD 10 121). It is interesting to observe that with the exception of Mexico, the one-earner married couple takes home more than the single individual at the average wage with the average difference equalling more than USD 4 650. The higher take home pay for the one-earner married couple is due to the favourable tax treatment of this family and/or the cash transfers to which they are entitled.

Labour costs and net income for the selected eight family-types are shown in Table I.11. The "net" columns in Table I. 10 and I. 11 are identical, but in Table I. 11 the amounts in the "gross" column refer to total labour costs for employers instead of wage earnings of employees. 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 57 010) and Luxembourg (USD 56 840), and the lowest in Mexico (USD 11 944) and the Slovak Republic (USD 20 104).

Table I.1. Income tax plus employee and employer contributions less cash benefits, by family-type and wage level (as \% of labour costs), 2009

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married 2 ch | married 2 ch | married 2 ch | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{array}{r} 67  \tag{6}\\ (1) \\ \hline \end{array}$ | $\begin{array}{r} 100  \tag{7}\\ (2) \end{array}$ | $\begin{array}{r} 167  \tag{8}\\ (3) \\ \hline \end{array}$ | $67$ (4) | $\begin{array}{r} 100-0 \\ (5) \\ \hline \end{array}$ | $100-33^{1}$ | $100-67^{1}$ | $100-33^{1}$ |
| Australia | 20.7 | 26.7 | 32.6 | -7.5 | 14.1 | 17.9 | 22.2 | 23.1 |
| Austria | 43.3 | 47.9 | 50.1 | 26.4 | 36.6 | 36.8 | 40.0 | 44.3 |
| Belgium | 48.9 | 55.2 | 60.5 | 33.7 | 38.8 | 40.3 | 47.4 | 47.3 |
| Canada | 26.3 | 30.8 | 32.9 | -7.7 | 18.3 | 23.5 | 26.9 | 27.6 |
| Czech Republic | 38.6 | 41.9 | 44.6 | 15.0 | 20.5 | 30.0 | 33.9 | 39.8 |
| Denmark | 37.7 | 39.4 | 48.6 | 13.2 | 28.8 | 33.2 | 35.0 | 37.9 |
| Finland | 37.0 | 42.4 | 48.2 | 25.4 | 37.0 | 35.1 | 37.0 | 39.1 |
| France | 45.2 | 49.2 | 53.1 | 36.8 | 41.7 | 38.6 | 44.0 | 44.0 |
| Germany | 46.0 | 50.9 | 53.0 | 31.3 | 33.7 | 39.1 | 43.1 | 46.0 |
| Greece ${ }^{2}$ | 36.8 | 41.5 | 46.2 | 36.0 | 41.7 | 39.9 | 40.7 | 40.4 |
| Hungary | 46.3 | 53.4 | 58.4 | 30.1 | 43.7 | 42.5 | 44.7 | 49.8 |
| Iceland | 22.7 | 28.3 | 32.7 | 4.9 | 8.6 | 17.6 | 22.9 | 22.7 |
| Ireland | 22.5 | 28.6 | 39.1 | -9.5 | 11.7 | 13.7 | 19.8 | 20.5 |
| Italy | 43.0 | 46.5 | 51.5 | 25.0 | 35.7 | 38.0 | 41.3 | 42.7 |
| Japan | 27.8 | 29.2 | 32.3 | 21.5 | 23.7 | 24.9 | 25.9 | 28.4 |
| Korea | 17.0 | 19.7 | 21.9 | 16.4 | 17.2 | 17.3 | 17.4 | 18.8 |
| Luxembourg | 27.4 | 34.0 | 41.4 | 0.3 | 11.2 | 15.6 | 20.9 | 26.0 |
| Mexico | 11.8 | 15.3 | 20.8 | 11.8 | 15.3 | 13.4 | 13.9 | 13.4 |
| Netherlands | 33.3 | 38.0 | 41.8 | 11.3 | 29.7 | 29.1 | 31.6 | 33.9 |
| New Zealand | 15.6 | 18.4 | 24.9 | -16.5 | 0.6 | 8.8 | 15.3 | 17.2 |
| Norway | 34.0 | 37.4 | 43.0 | 20.6 | 30.6 | 31.5 | 33.3 | 34.9 |
| Poland | 33.0 | 34.0 | 34.9 | 28.4 | 28.4 | 28.9 | 30.3 | 33.0 |
| Portugal | 32.3 | 37.2 | 43.0 | 20.6 | 26.3 | 28.4 | 32.5 | 32.3 |
| Slovak Republic | 34.3 | 37.6 | 40.1 | 21.2 | 22.7 | 26.5 | 31.1 | 33.1 |
| Spain | 34.2 | 38.2 | 41.6 | 28.4 | 32.3 | 34.5 | 34.8 | 35.6 |
| Sweden | 41.2 | 43.2 | 50.9 | 32.8 | 37.5 | 37.2 | 39.0 | 41.4 |
| Switzerland | 26.3 | 29.3 | 33.6 | 11.4 | 17.2 | 20.0 | 23.0 | 26.9 |
| Turkey ${ }^{3}$ | 35.2 | 37.5 | 40.4 | 34.0 | 36.2 | 37.2 | 37.7 | 37.8 |
| United Kingdom | 29.2 | 32.5 | 37.0 | 8.9 | 26.4 | 24.6 | 28.2 | 29.2 |
| United States | 26.9 | 29.4 | 34.6 | 4.2 | 13.7 | 21.7 | 24.2 | 27.6 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 32.5 | 36.4 | 41.1 | 16.9 | 26.0 | 28.2 | 31.3 | 33.2 |
| EU-15 | 37.2 | 41.6 | 47.1 | 21.4 | 31.3 | 32.3 | 35.7 | 37.4 |
| EU-19 | 37.4 | 41.7 | 46.5 | 21.9 | 30.8 | 32.2 | 35.5 | 37.7 |

Note : ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Figure I.1. Income tax plus employee and employer contributions less cash benefits, by family-type
As \% of labour costs, 2009


Note: Corresponds to Table I.1, columns 2 and 5.
Source: OECD calculations based on country submissions and OECD Economic Outlook No. 86 (2009).
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Table I.2. Income tax plus employee contributions, by family-type and wage level (as \% of gross wage earnings), 2009

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married <br> 2 ch | married $2 \text { ch }$ | married $2 \text { ch }$ | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{align*} & 67 \\ & (1) \tag{7} \end{align*}$ | $\begin{array}{r} 100 \\ (2) \end{array}$ | $\begin{array}{r} 167 \\ (3) \end{array}$ | 67 <br> (4) | $\begin{array}{r} 100-0 \\ (5) \end{array}$ | $100-33^{1}$ (6) | $100-67^{1}$ | $100-33^{1}$ (8) |
| Australia | 15.6 | 22.0 | 28.3 | 13.9 | 20.9 | 17.3 | 18.8 | 18.2 |
| Austria | 26.8 | 32.7 | 37.2 | 23.7 | 30.6 | 27.8 | 30.1 | 28.1 |
| Belgium | 34.4 | 41.5 | 48.5 | 28.5 | 29.3 | 32.0 | 37.2 | 34.0 |
| Canada | 19.2 | 22.8 | 26.8 | 7.8 | 16.2 | 18.3 | 20.5 | 19.4 |
| Czech Republic | 17.7 | 22.2 | 25.8 | 6.2 | 5.6 | 13.6 | 15.8 | 19.4 |
| Denmark | 37.7 | 39.4 | 48.6 | 37.7 | 35.0 | 37.9 | 38.7 | 37.9 |
| Finland | 22.5 | 29.2 | 36.3 | 22.5 | 29.2 | 25.1 | 26.5 | 25.1 |
| France | 25.7 | 27.7 | 33.1 | 21.1 | 21.6 | 20.0 | 24.6 | 23.9 |
| Germany | 35.5 | 41.3 | 45.5 | 17.9 | 20.8 | 27.3 | 32.1 | 35.5 |
| Greece ${ }^{2}$ | 19.1 | 25.1 | 31.1 | 18.0 | 25.4 | 23.1 | 24.1 | 23.6 |
| Hungary | 28.9 | 38.2 | 44.7 | 28.9 | 38.2 | 33.2 | 34.5 | 33.2 |
| Iceland | 17.9 | 23.9 | 28.6 | 17.9 | 11.8 | 17.9 | 21.5 | 17.9 |
| Ireland | 14.2 | 20.9 | 32.5 | 8.0 | 12.3 | 12.4 | 17.2 | 12.4 |
| Italy | 24.7 | 29.3 | 36.0 | 16.8 | 21.9 | 20.8 | 24.5 | 24.4 |
| Japan | 18.5 | 20.1 | 24.0 | 15.1 | 16.3 | 17.1 | 17.8 | 19.1 |
| Korea | 8.9 | 11.8 | 15.2 | 8.2 | 9.1 | 9.2 | 9.3 | 10.8 |
| Luxembourg | 19.1 | 26.4 | 34.6 | 12.1 | 16.5 | 17.5 | 21.0 | 17.5 |
| Mexico | -0.4 | 5.3 | 12.8 | -0.4 | 5.3 | 1.2 | 3.0 | 1.2 |
| Netherlands | 27.0 | 31.8 | 37.8 | 13.6 | 27.6 | 25.6 | 27.5 | 27.6 |
| New Zealand | 15.6 | 18.4 | 24.9 | 17.3 | 18.5 | 17.3 | 18.0 | 17.2 |
| Norway | 25.6 | 29.3 | 35.7 | 21.9 | 26.8 | 26.6 | 27.8 | 26.6 |
| Poland | 23.0 | 24.3 | 25.2 | 17.8 | 17.8 | 18.3 | 20.0 | 23.0 |
| Portugal | 16.2 | 22.3 | 29.5 | 11.9 | 14.4 | 14.6 | 18.5 | 16.2 |
| Slovak Republic | 17.0 | 21.3 | 24.5 | 9.1 | 8.1 | 11.6 | 16.4 | 15.5 |
| Spain | 14.6 | 19.7 | 25.0 | 6.9 | 12.0 | 14.9 | 15.3 | 16.3 |
| Sweden | 22.7 | 25.3 | 35.5 | 22.7 | 25.3 | 23.0 | 24.3 | 23.0 |
| Switzerland | 18.2 | 21.5 | 26.4 | 13.5 | 16.0 | 17.1 | 19.3 | 18.9 |
| Turkey ${ }^{3}$ | 24.5 | 27.2 | 30.5 | 23.1 | 25.7 | 26.8 | 27.4 | 27.5 |
| United Kingdom | 22.4 | 25.3 | 29.8 | 7.9 | 23.7 | 21.2 | 23.9 | 22.4 |
| United States | 18.9 | 22.4 | 28.7 | -6.3 | 5.2 | 13.1 | 16.4 | 19.7 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 21.1 | 25.6 | 31.4 | 15.5 | 19.6 | 20.1 | 22.4 | 21.8 |
| EU-15 | 24.2 | 29.2 | 36.1 | 18.0 | 23.0 | 22.9 | 25.7 | 24.5 |
| EU-19 | 23.7 | 28.6 | 34.8 | 17.5 | 21.8 | 22.1 | 24.8 | 24.2 |

[^5]Figure I.2. Income tax plus employee contributions, by family-type
As \% of gross wage earnings, 2009


Note: Corresponds to Table I.2, columns 2 and 5.
Source: OECD calculations based on country submissions and OECD Economic Outlook No. 86, 2009.
StatLink Minst http://dx.doi.org/10.1787/828537351122

Table I.3. Income tax plus employee contributions less cash benefits, by family-type and wage level (as \% of gross wage earnings), 2009

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married 2 ch | married 2 ch | married $2 \text { ch }$ | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{align*} & 67 \\ & (1) \tag{7} \end{align*}$ | $\begin{array}{r} 100 \\ (2) \end{array}$ | $\begin{array}{r} 167 \\ (3) \end{array}$ | $67$ <br> (4) | $\begin{array}{r} 100-0 \\ (5) \end{array}$ | $100-33^{1}$ (6) | $100-67^{1}$ | $100-33^{1}$ (8) |
| Australia | 15.6 | 22.0 | 28.3 | -14.4 | 8.6 | 12.7 | 17.2 | 18.2 |
| Austria | 26.8 | 32.7 | 37.2 | 5.0 | 18.1 | 18.4 | 22.6 | 28.1 |
| Belgium | 34.4 | 41.5 | 48.5 | 14.9 | 20.2 | 25.2 | 31.8 | 34.0 |
| Canada | 17.9 | 22.8 | 26.8 | -20.0 | 8.8 | 14.8 | 18.5 | 19.4 |
| Czech Republic | 17.7 | 22.2 | 25.8 | -13.9 | -6.5 | 6.2 | 11.5 | 19.4 |
| Denmark | 37.7 | 39.4 | 48.6 | 13.2 | 28.8 | 33.2 | 35.0 | 37.9 |
| Finland | 22.5 | 29.2 | 36.3 | 8.2 | 22.6 | 20.2 | 22.5 | 25.1 |
| France | 25.7 | 27.7 | 33.1 | 14.4 | 17.1 | 16.7 | 21.9 | 23.9 |
| Germany | 35.5 | 41.3 | 45.5 | 17.9 | 20.8 | 27.3 | 32.1 | 35.5 |
| Greece ${ }^{2}$ | 19.1 | 25.1 | 31.1 | 18.0 | 25.4 | 23.1 | 24.1 | 23.6 |
| Hungary | 28.9 | 38.2 | 44.7 | 7.4 | 25.3 | 23.6 | 26.7 | 33.2 |
| Iceland | 17.9 | 23.9 | 28.6 | -1.0 | 3.0 | 12.5 | 18.1 | 17.9 |
| Ireland | 14.2 | 20.9 | 32.5 | -21.3 | 2.2 | 4.9 | 11.1 | 12.4 |
| Italy | 24.7 | 29.3 | 36.0 | 1.0 | 15.1 | 18.1 | 22.5 | 24.4 |
| Japan | 18.5 | 20.1 | 24.0 | 11.4 | 13.8 | 15.3 | 16.3 | 19.1 |
| Korea | 8.9 | 11.8 | 15.2 | 8.2 | 9.1 | 9.2 | 9.3 | 10.8 |
| Luxembourg | 19.1 | 26.4 | 34.6 | -11.2 | 0.9 | 5.8 | 11.7 | 17.5 |
| Mexico | -0.4 | 5.3 | 12.8 | -0.4 | 5.3 | 1.2 | 3.0 | 1.2 |
| Netherlands | 27.0 | 31.8 | 37.8 | 3.0 | 22.6 | 22.5 | 24.9 | 27.6 |
| New Zealand | 15.6 | 18.4 | 24.9 | -16.5 | 0.6 | 8.8 | 15.3 | 17.2 |
| Norway | 25.6 | 29.3 | 35.7 | 10.4 | 21.8 | 22.7 | 24.8 | 26.6 |
| Poland | 23.0 | 24.3 | 25.2 | 17.8 | 17.8 | 18.3 | 20.0 | 23.0 |
| Portugal | 16.2 | 22.3 | 29.5 | 1.7 | 8.7 | 11.4 | 16.4 | 16.2 |
| Slovak Republic | 17.0 | 21.3 | 24.5 | 0.6 | 2.4 | 7.3 | 13.0 | 15.5 |
| Spain | 14.6 | 19.7 | 25.0 | 6.9 | 12.0 | 14.9 | 15.3 | 16.3 |
| Sweden | 22.7 | 25.3 | 35.5 | 11.6 | 17.9 | 17.4 | 19.8 | 23.0 |
| Switzerland | 18.2 | 21.5 | 26.4 | 1.6 | 8.1 | 11.1 | 14.5 | 18.9 |
| Turkey ${ }^{3}$ | 24.5 | 27.2 | 30.5 | 23.1 | 25.7 | 26.8 | 27.4 | 27.5 |
| United Kingdom | 22.4 | 25.3 | 29.8 | 0.2 | 18.5 | 17.4 | 20.8 | 22.4 |
| United States | 18.9 | 22.4 | 28.7 | -6.3 | 5.2 | 13.1 | 16.4 | 19.7 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 21.0 | 25.6 | 31.4 | 3.1 | 13.3 | 16.0 | 19.5 | 21.8 |
| EU-15 | 24.2 | 29.2 | 36.1 | 5.6 | 16.7 | 18.4 | 22.2 | 24.5 |
| EU-19 | 23.7 | 28.6 | 34.8 | 5.0 | 15.3 | 17.5 | 21.3 | 24.2 |

[^6]1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Figure I.3. Income tax plus employee contributions less cash benefits, by family-type
As \% of gross wage earnings, 2009


Note: Corresponds to Table I.3, columns 2 and 5.
Source: OECD calculations based on country submissions and OECD Economic Outlook No. 86, 2009.
StatLink (inist http://dx.doi.org/10.1787/828652487854

Table I.4. Income tax, by family-type and wage level (as \% of gross wage earnings), 2009

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married | married | married | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | 67 | 100 | 167 | 67 | 100-0 | $100-33^{1}$ | $100-67^{1}$ | $100-33^{1}$ |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Australia | 15.6 | 22.0 | 28.3 | 13.9 | 20.9 | 17.3 | 18.8 | 18.2 |
| Austria | 8.8 | 14.7 | 21.9 | 5.6 | 12.5 | 10.5 | 12.0 | 10.8 |
| Belgium | 20.7 | 27.5 | 34.4 | 14.8 | 15.3 | 21.2 | 23.2 | 23.2 |
| Canada | 12.1 | 15.5 | 21.9 | 0.7 | 8.9 | 11.5 | 13.3 | 12.6 |
| Czech Republic | 6.7 | 11.2 | 14.8 | -4.8 | -5.4 | 2.6 | 4.8 | 8.4 |
| Denmark | 26.3 | 29.1 | 39.3 | 26.3 | 24.7 | 26.4 | 28.0 | 26.4 |
| Finland | 16.3 | 22.9 | 29.9 | 16.3 | 22.9 | 19.0 | 20.2 | 19.0 |
| France | 12.0 | 14.0 | 20.0 | 7.4 | 7.9 | 6.3 | 10.9 | 10.2 |
| Germany | 14.8 | 20.7 | 28.7 | -2.5 | 0.4 | 6.9 | 11.7 | 14.8 |
| Greece ${ }^{2}$ | 3.1 | 9.1 | 15.1 | 2.0 | 9.4 | 7.1 | 8.1 | 7.6 |
| Hungary | 11.9 | 21.2 | 27.7 | 11.9 | 21.2 | 16.2 | 17.5 | 16.2 |
| Iceland | 17.7 | 23.7 | 28.5 | 17.7 | 11.6 | 17.7 | 21.3 | 17.7 |
| Ireland | 7.9 | 14.2 | 25.6 | 1.7 | 5.6 | 7.4 | 10.6 | 7.4 |
| Italy | 15.2 | 19.8 | 26.5 | 7.3 | 12.4 | 11.3 | 15.0 | 14.9 |
| Japan | 6.3 | 7.9 | 12.5 | 2.9 | 4.1 | 4.9 | 5.7 | 6.9 |
| Korea | 1.3 | 4.2 | 8.7 | 0.6 | 1.5 | 1.6 | 1.7 | 3.2 |
| Luxembourg | 6.9 | 14.2 | 22.4 | 0.0 | 4.3 | 5.3 | 8.9 | 5.3 |
| Mexico | -1.7 | 4.0 | 11.3 | -1.7 | 4.0 | -0.1 | 1.7 | -0.1 |
| Netherlands | 5.4 | 16.6 | 28.7 | 4.5 | 16.3 | 12.6 | 12.0 | 12.7 |
| New Zealand | 15.6 | 18.4 | 24.9 | 17.3 | 18.5 | 17.3 | 18.0 | 17.2 |
| Norway | 17.8 | 21.5 | 27.9 | 14.1 | 19.0 | 18.8 | 20.0 | 18.8 |
| Poland | 5.2 | 6.4 | 7.4 | 0.0 | 0.0 | 0.5 | 2.2 | 5.2 |
| Portugal | 5.2 | 11.3 | 18.5 | 0.9 | 3.4 | 3.6 | 7.5 | 5.2 |
| Slovak Republic | 3.6 | 7.9 | 11.4 | -4.3 | -5.3 | -1.8 | 3.0 | 2.1 |
| Spain | 8.2 | 13.3 | 19.0 | 0.6 | 5.7 | 8.5 | 9.0 | 10.0 |
| Sweden | 15.8 | 18.3 | 30.6 | 15.8 | 18.3 | 16.0 | 17.3 | 16.0 |
| Switzerland | 7.2 | 10.5 | 15.5 | 2.5 | 5.0 | 6.1 | 8.2 | 7.8 |
| Turkey ${ }^{3}$ | 9.5 | 12.2 | 15.5 | 8.1 | 10.7 | 11.8 | 12.4 | 12.5 |
| United Kingdom | 14.2 | 16.2 | 22.1 | -0.3 | 14.5 | 13.0 | 15.2 | 14.2 |
| United States | 11.3 | 14.8 | 21.0 | -13.9 | -2.4 | 5.5 | 8.7 | 12.0 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 10.7 | 15.4 | 22.0 | 5.5 | 9.5 | 10.2 | 12.2 | 11.9 |
| EU-15 | 12.1 | 17.5 | 25.5 | 6.7 | 11.6 | 11.7 | 14.0 | 13.2 |
| EU-19 | 11.0 | 16.2 | 23.4 | 5.4 | 9.7 | 10.1 | 12.5 | 12.1 |

[^7]

Figure I.4. Income tax, by family-type
As \% of gross wage earnings, 2009


Note: Corresponds to Table I.4, columns 2 and 5.
Source: OECD calculations based on country submissions and OECD Economic Outlook No. 86, 2009.
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Table I.5. Employee contributions, by family-type and wage level (as \% of gross wage earnings), 2009

| Family-type: | single | single | single | single | married | married | married | married |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | 67 <br> (1) | 100 <br> (2) | 167 <br> (3) | 67 <br> (4) | $100-0$ <br> (5) | $100-33^{1}$ (6) | $100-67^{1}$ | $100-33^{1}$ (8) |
| Australia | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Austria | 18.1 | 18.1 | 15.3 | 18.1 | 18.1 | 17.3 | 18.1 | 17.3 |
| Belgium | 13.7 | 14.0 | 14.1 | 13.7 | 14.0 | 10.8 | 14.0 | 10.8 |
| Canada | 7.1 | 7.3 | 5.0 | 7.1 | 7.3 | 6.8 | 7.2 | 6.8 |
| Czech Republic | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
| Denmark | 11.4 | 10.3 | 9.4 | 11.4 | 10.3 | 11.4 | 10.7 | 11.4 |
| Finland | 6.2 | 6.3 | 6.4 | 6.2 | 6.3 | 6.2 | 6.3 | 6.2 |
| France | 13.7 | 13.7 | 13.1 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 |
| Germany | 20.6 | 20.6 | 16.8 | 20.4 | 20.4 | 20.4 | 20.4 | 20.6 |
| Greece ${ }^{2}$ | 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 | 0.3 | 0.2 | 0.1 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 |
| Ireland | 6.3 | 6.7 | 6.9 | 6.3 | 6.7 | 5.0 | 6.5 | 5.0 |
| Italy | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 |
| Japan | 12.2 | 12.2 | 11.5 | 12.2 | 12.2 | 12.2 | 12.2 | 12.2 |
| Korea ${ }^{3}$ | 7.6 | 7.6 | 6.5 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 |
| Luxembourg | 12.1 | 12.2 | 12.3 | 12.1 | 12.2 | 12.1 | 12.2 | 12.1 |
| Mexico | 1.3 | 1.4 | 1.5 | 1.3 | 1.4 | 1.3 | 1.3 | 1.3 |
| Netherlands | 21.6 | 15.2 | 9.1 | 9.1 | 11.3 | 13.1 | 15.5 | 14.9 |
| 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 |
| Spain | 6.4 | 6.4 | 6.0 | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 |
| Sweden | 7.0 | 7.0 | 4.8 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Switzerland | 11.1 | 11.1 | 10.9 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 |
| Turkey ${ }^{3}$ | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| United Kingdom | 8.2 | 9.1 | 7.7 | 8.2 | 9.1 | 8.2 | 8.8 | 8.2 |
| United States | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 10.4 | 10.2 | 9.4 | 9.9 | 10.0 | 9.9 | 10.2 | 10.0 |
| EU-15 | 12.1 | 11.7 | 10.6 | 11.3 | 11.5 | 11.2 | 11.7 | 11.3 |
| EU-19 | 12.7 | 12.4 | 11.4 | 12.0 | 12.2 | 12.0 | 12.4 | 12.1 |

## Note : ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Figure I.5. Employee contributions, by family-type
As \% of gross wage earnings, 2009


Note: Corresponds to Table I.5, columns 2 and 5.
Source: OECD calculations based on country submissions and OECD Economic Outlook No. 86, 2009.
StatLink minst http://dx.doi.org/10.1787/828720047258

Table I.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, by family-type and wage level (as \% of labour costs), 2009 ${ }^{1}$

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married 2 ch | married 2 ch | married 2 ch | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{align*} & 67 \\ & (1) \tag{7} \end{align*}$ | $\begin{array}{r} 100 \\ (2) \end{array}$ | $\begin{array}{r} 167 \\ (3) \end{array}$ | $\begin{aligned} & 67 \\ & (4) \end{aligned}$ | $\begin{array}{r} 100-0 \\ (5) \end{array}$ | $100-33^{2}$ (6) | $100-67^{2}$ | $100-33^{2}$ (8) |
| Australia | 39.4 | 35.6 | 45.0 | 39.4 | 54.4 | 35.6 | 63.8 | 35.6 |
| Austria | 56.3 | 59.9 | 41.4 | 56.3 | 59.9 | 59.9 | 59.9 | 59.9 |
| Belgium | 71.3 | 66.5 | 68.4 | 71.3 | 66.5 | 66.5 | 66.5 | 66.5 |
| Canada | 34.2 | 40.7 | 35.9 | 60.4 | 68.0 | 44.4 | 44.4 | 40.7 |
| Czech Republic | 48.6 | 48.6 | 48.6 | 55.7 | 54.0 | 54.0 | 54.0 | 48.6 |
| Denmark | 42.1 | 43.5 | 62.8 | 42.1 | 43.5 | 43.5 | 43.5 | 43.5 |
| Finland | 52.8 | 56.9 | 56.9 | 52.8 | 56.9 | 56.9 | 56.9 | 56.9 |
| France | 63.2 | 52.0 | 59.7 | 57.7 | 46.2 | 46.2 | 52.0 | 52.0 |
| Germany | 58.1 | 63.3 | 44.3 | 56.2 | 54.4 | 57.8 | 60.4 | 58.1 |
| Greece ${ }^{3}$ | 50.8 | 50.8 | 57.4 | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 |
| Hungary | 57.3 | 71.5 | 64.8 | 57.3 | 71.5 | 71.5 | 71.5 | 71.5 |
| Iceland | 39.4 | 39.4 | 39.4 | 44.0 | 44.0 | 44.0 | 44.0 | 39.4 |
| Ireland | 35.9 | 54.8 | 54.8 | 67.1 | 35.9 | 35.9 | 35.9 | 35.9 |
| Italy | 53.6 | 53.6 | 61.5 | 54.1 | 54.6 | 54.6 | 54.1 | 53.6 |
| Japan | 29.9 | 34.2 | 33.6 | 29.9 | 31.2 | 31.2 | 31.2 | 34.2 |
| Korea | 19.3 | 29.1 | 23.4 | 18.0 | 25.1 | 25.1 | 25.1 | 29.1 |
| Luxembourg | 41.1 | 52.5 | 52.5 | 38.6 | 36.1 | 39.4 | 46.0 | 39.4 |
| Mexico | 17.5 | 18.7 | 27.1 | 17.5 | 18.7 | 18.7 | 18.7 | 18.7 |
| Netherlands | 49.0 | 46.5 | 50.0 | 51.1 | 52.1 | 46.5 | 46.5 | 46.5 |
| New Zealand | 21.0 | 34.0 | 38.0 | 21.0 | 41.0 | 41.0 | 41.0 | 34.0 |
| 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 | 47.1 | 47.1 | 55.6 | 47.1 | 38.6 | 47.1 | 47.1 | 47.1 |
| Slovak Republic | 44.4 | 44.4 | 42.8 | 44.4 | 31.4 | 44.4 | 44.4 | 44.4 |
| Spain | 45.2 | 48.1 | 37.0 | 33.9 | 45.2 | 48.1 | 48.1 | 48.1 |
| Sweden | 46.3 | 47.9 | 66.9 | 46.3 | 47.9 | 47.9 | 47.9 | 47.9 |
| Switzerland | 32.5 | 35.8 | 42.6 | 27.7 | 31.7 | 34.1 | 36.6 | 34.1 |
| Turkey ${ }^{4}$ | 42.1 | 42.1 | 47.3 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 |
| United Kingdom | 38.8 | 38.8 | 47.7 | 73.4 | 38.8 | 38.8 | 44.7 | 38.8 |
| United States | 34.4 | 34.4 | 43.7 | 49.3 | 49.3 | 34.4 | 34.4 | 34.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 43.0 | 45.9 | 48.0 | 45.9 | 45.6 | 44.9 | 46.6 | 44.6 |
| EU-15 | 50.1 | 52.1 | 54.5 | 53.3 | 48.5 | 49.3 | 50.7 | 49.7 |
| EU-19 | 49.4 | 51.7 | 53.1 | 51.8 | 48.0 | 49.8 | 50.9 | 49.8 |

[^8]1. Assumes a rise in gross earnings of the principal earner in the household. The outcome may differ if
the wage of the spouse goesup, especially if partners are taxed individually.
2. Two-earner family.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Figure I.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, by family-type

As \% of labour costs, 2009


Note: Corresponds to Table I.6, columns 2 and 5.
Source: OECD calculations based on country submissions and OECD Economic Outlook No. 86, 2009.
StatLink (inist http://dx.doi.org/10.1787/828734478062

Table I.7. Marginal rate of income tax plus employee contributions less cash benefits, by family-type and wage level (as \% of gross wage earnings), 2009 ${ }^{1}$


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. Two-earner family.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Figure I.7. Marginal rate of income tax plus employee contributions less cash benefits, by family-type

As \% of gross wage earnings, 2009


Note: Corresponds to Table I.7, columns 2 and 5.
Source: OECD calculations based on country submissions and OECD Economic Outlook No. 86, 2009.

Table I.8. Increase in net income ${ }^{1}$ after $1 \%$ increase in gross wage earnings,
by family-type and wage level (\%), 2009

| Family-type: | single no ch | single no ch | single <br> no ch | single 2 ch | married <br> 2 ch | married <br> 2 ch | married <br> 2 ch | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{align*} & 67 \\ & (1) \tag{7} \end{align*}$ | $\begin{array}{r} 100 \\ (2) \\ \hline \end{array}$ | $\begin{array}{r} 167 \\ (3) \end{array}$ | $\begin{aligned} & 67 \\ & (4) \end{aligned}$ | $\begin{array}{r} 100-0 \\ (5) \end{array}$ | $\begin{array}{r} 100-33^{2} \\ (6) \\ \hline \end{array}$ | $100-67^{2}$ | $\begin{array}{r} 100-33^{2} \\ (8) \\ \hline \end{array}$ |
| Australia | 0.76 | 0.88 | 0.82 | 0.56 | 0.53 | 0.78 | 0.47 | 0.84 |
| Austria | 0.77 | 0.77 | 1.00 | 0.59 | 0.63 | 0.63 | 0.67 | 0.72 |
| Belgium | 0.59 | 0.77 | 0.79 | 0.45 | 0.56 | 0.60 | 0.66 | 0.68 |
| Canada | 0.90 | 0.84 | 0.92 | 0.37 | 0.38 | 0.72 | 0.75 | 0.81 |
| Czech Republic | 0.84 | 0.89 | 0.93 | 0.52 | 0.58 | 0.66 | 0.70 | 0.85 |
| Denmark | 0.93 | 0.93 | 0.72 | 0.67 | 0.79 | 0.85 | 0.87 | 0.91 |
| Finland | 0.75 | 0.75 | 0.83 | 0.63 | 0.68 | 0.66 | 0.68 | 0.71 |
| France | 0.92 | 0.95 | 0.86 | 0.92 | 0.92 | 0.92 | 0.87 | 0.90 |
| Germany | 0.77 | 0.75 | 1.02 | 0.64 | 0.69 | 0.69 | 0.70 | 0.77 |
| Greece ${ }^{3}$ | 0.78 | 0.84 | 0.79 | 0.77 | 0.84 | 0.82 | 0.83 | 0.82 |
| Hungary | 0.79 | 0.61 | 0.85 | 0.60 | 0.51 | 0.50 | 0.52 | 0.57 |
| Iceland | 0.78 | 0.84 | 0.90 | 0.59 | 0.61 | 0.68 | 0.73 | 0.78 |
| Ireland | 0.83 | 0.63 | 0.74 | 0.30 | 0.73 | 0.75 | 0.80 | 0.81 |
| Italy | 0.81 | 0.87 | 0.79 | 0.61 | 0.71 | 0.73 | 0.78 | 0.81 |
| Japan | 0.97 | 0.93 | 0.92 | 0.89 | 0.90 | 0.92 | 0.93 | 0.92 |
| Korea | 0.97 | 0.88 | 0.95 | 0.98 | 0.90 | 0.91 | 0.91 | 0.87 |
| Luxembourg | 0.81 | 0.72 | 0.81 | 0.62 | 0.72 | 0.72 | 0.68 | 0.82 |
| Mexico | 0.88 | 0.92 | 0.90 | 0.88 | 0.92 | 0.89 | 0.90 | 0.89 |
| Netherlands | 0.78 | 0.87 | 0.80 | 0.56 | 0.69 | 0.77 | 0.79 | 0.82 |
| New Zealand | 0.94 | 0.81 | 0.83 | 0.68 | 0.59 | 0.65 | 0.70 | 0.80 |
| Norway | 0.86 | 0.78 | 0.81 | 0.72 | 0.71 | 0.71 | 0.73 | 0.75 |
| Poland | 0.95 | 0.97 | 0.98 | 1.00 | 1.00 | 0.90 | 0.92 | 0.95 |
| Portugal | 0.78 | 0.84 | 0.78 | 0.67 | 0.83 | 0.74 | 0.78 | 0.78 |
| Slovak Republic | 0.85 | 0.89 | 0.94 | 0.71 | 0.89 | 0.76 | 0.81 | 0.83 |
| Spain | 0.83 | 0.84 | 0.84 | 0.92 | 0.81 | 0.79 | 0.80 | 0.81 |
| Sweden | 0.91 | 0.92 | 0.67 | 0.80 | 0.83 | 0.83 | 0.85 | 0.89 |
| Switzerland | 0.92 | 0.91 | 0.86 | 0.82 | 0.83 | 0.82 | 0.82 | 0.90 |
| Turkey ${ }^{4}$ | 0.89 | 0.93 | 0.88 | 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 | 0.87 | 0.91 | 0.85 | 0.51 | 0.58 | 0.81 | 0.84 | 0.88 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 0.84 | 0.85 | 0.85 | 0.67 | 0.74 | 0.77 | 0.77 | 0.82 |
| EU-15 | 0.81 | 0.82 | 0.82 | 0.63 | 0.75 | 0.76 | 0.77 | 0.81 |
| EU-19 | 0.82 | 0.83 | 0.84 | 0.65 | 0.75 | 0.74 | 0.76 | 0.81 |

[^9]StatLink Filst http://dx.doi.org/10.1787/831836467657

## Table I.9. Increase in net income ${ }^{1}$ after $\mathbf{1 \%}$ increase in labour costs, <br> by family-type and wage level (\%), 2009

| Family type: | single | single | single | single | married | married | married | married |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{array}{r} 67 \\ (1)  \tag{7}\\ \hline \end{array}$ | $\begin{array}{r} 100 \\ (2) \\ \hline \end{array}$ | $\begin{array}{r} 167 \\ (3) \\ \hline \end{array}$ | $\begin{array}{r} 67 \\ (4) \\ \hline \end{array}$ | $\begin{array}{r} 100-0 \\ (5) \\ \hline \end{array}$ | $100-33^{2}$ (6) | $100-67^{2}$ | $100-33^{2}$ (8) |
| Australia | 0.76 | 0.88 | 0.82 | 0.56 | 0.53 | 0.78 | 0.47 | 0.84 |
| Austria | 0.77 | 0.77 | 1.17 | 0.59 | 0.63 | 0.63 | 0.67 | 0.72 |
| Belgium | 0.56 | 0.75 | 0.80 | 0.43 | 0.55 | 0.56 | 0.64 | 0.64 |
| Canada | 0.89 | 0.86 | 0.95 | 0.37 | 0.39 | 0.73 | 0.76 | 0.82 |
| Czech Republic | 0.84 | 0.89 | 0.93 | 0.52 | 0.58 | 0.66 | 0.70 | 0.85 |
| Denmark | 0.93 | 0.93 | 0.72 | 0.67 | 0.79 | 0.85 | 0.87 | 0.91 |
| Finland | 0.75 | 0.75 | 0.83 | 0.63 | 0.68 | 0.66 | 0.68 | 0.71 |
| France | 0.67 | 0.95 | 0.86 | 0.67 | 0.92 | 0.88 | 0.86 | 0.86 |
| Germany | 0.77 | 0.75 | 1.19 | 0.64 | 0.69 | 0.69 | 0.70 | 0.77 |
| Greece ${ }^{3}$ | 0.78 | 0.84 | 0.79 | 0.77 | 0.84 | 0.82 | 0.83 | 0.82 |
| Hungary | 0.80 | 0.61 | 0.85 | 0.61 | 0.51 | 0.50 | 0.52 | 0.57 |
| Iceland | 0.78 | 0.84 | 0.90 | 0.59 | 0.61 | 0.68 | 0.73 | 0.78 |
| Ireland | 0.83 | 0.63 | 0.74 | 0.30 | 0.73 | 0.74 | 0.80 | 0.81 |
| Italy | 0.81 | 0.87 | 0.79 | 0.61 | 0.71 | 0.73 | 0.78 | 0.81 |
| Japan | 0.97 | 0.93 | 0.98 | 0.89 | 0.90 | 0.92 | 0.93 | 0.92 |
| Korea | 0.97 | 0.88 | 0.98 | 0.98 | 0.90 | 0.91 | 0.91 | 0.87 |
| Luxembourg | 0.81 | 0.72 | 0.81 | 0.62 | 0.72 | 0.72 | 0.68 | 0.82 |
| Mexico | 0.94 | 0.96 | 0.92 | 0.94 | 0.96 | 0.94 | 0.94 | 0.94 |
| Netherlands | 0.76 | 0.86 | 0.86 | 0.55 | 0.68 | 0.75 | 0.78 | 0.81 |
| New Zealand | 0.94 | 0.81 | 0.83 | 0.68 | 0.59 | 0.65 | 0.70 | 0.80 |
| Norway | 0.86 | 0.78 | 0.81 | 0.72 | 0.71 | 0.71 | 0.73 | 0.75 |
| Poland | 0.95 | 0.97 | 0.98 | 1.00 | 1.00 | 0.90 | 0.92 | 0.95 |
| Portugal | 0.78 | 0.84 | 0.78 | 0.67 | 0.83 | 0.74 | 0.78 | 0.78 |
| Slovak Republic | 0.85 | 0.89 | 0.96 | 0.71 | 0.89 | 0.76 | 0.81 | 0.83 |
| Spain | 0.83 | 0.84 | 1.08 | 0.92 | 0.81 | 0.79 | 0.80 | 0.81 |
| Sweden | 0.91 | 0.92 | 0.67 | 0.80 | 0.83 | 0.83 | 0.85 | 0.89 |
| Switzerland | 0.92 | 0.91 | 0.86 | 0.82 | 0.83 | 0.82 | 0.82 | 0.90 |
| Turkey ${ }^{4}$ | 0.89 | 0.93 | 0.88 | 0.88 | 0.91 | 0.92 | 0.93 | 0.93 |
| United Kingdom | 0.86 | 0.91 | 0.83 | 0.29 | 0.83 | 0.81 | 0.77 | 0.86 |
| United States | 0.90 | 0.93 | 0.86 | 0.53 | 0.59 | 0.84 | 0.87 | 0.91 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 0.84 | 0.85 | 0.88 | 0.66 | 0.74 | 0.76 | 0.77 | 0.82 |
| EU-15 | 0.79 | 0.82 | 0.86 | 0.61 | 0.75 | 0.75 | 0.77 | 0.80 |
| EU-19 | 0.80 | 0.82 | 0.88 | 0.63 | 0.75 | 0.74 | 0.76 | 0.80 |

## Note : ch = children.

1. Net income is calculated as gross earnings minus personal income tax and employees' social security contributions 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. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

## Table I.10. Annual gross wage and net income, by family-type and wage level <br> (in US dollars using PPP), 2009

| Family-type: | single |  | single |  | single |  | single |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no |  |  |  |  |  |  |  |
| Wage level (\% of AW): | 67 |  | 100 |  | 167 |  | 67 |  |
|  | gross <br> (1) | net <br> (2) | gross <br> (3) | net <br> (4) | gross <br> (5) | $\begin{aligned} & \hline \text { net } \\ & (6) \end{aligned}$ | $\begin{array}{r} \hline \text { gross } \\ \hline \end{array}$ | net <br> (8) |
| Australia | 28513 | 24057 | 42769 | 33344 | 71282 | 51143 | 28513 | 32615 |
| Austria | 29750 | 21773 | 44626 | 30011 | 74376 | 46690 | 29750 | 28268 |
| Belgium | 29032 | 19051 | 43547 | 25470 | 72579 | 37401 | 29032 | 24704 |
| Canada | 23602 | 19387 | 35403 | 27334 | 59006 | 43167 | 23602 | 28317 |
| Czech Republic | 12939 | 10645 | 19409 | 15103 | 32348 | 24018 | 12939 | 14744 |
| Denmark | 29099 | 18126 | 43649 | 26463 | 72748 | 37358 | 29099 | 25268 |
| Finland | 26321 | 20403 | 39482 | 27967 | 65804 | 41921 | 26321 | 24168 |
| France | 23984 | 17808 | 35976 | 25997 | 59959 | 40121 | 23984 | 20533 |
| Germany | 31811 | 20531 | 47717 | 27999 | 79528 | 43334 | 31811 | 26114 |
| Greece ${ }^{1}$ | 22762 | 18413 | 34142 | 25583 | 56904 | 39216 | 25038 | 20526 |
| Hungary | 12321 | 8755 | 18482 | 11430 | 30803 | 17030 | 12321 | 11405 |
| Iceland | 22437 | 18413 | 33656 | 25626 | 56093 | 40050 | 22437 | 22655 |
| Ireland | 26884 | 23070 | 40327 | 31897 | 67211 | 45342 | 26884 | 32598 |
| Italy | 20778 | 15647 | 31167 | 22027 | 51945 | 33244 | 20778 | 20572 |
| Japan | 27860 | 22717 | 41791 | 33395 | 69651 | 52904 | 27860 | 24684 |
| Korea | 30369 | 27670 | 45554 | 40190 | 75923 | 64408 | 30369 | 27868 |
| Luxembourg | 33973 | 27499 | 50960 | 37523 | 84933 | 55521 | 33973 | 37764 |
| Mexico | 7126 | 7155 | 10689 | 10121 | 17815 | 15533 | 7126 | 7155 |
| Netherlands | 33693 | 24586 | 50540 | 34489 | 84233 | 52354 | 33693 | 32678 |
| New Zealand | 20352 | 17173 | 30528 | 24904 | 50881 | 38234 | 20352 | 23704 |
| Norway | 33531 | 24946 | 50297 | 35543 | 83828 | 53900 | 33531 | 30038 |
| Poland | 12246 | 9423 | 18368 | 13913 | 30614 | 22893 | 12246 | 10063 |
| Portugal | 16501 | 13833 | 24752 | 19237 | 41253 | 29103 | 16501 | 16215 |
| Slovak Republic | 10620 | 8812 | 15931 | 12537 | 26551 | 20034 | 10620 | 10560 |
| Spain | 21031 | 17963 | 31546 | 25339 | 52577 | 39417 | 21031 | 19572 |
| Sweden | 25671 | 19833 | 38507 | 28761 | 64178 | 41414 | 25671 | 22683 |
| Switzerland | 30591 | 25024 | 45887 | 36012 | 76479 | 56324 | 30591 | 30106 |
| Turkey ${ }^{2}$ | 13367 | 10089 | 20050 | 14594 | 33417 | 23222 | 13367 | 10277 |
| United Kingdom | 33960 | 26337 | 50941 | 38054 | 84901 | 59618 | 33960 | 33905 |
| United States | 26615 | 21579 | 39923 | 30977 | 66538 | 47451 | 26615 | 28286 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 23925 | 18691 | 35887 | 26395 | 59812 | 40412 | 24001 | 23268 |
| EU-15 | 27017 | 20325 | 40525 | 28454 | 67542 | 42804 | 27169 | 25705 |
| EU-19 | 23862 | 18027 | 35793 | 25253 | 59655 | 38212 | 23982 | 22755 |

[^10]Table I. 10 (cont'd). Annual gross wage and net income, by family-type and wage level (in US dollars using PPP), 2009

| Family-type: Wage level (\% of AW): | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-0 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-33^{1} \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-67^{1} \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ \text { no ch } \\ 100-33^{1} \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | gross (9) | $\begin{array}{r} \hline \text { net } \\ (10) \\ \hline \end{array}$ | gross <br> (11) | $\begin{array}{r} \hline \text { net } \\ (12) \\ \hline \end{array}$ | gross <br> (13) | $\begin{array}{r} \text { net } \\ (14) \\ \hline \end{array}$ | gross <br> (15) | $\begin{array}{r} \hline \text { net } \\ (16) \\ \hline \end{array}$ |
| Australia | 42769 | 39090 | 57025 | 49795 | 71282 | 58999 | 57025 | 46664 |
| Austria | 44626 | 36539 | 59501 | 48549 | 74376 | 57586 | 59501 | 42770 |
| Belgium | 43547 | 34750 | 58063 | 43460 | 72579 | 49531 | 58063 | 38344 |
| Canada | 35403 | 32272 | 47205 | 40198 | 59006 | 48081 | 47205 | 38057 |
| Czech Republic | 19409 | 20668 | 25879 | 24268 | 32348 | 28635 | 25879 | 20861 |
| Denmark | 43649 | 31092 | 58198 | 38865 | 72748 | 47292 | 58198 | 36161 |
| Finland | 39482 | 30576 | 52643 | 42025 | 65804 | 50979 | 52643 | 39415 |
| France | 35976 | 29830 | 47967 | 39980 | 59959 | 46853 | 47967 | 36510 |
| Germany | 47717 | 37789 | 63623 | 46255 | 79528 | 54028 | 63623 | 41062 |
| Greece ${ }^{2}$ | 40971 | 30564 | 54628 | 42036 | 68285 | 51845 | 50075 | 38250 |
| Hungary | 18482 | 13812 | 24643 | 18832 | 30803 | 22567 | 24643 | 16450 |
| Iceland | 33656 | 32656 | 44874 | 39269 | 56093 | 45943 | 44874 | 36827 |
| Ireland | 40327 | 39423 | 53769 | 51119 | 67211 | 59724 | 53769 | 47080 |
| Italy | 31167 | 26470 | 41556 | 34049 | 51945 | 40280 | 41556 | 31430 |
| Japan | 41791 | 36014 | 55721 | 47216 | 69651 | 58264 | 55721 | 45065 |
| Korea | 45554 | 41404 | 60739 | 55161 | 75923 | 68862 | 60739 | 54189 |
| Luxembourg | 50960 | 50482 | 67946 | 63999 | 84933 | 74974 | 67946 | 56087 |
| Mexico | 10689 | 10121 | 14252 | 14080 | 17815 | 17275 | 14252 | 14080 |
| Netherlands | 50540 | 39095 | 67386 | 52256 | 84233 | 63220 | 67386 | 48756 |
| New Zealand | 30528 | 30351 | 40705 | 37117 | 50881 | 43121 | 40705 | 33704 |
| Norway | 50297 | 39356 | 67063 | 51810 | 83828 | 63047 | 67063 | 49252 |
| Poland | 18368 | 15094 | 24491 | 19998 | 30614 | 24488 | 24491 | 18846 |
| Portugal | 24752 | 22586 | 33003 | 29226 | 41253 | 34477 | 33003 | 27665 |
| Slovak Republic | 15931 | 15544 | 21241 | 19694 | 26551 | 23096 | 21241 | 17946 |
| Spain | 31546 | 27748 | 42062 | 35799 | 52577 | 44527 | 42062 | 35186 |
| Sweden | 38507 | 31611 | 51342 | 42391 | 64178 | 51445 | 51342 | 39542 |
| Switzerland | 45887 | 42192 | 61183 | 54368 | 76479 | 65373 | 61183 | 49643 |
| Turkey ${ }^{3}$ | 20050 | 14907 | 26734 | 19570 | 33417 | 24245 | 26734 | 19382 |
| United Kingdom | 50941 | 41494 | 67921 | 56115 | 84901 | 67203 | 67921 | 52675 |
| United States | 39923 | 37837 | 53230 | 46243 | 66538 | 55641 | 53230 | 42762 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 36115 | 31046 | 48153 | 40125 | 60191 | 48053 | 48001 | 37155 |
| EU-15 | 40980 | 34003 | 54641 | 44408 | 68301 | 52931 | 54337 | 40729 |
| EU-19 | 36152 | 30272 | 48203 | 39417 | 60254 | 46987 | 47964 | 36054 |

[^11]StatLink . .intst http://dx.doi.org/10.1787/831864574707

## Table I.11. Annual labour costs and net income, by family-type and wage level <br> (in US dollars using PPP), 2009

| Family-type: | single |  | single |  | single |  | single |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no |  |  |  |  |  |  |  |
| Wage level (\% of AW): | 67 |  | 100 |  | 167 |  | 67 |  |
|  | gross <br> (1) | net <br> (2) | gross <br> (3) | net <br> (4) | gross <br> (5) | $\begin{gathered} \text { net } \\ (6) \end{gathered}$ | $\begin{array}{r} \hline \text { gross } \\ \hline \end{array}$ | net <br> (8) |
| Australia | 30339 | 24057 | 45508 | 33344 | 75847 | 51143 | 30339 | 32615 |
| Austria | 36185 | 21773 | 54277 | 30011 | 88005 | 46690 | 36185 | 28268 |
| Belgium | 37285 | 19051 | 56804 | 25470 | 94645 | 37401 | 37285 | 24704 |
| Canada | 26294 | 19387 | 39487 | 27334 | 64292 | 43167 | 26294 | 28317 |
| Czech Republic | 17339 | 10645 | 26008 | 15103 | 43347 | 24018 | 17339 | 14744 |
| Denmark | 29099 | 18126 | 43649 | 26463 | 72748 | 37358 | 29099 | 25268 |
| Finland | 32375 | 20403 | 48563 | 27967 | 80938 | 41921 | 32375 | 24168 |
| France | 32481 | 17808 | 51193 | 25997 | 85503 | 40121 | 32481 | 20533 |
| Germany | 38007 | 20531 | 57010 | 27999 | 92280 | 43334 | 38007 | 26114 |
| Greece ${ }^{1}$ | 29148 | 18413 | 43723 | 25583 | 72871 | 39216 | 32063 | 20526 |
| Hungary | 16316 | 8755 | 24528 | 11430 | 40977 | 17030 | 16316 | 11405 |
| Iceland | 23821 | 18413 | 35732 | 25626 | 59553 | 40050 | 23821 | 22655 |
| Ireland | 29775 | 23070 | 44662 | 31897 | 74436 | 45342 | 29775 | 32598 |
| Italy | 27444 | 15647 | 41166 | 22027 | 68609 | 33244 | 27444 | 20572 |
| Japan | 31456 | 22717 | 47184 | 33395 | 78197 | 52904 | 31456 | 24684 |
| Korea | 33349 | 27670 | 50023 | 40190 | 82508 | 64408 | 33349 | 27868 |
| Luxembourg | 37894 | 27499 | 56840 | 37523 | 94734 | 55521 | 37894 | 37764 |
| Mexico | 8114 | 7155 | 11944 | 10121 | 19615 | 15533 | 8114 | 7155 |
| Netherlands | 36838 | 24586 | 55611 | 34489 | 89893 | 52354 | 36838 | 32678 |
| New Zealand | 20352 | 17173 | 30528 | 24904 | 50881 | 38234 | 20352 | 23704 |
| Norway | 37823 | 24946 | 56735 | 35543 | 94558 | 53900 | 37823 | 30038 |
| Poland | 14055 | 9423 | 21083 | 13913 | 35139 | 22893 | 14055 | 10063 |
| Portugal | 20420 | 13833 | 30631 | 19237 | 51051 | 29103 | 20420 | 16215 |
| Slovak Republic | 13403 | 8812 | 20104 | 12537 | 33437 | 20034 | 13403 | 10560 |
| Spain | 27319 | 17963 | 40979 | 25339 | 67545 | 39417 | 27319 | 19572 |
| Sweden | 33737 | 19833 | 50606 | 28761 | 84343 | 41414 | 33737 | 22683 |
| Switzerland | 33972 | 25024 | 50958 | 36012 | 84815 | 56324 | 33972 | 30106 |
| Turkey ${ }^{2}$ | 15572 | 10089 | 23359 | 14594 | 38931 | 23222 | 15572 | 10277 |
| United Kingdom | 37202 | 26337 | 56356 | 38054 | 94663 | 59618 | 37202 | 33905 |
| United States | 29526 | 21579 | 43852 | 30977 | 72503 | 47451 | 29526 | 28286 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 27898 | 18691 | 41970 | 26395 | 69562 | 40412 | 27995 | 23268 |
| EU-15 | 32347 | 20325 | 48805 | 28454 | 80818 | 42804 | 32542 | 25705 |
| EU-19 | 28754 | 18027 | 43357 | 25253 | 71851 | 38212 | 28907 | 22755 |

[^12]Table 1.11 (cont'd). Annual labour costs and net income, by family-type and wage level
(in US dollars using PPP), 2009

| Family-type: Wage level (\% of AW): | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-0 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-33^{1} \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-67^{1} \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ \text { no ch } \\ 100-33^{1} \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \hline \text { gross } \\ \text { (9) } \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { net } \\ (10) \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { gross } \\ (11) \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { net } \\ (12) \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { gross } \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { net } \\ (14) \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { gross } \\ \hline(15) \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { net } \\ (16) \\ \hline \end{array}$ |
| Australia | 45508 | 39090 | 60677 | 49795 | 75847 | 58999 | 60677 | 46664 |
| Austria | 54277 | 36539 | 72370 | 48549 | 90462 | 57586 | 72370 | 42770 |
| Belgium | 56804 | 34750 | 72750 | 43460 | 94089 | 49531 | 72750 | 38344 |
| Canada | 39487 | 32272 | 52564 | 40198 | 65781 | 48081 | 52564 | 38057 |
| Czech Republic | 26008 | 20668 | 34677 | 24268 | 43347 | 28635 | 34677 | 20861 |
| Denmark | 43649 | 31092 | 58198 | 38865 | 72748 | 47292 | 58198 | 36161 |
| Finland | 48563 | 30576 | 64751 | 42025 | 80938 | 50979 | 64751 | 39415 |
| France | 51193 | 29830 | 65140 | 39980 | 83674 | 46853 | 65140 | 36510 |
| Germany | 57010 | 37789 | 76013 | 46255 | 95016 | 54028 | 76013 | 41062 |
| Greece ${ }^{2}$ | 52467 | 30564 | 69956 | 42036 | 87445 | 51845 | 64126 | 38250 |
| Hungary | 24528 | 13812 | 32773 | 18832 | 40843 | 22567 | 32773 | 16450 |
| Iceland | 35732 | 32656 | 47643 | 39269 | 59553 | 45943 | 47643 | 36827 |
| Ireland | 44662 | 39423 | 59247 | 51119 | 74436 | 59724 | 59247 | 47080 |
| Italy | 41166 | 26470 | 54887 | 34049 | 68609 | 40280 | 54887 | 31430 |
| Japan | 47184 | 36014 | 62912 | 47216 | 78639 | 58264 | 62912 | 45065 |
| Korea | 50023 | 41404 | 66698 | 55161 | 83372 | 68862 | 66698 | 54189 |
| Luxembourg | 56840 | 50482 | 75787 | 63999 | 94734 | 74974 | 75787 | 56087 |
| Mexico | 11944 | 10121 | 16262 | 14080 | 20058 | 17275 | 16262 | 14080 |
| Netherlands | 55611 | 39095 | 73753 | 52256 | 92448 | 63220 | 73753 | 48756 |
| New Zealand | 30528 | 30351 | 40705 | 37117 | 50881 | 43121 | 40705 | 33704 |
| Norway | 56735 | 39356 | 75647 | 51810 | 94558 | 63047 | 75647 | 49252 |
| Poland | 21083 | 15094 | 28111 | 19998 | 35139 | 24488 | 28111 | 18846 |
| Portugal | 30631 | 22586 | 40841 | 29226 | 51051 | 34477 | 40841 | 27665 |
| Slovak Republic | 20104 | 15544 | 26806 | 19694 | 33507 | 23096 | 26806 | 17946 |
| Spain | 40979 | 27748 | 54638 | 35799 | 68298 | 44527 | 54638 | 35186 |
| Sweden | 50606 | 31611 | 67474 | 42391 | 84343 | 51445 | 67474 | 39542 |
| Switzerland | 50958 | 42192 | 67944 | 54368 | 84930 | 65373 | 67944 | 49643 |
| Turkey ${ }^{3}$ | 23359 | 14907 | 31145 | 19570 | 38931 | 24245 | 31145 | 19382 |
| United Kingdom | 56356 | 41494 | 74404 | 56115 | 93558 | 67203 | 74404 | 52675 |
| United States | 43852 | 37837 | 59052 | 46243 | 73378 | 55641 | 59052 | 42762 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 42262 | 31046 | 56127 | 40125 | 70354 | 48053 | 55933 | 37155 |
| EU-15 | 49387 | 34003 | 65347 | 44408 | 82123 | 52931 | 64959 | 40729 |
| EU-19 | 43818 | 30272 | 58030 | 39417 | 72878 | 46987 | 57724 | 36054 |

[^13]
## Graphical Exposition of the 2009 Estimated Tax Burden

T
he graphs in this section show the estimated tax burden on labour income in 2009 for gross wage earnings between 50 per cent and 250 per cent of the average wage (AW). For each OECD member country, the tax burden is shown for four family types: single taxpayers without children, single parents with 2 children, one-earner married couples without children and one-earner married couples with 2 children. Both the average and the marginal tax wedge are presented in a separate graph for each of these family types. The different components of the tax wedge are also presented; the graphs show respectively 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). In addition, the net personal average and marginal tax rate (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. ${ }^{3}$

The different components of the tax wedges are shown as a percentage of total labour costs. A decreasing share in total labour costs does not necessarily imply that the corresponding taxes or cash benefits are decreasing in 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 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.

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 2 children can be found in Australia, Canada, Denmark (but not especially for low-income one-earner married couples with 2 children), Iceland, Ireland, Luxembourg and New Zealand.

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 Sweden because of the nonwastable 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 2 children do not pay taxes and employee social security contributions on earnings below 85 per cent of the AW in 6 OECD member countries. The net personal average tax rate for single parents is not positive on earnings below 85 per cent of the AW in Australia, 87 per cent of the AW in Luxembourg, 88 per cent of the AW in Canada, 89 per cent of the AW in Ireland, 90 per cent of the AW in the Czech Republic and 99 per cent of the AW in New Zealand. The net personal average tax rate for one-earner married couples with 2 children is not positive on earnings below 85 per cent of the AW in Australia, 88 per cent of the AW in Canada, 93 per cent of the AW in Iceland and Ireland, 97 per cent of the AW in Luxembourg, 99 per cent of the AW in New Zealand and 117 per cent of the AW in the Czech Republic.

Social security contributions are levied at a flat rate in many OECD countries although some countries have an earnings ceiling above which no social security contributions are levied. 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 6.2 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 and Sweden and to a large extent in Luxembourg (employee social security contributions drop to 1.4 per cent on earnings above EUR 100555,4 ) and the United Kingdom (employee national insurance contributions drop to 1 per cent of earnings above GBP 43 888).

Taxpayers in some OECD countries face marginal social security contribution rates that are decreasing in income (for gross earnings between 50 per cent and 250 per cent of the AW). For single taxpayers without children, this can be observed in Belgium, Canada, France, Germany, Iceland, Ireland, Japan, Korea and Switzerland. In Poland, both employee and employer marginal social security contribution rates are substantially lower on earnings above 270 per cent of the AW.

Because of the flat social security contribution and personal income tax rates, single taxpayers without children face a flat marginal tax wedge of 48.6 per cent in the Czech Republic and 37.6 per cent in Iceland on average earnings below 207 per cent of the AW; the marginal wedge is $43.1 \%$ on higher earnings. The tax wedge continues to be relatively flat in the Slovak Republic; it is 44.4 per cent on earnings below 140 per cent of the AW, 42.8 per cent on earnings between 140 and 196 per cent of the AW and 46.1 per cent on earnings between 196 and 250 per cent of the AW.

The reduction in social security contribution rates mainly offsets the impact of the progressivity of the personal income tax system in Belgium for single taxpayers without children. The marginal tax wedge is about 69.8 per cent for single taxpayers that earn at least 108 per cent of the AW. It is 66.5 per cent for earnings between 69 and 107 per cent of the AW in 2009. In Denmark, single taxpayers without children face a constant marginal tax wedge on earnings exceeding the AW of 62.8 per cent. In France, the marginal tax wedge is 59.7 per cent on earnings exceeding 108 per cent of the AW. In Hungary, the marginal tax wedge is 64.8 per cent on earnings exceeding 112 per cent of the AW.

Taxpayers face marginal tax rates and wedges of more than 80 per cent in a number of OECD countries. This is the case for low-income single taxpayers without children in

Ireland and also for taxpayers in Mexico. Families with children face very high marginal tax rates and wedges (at particular income levels) in Australia, Belgium, Canada, the Czech Republic, Ireland, Italy, Japan, Mexico, New Zealand, Poland, Portugal, the Slovak Republic 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

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

$\square$ 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


## Austria

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

$\square$ 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





[^14]
## Belgium

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

$\square$ 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



StatLink

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





## Canada

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





[^15]
## Czech Republic

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


$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$===$ Net personal marginal tax rate



[^16]
## Denmark

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
ZIZ Family benefits as \% ot total labour costs

- Average tax wedge (sum of the components)

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



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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$-=-$ Net personal marginal tax rate




## Finland

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


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


| $\square$ | Marginal employee SSC |
| :--- | :--- |
| $\square$ | Marginal central income tax |
| $===$ | Net personal marginal tax rate |




## France

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

$\square$ 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





## Germany

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 ग्ञाIsta http://dx.doi.org/10.1787/830518607176

## Greece

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

$\square$ 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



StatLink ..insta http://dx.doi.org/10.1787/830625254835

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


$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$=-=$ Net personal marginal tax rate



## Hungary

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

$\square$ 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

```
\(\square\) Marginal employer SSC
\(\square\) Marginal local income tax
\(\square \square\) Marginal family benefits
\(-=\) Marginal tax wedge (sum of the components)
```


$\square$ Marginal employee SSC
$\square$ Marginal central income tax
--- Net personal marginal tax rate
--- Net personal marginal tax rate




[^17]
## Iceland

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

$\square$ 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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
--- Net personal marginal tax rate



StatLink (inlsta http://dx.doi.org/10.1787/830721535282

## Ireland

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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
--- Net personal marginal tax rate




[^18]
## Italy

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


## Japan

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


$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$-=-$ Net personal marginal tax rate



StatLink ..insta http://dx.doi.org/10.1787/830845640463

## Korea

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


| $\square$ | Marginal employee SSC |
| :--- | :--- |
| $\square$ | Marginal central income tax |
| $-=-$ | Net personal marginal tax rate |





StatLink .

## Luxembourg

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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$-=-$ Net personal marginal tax rate




[^19]
## Mexico

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



| $\square$ | Marginal employee SSC |
| :--- | :--- |
| $\square$ | Marginal central income tax |
| $===$ | Net personal marginal tax rate |




[^20]
## Netherlands

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


$\square$ Marginal employee SSC
$\square$ Marginal central income tax
---



## New Zealand

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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$=-=$ Net personal marginal tax rate


## Norway

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


$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$=-$ Net personal marginal tax rate



[^21]
## Poland

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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$-=-$ Net personal marginal tax rate



## Portugal

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


```
\square \text { Marginal employee SSC}
```

\square Marginal employee SSC
\squareMarginal central income tax
\squareMarginal central income tax
--- Net personal marginal tax rate

```
--- Net personal marginal tax rate
```




## Slovak Republic

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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
$==-$ Net personal marginal tax rate



StatLink 可ilsta http://dx.doi.org/10.1787/831372312611

## Spain

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

Marginal employee SSC
$\square$ Marginal central income tax
$---\quad$ Net personal marginal tax rate



StatLink .ailst http://dx.doi.org/10.1787/831384081831

## Sweden

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
ZZIT Family benefits as \% ot 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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
-- Net personal marginal tax rate



StatLink .ailst http://dx.doi.org/10.1787/831406376153

## Switzerland

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

$\square$ 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


## Turkey

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


## United Kingdom

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

$\square$ 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

$\square$ Marginal employee SSC
$\square$ Marginal central income tax
--- Net personal marginal tax rate



## United States

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

$\square$ Marginal employee SSC
$\square$ Magrinal central income tax
$--=$ Net personal marginal tax rate



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## Tax Burdens, 2008 Definitive Results

## T

 his section briefly reviews the definitive results for 2008 reported in Tables I.12-I. 22 which can be found at the end of this Section and what they show about changes between 2008 and 2009. The format of Tables I.12-I. 22 is identical to that of Tables I.1I. 22 reviewed above. Thus, changes between 2008 and 2009 for the various cases considered can be traced by comparing the same columns in Tables I.12-I.22, to those in Tables I.1-I.22. The following commentary on Tables I.12-I. 22 focuses on changes in tax burdens and marginal tax rates for single employees without children at the average wage level (column 2 of the tables) and for 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 would give the results for the remaining six family-types distinguished in this Report. Generally, only 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 2009 as compared to 2008 were within plus or minus one percentage point. However, for the single average worker, the wedge fell by more than 1 percentage point in New Zealand ( -2.7 percentage points), Turkey ( -2.3 percentage points), the Czech Republic and Sweden ( -1.6 percentage points), Finland ( -1.4 percentage points), Denmark ( -1.3 percentage points), the Slovak Republic ( -1.2 percentage points) and Luxembourg ( -1.1 percentage points); the tax wedge increased with 1.6 percentage points in Ireland; compare column 2 of Tables I. 1 and I.12. The OECD average tax wedge decreased by 0.6 percentage point for a single average worker between 2009 and 2008.

For one-earner married couples (compare column 5 of Tables I. 1 and I.12), the wedge decreased by more than one percentage point in ten countries: the Slovak Republic (-2.6 percentage points), New Zealand ( -2.5 percentage points), Turkey ( -2.4 percentage points), Austria ( -1.9 percentage points), Sweden ( -1.7 percentage points), Germany ( -1.6 percentage points), the United States ( -1.5 percentage points), Finland and Iceland ( -1.3 percentage points) and Belgium ( -1.2 percentage points). For this family type, the wedge increased by more than one percentage point in Ireland (1.9 percentage points). The OECD average tax wedge decreased by 0.7 percentage points for this family type in this period (compared to a decrease of 0.6 percentage point for a single worker).

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 at average earnings, this fell more than one percentage point between 2009 and 2008 in New Zealand ( -2.7 percentage points), Sweden and Luxembourg ( -1.6 percentage points), the Slovak Republic and the Czech Republic ( -1.5 percentage points), Austria,

Denmark and the United States ( -1.3 percentage points) and Finland ( -1.1 percentage points). For this family type, the rate increased by more than one percentage point in Ireland (1.7 percentage points). For one-earner married couples it fell with more than 1 percentage point in Finland ( -1.1 percentage points), Luxembourg ( -1.2 percentage points), Belgium and the Czech Republic ( -1.3 percentage points), Sweden ( -1.6 percentage points), Australia and Austria ( -1.7 percentage points), Germany ( -1.9 percentage points), the Slovak Republic ( -2.4 percentage points), New Zealand and Iceland ( -2.6 percentage points) and the United States ( -4.6 percentage points). It rose more than one percentage point in Ireland ( 2.5 percentage points). For this family type, the OECD average burden decreased 0.8 percentage point between the two years.

Table I. 14 provides the combined burden of income tax and social security contributions when levies due have been reduced by the amount of cash family benefits (net personal average tax rate). For single persons at average earnings, increases between 2008 and 2009 equalled +1.7 percentage points in Ireland; in contrast the burden of such contributions decreased more than one percentage point in Finland ( -1.1 percentage points), Austria and Denmark ( -1.3 percentage points), the Czech Republic, Luxembourg and the Slovak Republic ( -1.5 percentage points), Sweden ( -1.6 percentage points) and New Zealand ( -2.7 percentage points) - compare column 2 of Tables I. 3 and I.14. Reductions in the net personal average tax rate of one-earner married couples exceeding one percentage point are noted for Australia and Luxembourg ( -1.2 percentage points), Belgium ( -1.4 percentage points), Sweden ( -1.5 percentage points), the United States ( -1.6 percentage points), Germany ( -1.9 percentage points), Iceland ( -2.1 percentage points), New Zealand ( -2.5 percentage points), Austria ( -2.6 percentage points) and the Slovak Republic ( -3.3 percentage points). On the other hand, the net personal average tax rate increased more than one percentage points in Switzerland ( +1.1 percentage points) and Ireland ( 2.1 percentage points); compare column 5 of Tables I. 3 and I.14.

Table I. 15 presents information on income tax due as a percentage of gross wage earnings. In two OECD member countries (the Czech Republic and Greece) the income tax for single persons at average earnings did not change between 2009 and 2008. In contrast, the income tax rate fell more than one percentage point in Austria, Denmark, Finland and the United States ( -1.2 percentage points), the Slovak Republic ( -1.5 percentage points), Sweden ( -1.6 percentage points), Luxembourg ( -1.7 percentage points) and New Zealand ( -2.7 percentage points); the income tax rate increased with +1.3 percentage points in the Netherlands; compare column 2 of Tables I. 4 and I. 15 .

A one-earner married couple faced a decrease in the average income tax rate in twentythree of the OECD member countries while increases were observed in five countries. The OECD average income tax rate decreased 0.8 percentage points during this period. Increases greater than one percentage point were only observed in Ireland ( +1.2 percentage points) and the Netherlands ( +1.3 percentage points). One-earner married couples at the average earnings level in Finland ( -1.2 percentage points), Belgium and Luxembourg ( -1.3 percentage points), Sweden ( -1.6 percentage points), Australia and Austria ( -1.7 percentage points), Germany ( -1.9 percentage points), the Slovak Republic ( -2.5 percentage points), Iceland and New Zealand ( -2.6 percentage points) and the United States ( -4.6 percentage points) enjoyed a reduction in the average income tax rate of more than one percentage point.

Table I. 16 shows information on employee social security contributions as a percentage of gross wage earnings. For both single persons at average earnings and for
one-earner married couples, changes between 2008 and 2009 in the average burden of employee social security contributions did not exceed one percentage point - compare respectively column 2 and column 5 of Tables I. 5 and I.16, except for the Czech Republic ( -1.5 percentage points for both family types), the Netherlands ( -2.1 percentage points for single taxpayers at average earnings and -1.3 percentage points for one-earner married couples with 2 children at average earnings) and Ireland ( +1.3 percentage points for both family types).

Table I. 17 provides the marginal tax wedge (rate of income tax plus employee and employer social security contributions minus benefits) in 2008. Generally, changes between 2008 and 2009 in the marginal rate remain within the range of plus or minus five percentage points. For a single worker at the average earnings, a decrease higher than five percentage points in the marginal wedge is noted for Denmark ( -5.9 percentage points) and Sweden (-15.4 percentage points). For a one-earner married couple, the marginal wedge decreased by more than five percentage points in New Zealand ( -12 percentage points), the Slovak Republic ( -13 percentage points), Sweden ( -15.4 percentage points) and Belgium (-20.2 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. As for the tax wedge, in general changes between 2008 and 2009 in the marginal rate remain within the range of plus or minus five percentage points. For a single worker at the average earnings, a decrease higher than five percentage points is noted for Denmark ( -5.9 percentage points) and Sweden ( -19.9 percentage points). For a one-earner married couple, the marginal rate decreased by more than five percentage points in New Zealand ( -12 percentage points), the Slovak Republic ( -16.5 percentage points), Sweden ( -19.9 percentage points) and Belgium (-27.2 percentage points) - compare column 5 of Tables I. 7 and I.18.

Table I. 19 shows the increase in net income (in per cent) after a 1 per cent increase in gross wage earnings for $2008 .{ }^{4}$ Table I. 20 provides the percentage increase in net income given a 1 per cent increase in labour costs for this same year. ${ }^{5}$ Given that the results shown in these two tables are directly dependent upon the marginal and average tax rates that have been previously discussed, readers are left to make their own comparisons.

Tables I. 21 and I. 22 Report background information on levels of labour costs, gross wages and net wages in 2008 and do not require further discussion.

Table I.12. Income tax plus employee and employer contributions less cash benefits, by family-type and wage level (as \% of labour costs), 2008

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married | married | married | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): |  | $\begin{array}{r} 100  \tag{7}\\ (2) \\ \hline \end{array}$ |  | $\begin{array}{r} 67 \\ (4) \\ \hline \end{array}$ | $\begin{array}{r} 100-0 \\ (5) \\ \hline \end{array}$ | $100-33^{1}$ (6) | $100-67^{1}$ | $100-33^{1}$ (8) |
| Australia | 21.9 | 26.9 | 32.7 | -5.1 | 14.9 | 19.1 | 22.9 | 23.6 |
| Austria | 44.4 | 48.8 | 50.8 | 28.9 | 38.5 | 38.8 | 41.7 | 45.6 |
| Belgium | 49.8 | 55.7 | 60.9 | 35.0 | 40.0 | 41.2 | 48.1 | 48.0 |
| Canada | 26.5 | 31.3 | 32.9 | -6.4 | 19.0 | 24.0 | 27.3 | 28.1 |
| Czech Republic | 40.1 | 43.5 | 46.2 | 15.2 | 21.0 | 30.7 | 34.6 | 41.4 |
| Denmark | 38.2 | 40.7 | 49.4 | 13.2 | 29.0 | 33.5 | 35.3 | 38.3 |
| Finland | 38.5 | 43.8 | 49.5 | 26.7 | 38.3 | 36.4 | 38.4 | 40.5 |
| France | 45.4 | 49.3 | 53.2 | 37.1 | 42.1 | 39.5 | 44.2 | 43.9 |
| Germany | 46.6 | 51.5 | 53.0 | 33.3 | 35.3 | 40.5 | 44.3 | 46.6 |
| Greece ${ }^{2}$ | 36.3 | 41.5 | 46.5 | 35.3 | 41.8 | 40.0 | 40.7 | 40.5 |
| Hungary | 46.7 | 54.1 | 59.1 | 29.8 | 44.0 | 42.9 | 45.1 | 50.4 |
| Iceland | 23.6 | 28.3 | 32.0 | 4.8 | 9.9 | 18.1 | 22.9 | 23.6 |
| Ireland | 20.2 | 27.0 | 36.3 | -6.3 | 9.8 | 12.3 | 17.5 | 18.8 |
| Italy | 43.0 | 46.5 | 51.6 | 25.5 | 36.1 | 38.0 | 41.4 | 42.8 |
| Japan | 28.0 | 29.5 | 32.5 | 21.9 | 24.0 | 25.2 | 26.2 | 28.6 |
| Korea | 17.3 | 19.9 | 22.6 | 16.6 | 17.8 | 17.6 | 17.8 | 18.9 |
| Luxembourg | 28.5 | 35.1 | 41.9 | 3.0 | 11.9 | 16.5 | 21.8 | 27.0 |
| Mexico | 10.9 | 15.1 | 20.6 | 10.9 | 15.1 | 13.1 | 13.4 | 13.1 |
| Netherlands | 33.6 | 38.9 | 42.4 | 13.3 | 30.1 | 29.9 | 33.2 | 34.3 |
| New Zealand | 18.2 | 21.1 | 26.8 | -15.7 | 3.1 | 11.2 | 17.1 | 19.7 |
| Norway | 34.1 | 37.5 | 43.1 | 20.3 | 30.6 | 31.5 | 33.3 | 35.0 |
| Poland | 33.4 | 34.5 | 35.9 | 28.4 | 28.4 | 28.8 | 30.4 | 33.4 |
| Portugal | 32.4 | 37.3 | 43.0 | 23.3 | 26.7 | 28.8 | 32.7 | 32.4 |
| Slovak Republic | 36.0 | 38.8 | 40.7 | 24.1 | 25.3 | 30.0 | 32.9 | 36.0 |
| Spain | 34.0 | 38.0 | 41.4 | 28.3 | 32.0 | 34.3 | 34.6 | 35.5 |
| Sweden | 42.5 | 44.8 | 52.7 | 34.1 | 39.2 | 38.8 | 40.5 | 43.0 |
| Switzerland | 26.3 | 29.2 | 33.5 | 10.0 | 16.2 | 19.3 | 22.4 | 26.9 |
| Turkey ${ }^{3}$ | 37.7 | 39.8 | 42.7 | 36.7 | 38.6 | 39.4 | 40.0 | 40.0 |
| United Kingdom | 29.7 | 32.8 | 37.5 | 11.7 | 27.0 | 25.3 | 28.7 | 29.7 |
| United States | 26.6 | 29.1 | 34.7 | 4.4 | 15.2 | 20.6 | 23.2 | 27.3 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 33.0 | 37.0 | 41.5 | 17.9 | 26.7 | 28.8 | 31.8 | 33.8 |
| EU-15 | 37.5 | 42.1 | 47.3 | 22.8 | 31.8 | 32.9 | 36.2 | 37.8 |
| EU-19 | 37.9 | 42.2 | 46.9 | 23.1 | 31.4 | 33.0 | 36.1 | 38.3 |

Note : ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits
linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

## Table I.13. Income tax plus employee contributions, by family-type and wage level (as \% of gross wage earnings), 2008



## Note : ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits
linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Table I.14. Income tax plus employee contributions less cash benefits, by family-type and wage level (as \% of gross wage earnings), 2008

| Family-type: | single | single | single | single | married |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no ch | no ch | no ch | 2 ch | 2 ch | 2 ch | 2 ch | no ch |
| Wage level (\% of AW): | 67 | 100 | 167 | 67 | 100-0 | 100-33 ${ }^{1}$ | $100-67^{1}$ | $100-33^{1}$ |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Australia | 17.2 | 22.6 | 28.7 | -11.4 | 9.8 | 14.3 | 18.3 | 19.0 |
| Austria | 28.3 | 34.0 | 38.1 | 8.3 | 20.7 | 21.1 | 24.8 | 29.8 |
| Belgium | 35.4 | 42.2 | 49.0 | 16.5 | 21.6 | 26.2 | 32.7 | 34.8 |
| Canada | 18.2 | 23.4 | 27.0 | -18.5 | 9.7 | 15.4 | 19.0 | 20.0 |
| Czech Republic | 19.2 | 23.7 | 27.3 | -14.5 | -6.6 | 6.4 | 11.7 | 20.9 |
| Denmark | 38.2 | 40.7 | 49.4 | 13.2 | 29.0 | 33.5 | 35.3 | 38.3 |
| Finland | 23.8 | 30.3 | 37.4 | 9.1 | 23.5 | 21.1 | 23.6 | 26.2 |
| France | 25.8 | 27.8 | 33.2 | 14.6 | 17.6 | 17.9 | 22.1 | 23.9 |
| Germany | 36.2 | 42.0 | 45.7 | 20.3 | 22.7 | 28.9 | 33.5 | 36.2 |
| Greece ${ }^{2}$ | 18.4 | 25.1 | 31.4 | 17.1 | 25.5 | 23.1 | 24.0 | 23.8 |
| Hungary | 28.1 | 38.3 | 45.1 | 5.3 | 24.6 | 22.9 | 26.0 | 33.1 |
| Iceland | 19.5 | 24.4 | 28.4 | -0.2 | 5.1 | 13.7 | 18.8 | 19.5 |
| Ireland | 11.6 | 19.2 | 29.4 | -17.8 | 0.1 | 3.3 | 8.7 | 10.6 |
| Italy | 24.8 | 29.4 | 36.1 | 1.6 | 15.6 | 18.2 | 22.6 | 24.4 |
| Japan | 18.5 | 20.3 | 24.2 | 11.7 | 14.1 | 15.5 | 16.5 | 19.3 |
| Korea | 9.2 | 12.1 | 15.8 | 8.4 | 9.7 | 9.5 | 9.7 | 11.0 |
| Luxembourg | 20.5 | 27.9 | 35.5 | -7.8 | 2.1 | 7.1 | 13.1 | 18.8 |
| Mexico | -1.4 | 5.1 | 12.6 | -1.4 | 5.1 | 0.9 | 2.5 | 0.9 |
| Netherlands | 27.2 | 32.6 | 38.4 | 5.1 | 22.9 | 23.1 | 26.6 | 28.0 |
| New Zealand | 18.2 | 21.1 | 26.8 | -15.7 | 3.1 | 11.2 | 17.1 | 19.7 |
| Norway | 25.7 | 29.5 | 35.8 | 10.1 | 21.7 | 22.7 | 24.8 | 26.7 |
| Poland | 23.5 | 24.9 | 26.4 | 17.8 | 17.8 | 18.3 | 20.1 | 23.5 |
| Portugal | 16.3 | 22.4 | 29.5 | 5.0 | 9.3 | 11.8 | 16.7 | 16.3 |
| Slovak Republic | 19.3 | 22.8 | 25.4 | 4.2 | 5.7 | 11.7 | 15.3 | 19.3 |
| Spain | 14.1 | 19.3 | 24.5 | 6.7 | 11.5 | 14.5 | 14.8 | 16.0 |
| Sweden | 23.9 | 26.9 | 37.4 | 12.7 | 19.4 | 18.9 | 21.2 | 24.5 |
| Switzerland | 18.2 | 21.4 | 26.2 | 0.0 | 7.0 | 10.4 | 13.9 | 18.8 |
| Turkey ${ }^{3}$ | 25.1 | 27.6 | 31.1 | 23.8 | 26.2 | 27.1 | 27.8 | 27.8 |
| United Kingdom | 22.9 | 25.6 | 30.3 | 3.1 | 19.1 | 18.1 | 21.4 | 22.9 |
| United States | 18.6 | 22.2 | 28.9 | -6.0 | 6.8 | 12.0 | 15.3 | 19.3 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 21.5 | 26.2 | 31.8 | 4.0 | 14.0 | 16.6 | 19.9 | 22.4 |
| EU-15 | 24.5 | 29.7 | 36.4 | 7.2 | 17.4 | 19.1 | 22.7 | 25.0 |
| EU-19 | 24.1 | 29.2 | 35.2 | 6.3 | 15.9 | 18.2 | 21.8 | 24.8 |

[^22]1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits
linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Table I.15. Income tax, by family-type and wage level (as \% of gross wage earnings), 2008

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married | married | married | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | 67 <br> (1) | $\begin{array}{r} 100 \\ (2) \end{array}$ | $\begin{array}{r} 167 \\ (3) \\ \hline \end{array}$ | 67 <br> (4) | $\begin{array}{r} 100-0 \\ \text { (5) } \end{array}$ | $100-33^{1}$ <br> (6) | $100-67^{1}$ <br> (7) | $100-33^{1}$ <br> (8) |
| Australia | 17.2 | 22.6 | 28.7 | 17.2 | 22.6 | 19.0 | 20.4 | 19.0 |
| Austria | 10.3 | 15.9 | 22.8 | 7.7 | 14.2 | 11.7 | 13.7 | 11.7 |
| Belgium | 21.7 | 28.2 | 35.0 | 16.1 | 16.6 | 22.2 | 24.1 | 24.1 |
| Canada | 12.4 | 16.1 | 22.3 | 1.4 | 9.9 | 12.1 | 13.8 | 13.2 |
| Czech Republic | 6.7 | 11.2 | 14.8 | -5.0 | -5.6 | 2.6 | 4.7 | 8.4 |
| Denmark | 26.7 | 30.3 | 40.0 | 26.7 | 25.1 | 26.8 | 28.4 | 26.8 |
| Finland | 17.7 | 24.1 | 31.1 | 17.7 | 24.1 | 20.1 | 21.6 | 20.1 |
| France | 12.1 | 14.1 | 20.1 | 7.4 | 8.2 | 7.5 | 11.0 | 10.2 |
| Germany | 15.5 | 21.3 | 29.3 | -0.1 | 2.3 | 8.5 | 13.0 | 15.5 |
| Greece ${ }^{2}$ | 2.4 | 9.1 | 15.4 | 1.1 | 9.5 | 7.1 | 8.0 | 7.8 |
| Hungary | 11.1 | 21.3 | 28.1 | 11.1 | 21.3 | 16.1 | 17.2 | 16.1 |
| Iceland | 19.2 | 24.3 | 28.3 | 19.2 | 14.2 | 19.2 | 22.2 | 19.2 |
| Ireland | 6.6 | 13.8 | 24.7 | 0.0 | 4.4 | 6.6 | 9.3 | 6.6 |
| Italy | 15.3 | 19.9 | 26.5 | 7.4 | 12.5 | 11.3 | 15.0 | 14.9 |
| Japan | 6.3 | 8.1 | 12.8 | 3.1 | 4.3 | 5.1 | 5.8 | 7.1 |
| Korea | 1.7 | 4.5 | 9.2 | 0.8 | 2.1 | 1.9 | 2.1 | 3.4 |
| Luxembourg | 8.5 | 15.9 | 23.4 | 3.5 | 5.6 | 6.8 | 10.4 | 6.8 |
| Mexico | -2.6 | 3.8 | 11.1 | -2.6 | 3.8 | -0.4 | 1.2 | -0.4 |
| Netherlands | 5.1 | 15.3 | 27.8 | 4.2 | 15.0 | 11.6 | 11.1 | 11.8 |
| New Zealand | 18.2 | 21.1 | 26.8 | 18.2 | 21.1 | 19.7 | 19.9 | 19.7 |
| Norway | 17.9 | 21.7 | 28.0 | 14.2 | 19.2 | 18.9 | 20.2 | 18.9 |
| Poland | 5.7 | 7.0 | 8.6 | 0.0 | 0.0 | 0.5 | 2.3 | 5.7 |
| Portugal | 5.3 | 11.4 | 18.5 | 1.1 | 3.6 | 3.7 | 7.7 | 5.3 |
| Slovak Republic | 5.9 | 9.4 | 12.3 | -1.9 | -2.8 | 2.0 | 4.9 | 5.9 |
| Spain | 7.8 | 12.9 | 18.5 | 0.4 | 5.2 | 8.2 | 8.5 | 9.7 |
| Sweden | 16.9 | 19.9 | 32.8 | 16.9 | 19.9 | 17.5 | 18.7 | 17.5 |
| Switzerland | 7.1 | 10.4 | 15.3 | 2.6 | 5.0 | 6.1 | 8.3 | 7.7 |
| Turkey ${ }^{3}$ | 10.1 | 12.6 | 16.1 | 8.8 | 11.2 | 12.1 | 12.8 | 12.8 |
| United Kingdom | 14.6 | 16.4 | 23.3 | 2.1 | 14.8 | 13.4 | 15.4 | 14.6 |
| United States | 13.2 | 16.0 | 22.1 | -10.3 | 2.2 | 7.5 | 10.4 | 13.9 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 11.2 | 16.0 | 22.5 | 6.3 | 10.3 | 10.8 | 12.7 | 12.5 |
| EU-15 | 12.4 | 17.9 | 26.0 | 7.5 | 12.1 | 12.2 | 14.4 | 13.6 |
| EU-19 | 11.4 | 16.7 | 23.8 | 6.1 | 10.2 | 10.7 | 12.9 | 12.6 |

[^23]Table I.16. Employee contributions, by family-type and wage level (as \% of gross wage earnings), 2008

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married 2 ch | married | married $2 \text { ch }$ | married no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{array}{r} 67  \tag{6}\\ (1) \\ \hline \end{array}$ | $\begin{array}{r} 100  \tag{7}\\ (2) \\ \hline \end{array}$ | $\begin{array}{r} 167 \\ (3) \end{array}$ | $\begin{array}{r} 67 \\ (4) \\ \hline \end{array}$ | 100-0 (5) | $100-33^{1}$ | $100-67^{1}$ | $100-33^{1}$ (8) |
| Australia | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Austria | 18.1 | 18.1 | 15.3 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 |
| Belgium | 13.8 | 14.0 | 14.1 | 13.8 | 14.0 | 10.8 | 14.0 | 10.8 |
| Canada | 7.1 | 7.2 | 4.7 | 7.1 | 7.2 | 6.8 | 7.2 | 6.8 |
| Czech Republic | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| Denmark | 11.5 | 10.3 | 9.4 | 11.5 | 10.3 | 11.5 | 10.8 | 11.5 |
| Finland | 6.1 | 6.2 | 6.2 | 6.1 | 6.2 | 6.1 | 6.1 | 6.1 |
| France | 13.7 | 13.7 | 13.1 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 |
| Germany | 20.7 | 20.7 | 16.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.7 |
| Greece ${ }^{2}$ | 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 | 0.3 | 0.2 | 0.1 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 |
| Ireland | 5.0 | 5.4 | 4.7 | 5.0 | 5.4 | 4.0 | 5.2 | 4.0 |
| Italy | 9.5 | 9.5 | 9.6 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 |
| Japan | 12.2 | 12.2 | 11.4 | 12.2 | 12.2 | 12.2 | 12.2 | 12.2 |
| Korea | 7.6 | 7.6 | 6.6 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 |
| Luxembourg | 12.0 | 12.1 | 12.1 | 12.0 | 12.1 | 12.0 | 12.0 | 12.0 |
| Mexico | 1.3 | 1.4 | 1.5 | 1.3 | 1.4 | 1.3 | 1.3 | 1.3 |
| Netherlands | 22.2 | 17.3 | 10.5 | 10.7 | 12.6 | 14.7 | 18.0 | 16.2 |
| 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 | 13.1 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 |
| Spain | 6.4 | 6.4 | 6.1 | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 |
| Sweden | 7.0 | 7.0 | 4.6 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Switzerland | 11.1 | 11.1 | 10.9 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 |
| Turkey ${ }^{3}$ | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| United Kingdom | 8.3 | 9.2 | 7.1 | 8.3 | 9.2 | 8.3 | 8.9 | 8.3 |
| United States | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 10.4 | 10.2 | 9.4 | 10.0 | 10.1 | 10.0 | 10.3 | 10.1 |
| EU-15 | 12.1 | 11.8 | 10.4 | 11.3 | 11.4 | 11.3 | 11.8 | 11.4 |
| EU-19 | 12.7 | 12.5 | 11.4 | 12.1 | 12.2 | 12.1 | 12.5 | 12.2 |

[^24]1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits
linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Table I.17. Marginal rate of income tax plus employee and employer contributions less cash benefits, by family-type and wage level (as \% of labour costs), 2008 ${ }^{1}$


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 goesup, especially if partners are taxed individually.
2. Two-earner family.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Table I.18. Marginal rate of income tax plus employee contributions less cash benefits, by family-type and wage level (as \% of gross wage earnings), 2008 ${ }^{1}$

| Family-type: |  | single |  | single | married | married | married |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no ch | no ch | no ch | 2 ch | 2 ch | 2 ch | 2 ch | no ch |
| Wage level (\% of AW): | $67$ (1) |  | $\begin{array}{r} 167 \\ (3) \\ \hline \end{array}$ |  | $\begin{array}{r} 100-0 \\ (5) \end{array}$ | $\begin{array}{r} 100-33^{2} \\ (6) \\ \hline \end{array}$ | $100-67^{2}$ | $\begin{array}{r} 100-33^{2} \\ (8) \\ \hline \end{array}$ |
| Australia | 35.5 | 31.5 | 41.5 | 44.0 | 51.5 | 31.5 | 61.5 | 31.5 |
| Austria | 44.9 | 48.5 | 37.5 | 44.9 | 48.5 | 48.5 | 48.5 | 48.5 |
| Belgium | 61.4 | 54.9 | 60.9 | 61.4 | 82.1 | 54.9 | 54.9 | 54.9 |
| Canada | 26.3 | 35.1 | 33.0 | 51.7 | 60.9 | 39.1 | 39.1 | 35.1 |
| Czech Republic | 32.8 | 32.8 | 32.7 | 32.8 | 39.2 | 39.2 | 39.2 | 32.8 |
| Denmark | 42.6 | 49.4 | 63.0 | 42.6 | 43.9 | 43.9 | 43.9 | 43.9 |
| Finland | 42.8 | 48.0 | 48.0 | 42.8 | 48.0 | 48.0 | 48.0 | 48.0 |
| France | 31.7 | 31.7 | 42.3 | 21.5 | 27.5 | 27.5 | 31.7 | 31.7 |
| Germany | 50.5 | 56.8 | 44.3 | 48.1 | 46.0 | 50.1 | 53.3 | 50.5 |
| Greece ${ }^{3}$ | 38.7 | 38.7 | 47.1 | 38.7 | 38.7 | 38.7 | 38.7 | 38.7 |
| Hungary | 44.0 | 62.0 | 53.0 | 44.0 | 62.0 | 62.0 | 62.0 | 62.0 |
| Iceland | 34.3 | 34.3 | 34.3 | 39.1 | 39.1 | 39.1 | 39.1 | 34.3 |
| Ireland | 26.0 | 47.0 | 43.3 | 62.4 | 26.0 | 26.0 | 26.0 | 26.0 |
| Italy | 38.7 | 38.7 | 49.2 | 39.3 | 40.0 | 40.0 | 39.4 | 38.7 |
| Japan | 20.9 | 25.8 | 30.3 | 20.9 | 22.4 | 22.4 | 22.4 | 25.8 |
| Korea | 12.6 | 23.0 | 20.3 | 10.8 | 18.4 | 23.0 | 23.0 | 23.0 |
| Luxembourg | 36.0 | 46.9 | 46.9 | 36.9 | 28.7 | 34.1 | 41.5 | 34.1 |
| Mexico | 12.1 | 12.5 | 21.5 | 12.1 | 12.5 | 12.5 | 12.5 | 12.5 |
| Netherlands | 45.4 | 42.7 | 50.4 | 46.8 | 48.1 | 42.7 | 42.7 | 42.7 |
| New Zealand | 21.0 | 33.0 | 39.0 | 21.0 | 53.0 | 53.0 | 53.0 | 33.0 |
| Norway | 35.8 | 44.8 | 47.8 | 35.8 | 44.8 | 44.8 | 44.8 | 44.8 |
| Poland | 27.5 | 27.5 | 37.0 | 17.8 | 17.8 | 27.5 | 27.5 | 27.5 |
| Portugal | 34.5 | 34.5 | 45.0 | 34.5 | 24.0 | 34.5 | 34.5 | 34.5 |
| Slovak Republic | 29.9 | 29.9 | 28.7 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| Spain | 28.8 | 32.6 | 37.0 | 14.2 | 28.8 | 32.6 | 32.6 | 32.6 |
| Sweden | 30.4 | 51.4 | 56.4 | 30.4 | 51.4 | 51.4 | 51.4 | 51.4 |
| Switzerland | 25.1 | 28.7 | 36.8 | 19.7 | 24.1 | 26.9 | 29.6 | 26.9 |
| Turkey ${ }^{4}$ | 32.6 | 32.6 | 38.6 | 32.6 | 32.6 | 32.6 | 32.6 | 32.6 |
| United Kingdom | 31.0 | 31.0 | 41.0 | 70.0 | 31.0 | 31.0 | 37.7 | 31.0 |
| United States | 29.4 | 29.4 | 39.4 | 45.4 | 45.4 | 14.4 | 29.4 | 29.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 33.4 | 37.9 | 41.5 | 36.4 | 38.9 | 36.7 | 39.0 | 36.3 |
| EU-15 | 38.9 | 43.5 | 47.5 | 42.3 | 40.8 | 40.3 | 41.6 | 40.5 |
| EU-19 | 37.8 | 42.4 | 45.5 | 39.9 | 40.1 | 40.1 | 41.2 | 40.0 |

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. Two-earner family.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

## Table I.19. Increase in net income ${ }^{1}$ after $\mathbf{1 \%}$ increase in gross wage earnings, by family-type and wage level (\%), 2008

| Family-type: | single no ch | single no ch | single no ch | single 2 ch | married 2 ch | married 2 ch | married 2 ch | married <br> no ch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wage level (\% of AW): | $\begin{aligned} & 67 \\ & (1) \\ & \hline \end{aligned}$ | $\begin{array}{r} 100 \\ (2) \\ \hline \end{array}$ | $\begin{array}{r} 167 \\ (3) \\ \hline \end{array}$ | $\begin{array}{r} 67 \\ (4) \\ \hline \end{array}$ | $\begin{array}{r} 100-0 \\ (5) \\ \hline \end{array}$ | $\begin{array}{r} 100-33^{2} \\ (6) \\ \hline \end{array}$ | $\begin{array}{r} 100-67^{2} \\ (7) \\ \hline \end{array}$ | $\begin{array}{r} 100-33^{2} \\ (8) \\ \hline \end{array}$ |
| Australia | 0.78 | 0.88 | 0.82 | 0.50 | 0.54 | 0.80 | 0.47 | 0.85 |
| Austria | 0.77 | 0.78 | 1.01 | 0.60 | 0.65 | 0.65 | 0.68 | 0.73 |
| Belgium | 0.60 | 0.78 | 0.77 | 0.46 | 0.23 | 0.61 | 0.67 | 0.69 |
| Canada | 0.90 | 0.85 | 0.92 | 0.41 | 0.43 | 0.72 | 0.75 | 0.81 |
| Czech Republic | 0.83 | 0.88 | 0.93 | 0.59 | 0.57 | 0.65 | 0.69 | 0.85 |
| Denmark | 0.93 | 0.85 | 0.73 | 0.66 | 0.79 | 0.84 | 0.87 | 0.91 |
| Finland | 0.75 | 0.75 | 0.83 | 0.63 | 0.68 | 0.66 | 0.68 | 0.71 |
| France | 0.92 | 0.95 | 0.86 | 0.92 | 0.88 | 0.88 | 0.88 | 0.90 |
| Germany | 0.77 | 0.75 | 1.03 | 0.65 | 0.70 | 0.70 | 0.70 | 0.77 |
| Greece ${ }^{3}$ | 0.75 | 0.82 | 0.77 | 0.74 | 0.82 | 0.80 | 0.81 | 0.80 |
| Hungary | 0.78 | 0.62 | 0.86 | 0.59 | 0.50 | 0.49 | 0.51 | 0.57 |
| Iceland | 0.82 | 0.87 | 0.92 | 0.61 | 0.64 | 0.71 | 0.75 | 0.82 |
| Ireland | 0.84 | 0.66 | 0.80 | 0.32 | 0.74 | 0.77 | 0.81 | 0.83 |
| Italy | 0.82 | 0.87 | 0.79 | 0.62 | 0.71 | 0.73 | 0.78 | 0.81 |
| Japan | 0.97 | 0.93 | 0.92 | 0.90 | 0.90 | 0.92 | 0.93 | 0.92 |
| Korea | 0.96 | 0.88 | 0.95 | 0.97 | 0.90 | 0.85 | 0.85 | 0.86 |
| Luxembourg | 0.81 | 0.74 | 0.82 | 0.59 | 0.73 | 0.71 | 0.67 | 0.81 |
| Mexico | 0.87 | 0.92 | 0.90 | 0.87 | 0.92 | 0.88 | 0.90 | 0.88 |
| Netherlands | 0.75 | 0.85 | 0.80 | 0.56 | 0.67 | 0.75 | 0.78 | 0.80 |
| New Zealand | 0.97 | 0.85 | 0.83 | 0.68 | 0.49 | 0.53 | 0.57 | 0.83 |
| Norway | 0.86 | 0.78 | 0.81 | 0.71 | 0.71 | 0.71 | 0.73 | 0.75 |
| Poland | 0.95 | 0.96 | 0.86 | 1.00 | 1.00 | 0.89 | 0.91 | 0.95 |
| Portugal | 0.78 | 0.84 | 0.78 | 0.69 | 0.84 | 0.74 | 0.79 | 0.78 |
| Slovak Republic | 0.87 | 0.91 | 0.96 | 0.73 | 0.74 | 0.79 | 0.83 | 0.87 |
| Spain | 0.83 | 0.84 | 0.83 | 0.92 | 0.80 | 0.79 | 0.79 | 0.80 |
| Sweden | 0.91 | 0.66 | 0.70 | 0.80 | 0.60 | 0.60 | 0.62 | 0.64 |
| Switzerland | 0.92 | 0.91 | 0.86 | 0.80 | 0.82 | 0.82 | 0.82 | 0.90 |
| Turkey ${ }^{4}$ | 0.90 | 0.93 | 0.89 | 0.88 | 0.91 | 0.93 | 0.93 | 0.93 |
| United Kingdom | 0.90 | 0.93 | 0.85 | 0.31 | 0.85 | 0.84 | 0.79 | 0.90 |
| United States | 0.87 | 0.91 | 0.85 | 0.51 | 0.59 | 0.97 | 0.83 | 0.88 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 0.85 | 0.84 | 0.85 | 0.67 | 0.71 | 0.76 | 0.76 | 0.82 |
| EU-15 | 0.85 | 0.85 | 0.89 | 0.72 | 0.77 | 0.79 | 0.78 | 0.84 |
| EU-19 | 0.85 | 0.85 | 0.87 | 0.71 | 0.75 | 0.78 | 0.78 | 0.83 |

## Note : ch = children.

1. Net income is calculated as gross earnings minus personal income tax and employees' social security contributions plusfamily benefits. The increase reported in the Table represents a form of elasticity. In a proportional tax system the elasticity would equal 1 . The more progressive the system at these income levels, the lower is the elasticity.
2. Two-earner family. Assumes a rise in gross earnings of the principal earner in the household.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

## Table I.20. Increase in net income ${ }^{1}$ after $1 \%$ increase in labour costs, by family-type and wage level (\%), 2008

| Family type: | single | single | single | single |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no ch | no ch | no ch | 2 ch | 2 ch | 2 ch | 2 ch | no ch |
| Wage level (\% of AW): | 67 | 100 | 167 | 67 | 100-0 | $100-33^{2}$ | 100-67 ${ }^{2}$ | 100-33 ${ }^{2}$ |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Australia | 0.78 | 0.88 | 0.82 | 0.50 | 0.54 | 0.80 | 0.47 | 0.85 |
| Austria | 0.77 | 0.78 | 1.18 | 0.60 | 0.65 | 0.65 | 0.68 | 0.73 |
| Belgium | 0.57 | 0.76 | 0.78 | 0.44 | 0.22 | 0.57 | 0.65 | 0.64 |
| Canada | 0.90 | 0.86 | 0.96 | 0.41 | 0.44 | 0.73 | 0.76 | 0.82 |
| Czech Republic | 0.83 | 0.88 | 0.93 | 0.59 | 0.57 | 0.65 | 0.69 | 0.85 |
| Denmark | 0.93 | 0.85 | 0.73 | 0.66 | 0.79 | 0.84 | 0.87 | 0.91 |
| Finland | 0.75 | 0.75 | 0.83 | 0.63 | 0.68 | 0.66 | 0.68 | 0.71 |
| France | 0.67 | 0.95 | 0.86 | 0.67 | 0.88 | 0.84 | 0.86 | 0.86 |
| Germany | 0.77 | 0.75 | 1.19 | 0.65 | 0.70 | 0.70 | 0.70 | 0.77 |
| Greece ${ }^{3}$ | 0.75 | 0.82 | 0.77 | 0.74 | 0.82 | 0.80 | 0.81 | 0.80 |
| Hungary | 0.79 | 0.62 | 0.86 | 0.60 | 0.51 | 0.50 | 0.52 | 0.57 |
| Iceland | 0.82 | 0.87 | 0.92 | 0.61 | 0.64 | 0.71 | 0.75 | 0.82 |
| Ireland | 0.84 | 0.66 | 0.80 | 0.32 | 0.74 | 0.76 | 0.81 | 0.82 |
| Italy | 0.82 | 0.87 | 0.79 | 0.62 | 0.71 | 0.73 | 0.78 | 0.81 |
| Japan | 0.97 | 0.93 | 0.98 | 0.90 | 0.90 | 0.92 | 0.93 | 0.92 |
| Korea | 0.96 | 0.88 | 0.98 | 0.97 | 0.90 | 0.85 | 0.85 | 0.86 |
| Luxembourg | 0.81 | 0.74 | 0.82 | 0.59 | 0.73 | 0.71 | 0.68 | 0.81 |
| Mexico | 0.93 | 0.96 | 0.92 | 0.93 | 0.96 | 0.94 | 0.94 | 0.94 |
| Netherlands | 0.73 | 0.84 | 0.86 | 0.55 | 0.66 | 0.73 | 0.77 | 0.78 |
| New Zealand | 0.97 | 0.85 | 0.83 | 0.68 | 0.49 | 0.53 | 0.57 | 0.83 |
| Norway | 0.86 | 0.78 | 0.81 | 0.71 | 0.71 | 0.71 | 0.73 | 0.75 |
| Poland | 0.95 | 0.96 | 0.86 | 1.00 | 1.00 | 0.89 | 0.91 | 0.95 |
| Portugal | 0.78 | 0.84 | 0.78 | 0.69 | 0.84 | 0.74 | 0.79 | 0.78 |
| Slovak Republic | 0.87 | 0.91 | 0.97 | 0.73 | 0.74 | 0.79 | 0.83 | 0.87 |
| Spain | 0.83 | 0.84 | 1.07 | 0.92 | 0.80 | 0.79 | 0.79 | 0.80 |
| Sweden | 0.91 | 0.66 | 0.70 | 0.80 | 0.60 | 0.60 | 0.62 | 0.64 |
| Switzerland | 0.92 | 0.91 | 0.86 | 0.80 | 0.82 | 0.82 | 0.82 | 0.90 |
| Turkey ${ }^{4}$ | 0.90 | 0.93 | 0.89 | 0.88 | 0.91 | 0.93 | 0.93 | 0.93 |
| United Kingdom | 0.87 | 0.91 | 0.84 | 0.30 | 0.84 | 0.82 | 0.78 | 0.87 |
| United States | 0.89 | 0.93 | 0.86 | 0.53 | 0.60 | 1.00 | 0.85 | 0.90 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 0.84 | 0.84 | 0.88 | 0.67 | 0.72 | 0.76 | 0.77 | 0.82 |
| EU-15 | 0.79 | 0.80 | 0.87 | 0.61 | 0.71 | 0.73 | 0.75 | 0.78 |
| EU-19 | 0.80 | 0.81 | 0.87 | 0.64 | 0.71 | 0.73 | 0.75 | 0.79 |

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 elasticity would equal 1. The more progressive the system at these income levels, the lower is the elasticity.
2. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.
3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

## Table I.21. Annual gross wage and net income, by family-type and wage level (in US dollars using PPP), 2008

| Family-type: | single |  | single |  | single |  | single |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no ch |  | no ch |  | no ch |  | 2 ch |  |
| Wage level (\% of AW): | 67 |  | 100 |  | 167 |  | 67 |  |
|  | gross <br> (1) | net <br> (2) | gross <br> (3) | net <br> (4) | gross <br> (5) | net <br> (6) | gross <br> (7) | net <br> (8) |
| Australia | 27154 | 22472 | 40731 | 31543 | 67886 | 48414 | 27154 | 30263 |
| Austria | 28995 | 20785 | 43492 | 28702 | 72487 | 44835 | 28995 | 26591 |
| Belgium | 29034 | 18743 | 43551 | 25179 | 72586 | 37000 | 29034 | 24249 |
| Canada | 23268 | 19038 | 34902 | 26739 | 58169 | 42481 | 23268 | 27572 |
| Czech Republic | 12742 | 10299 | 19114 | 14584 | 31856 | 23153 | 12742 | 14593 |
| Denmark | 27870 | 17234 | 41804 | 24810 | 69674 | 35240 | 27870 | 24199 |
| Finland | 25670 | 19562 | 38505 | 26833 | 64175 | 40187 | 25670 | 23326 |
| France | 23692 | 17569 | 35538 | 25658 | 59230 | 39545 | 23692 | 20234 |
| Germany | 32177 | 20541 | 48265 | 27998 | 80442 | 43683 | 32177 | 25631 |
| Greece ${ }^{1}$ | 21665 | 17685 | 32498 | 24327 | 54163 | 37136 | 23832 | 19746 |
| Hungary | 11635 | 8370 | 17452 | 10770 | 29087 | 15954 | 11635 | 11021 |
| Iceland | 21683 | 17456 | 32525 | 24580 | 54208 | 38828 | 21683 | 21734 |
| Ireland | 27621 | 24419 | 41432 | 33475 | 69053 | 48752 | 27621 | 32528 |
| Italy | 20876 | 15707 | 31314 | 22117 | 52190 | 33360 | 20876 | 20538 |
| Japan | 28625 | 23317 | 42938 | 34239 | 71563 | 54219 | 28625 | 25283 |
| Korea | 29294 | 26586 | 43941 | 38631 | 73234 | 61658 | 29294 | 26824 |
| Luxembourg | 33922 | 26962 | 50883 | 36665 | 84805 | 54669 | 33922 | 36575 |
| Mexico | 6920 | 7016 | 10381 | 9848 | 17301 | 15127 | 6920 | 7016 |
| Netherlands | 32865 | 23911 | 49297 | 33224 | 82162 | 50627 | 32865 | 31203 |
| New Zealand | 19914 | 16295 | 29871 | 23572 | 49785 | 36423 | 19914 | 23039 |
| Norway | 32225 | 23945 | 48338 | 34091 | 80563 | 51712 | 32225 | 28976 |
| Poland | 11639 | 8902 | 17458 | 13120 | 29097 | 21422 | 11639 | 9564 |
| Portugal | 15943 | 13344 | 23915 | 18565 | 39858 | 28112 | 15943 | 15138 |
| Slovak Republic | 10431 | 8423 | 15647 | 12082 | 26078 | 19460 | 10431 | 9996 |
| Spain | 20394 | 17510 | 30591 | 24694 | 50985 | 38472 | 20394 | 19026 |
| Sweden | 25365 | 19301 | 38047 | 27805 | 63412 | 39688 | 25365 | 22151 |
| Switzerland | 30234 | 24744 | 45351 | 35635 | 75585 | 55763 | 30234 | 30230 |
| Turkey ${ }^{2}$ | 13105 | 9811 | 19658 | 14228 | 32763 | 22558 | 13105 | 9983 |
| United Kingdom | 33806 | 26055 | 50710 | 37718 | 84516 | 58878 | 33806 | 32755 |
| United States | 26837 | 21851 | 40256 | 31328 | 67093 | 47722 | 26837 | 28454 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 23520 | 18262 | 35280 | 25759 | 58800 | 39503 | 23592 | 22615 |
| EU-15 | 26660 | 19955 | 39990 | 27851 | 66649 | 42012 | 26804 | 24926 |
| EU-19 | 23492 | 17648 | 35238 | 24649 | 58729 | 37378 | 23606 | 22056 |

[^25]1. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

Table 1.21 (cont'd). Annual gross wage and net income, by family-type and wage level (in US dollars using PPP), 2008

| Family-type: Wage level (\% of AW): | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-0 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-33^{1} \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-67^{1} \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ \text { no ch } \\ 100-33^{1} \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | gross <br> (9) | $\begin{array}{r} \hline \text { net } \\ (10) \\ \hline \end{array}$ | gross <br> (11) | $\begin{array}{r} \hline \text { net } \\ (12) \\ \hline \end{array}$ | gross <br> (13) | $\begin{array}{r} \hline \text { net } \\ (14) \\ \hline \end{array}$ | gross <br> (15) | $\begin{array}{r} \text { net } \\ (16) \\ \hline \end{array}$ |
| Australia | 40731 | 36738 | 54309 | 46557 | 67886 | 55463 | 54309 | 44007 |
| Austria | 43492 | 34508 | 57989 | 45762 | 72487 | 54544 | 57989 | 40704 |
| Belgium | 43551 | 34130 | 58069 | 42833 | 72586 | 48822 | 58069 | 37842 |
| Canada | 34902 | 31515 | 46536 | 39367 | 58169 | 47142 | 46536 | 37230 |
| Czech Republic | 19114 | 20376 | 25485 | 23850 | 31856 | 28117 | 25485 | 20159 |
| Denmark | 41804 | 29678 | 55739 | 37047 | 69674 | 45051 | 55739 | 34388 |
| Finland | 38505 | 29443 | 51340 | 40490 | 64175 | 49004 | 51340 | 37880 |
| France | 35538 | 29300 | 47384 | 38910 | 59230 | 46164 | 47384 | 36081 |
| Germany | 48265 | 37303 | 64354 | 45760 | 80442 | 53529 | 64354 | 41082 |
| Greece ${ }^{2}$ | 38998 | 29046 | 51997 | 39965 | 64996 | 49388 | 47664 | 36329 |
| Hungary | 17452 | 13152 | 23269 | 17949 | 29087 | 21522 | 23269 | 15567 |
| Iceland | 32525 | 30881 | 43367 | 37427 | 54208 | 44031 | 43367 | 34913 |
| Ireland | 41432 | 41409 | 55242 | 53401 | 69053 | 63060 | 55242 | 49398 |
| Italy | 31314 | 26419 | 41752 | 34169 | 52190 | 40414 | 41752 | 31565 |
| Japan | 42938 | 36897 | 57250 | 48403 | 71563 | 59746 | 57250 | 46213 |
| Korea | 43941 | 39672 | 58587 | 53021 | 73234 | 66117 | 58587 | 52162 |
| Luxembourg | 50883 | 49823 | 67844 | 63015 | 84805 | 73667 | 67844 | 55103 |
| Mexico | 10381 | 9848 | 13841 | 13713 | 17301 | 16865 | 13841 | 13713 |
| Netherlands | 49297 | 38022 | 65729 | 50558 | 82162 | 60347 | 65729 | 47346 |
| New Zealand | 29871 | 28938 | 39828 | 35376 | 49785 | 41251 | 39828 | 32001 |
| Norway | 48338 | 37844 | 64451 | 49813 | 80563 | 60594 | 64451 | 47255 |
| Poland | 17458 | 14346 | 23278 | 19021 | 29097 | 23238 | 23278 | 17805 |
| Portugal | 23915 | 21690 | 31887 | 28113 | 39858 | 33202 | 31887 | 26687 |
| Slovak Republic | 15647 | 14760 | 20863 | 18419 | 26078 | 22077 | 20863 | 16846 |
| Spain | 30591 | 27068 | 40788 | 34856 | 50985 | 43429 | 40788 | 34243 |
| Sweden | 38047 | 30655 | 50730 | 41130 | 63412 | 49956 | 50730 | 38280 |
| Switzerland | 45351 | 42180 | 60468 | 54207 | 75585 | 65096 | 60468 | 49106 |
| Turkey ${ }^{3}$ | 19658 | 14514 | 26210 | 19094 | 32763 | 23639 | 26210 | 18923 |
| United Kingdom | 50710 | 41012 | 67613 | 55404 | 84516 | 66465 | 67613 | 52110 |
| United States | 40256 | 37505 | 53675 | 47260 | 67093 | 56801 | 53675 | 43306 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 35497 | 30289 | 47329 | 39163 | 59161 | 46958 | 47185 | 36275 |
| EU-15 | 40423 | 33300 | 53897 | 43428 | 67371 | 51803 | 53608 | 39936 |
| EU-19 | 35580 | 29586 | 47440 | 38455 | 59299 | 45895 | 47211 | 35232 |

[^26]Table I.22. Annual labour costs and net income, by family-type and wage level (in US dollars using PPP), 2008

| Family-type: | single |  | single |  | single |  | single |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no |  |  |  |  |  |  |  |
| Wage level (\% of AW): | 67 |  | 100 |  | 167 |  | 67 |  |
|  | gross <br> (1) | net <br> (2) | gross <br> (3) | net <br> (4) | gross <br> (5) | net <br> (6) | gross <br> (7) | net <br> (8) |
| Australia | 28784 | 22472 | 43175 | 31543 | 71959 | 48414 | 28784 | 30263 |
| Austria | 35222 | 20785 | 52833 | 28702 | 85718 | 44835 | 35222 | 26591 |
| Belgium | 37309 | 18743 | 56840 | 25179 | 94705 | 37000 | 37309 | 24249 |
| Canada | 25917 | 19038 | 38910 | 26739 | 63331 | 42481 | 25917 | 27572 |
| Czech Republic | 17202 | 10299 | 25803 | 14584 | 43006 | 23153 | 17202 | 14593 |
| Denmark | 27870 | 17234 | 41804 | 24810 | 69674 | 35240 | 27870 | 24199 |
| Finland | 31831 | 19562 | 47747 | 26833 | 79578 | 40187 | 31831 | 23326 |
| France | 32164 | 17569 | 50571 | 25658 | 84469 | 39545 | 32164 | 20234 |
| Germany | 38456 | 20541 | 57683 | 27998 | 93029 | 43683 | 38456 | 25631 |
| Greece ${ }^{1}$ | 27745 | 17685 | 41617 | 24327 | 69362 | 37136 | 30519 | 19746 |
| Hungary | 15707 | 8370 | 23473 | 10770 | 39006 | 15954 | 15707 | 11021 |
| Iceland | 22841 | 17456 | 34262 | 24580 | 57103 | 38828 | 22841 | 21734 |
| Ireland | 30590 | 24419 | 45886 | 33475 | 76476 | 48752 | 30590 | 32528 |
| Italy | 27573 | 15707 | 41360 | 22117 | 68933 | 33360 | 27573 | 20538 |
| Japan | 32369 | 23317 | 48553 | 34239 | 80346 | 54219 | 32369 | 25283 |
| Korea | 32162 | 26586 | 48244 | 38631 | 79663 | 61658 | 32162 | 26824 |
| Luxembourg | 37724 | 26962 | 56535 | 36665 | 94158 | 54669 | 37724 | 36575 |
| Mexico | 7874 | 7016 | 11594 | 9848 | 19043 | 15127 | 7874 | 7016 |
| Netherlands | 35990 | 23911 | 54414 | 33224 | 87848 | 50627 | 35990 | 31203 |
| New Zealand | 19914 | 16295 | 29871 | 23572 | 49785 | 36423 | 19914 | 23039 |
| Norway | 36350 | 23945 | 54525 | 34091 | 90876 | 51712 | 36350 | 28976 |
| Poland | 13359 | 8902 | 20039 | 13120 | 33398 | 21422 | 13359 | 9564 |
| Portugal | 19730 | 13344 | 29595 | 18565 | 49325 | 28112 | 19730 | 15138 |
| Slovak Republic | 13164 | 8423 | 19746 | 12082 | 32822 | 19460 | 13164 | 9996 |
| Spain | 26543 | 17510 | 39814 | 24694 | 65638 | 38472 | 26543 | 19026 |
| Sweden | 33588 | 19301 | 50382 | 27805 | 83971 | 39688 | 33588 | 22151 |
| Switzerland | 33575 | 24744 | 50362 | 35635 | 83832 | 55763 | 33575 | 30230 |
| Turkey ${ }^{2}$ | 15759 | 9811 | 23638 | 14228 | 39397 | 22558 | 15759 | 9983 |
| United Kingdom | 37079 | 26055 | 56145 | 37718 | 94279 | 58878 | 37079 | 32755 |
| United States | 29765 | 21851 | 44211 | 31328 | 73101 | 47722 | 29765 | 28454 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 27472 | 18262 | 41321 | 25759 | 68461 | 39503 | 27564 | 22615 |
| EU-15 | 31961 | 19955 | 48215 | 27851 | 79811 | 42012 | 32146 | 24926 |
| EU-19 | 28360 | 17648 | 42752 | 24649 | 70810 | 37378 | 28506 | 22056 |

[^27]Table I. 22 (cont'd). Annual labour costs and net income, by family-type and wage level (in US dollars using PPP), 2008

| Family-type: Wage level (\% of AW): | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-0 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \mathrm{ch} \\ 100-33^{1} \end{gathered}$ |  | $\begin{gathered} \text { married } \\ 2 \text { ch } \\ 100-67^{1} \end{gathered}$ |  | $\begin{gathered} \text { married } \\ \text { no ch } \\ 100-33^{1} \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { gross } \\ \text { (9) } \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { net } \\ (10) \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { gross } \\ \text { (11) } \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { net } \\ (12) \\ \hline \end{array}$ | $\begin{array}{r} \text { gross } \\ \text { (13) } \\ \hline \end{array}$ | $\begin{array}{r} \text { net } \\ (14) \\ \hline \end{array}$ | $\begin{array}{r} \text { gross } \\ (15) \\ \hline \end{array}$ | $\begin{array}{r} \text { net } \\ (16) \\ \hline \end{array}$ |
| Australia | 43175 | 36738 | 57567 | 46557 | 71959 | 55463 | 57567 | 44007 |
| Austria | 52833 | 34508 | 70444 | 45762 | 88056 | 54544 | 70444 | 40704 |
| Belgium | 56840 | 34130 | 72799 | 42833 | 94149 | 48822 | 72799 | 37842 |
| Canada | 38910 | 31515 | 51798 | 39367 | 64827 | 47142 | 51798 | 37230 |
| Czech Republic | 25803 | 20376 | 34405 | 23850 | 43006 | 28117 | 34405 | 20159 |
| Denmark | 41804 | 29678 | 55739 | 37047 | 69674 | 45051 | 55739 | 34388 |
| Finland | 47747 | 29443 | 63662 | 40490 | 79578 | 49004 | 63662 | 37880 |
| France | 50571 | 29300 | 64348 | 38910 | 82735 | 46164 | 64348 | 36081 |
| Germany | 57683 | 37303 | 76911 | 45760 | 96139 | 53529 | 76911 | 41082 |
| Greece ${ }^{2}$ | 49940 | 29046 | 66587 | 39965 | 83234 | 49388 | 61038 | 36329 |
| Hungary | 23473 | 13152 | 31414 | 17949 | 39180 | 21522 | 31414 | 15567 |
| Iceland | 34262 | 30881 | 45682 | 37427 | 57103 | 44031 | 45682 | 34913 |
| Ireland | 45886 | 41409 | 60870 | 53401 | 76476 | 63060 | 60870 | 49398 |
| Italy | 41360 | 26419 | 55146 | 34169 | 68933 | 40414 | 55146 | 31565 |
| Japan | 48553 | 36897 | 64738 | 48403 | 80922 | 59746 | 64738 | 46213 |
| Korea | 48244 | 39672 | 64325 | 53021 | 80406 | 66117 | 64325 | 52162 |
| Luxembourg | 56535 | 49823 | 75433 | 63015 | 94259 | 73667 | 75433 | 55103 |
| Mexico | 11594 | 9848 | 15782 | 13713 | 19468 | 16865 | 15782 | 13713 |
| Netherlands | 54414 | 38022 | 72081 | 50558 | 90404 | 60347 | 72081 | 47346 |
| New Zealand | 29871 | 28938 | 39828 | 35376 | 49785 | 41251 | 39828 | 32001 |
| Norway | 54525 | 37844 | 72700 | 49813 | 90876 | 60594 | 72700 | 47255 |
| Poland | 20039 | 14346 | 26718 | 19021 | 33398 | 23238 | 26718 | 17805 |
| Portugal | 29595 | 21690 | 39460 | 28113 | 49325 | 33202 | 39460 | 26687 |
| Slovak Republic | 19746 | 14760 | 26329 | 18419 | 32911 | 22077 | 26329 | 16846 |
| Spain | 39814 | 27068 | 53085 | 34856 | 66356 | 43429 | 53085 | 34243 |
| Sweden | 50382 | 30655 | 67176 | 41130 | 83970 | 49956 | 67176 | 38280 |
| Switzerland | 50362 | 42180 | 67150 | 54207 | 83937 | 65096 | 67150 | 49106 |
| Turkey ${ }^{3}$ | 23638 | 14514 | 31518 | 19094 | 39397 | 23639 | 31518 | 18923 |
| United Kingdom | 56145 | 41012 | 74157 | 55404 | 93224 | 66465 | 74157 | 52110 |
| United States | 44211 | 37505 | 59531 | 47260 | 73976 | 56801 | 59531 | 43306 |
| Unweighted average: |  |  |  |  |  |  |  |  |
| OECD | 41599 | 30289 | 55246 | 39163 | 69255 | 46958 | 55061 | 36275 |
| EU-15 | 48770 | 33300 | 64527 | 43428 | 81101 | 51803 | 64157 | 39936 |
| EU-19 | 43190 | 29586 | 57198 | 38455 | 71842 | 45895 | 56906 | 35232 |

Note : ch = children.

1. Two-earner family.
2. The AW for Greece overestimates the actual gross earnings because it includes benefits
linked to marriage and children which are not available to all families.
3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).

## Notes

1. The reported elasticities in Table I. 8 are calculated as ( $100-$ METR) / ( $100-$ AETR), 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.
3. 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.
4. The reported elasticities in Table I. 19 are calculated as ( 100 - METR) / ( 100 - 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.
5. 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.

## Part II

## Tax Burden Trends 2000-2009

This Part 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. This Part provides detailed results of the evolution of the tax burden for 2000-2009.

## Historical trends

This Section includes historical figures using the new definition for the average worker since 2000. The evolution of the tax burden for the eight family types in the period 2000 to 2009 is presented in Tables 1-8, Part II of this Report.

Each of the Tables 1-8 corresponds to a particular family type and each is divided into three parts. The Part a.-tables contain the (average) tax wedge that comprises income taxes plus employee and employer social security contributions (including any applicable payroll taxes) less cash benefits, the Part b.-tables provide data related to the (average) burden of personal income taxes, and the Part c.-tables depict the (average) burden of income taxes plus employee social security contributions less cash benefits (net personal average tax rates). Given the wealth of data that these Tables provide, it would not be possible to fully discuss all of the information. Therefore, the discussion will focus on some observable trends over this period and will highlight selected important year-to-year changes.

## Important trends

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 when one compares the levels in 2009 with those in 2000 for all of the family types considered in this Report. The reductions in the EU15 and EU19 averages have been larger for most family-types.

The reductions over the period in the OECD average tax wedge have been anywhere from 1.3 percentage points (for single workers earning the average wage and five-thirds of the average wage) to 3.5 percentage points (for single parents at two-thirds of the average wage level).

The decrease in the OECD net personal average tax burden ranges from 1 percentage points (for single workers earning the average wage and five-thirds of the average wage) to 2.9 percentage points (for single parents earning two-thirds of the average wage level).

The OECD average income tax burden has also declined for all family types in the period considered. The reduction ranges from 0.9 percentage point (for single average workers at the average wage level) to 2.1 percentage point (for single parents at two-thirds of the average wage level).

## Tax wedge

Focusing on the overall (average) tax wedge (Part a.-tables), it is useful to note those countries where there have been the most significant changes. The most significant reductions for at least one family-type, exceeding five percentage points, can be observed in sixteen OECD member countries - Australia, Canada, Finland, Hungary, Iceland, Ireland, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, the Slovak Republic, Sweden, Turkey, the United Kingdom and the United States. The largest decline is observed in Ireland
where single parents have benefited from a reduction in the wedge of 25.9 percentage points. In this particular case, all family types enjoyed a significant reduction in the wedge (only lower than five per cent ( -3.1 and -4.9 percentage points) in the case of single workers earning fivethirds and two-thirds of the average wage level respectively). In New Zealand married couples earning the average wage level and single parents at two-thirds of the average wage level enjoyed a reduction of more than thirteen percentage points in the wedge.

The reductions observed in Australia, Canada, the Netherlands, Poland, the Slovak Republic and Sweden have been focused in nature as well (decrease of at least 7 percentage points for at least one family type). In Australia, one-earner married couples ( -8.6 percentage points), single parents earning two-thirds of the average wage level ( -8.5 percentage points), two-earning married couples with children where the spouse is earning one-third of the average wage level ( -6.2 percentage points), single workers at five-thirds of the average wage level ( -5.9 percentage points) have enjoyed the most significant reductions. In Poland married couples where the principal earns the average wage and the spouse earns either one-third or two-thirds of the average wage level are the families that have most benefited from the reduction in the tax wedge ( -5.7 and -7.4 percentage points respectively). In the Slovak Republic, the highest reduction in the tax wedge was for married couples where the principal earns the average wage and the spouse earns one-third of the average wage level ( -8.4 percentage points). In Sweden, the tax wedge has been reduced by more than 5 percentage points for all family types except for single workers at five-thirds of the average wage level ( -4.8 percentage points). In Canada, the tax wedge for single parents at two-thirds of the average wage level decreased by 8.2 percentage points. In the Netherlands, the tax wedge decreased strongly for single workers and single parents at three-thirds of the average wage and married couples where the principal earns the average wage and the spouse earns two-thirds of the average wage level, respectively by $8.7,14.5$ and 6 percentage points. It is interesting to note that in Iceland single average workers earning five-thirds of the average wage level enjoyed a reduction in the tax wedge ( -5.2 percentage points), while for single parents the tax burden increased with 9.4 percentage points.

The tax wedge has decreased for all family types in fourteen of the OECD member countries (Australia, Belgium, Canada, Denmark, Finland, Germany, Hungary, Ireland, Luxembourg, Poland, the Slovak Republic, Sweden, Switzerland and the United States) while it has increased across all family types in four countries (Greece, Japan, Korea, and Mexico).

## Average income tax rate

Over the time period in question, the average income tax burden (Part b.-tables) has decreased for all family types in eleven of the OECD member countries: Australia, Belgium, Canada, Denmark, Finland, Ireland, Poland, Sweden, Turkey, the United Kingdom and the United States. The most significant reductions affecting all of the family types are noted in Sweden with a range of -9.3 percentage points (two-earning married couples with and without children where the spouse is earning one-third of the average wage level) to -5.7 percentage points (single taxpayer earning five-thirds of the average wage level). In Ireland, the average income tax burden has decreased with at least five percentage points for all family types except for one-earner married couples at the average wage level ( -3.4 percentage points).

There are nine other OECD member countries with reductions in the personal income tax exceeding five percentage points in some family types: Australia (-6.2 percentage points
for single workers at five-thirds of the average wage level), Canada (-6 percentage points for single parents earning two-thirds of the average wage level, -6.6 percentage points for oneearner married couples and -5.1 percentage points for married couples where the principal earns the average wage and the spouse earns one-third of the average wage level), the Czech Republic ( -7.2 percentage points for single parents earning two-thirds of the average wage level and -9.6 percentage points for one-earner married couples at average earnings), Hungary ( -5.5 percentage points for single workers at two-thirds of the average wage level), Iceland ( -6.4 percentage points for single workers earning five-thirds of the average wage level), the Slovak Republic (-7.4 percentage points for single parents earning two-thirds of the average wage level, -9.9 percentage points for one-earner married couples at the average wage level and -6.3 percentage points for married couples where the principal earns the average wage and the spouse earns one-third of the average wage level), Turkey ( -5.1 percentage points for single parents earning two-thirds of the average wage level), the United Kingdom (-8.7 percentage points for single parents at two-thirds of the average wage level) and the United States (-8.7 percentage points for single parents earning two-thirds of the average wage level, -9.2 percentage points for one-earner married couples at the average wage level and -5.1 percentage points for married couples where the principal earns the average wage and the spouse earns one-third of the average wage level).

At the other extreme, the personal income tax burden has increased across all family types in five OECD member countries: Greece, Japan, Korea, Mexico and the Netherlands, although the changes in Japan have been small.

## 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 (Part c.-tables). The most significant reductions affecting all of the family types are noted in Sweden with a range of over -9.0 percentage points (two-earning married couples with and without children where the spouse is earning one-third of the average wage level) to -5.6 percentage points (single taxpayer earning five-thirds of the average wage level). In Ireland, the personal average tax burden has decreased with at least five percentage points for all family types except for single taxpayers earning respectively two-thirds of the average wage ( -4.5 percentage points) and five-thirds of the average wage ( -3.0 percentage points).

There are ten other OECD member countries with reductions in the net personal average tax rate exceeding five percentage points in some family types: Australia, Canada, Finland, Iceland, Ireland, the Netherlands, New Zealand, Poland, Portugal, Sweden, the United Kingdom and the United States. The largest reductions are observed for one-earner married couples in Australia (-9.1 percentage points) and the United States ( -9.2 percentage points), for single parents earning two-thirds of the average wage level in Canada ( -9.1 percentage points), Ireland ( -27.6 percentage points), the Netherlands ( -10.9 percentage points), New Zealand ( -13.2 percentage points), Portugal ( -7.3 percentage points) and the United Kingdom (-7.2 percentage points), for single taxpayers earning two-thirds of average earnings in Finland (-5.7 percentage points), for single taxpayers earning five-thirds of average earnings in Iceland (-6.4 percentage points), for married couples where the principal earns the average wage and the spouse earns two-thirds of the average wage level in Poland (-7.3 percentage points) and for couples without children where the principal earns the average wage and the spouse earns one-third of the average wage level in Sweden ( -9.3 percentage points).

Additionally, between 2000 and 2009, ten OECD countries experienced a reduction of the net personal income tax for all family types: Australia, Belgium, Canada, Denmark, Finland, Ireland, Luxembourg, Poland, Sweden, Switzerland and the United States.

During the period considered, only Iceland showed an increase of five or more percentage points in the net tax burden for one or more family types (single parents at two-thirds of the average wage: +8.5 percentage points).

## Progressivity

In the discussion of the results for 2009, attention was paid to how the Taxing Wages results could be used to assess the progressivity of personal income taxes as well as evaluating the tax treatment of families versus a single person. The results presented in Part II can be used to look at the evolution of these two measures.

The degree of progressivity of the personal income tax system can also be assessed by comparing the burden faced by single persons earning two-thirds of the average wage with the burden faced by their counterparts earning five-thirds 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, except in Turkey in the year 2000.

By comparing the situation in 2000 versus the one in 2009, one can assess whether there has been any change in this measure of progressivity. On average, the progressivity of the personal income taxes has not changed drastically in OECD countries. On average (but not including Mexico), the single worker earning two-thirds of the average wage level paid 52 per cent in 2000 and 48 per cent 2009 of the tax burden of the worker earning five-thirds of the average wage level.

When one compares the situation in each OECD country, one observes that personal income taxes have become more progressive in twenty countries, although none more so than in the Czech Republic, where the burden of the lower paid worker in 2000 was about 64 per cent the higher paid worker while in 2009 the burden of the lower paid worker represents only about 46 per cent of that for the higher paid worker.

Personal income taxes have become slightly less progressive (using this measure) in eight OECD countries: Austria, France, Greece, Iceland, Japan, Korea, Mexico, Norway and Poland.

## 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 at the average wage with two children and the single worker at the same income level without children. 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 (the difference between the personal tax of a single worker and that of a one-earner married couples) enjoyed by a one-earner married couple relative to a single worker at the average wage have slightly increased between 2000 and 2009 (about 1 percentage point).

The savings for the one-earner married couple have increased in 17 countries and declined in 12 others. In New Zealand the fiscal savings have increased by more than 5 percentage points (increasing 12.0 percentage points from 5.8 to 17.8 per cent of income); this holds as well for the United States (fiscal savings have increased 6.7 percentage points from 10.5 to 17.2 per cent of income).

Table II.1a. Evolution of the tax burden, 2000-2009
Single persons without children at $67 \%$ of average earnings
Income tax plus employee and employer contributions less cash benefits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 25.4 | 23.2 | 23.7 | 24.3 | 24.3 | 24.8 | 24.8 | 23.7 | 21.9 | 20.7 |
| Austria | 43.2 | 42.9 | 43.1 | 43.5 | 43.9 | 43.3 | 43.7 | 44.1 | 44.4 | 43.3 |
| Belgium | 51.3 | 50.7 | 50.5 | 49.6 | 49.0 | 49.3 | 49.4 | 49.6 | 49.8 | 48.9 |
| Canada | 27.8 | 27.2 | 27.4 | 27.2 | 27.5 | 27.4 | 27.4 | 26.5 | 26.5 | 26.3 |
| Czech Republic | 41.4 | 41.3 | 41.5 | 41.7 | 41.9 | 42.0 | 40.1 | 40.6 | 40.1 | 38.6 |
| Denmark | 40.4 | 39.7 | 39.0 | 39.0 | 38.5 | 38.4 | 38.5 | 38.5 | 38.2 | 37.7 |
| Finland | 43.0 | 41.4 | 40.9 | 40.0 | 39.4 | 39.5 | 38.8 | 38.6 | 38.5 | 37.0 |
| France | 47.4 | 47.6 | 47.4 | 45.0 | 42.4 | 41.4 | 45.5 | 45.4 | 45.4 | 45.2 |
| Germany | 47.5 | 46.6 | 47.1 | 47.9 | 46.9 | 47.3 | 47.4 | 47.0 | 46.6 | 46.0 |
| Greece | 35.0 | 34.7 | 35.3 | 34.9 | 35.8 | 35.1 | 35.7 | 36.0 | 36.3 | 36.8 |
| Hungary | 51.4 | 50.9 | 48.2 | 44.5 | 44.8 | 43.1 | 43.3 | 46.0 | 46.7 | 46.3 |
| Iceland | 19.8 | 20.9 | 22.6 | 23.8 | 24.5 | 24.7 | 24.8 | 23.4 | 23.6 | 22.7 |
| Ireland | 27.4 | 24.6 | 23.2 | 22.9 | 22.7 | 22.4 | 21.5 | 20.2 | 20.2 | 22.5 |
| Italy | 43.5 | 43.1 | 43.0 | 41.6 | 41.9 | 42.2 | 42.5 | 42.6 | 43.0 | 43.0 |
| Japan | 23.4 | 23.5 | 29.3 | 26.1 | 26.1 | 26.5 | 27.4 | 27.8 | 28.0 | 27.8 |
| Korea | 15.0 | 15.0 | 14.8 | 15.1 | 15.5 | 15.6 | 16.0 | 16.8 | 17.3 | 17.0 |
| Luxembourg | 31.5 | 29.7 | 27.4 | 27.8 | 28.1 | 28.7 | 29.1 | 29.9 | 28.5 | 27.4 |
| Mexico | 7.2 | 8.1 | 10.9 | 12.0 | 10.5 | 10.0 | 10.6 | 11.1 | 10.9 | 11.8 |
| Netherlands | 42.0 | 38.9 | 39.1 | 40.0 | 40.8 | 41.6 | 33.1 | 33.1 | 33.6 | 33.3 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 19.1 | 18.2 | 15.6 |
| Norway | 35.1 | 35.2 | 35.2 | 34.9 | 35.0 | 34.2 | 34.3 | 34.2 | 34.1 | 34.0 |
| Poland | 37.0 | 36.6 | 36.5 | 36.8 | 37.0 | 37.3 | 37.6 | 36.8 | 33.4 | 33.0 |
| Portugal | 33.2 | 32.2 | 32.9 | 32.8 | 32.8 | 32.1 | 32.3 | 32.4 | 32.4 | 32.3 |
| Slovak Republic | 40.5 | 41.3 | 40.8 | 40.9 | 39.6 | 35.2 | 35.5 | 35.6 | 36.0 | 34.3 |
| Spain | 34.7 | 35.3 | 35.7 | 34.7 | 35.2 | 35.5 | 35.9 | 35.6 | 34.0 | 34.2 |
| Sweden | 48.6 | 47.8 | 46.8 | 47.0 | 47.2 | 46.6 | 45.9 | 43.3 | 42.5 | 41.2 |
| Switzerland | 27.3 | 27.3 | 27.3 | 26.9 | 26.6 | 26.7 | 26.7 | 26.9 | 26.3 | 26.3 |
| Turkey |  | 39.1 | 42.6 | 41.5 | 41.0 | 41.9 | 41.9 | 41.8 | 41.8 | 37.7 |
| 2 | 29.1 | 28.6 | 28.7 | 30.3 | 30.5 | 30.5 | 30.6 | 30.7 | 29.7 | 29.2 |
| United Kingdom | 28.3 | 28.2 | 28.0 | 27.8 | 27.7 | 27.6 | 27.7 | 27.5 | 26.6 | 26.9 |
| United States |  |  |  |  |  |  |  |  |  |  |
| Unweighted average: | 34.5 | 34.1 | 34.2 | 34.0 | 33.9 | 33.7 | 33.6 | 33.5 | 33.0 | 32.5 |
|  | 30.4 | 39.7 | 39.3 | 39.0 | 38.9 | 38.5 | 38.2 | 38.2 | 37.9 | 37.4 |
|  |  |  |  |  |  |  |  |  |  |  |

[^28]Table II.1b. Evolution of the tax burden, 2000-2009
Single persons without children at $67 \%$ of average earnings Income Tax as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 20.7 | 18.4 | 19.0 | 19.7 | 19.7 | 20.3 | 20.2 | 19.1 | 17.2 | 15.6 |
| Austria | 7.5 | 8.1 | 8.4 | 9.0 | 9.6 | 8.7 | 9.3 | 9.8 | 10.3 | 8.8 |
| Belgium | 22.7 | 22.8 | 22.7 | 21.7 | 21.6 | 21.7 | 21.6 | 21.8 | 21.7 | 20.7 |
| Canada | 15.1 | 14.2 | 14.0 | 13.9 | 13.9 | 13.0 | 13.0 | 12.2 | 12.4 | 12.1 |
| Czech Republic | 8.3 | 8.2 | 8.5 | 8.7 | 9.0 | 9.2 | 6.6 | 7.3 | 6.7 | 6.7 |
| Denmark | 27.9 | 28.1 | 27.5 | 27.5 | 26.9 | 26.8 | 26.9 | 27.0 | 26.7 | 26.3 |
| Finland | 21.2 | 20.3 | 20.1 | 19.6 | 18.8 | 18.8 | 17.5 | 17.2 | 17.7 | 16.3 |
| France | 12.3 | 12.4 | 12.5 | 12.2 | 12.1 | 12.3 | 12.4 | 12.1 | 12.1 | 12.0 |
| Germany | 16.3 | 15.1 | 15.6 | 15.9 | 15.0 | 14.9 | 14.9 | 15.2 | 15.5 | 14.8 |
| Greece ${ }^{1}$ | 1.0 | 0.5 | 1.4 | 0.6 | 1.8 | 0.8 | 1.7 | 2.1 | 2.4 | 3.1 |
| Hungary | 17.5 | 18.0 | 15.4 | 11.2 | 10.8 | 8.7 | 9.0 | 10.1 | 11.1 | 11.9 |
| Iceland | 15.7 | 16.4 | 18.2 | 19.1 | 19.9 | 20.1 | 20.2 | 19.0 | 19.2 | 17.7 |
| Ireland | 13.7 | 10.9 | 10.2 | 9.7 | 9.4 | 9.1 | 8.1 | 6.6 | 6.6 | 7.9 |
| Italy | 15.0 | 14.6 | 14.9 | 13.2 | 13.5 | 13.9 | 14.8 | 14.7 | 15.3 | 15.2 |
| Japan | 5.5 | 5.5 | 5.0 | 5.3 | 5.3 | 5.2 | 5.7 | 6.4 | 6.3 | 6.3 |
| Korea | 0.7 | 0.9 | 0.8 | 0.9 | 1.0 | 1.0 | 1.1 | 1.5 | 1.7 | 1.3 |
| Luxembourg | 10.2 | 8.6 | 6.1 | 6.5 | 6.8 | 7.3 | 7.8 | 8.3 | 8.5 | 6.9 |
| Mexico | -5.9 | -5.2 | -3.8 | -3.2 | -2.7 | -3.3 | -2.8 | -2.4 | -2.6 | -1.7 |
| Netherlands | 5.2 | 4.0 | 4.2 | 3.3 | 3.5 | 4.2 | 4.4 | 4.8 | 5.1 | 5.4 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 19.1 | 18.2 | 15.6 |
| Norway | 18.9 | 19.1 | 19.1 | 18.8 | 18.8 | 17.8 | 17.8 | 17.9 | 17.9 | 17.8 |
| Poland | 5.3 | 4.6 | 4.4 | 4.6 | 4.6 | 4.7 | 4.9 | 5.2 | 5.7 | 5.2 |
| Portugal | 6.3 | 5.1 | 6.0 | 5.8 | 5.8 | 4.9 | 5.2 | 5.3 | 5.3 | 5.2 |
| Slovak Republic | 5.9 | 6.1 | 5.3 | 5.5 | 5.0 | 4.9 | 5.3 | 5.4 | 5.9 | 3.6 |
| Spain | 8.4 | 9.1 | 9.7 | 8.4 | 9.0 | 9.5 | 9.9 | 9.9 | 7.8 | 8.2 |
| Sweden | 24.7 | 23.7 | 22.4 | 22.6 | 22.9 | 22.2 | 21.5 | 17.9 | 16.9 | 15.8 |
| Switzerland | 7.3 | 7.3 | 7.3 | 7.3 | 7.4 | 7.6 | 7.5 | 7.8 | 7.1 | 7.2 |
| Turkey ${ }^{2}$ | 13.2 | 13.7 | 13.9 | 13.4 | 14.4 | 14.5 | 14.2 | 14.3 | 10.1 | 9.5 |
| United Kingdom | 15.1 | 14.9 | 15.0 | 15.3 | 15.4 | 15.4 | 15.5 | 15.5 | 14.6 | 14.2 |
| United States | 14.9 | 14.9 | 14.7 | 14.4 | 14.4 | 14.3 | 14.4 | 14.2 | 13.2 | 11.3 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
| OECD | 12.3 | 12.0 | 11.9 | 11.7 | 11.8 | 11.6 | 11.6 | 11.5 | 11.2 | 10.7 |
| EU-15 | 13.8 | 13.2 | 13.1 | 12.8 | 12.8 | 12.7 | 12.8 | 12.5 | 12.4 | 12.1 |
| EU-19 | 12.9 | 12.4 | 12.1 | 11.7 | 11.7 | 11.5 | 11.4 | 11.4 | 11.4 | 11.0 |

[^29]Table II.1c. Evolution of the tax burden, 2000-2009
Single persons without children at $67 \%$ of average earnings Income tax plus employee contributions less cash benefits as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 20.7 | 18.4 | 19.0 | 19.7 | 19.7 | 20.3 | 20.2 | 19.1 | 17.2 | 15.6 |
| Austria | 25.6 | 26.2 | 26.5 | 27.0 | 27.6 | 26.8 | 27.3 | 27.9 | 28.3 | 26.8 |
| Belgium | 35.8 | 35.9 | 35.8 | 34.8 | 34.7 | 35.0 | 35.1 | 35.3 | 35.4 | 34.4 |
| Canada | 19.6 | 18.9 | 18.9 | 19.0 | 19.1 | 19.0 | 18.9 | 18.0 | 18.2 | 17.9 |
| Czech Republic | 20.8 | 20.7 | 21.0 | 21.2 | 21.5 | 21.7 | 19.1 | 19.8 | 19.2 | 17.7 |
| Denmark | 40.5 | 39.7 | 39.0 | 39.0 | 38.5 | 38.4 | 38.5 | 38.5 | 38.2 | 37.7 |
| Finland | 28.1 | 26.8 | 26.1 | 25.7 | 24.8 | 25.0 | 24.2 | 23.8 | 23.8 | 22.5 |
| France | 25.7 | 25.9 | 25.8 | 25.8 | 25.7 | 25.9 | 26.0 | 25.8 | 25.8 | 25.7 |
| Germany | 36.8 | 35.6 | 36.2 | 36.9 | 35.8 | 36.3 | 36.6 | 36.4 | 36.2 | 35.5 |
| Greece | 16.9 | 16.4 | 17.3 | 16.6 | 17.8 | 16.8 | 17.7 | 18.1 | 18.4 | 19.1 |
| Hungary | 30.0 | 30.5 | 27.9 | 23.7 | 24.3 | 22.2 | 23.3 | 27.1 | 28.1 | 28.9 |
| Iceland | 15.9 | 16.7 | 18.6 | 19.4 | 20.2 | 20.4 | 20.5 | 19.3 | 19.5 | 17.9 |
| Ireland | 18.7 | 15.6 | 15.0 | 14.6 | 14.3 | 14.1 | 13.1 | 11.6 | 11.6 | 14.2 |
| Italy | 24.2 | 23.8 | 24.1 | 22.3 | 22.7 | 23.1 | 24.0 | 24.2 | 24.8 | 24.7 |
| Japan | 15.5 | 15.5 | 18.7 | 16.8 | 16.8 | 17.1 | 17.9 | 18.4 | 18.5 | 18.5 |
| Korea | 7.4 | 7.6 | 7.5 | 7.8 | 8.1 | 8.1 | 8.3 | 8.9 | 9.2 | 8.9 |
| Luxembourg | 21.9 | 20.3 | 17.6 | 18.0 | 18.3 | 18.9 | 19.4 | 20.3 | 20.5 | 19.1 |
| Mexico | -4.6 | -4.0 | -2.5 | -2.0 | -1.4 | -2.1 | -1.6 | -1.1 | -1.4 | -0.4 |
| Netherlands | 32.6 | 29.0 | 29.1 | 30.4 | 30.9 | 31.9 | 27.2 | 26.9 | 27.2 | 27.0 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 19.1 | 18.2 | 15.6 |
| Norway | 26.7 | 26.9 | 26.9 | 26.6 | 26.6 | 25.6 | 25.6 | 25.7 | 25.7 | 25.6 |
| Poland | 26.5 | 25.9 | 25.8 | 26.1 | 26.3 | 26.7 | 27.1 | 26.2 | 23.5 | 23.0 |
| Portugal | 17.3 | 16.1 | 17.0 | 16.8 | 16.8 | 15.9 | 16.2 | 16.3 | 16.3 | 16.2 |
| Slovak Republic | 17.9 | 18.9 | 18.1 | 18.3 | 18.4 | 18.3 | 18.7 | 18.8 | 19.3 | 17.0 |
| Spain | 14.7 | 15.4 | 16.0 | 14.7 | 15.3 | 15.8 | 16.3 | 16.2 | 14.1 | 14.6 |
| Sweden | 31.7 | 30.7 | 29.4 | 29.6 | 29.9 | 29.2 | 28.5 | 24.9 | 23.9 | 22.7 |
| Switzerland | 18.9 | 18.9 | 18.9 | 18.6 | 18.5 | 18.6 | 18.6 | 18.9 | 18.2 | 18.2 |
| Turkey | 27.2 | 29.7 | 28.9 | 28.4 | 29.4 | 29.5 | 29.2 | 29.3 | 25.1 | 24.5 |
| United Kingdom | 22.7 | 22.3 | 22.5 | 23.6 | 23.7 | 23.8 | 23.8 | 23.9 | 22.9 | 22.4 |
| United States | 22.6 | 22.5 | 22.4 | 22.1 | 22.0 | 21.9 | 22.0 | 21.8 | 18.6 | 18.9 |
| $\quad$ Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 22.6 | 22.2 | 22.2 | 22.0 | 22.2 | 22.1 | 22.0 | 22.0 | 21.5 | 21.0 |
| OECD | 26.2 | 25.3 | 25.2 | 25.1 | 25.1 | 25.1 | 24.9 | 24.7 | 24.5 | 24.2 |
| -15 | 25.7 | 25.0 | 24.7 | 24.5 | 24.6 | 24.5 | 24.3 | 24.3 | 24.1 | 23.7 |
|  |  |  |  |  |  |  |  |  |  |  |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

Table II.2a. Evolution of the tax burden, 2000-2009
Single persons without children at $100 \%$ of average earnings Income tax plus employee and employer contributions less cash benefits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 30.6 | 27.3 | 27.7 | 28.0 | 28.0 | 28.3 | 28.3 | 27.7 | 26.9 | 26.7 |
| Austria | 47.3 | 46.9 | 47.1 | 47.4 | 48.1 | 48.0 | 48.3 | 48.6 | 48.8 | 47.9 |
| Belgium | 57.1 | 56.7 | 56.3 | 55.7 | 55.4 | 55.5 | 55.5 | 55.6 | 55.7 | 55.2 |
| Canada | 33.2 | 32.0 | 32.1 | 32.0 | 32.0 | 31.9 | 31.9 | 31.2 | 31.3 | 30.8 |
| Czech Republic | 42.7 | 42.6 | 42.9 | 43.2 | 43.5 | 43.8 | 42.6 | 42.9 | 43.5 | 41.9 |
| Denmark | 43.8 | 43.1 | 42.1 | 42.1 | 40.7 | 40.6 | 40.7 | 40.9 | 40.7 | 39.4 |
| Finland | 47.8 | 46.4 | 45.9 | 45.0 | 44.5 | 44.6 | 44.0 | 43.9 | 43.8 | 42.4 |
| France | 49.6 | 49.8 | 49.8 | 49.8 | 49.9 | 50.0 | 50.1 | 49.2 | 49.3 | 49.2 |
| Germany | 52.9 | 51.9 | 52.5 | 53.2 | 52.2 | 52.1 | 52.3 | 51.9 | 51.5 | 50.9 |
| Greece | 37.9 | 37.6 | 38.8 | 39.4 | 40.9 | 40.7 | 41.7 | 41.8 | 41.5 | 41.5 |
| Hungary | 54.6 | 55.8 | 53.7 | 50.8 | 51.8 | 51.1 | 52.0 | 54.5 | 54.1 | 53.4 |
| Iceland | 26.2 | 26.9 | 28.5 | 29.3 | 29.8 | 29.7 | 29.5 | 28.1 | 28.3 | 28.3 |
| Ireland | 35.2 | 31.3 | 29.7 | 29.8 | 30.7 | 31.0 | 29.2 | 27.2 | 27.0 | 28.6 |
| Italy | 46.9 | 46.4 | 46.4 | 45.7 | 46.0 | 45.7 | 45.9 | 46.2 | 46.5 | 46.5 |
| Japan | 24.8 | 24.9 | 30.5 | 27.4 | 27.3 | 27.7 | 28.8 | 29.3 | 29.5 | 29.2 |
| Korea | 16.3 | 16.4 | 16.1 | 16.3 | 17.0 | 17.3 | 18.1 | 19.7 | 19.9 | 19.7 |
| Luxembourg | 37.5 | 35.8 | 32.9 | 33.5 | 33.9 | 34.7 | 35.3 | 36.3 | 35.1 | 34.0 |
| Mexico | 12.6 | 13.2 | 15.8 | 16.8 | 15.3 | 14.7 | 15.0 | 15.9 | 15.1 | 15.3 |
| Netherlands | 39.7 | 37.2 | 37.4 | 37.1 | 38.8 | 38.9 | 38.3 | 38.7 | 38.9 | 38.0 |
| New Zealand | 19.4 | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 21.5 | 21.1 | 18.4 |
| Norway | 38.6 | 39.2 | 38.6 | 38.1 | 38.1 | 37.2 | 37.4 | 37.5 | 37.5 | 37.4 |
| Poland | 38.2 | 37.9 | 37.8 | 38.1 | 38.3 | 38.5 | 38.8 | 38.0 | 34.5 | 34.0 |
| Portugal | 37.3 | 36.4 | 37.6 | 37.4 | 37.4 | 36.8 | 37.1 | 37.2 | 37.3 | 37.2 |
| Slovak Republic | 41.7 | 42.7 | 42.5 | 42.9 | 42.5 | 38.3 | 38.5 | 38.6 | 38.8 | 37.6 |
| Spain | 38.6 | 38.8 | 39.1 | 38.5 | 38.7 | 38.9 | 39.1 | 38.9 | 38.0 | 38.2 |
| Sweden | 50.1 | 49.1 | 47.8 | 48.2 | 48.4 | 48.1 | 47.8 | 45.3 | 44.8 | 43.2 |
| Switzerland | 30.0 | 30.1 | 30.1 | 29.7 | 29.4 | 29.5 | 29.5 | 29.7 | 29.2 | 29.3 |
| Turkey |  | 40.4 | 43.6 | 42.5 | 42.2 | 42.8 | 42.8 | 42.7 | 42.7 | 39.8 |
| 37.5 |  |  |  |  |  |  |  |  |  |  |
| United Kingdom | 32.6 | 32.2 | 32.3 | 33.8 | 33.9 | 33.9 | 34.0 | 34.1 | 32.8 | 32.5 |
| United States | 30.4 | 30.3 | 30.1 | 29.9 | 29.8 | 29.7 | 29.9 | 29.7 | 29.1 | 29.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 37.8 | 37.4 | 37.5 | 37.4 | 37.5 | 37.4 | 37.4 | 37.4 | 37.0 | 36.4 |
| OECD | 43.6 | 42.6 | 42.4 | 42.4 | 42.6 | 42.6 | 42.6 | 42.4 | 42.1 | 41.6 |
| EU-15 | 43.8 | 43.1 | 42.8 | 42.7 | 42.9 | 42.7 | 42.7 | 42.6 | 42.2 | 41.7 |
| 19 |  |  |  |  |  |  |  |  |  |  |

[^30]Table II.2b. Evolution of the tax burden, 2000-2009 Single persons without children at $100 \%$ of average earnings

Income Tax as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 26.1 | 22.7 | 23.2 | 23.7 | 23.7 | 24.0 | 24.0 | 23.4 | 22.6 | 22.0 |
| Austria | 12.9 | 13.3 | 13.5 | 13.9 | 15.0 | 14.7 | 15.1 | 15.5 | 15.9 | 14.7 |
| Belgium | 29.0 | 29.0 | 28.7 | 28.0 | 27.9 | 28.0 | 27.9 | 28.1 | 28.2 | 27.5 |
| Canada | 19.5 | 18.0 | 17.6 | 17.5 | 17.1 | 16.4 | 16.4 | 15.8 | 16.1 | 15.5 |
| Czech Republic | 10.1 | 10.0 | 10.4 | 10.8 | 11.3 | 11.6 | 9.9 | 10.4 | 11.2 | 11.2 |
| Denmark | 32.5 | 32.7 | 31.7 | 31.7 | 30.3 | 30.2 | 30.3 | 30.5 | 30.3 | 29.1 |
| Finland | 27.2 | 26.4 | 26.3 | 25.8 | 25.0 | 25.0 | 23.8 | 23.7 | 24.1 | 22.9 |
| France | 15.4 | 15.6 | 15.8 | 15.3 | 15.2 | 15.3 | 15.4 | 14.1 | 14.1 | 14.0 |
| Germany | 22.7 | 21.5 | 22.0 | 22.4 | 21.4 | 20.8 | 20.8 | 21.1 | 21.3 | 20.7 |
| Greece ${ }^{1}$ | 4.6 | 4.3 | 5.7 | 6.4 | 8.4 | 8.1 | 9.3 | 9.5 | 9.1 | 9.1 |
| Hungary | 23.2 | 25.9 | 24.0 | 20.5 | 20.9 | 20.2 | 21.0 | 21.8 | 21.3 | 21.2 |
| Iceland | 22.5 | 22.8 | 24.5 | 25.1 | 25.6 | 25.5 | 25.2 | 24.1 | 24.3 | 23.7 |
| Ireland | 22.0 | 17.9 | 17.0 | 17.0 | 18.0 | 18.2 | 16.2 | 14.0 | 13.8 | 14.2 |
| Italy | 19.7 | 19.1 | 19.5 | 18.5 | 19.0 | 18.6 | 19.3 | 19.5 | 19.9 | 19.8 |
| Japan | 7.0 | 7.0 | 6.4 | 6.7 | 6.6 | 6.6 | 7.2 | 8.1 | 8.1 | 7.9 |
| Korea | 2.1 | 2.4 | 2.2 | 2.3 | 2.7 | 2.7 | 3.4 | 4.7 | 4.5 | 4.2 |
| Luxembourg | 17.1 | 15.5 | 12.4 | 13.0 | 13.5 | 14.2 | 14.9 | 15.6 | 15.9 | 14.2 |
| Mexico | 0.8 | 1.5 | 2.7 | 3.2 | 3.7 | 3.1 | 3.5 | 4.6 | 3.8 | 4.0 |
| Netherlands | 8.9 | 10.5 | 11.0 | 10.2 | 10.7 | 11.2 | 13.3 | 14.6 | 15.3 | 16.6 |
| New Zealand | 19.4 | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 21.5 | 21.1 | 18.4 |
| Norway | 22.9 | 23.6 | 23.0 | 22.4 | 22.3 | 21.2 | 21.3 | 21.7 | 21.7 | 21.5 |
| Poland | 6.6 | 6.1 | 6.0 | 6.1 | 6.1 | 6.2 | 6.3 | 6.6 | 7.0 | 6.4 |
| Portugal | 11.4 | 10.3 | 11.7 | 11.5 | 11.5 | 10.8 | 11.2 | 11.3 | 11.4 | 11.3 |
| Slovak Republic | 7.5 | 8.2 | 7.7 | 8.2 | 8.8 | 8.7 | 9.0 | 9.1 | 9.4 | 7.9 |
| Spain | 13.4 | 13.8 | 14.1 | 13.4 | 13.6 | 13.9 | 14.1 | 14.2 | 12.9 | 13.3 |
| Sweden | 26.7 | 25.4 | 23.6 | 24.2 | 24.5 | 24.2 | 23.9 | 20.6 | 19.9 | 18.3 |
| Switzerland | 10.4 | 10.4 | 10.4 | 10.4 | 10.6 | 10.7 | 10.7 | 10.9 | 10.4 | 10.5 |
| Turkey ${ }^{2}$ | 14.7 | 14.9 | 15.1 | 14.8 | 15.5 | 15.5 | 15.4 | 15.4 | 12.6 | 12.2 |
| United Kingdom | 17.4 | 17.3 | 17.4 | 17.5 | 17.6 | 17.6 | 17.7 | 17.7 | 16.4 | 16.2 |
| United States | 17.3 | 17.2 | 17.0 | 16.8 | 16.7 | 16.6 | 16.8 | 16.6 | 16.0 | 14.8 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
| OECD | 16.4 | 16.1 | 16.0 | 15.9 | 16.1 | 16.0 | 16.2 | 16.2 | 16.0 | 15.4 |
| EU-15 | 18.7 | 18.2 | 18.0 | 17.9 | 18.1 | 18.1 | 18.2 | 18.0 | 17.9 | 17.5 |
| EU-19 | 17.3 | 17.0 | 16.8 | 16.6 | 16.8 | 16.7 | 16.8 | 16.7 | 16.7 | 16.2 |

[^31]Table II.2c. Evolution of the tax burden, 2000-2009
Single persons without children at $100 \%$ of average earnings Income tax plus employee contributions less cash benefits as a \% of gross earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 26.1 | 22.7 | 23.2 | 23.7 | 23.7 | 24.0 | 24.0 | 23.4 | 22.6 | 22.0 |
| Austria | 31.0 | 31.4 | 31.6 | 32.0 | 33.0 | 32.8 | 33.2 | 33.6 | 34.0 | 32.7 |
| Belgium | 43.0 | 43.0 | 42.7 | 42.0 | 41.9 | 42.0 | 41.9 | 42.1 | 42.2 | 41.5 |
| Canada | 25.4 | 24.1 | 24.1 | 24.1 | 23.9 | 23.9 | 23.9 | 23.2 | 23.4 | 22.8 |
| Czech Republic | 22.6 | 22.5 | 22.9 | 23.3 | 23.8 | 24.1 | 22.4 | 22.9 | 23.7 | 22.2 |
| Denmark | 43.9 | 43.1 | 42.1 | 42.1 | 40.7 | 40.6 | 40.7 | 40.9 | 40.7 | 39.4 |
| Finland | 34.2 | 32.9 | 32.4 | 31.9 | 31.1 | 31.3 | 30.6 | 30.4 | 30.3 | 29.2 |
| France | 28.8 | 29.1 | 29.1 | 28.9 | 28.8 | 28.9 | 29.0 | 27.8 | 27.8 | 27.7 |
| Germany | 43.2 | 42.0 | 42.7 | 43.4 | 42.3 | 42.2 | 42.5 | 42.2 | 42.0 | 41.3 |
| Greece ${ }^{1}$ | 20.5 | 20.2 | 21.6 | 22.4 | 24.4 | 24.1 | 25.3 | 25.5 | 25.1 | 25.1 |
| Hungary | 35.7 | 38.4 | 36.5 | 33.0 | 34.4 | 33.7 | 35.3 | 38.8 | 38.3 | 38.2 |
| Iceland | 22.6 | 23.0 | 24.7 | 25.3 | 25.8 | 25.7 | 25.4 | 24.3 | 24.4 | 23.9 |
| Ireland | 27.4 | 23.0 | 22.2 | 22.2 | 23.3 | 23.6 | 21.5 | 19.3 | 19.2 | 20.9 |
| Italy | 28.9 | 28.3 | 28.7 | 27.7 | 28.2 | 27.8 | 28.5 | 29.0 | 29.4 | 29.3 |
| Japan | 17.0 | 17.0 | 20.0 | 18.2 | 18.2 | 18.5 | 19.4 | 20.2 | 20.3 | 20.1 |
| Korea | 8.8 | 9.1 | 8.9 | 9.2 | 9.7 | 9.9 | 10.6 | 12.0 | 12.1 | 11.8 |
| Luxembourg | 28.8 | 27.3 | 24.0 | 24.6 | 25.0 | 25.9 | 26.6 | 27.7 | 27.9 | 26.4 |
| Mexico | 2.4 | 3.0 | 4.2 | 4.7 | 5.2 | 4.6 | 5.0 | 6.0 | 5.1 | 5.3 |
| Netherlands | 33.2 | 30.5 | 30.6 | 31.0 | 32.5 | 32.5 | 32.5 | 32.5 | 32.6 | 31.8 |
| New Zealand | 19.4 | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 21.5 | 21.1 | 18.4 |
| Norway | 30.7 | 31.4 | 30.8 | 30.2 | 30.1 | 29.0 | 29.1 | 29.5 | 29.5 | 29.3 |
| Poland | 27.8 | 27.5 | 27.4 | 27.7 | 27.9 | 28.2 | 28.5 | 27.6 | 24.9 | 24.3 |
| Portugal | 22.4 | 21.3 | 22.7 | 22.5 | 22.5 | 21.8 | 22.2 | 22.3 | 22.4 | 22.3 |
| Slovak Republic | 19.5 | 21.0 | 20.5 | 21.0 | 22.2 | 22.1 | 22.4 | 22.5 | 22.8 | 21.3 |
| Spain | 19.8 | 20.1 | 20.4 | 19.7 | 20.0 | 20.2 | 20.5 | 20.5 | 19.3 | 19.7 |
| Sweden | 33.7 | 32.4 | 30.6 | 31.2 | 31.5 | 31.2 | 30.9 | 27.6 | 26.9 | 25.3 |
| Switzerland | 22.0 | 22.0 | 22.0 | 21.7 | 21.6 | 21.7 | 21.7 | 21.9 | 21.4 | 21.5 |
| Turkey ${ }^{2}$ | 28.7 | 30.9 | 30.1 | 29.8 | 30.5 | 30.5 | 30.4 | 30.4 | 27.6 | 27.2 |
| United Kingdom | 25.8 | 25.5 | 25.6 | 26.7 | 26.8 | 26.9 | 26.9 | 27.0 | 25.6 | 25.3 |
| United States | 24.9 | 24.8 | 24.7 | 24.4 | 24.4 | 24.3 | 24.4 | 24.2 | 22.2 | 22.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
| OECD | 26.6 | 26.2 | 26.2 | 26.1 | 26.4 | 26.4 | 26.6 | 26.6 | 26.2 | 25.6 |
| EU-15 | 31.0 | 30.0 | 29.8 | 29.9 | 30.1 | 30.1 | 30.2 | 29.9 | 29.7 | 29.2 |
| EU-19 | 30.0 | 29.4 | 29.2 | 29.1 | 29.5 | 29.5 | 29.6 | 29.5 | 29.2 | 28.6 |

[^32]Table II.3a. Evolution of the tax burden, 2000-2009
Single persons without children at $167 \%$ of average earnings
Income tax plus employee and employer contributions less cash benefits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 38.4 | 34.3 | 35.1 | 36.0 | 36.1 | 35.6 | 34.7 | 32.8 | 32.7 | 32.6 |
| Austria | 50.4 | 50.6 | 50.6 | 50.6 | 50.4 | 50.4 | 50.6 | 50.7 | 50.8 | 50.1 |
| Belgium | 62.6 | 62.3 | 62.0 | 61.3 | 61.3 | 60.9 | 60.8 | 60.9 | 60.9 | 60.5 |
| Canada | 35.3 | 33.2 | 33.2 | 33.0 | 33.2 | 33.2 | 33.2 | 32.9 | 32.9 | 32.9 |
| Czech Republic | 44.9 | 44.8 | 45.2 | 45.5 | 45.9 | 46.2 | 46.1 | 46.8 | 46.2 | 44.6 |
| Denmark | 51.3 | 50.8 | 49.9 | 49.8 | 49.2 | 49.1 | 49.2 | 49.5 | 49.4 | 48.6 |
| Finland | 53.5 | 52.1 | 51.7 | 50.9 | 50.3 | 50.4 | 49.9 | 49.7 | 49.5 | 48.2 |
| France | 51.7 | 52.0 | 52.3 | 52.1 | 52.5 | 53.1 | 53.1 | 53.1 | 53.2 | 53.1 |
| Germany | 56.3 | 55.2 | 55.4 | 57.7 | 56.2 | 54.9 | 55.0 | 53.8 | 53.0 | 53.0 |
| Greece | 43.7 | 43.5 | 44.9 | 46.0 | 47.5 | 47.5 | 48.5 | 47.0 | 46.5 | 46.2 |
| Hungary | 59.1 | 58.8 | 57.9 | 57.6 | 57.7 | 56.7 | 56.7 | 58.6 | 59.1 | 58.4 |
| Iceland | 38.0 | 38.3 | 39.8 | 38.5 | 37.9 | 35.6 | 33.2 | 31.9 | 32.0 | 32.7 |
| Ireland | 42.2 | 39.3 | 38.1 | 38.2 | 38.7 | 38.8 | 37.8 | 36.3 | 36.3 | 39.1 |
| Italy | 51.0 | 50.4 | 50.4 | 50.5 | 50.7 | 50.4 | 50.7 | 51.2 | 51.6 | 51.5 |
| Japan | 28.6 | 28.8 | 32.2 | 30.0 | 30.0 | 30.3 | 31.6 | 32.4 | 32.5 | 32.3 |
| Korea | 20.2 | 20.8 | 20.5 | 21.3 | 21.7 | 21.4 | 21.7 | 22.5 | 22.6 | 21.9 |
| Luxembourg | 45.5 | 43.8 | 40.7 | 41.1 | 41.4 | 41.9 | 42.3 | 43.0 | 41.9 | 41.4 |
| Mexico | 19.4 | 19.7 | 21.7 | 22.6 | 21.3 | 21.8 | 21.9 | 22.0 | 20.6 | 20.8 |
| Netherlands | 44.8 | 41.5 | 41.7 | 41.4 | 42.5 | 42.4 | 41.3 | 42.2 | 42.4 | 41.8 |
| New Zealand | 24.2 | 24.6 | 25.0 | 25.4 | 25.7 | 26.2 | 26.8 | 27.3 | 26.8 | 24.9 |
| Norway | 45.2 | 45.6 | 45.2 | 44.9 | 44.9 | 43.8 | 43.0 | 43.1 | 43.1 | 43.0 |
| Poland | 39.1 | 38.9 | 38.9 | 39.1 | 39.3 | 39.5 | 40.0 | 38.9 | 35.9 | 34.9 |
| Portugal | 42.3 | 41.4 | 42.9 | 42.7 | 42.7 | 42.3 | 42.7 | 42.8 | 43.0 | 43.0 |
| Slovak Republic | 45.0 | 46.0 | 45.9 | 46.3 | 44.3 | 40.3 | 40.5 | 40.6 | 40.7 | 40.1 |
| Spain | 41.1 | 41.8 | 42.7 | 42.2 | 42.4 | 42.5 | 42.6 | 42.4 | 41.4 | 41.6 |
| Sweden | 55.7 | 55.1 | 54.0 | 54.4 | 54.7 | 54.7 | 54.5 | 53.0 | 52.7 | 50.9 |
| Switzerland | 34.3 | 34.4 | 34.4 | 34.0 | 33.8 | 33.9 | 33.7 | 34.0 | 33.5 | 33.6 |
| Turkey ${ }^{2}$ | 35.0 | 42.9 | 44.0 | 44.2 | 44.5 | 44.6 | 44.3 | 44.5 | 42.7 | 40.4 |
| United Kingdom | 35.8 | 35.7 | 35.9 | 37.5 | 37.7 | 37.7 | 37.8 | 37.9 | 37.5 | 37.0 |
| United States | 36.8 | 36.5 | 36.1 | 35.3 | 35.2 | 35.1 | 35.2 | 35.0 | 34.7 | 34.6 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 42.4 | 42.1 | 42.3 | 42.3 | 42.3 | 42.0 | 42.0 | 41.9 | 41.5 | 41.1 |
|  | 48.5 | 47.7 | 47.6 | 47.8 | 47.9 | 47.8 | 47.8 | 47.6 | 47.3 | 47.1 |
| OECD | 48.2 | 47.6 | 47.4 | 47.6 | 47.7 | 47.3 | 47.4 | 47.3 | 46.9 | 46.5 |
| -15 |  |  |  |  |  |  |  |  |  |  |

[^33]Table II.3b. Evolution of the tax burden, 2000-2009 Single persons without children at $167 \%$ of average earnings Income Tax as a \% of gross wage earnings

|  |  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 34.5 | 30.2 | 31.1 | 32.1 | 32.3 | 31.7 | 30.8 | 28.8 | 28.7 | 28.3 |
| Austria | 20.3 | 21.1 | 21.4 | 21.8 | 22.5 | 21.9 | 22.2 | 22.5 | 22.8 | 21.9 |
| Belgium | 36.0 | 35.9 | 35.5 | 34.7 | 34.7 | 34.7 | 34.7 | 34.9 | 35.0 | 34.4 |
| Canada | 25.9 | 23.5 | 23.1 | 23.1 | 22.8 | 22.4 | 22.4 | 22.1 | 22.3 | 21.9 |
| Czech Republic | 13.1 | 13.0 | 13.5 | 13.9 | 14.5 | 14.8 | 14.7 | 15.6 | 14.8 | 14.8 |
| Denmark | 40.9 | 41.3 | 40.5 | 40.4 | 39.8 | 39.6 | 39.8 | 40.1 | 40.0 | 39.3 |
| Finland | 34.3 | 33.6 | 33.4 | 32.9 | 32.2 | 32.1 | 31.0 | 30.9 | 31.1 | 29.9 |
| France | 20.7 | 21.0 | 21.2 | 20.4 | 20.0 | 20.0 | 20.1 | 20.0 | 20.1 | 20.0 |
| Germany | 31.6 | 30.7 | 31.4 | 31.8 | 30.6 | 28.8 | 28.8 | 29.1 | 29.3 | 28.7 |
| Greece | 12.1 | 11.8 | 13.6 | 14.8 | 16.8 | 16.8 | 18.0 | 16.1 | 15.4 | 15.1 |
| Hungary | 30.3 | 30.7 | 30.4 | 30.2 | 29.4 | 28.1 | 27.6 | 27.5 | 28.1 | 27.7 |
| Iceland | 34.9 | 35.0 | 36.5 | 34.9 | 34.2 | 31.8 | 29.2 | 28.2 | 28.3 | 28.5 |
| Ireland | 30.8 | 27.6 | 27.0 | 27.0 | 27.6 | 27.7 | 26.5 | 24.8 | 24.7 | 25.6 |
| Italy | 25.0 | 24.3 | 24.7 | 24.9 | 25.2 | 24.8 | 25.6 | 26.0 | 26.5 | 26.5 |
| Japan | 11.2 | 11.3 | 10.5 | 10.7 | 10.7 | 10.8 | 11.7 | 12.9 | 12.8 | 12.5 |
| Korea | 6.4 | 7.1 | 7.0 | 7.7 | 8.0 | 8.0 | 8.5 | 9.3 | 9.2 | 8.7 |
| Luxembourg | 26.2 | 24.6 | 21.3 | 21.7 | 22.0 | 22.4 | 22.8 | 23.3 | 23.4 | 22.4 |
| Mexico | 7.9 | 8.5 | 9.4 | 10.1 | 10.8 | 11.7 | 12.0 | 12.3 | 11.1 | 11.3 |
| Netherlands | 24.9 | 24.4 | 24.8 | 24.2 | 24.7 | 25.0 | 25.6 | 27.3 | 27.8 | 28.7 |
| New Zealand | 24.2 | 24.6 | 25.0 | 25.4 | 25.7 | 26.2 | 26.8 | 27.3 | 26.8 | 24.9 |
| Norway | 30.3 | 30.8 | 30.4 | 30.0 | 30.0 | 28.7 | 27.6 | 28.1 | 28.0 | 27.9 |
| Poland | 7.7 | 7.3 | 7.3 | 7.3 | 7.3 | 7.4 | 7.7 | 7.7 | 8.6 | 7.4 |
| Portugal | 17.6 | 16.5 | 18.4 | 18.1 | 18.1 | 17.6 | 18.1 | 18.2 | 18.5 | 18.5 |
| Slovak Republic | 12.1 | 12.7 | 12.5 | 13.1 | 11.9 | 11.9 | 12.0 | 12.1 | 12.3 | 11.4 |
| Spain | 18.4 | 18.7 | 18.9 | 18.3 | 18.6 | 18.7 | 19.0 | 19.0 | 18.5 | 19.0 |
| Sweden | 36.3 | 35.7 | 34.4 | 34.7 | 35.3 | 35.3 | 35.2 | 33.2 | 32.8 | 30.6 |
| Switzerland | 15.2 | 15.3 | 15.4 | 15.3 | 15.6 | 15.7 | 15.5 | 15.9 | 15.3 | 15.5 |
| Turkey |  | 18.0 | 17.8 | 17.7 | 17.2 | 17.6 | 17.7 | 17.4 | 17.6 | 16.1 |
| United Kingdom | 23.0 | 23.0 | 23.3 | 23.8 | 24.0 | 24.1 | 24.2 | 24.4 | 23.3 | 22.1 |
| United States | 24.2 | 23.9 | 23.5 | 22.6 | 22.5 | 22.4 | 22.6 | 22.3 | 22.1 | 21.0 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 23.1 | 22.7 | 22.8 | 22.8 | 22.8 | 22.6 | 22.6 | 22.6 | 22.5 | 22.0 |
| OECD | 26.5 | 26.0 | 26.0 | 26.0 | 26.1 | 26.0 | 26.1 | 26.0 | 26.0 | 25.5 |
| -19 | 24.3 | 23.9 | 23.9 | 23.9 | 24.0 | 23.8 | 23.9 | 23.8 | 23.8 | 23.4 |
|  |  |  |  |  |  |  |  |  |  |  |

[^34]Table II.3c. Evolution of the tax burden, 2000-2009
Single persons without children at $167 \%$ of average earnings Income tax plus employee contributions less cash benefits as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 34.5 | 30.2 | 31.1 | 32.1 | 32.3 | 31.7 | 30.8 | 28.8 | 28.7 | 28.3 |
| Austria | 36.3 | 37.3 | 37.4 | 37.6 | 37.7 | 37.4 | 37.7 | 37.9 | 38.1 | 37.2 |
| Belgium | 50.0 | 49.9 | 49.6 | 48.7 | 48.7 | 48.8 | 48.7 | 48.9 | 49.0 | 48.5 |
| Canada | 29.6 | 27.3 | 27.2 | 27.2 | 27.1 | 27.3 | 27.2 | 26.8 | 27.0 | 26.8 |
| Czech Republic | 25.6 | 25.5 | 26.0 | 26.4 | 27.0 | 27.3 | 27.2 | 28.1 | 27.3 | 25.8 |
| Denmark | 51.3 | 50.8 | 49.9 | 49.8 | 49.2 | 49.1 | 49.2 | 49.5 | 49.4 | 48.6 |
| Finland | 41.4 | 40.2 | 39.6 | 39.1 | 38.4 | 38.6 | 37.8 | 37.6 | 37.4 | 36.3 |
| France | 32.5 | 32.8 | 33.1 | 32.6 | 32.6 | 33.1 | 33.1 | 33.1 | 33.2 | 33.1 |
| Germany | 48.8 | 47.7 | 48.0 | 50.0 | 48.4 | 46.9 | 47.1 | 46.2 | 45.7 | 45.5 |
| Greece ${ }^{1}$ | 28.0 | 27.7 | 29.5 | 30.8 | 32.8 | 32.8 | 34.0 | 32.1 | 31.4 | 31.1 |
| Hungary | 42.8 | 43.2 | 42.9 | 42.7 | 42.9 | 41.6 | 41.9 | 44.5 | 45.1 | 44.7 |
| Iceland | 35.0 | 35.1 | 36.6 | 35.0 | 34.3 | 31.9 | 29.4 | 28.3 | 28.4 | 28.6 |
| Ireland | 35.5 | 32.0 | 31.4 | 31.5 | 32.1 | 32.2 | 31.1 | 29.5 | 29.4 | 32.5 |
| Italy | 34.3 | 33.6 | 34.0 | 34.1 | 34.4 | 34.0 | 34.9 | 35.5 | 36.1 | 36.0 |
| Japan | 21.2 | 21.3 | 22.8 | 21.7 | 21.7 | 21.9 | 23.1 | 24.2 | 24.2 | 24.0 |
| Korea | 13.1 | 13.8 | 13.7 | 14.6 | 14.9 | 14.7 | 15.1 | 15.8 | 15.8 | 15.2 |
| Luxembourg | 38.0 | 36.4 | 32.9 | 33.3 | 33.6 | 34.2 | 34.6 | 35.4 | 35.5 | 34.6 |
| Mexico | 10.0 | 10.5 | 11.3 | 12.0 | 12.7 | 13.4 | 13.7 | 13.9 | 12.6 | 12.8 |
| Netherlands | 40.4 | 36.9 | 37.0 | 37.4 | 38.3 | 38.3 | 37.6 | 38.3 | 38.4 | 37.8 |
| New Zealand | 24.2 | 24.6 | 25.0 | 25.4 | 25.7 | 26.2 | 26.8 | 27.3 | 26.8 | 24.9 |
| Norway | 38.1 | 38.6 | 38.2 | 37.8 | 37.8 | 36.5 | 35.4 | 35.9 | 35.8 | 35.7 |
| Poland | 28.9 | 28.7 | 28.6 | 28.9 | 29.1 | 29.3 | 29.9 | 28.7 | 26.4 | 25.2 |
| Portugal | 28.6 | 27.5 | 29.4 | 29.1 | 29.1 | 28.6 | 29.1 | 29.2 | 29.5 | 29.5 |
| Slovak Republic | 24.1 | 25.5 | 25.3 | 25.9 | 25.0 | 24.9 | 25.1 | 25.2 | 25.4 | 24.5 |
| Spain | 24.3 | 24.8 | 25.2 | 24.6 | 24.9 | 25.0 | 25.3 | 25.3 | 24.5 | 25.0 |
| Sweden | 41.1 | 40.3 | 39.0 | 39.4 | 39.9 | 40.0 | 39.8 | 37.8 | 37.4 | 35.5 |
| Switzerland | 26.8 | 26.9 | 26.9 | 26.6 | 26.6 | 26.6 | 26.5 | 26.8 | 26.2 | 26.4 |
| Turkey ${ }^{2}$ | 26.9 | 31.7 | 32.3 | 32.2 | 32.6 | 32.7 | 32.4 | 32.6 | 31.1 | 30.5 |
| United Kingdom | 28.8 | 28.9 | 29.1 | 30.3 | 30.5 | 30.5 | 30.6 | 30.7 | 30.3 | 29.8 |
| United States | 31.9 | 31.6 | 31.2 | 30.3 | 30.2 | 30.1 | 30.2 | 29.9 | 28.9 | 28.7 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
| OECD | 32.4 | 32.0 | 32.1 | 32.2 | 32.3 | 32.2 | 32.2 | 32.1 | 31.8 | 31.4 |
| EU-15 | 37.3 | 36.4 | 36.3 | 36.6 | 36.7 | 36.6 | 36.7 | 36.5 | 36.4 | 36.1 |
| EU-19 | 35.8 | 35.2 | 35.2 | 35.4 | 35.5 | 35.4 | 35.5 | 35.5 | 35.2 | 34.8 |

[^35]Table II.4a. Evolution of the tax burden, 2000-2009
Single parent with two children at $67 \%$ of average earnings
Income tax plus employee and employer contributions less cash benefits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 0.9 | -7.1 | -6.6 | -4.4 | -10.0 | -5.5 | -1.3 | -4.4 | -5.1 | -7.5 |
| Austria | 25.1 | 24.8 | 25.5 | 26.0 | 26.4 | 26.3 | 27.3 | 28.2 | 28.9 | 26.4 |
| Belgium | 36.3 | 36.2 | 36.1 | 35.4 | 34.9 | 35.2 | 35.4 | 35.4 | 35.0 | 33.7 |
| Canada | 0.5 | 6.3 | 0.0 | -1.4 | -0.8 | -0.7 | 0.2 | -3.2 | -6.4 | -7.7 |
| Czech Republic | 13.2 | 14.5 | 14.9 | 16.5 | 18.3 | 17.8 | 19.2 | 16.5 | 15.2 | 15.0 |
| Denmark | 14.2 | 13.8 | 13.2 | 13.1 | 12.4 | 12.1 | 12.5 | 13.2 | 13.2 | 13.2 |
| Finland | 28.8 | 27.7 | 27.8 | 27.3 | 26.2 | 27.0 | 26.6 | 27.0 | 26.7 | 25.4 |
| France | 39.1 | 38.9 | 38.7 | 36.2 | 33.3 | 32.1 | 36.9 | 37.0 | 37.1 | 36.8 |
| Germany | 31.7 | 31.4 | 31.5 | 32.6 | 33.0 | 33.3 | 33.7 | 33.5 | 33.3 | 31.3 |
| Greece | 34.3 | 34.3 | 34.8 | 34.4 | 35.1 | 34.4 | 35.8 | 35.0 | 35.3 | 36.0 |
| Hungary | 33.8 | 31.9 | 29.6 | 25.9 | 27.1 | 26.0 | 25.9 | 29.0 | 29.8 | 30.1 |
| Iceland | -4.5 | -3.6 | 1.0 | 3.7 | 5.5 | 5.0 | 6.1 | 5.7 | 4.8 | 4.9 |
| Ireland | 16.4 | 13.1 | 8.7 | 2.8 | 1.5 | 1.8 | -6.4 | -6.2 | -6.3 | -9.5 |
| Italy | 29.0 | 28.5 | 26.3 | 25.3 | 27.2 | 26.7 | 27.2 | 24.0 | 25.5 | 25.0 |
| Japan | 21.0 | 21.2 | 27.0 | 23.7 | 22.1 | 22.5 | 21.7 | 21.7 | 21.9 | 21.5 |
| Korea | 14.3 | 14.4 | 14.3 | 14.7 | 14.9 | 15.3 | 15.7 | 16.1 | 16.6 | 16.4 |
| Luxembourg | 6.6 | 6.7 | 3.9 | 4.3 | 4.4 | 5.0 | 5.1 | 6.0 | 3.0 | 0.3 |
| Mexico | 7.2 | 8.1 | 10.9 | 12.0 | 10.5 | 10.0 | 10.6 | 11.1 | 10.9 | 11.8 |
| Netherlands | 25.8 | 22.6 | 21.9 | 22.5 | 22.4 | 22.7 | 12.8 | 12.5 | 13.3 | 11.3 |
| New Zealand | -3.3 | -1.7 | -0.5 | 0.7 | 1.4 | -5.1 | -13.5 | -15.6 | -15.7 | -16.5 |
| Norway | 16.2 | 17.7 | 18.4 | 18.4 | 19.0 | 18.6 | 19.4 | 19.9 | 20.3 | 20.6 |
| Poland | 29.7 | 29.1 | 28.7 | 29.3 | 27.9 | 34.8 | 35.3 | 32.4 | 28.4 | 28.4 |
| Portugal | 26.5 | 22.5 | 24.0 | 23.2 | 24.2 | 23.5 | 24.0 | 23.9 | 23.3 | 20.6 |
| Slovak Republic | 24.7 | 26.8 | 26.1 | 27.0 | 26.9 | 22.0 | 22.2 | 23.1 | 24.1 | 21.2 |
| Spain | 28.4 | 29.0 | 29.5 | 29.1 | 29.5 | 29.9 | 30.2 | 28.1 | 28.3 | 28.4 |
| Sweden | 39.9 | 38.5 | 37.9 | 38.2 | 38.7 | 38.4 | 36.7 | 34.4 | 34.1 | 32.8 |
| Switzerland | 13.3 | 13.4 | 13.4 | 13.1 | 12.9 | 13.1 | 12.7 | 13.1 | 10.0 | 11.4 |
| Turkey | 39.1 | 42.6 | 41.5 | 41.0 | 41.9 | 41.9 | 41.8 | 41.8 | 36.7 | 34.0 |
| United Kingdom | 15.0 | 12.2 | 12.0 | 13.1 | 13.2 | 13.4 | 14.1 | 15.1 | 11.7 | 8.9 |
| United States | 9.6 | 8.7 | 8.6 | 6.0 | 6.0 | 6.2 | 7.0 | 5.8 | 4.4 | 4.2 |
| $\quad$ Unweighted average: |  |  |  |  |  |  |  |  | 18.7 | 17.9 |
|  | 20.4 | 20.1 | 20.0 | 19.7 | 19.5 | 19.5 | 19.2 | 18.7 | 16.9 |  |
|  | 26.5 | 25.3 | 24.8 | 24.2 | 24.2 | 24.1 | 23.5 | 23.2 | 22.8 | 21.4 |
| OECD | 26.2 | 25.4 | 24.8 | 24.3 | 24.3 | 24.3 | 23.9 | 23.6 | 23.1 | 21.9 |
| -15 |  |  |  |  |  |  |  |  |  |  |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

Table II.4b. Evolution of the tax burden, 2000-2009 Single parent with two children at $67 \%$ of average earnings

Income Tax as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 14.5 | 18.4 | 18.8 | 19.7 | 20.0 | 20.3 | 20.2 | 18.9 | 17.2 | 13.9 |
| Austria | 5.7 | 6.3 | 6.7 | 7.3 | 6.7 | 5.9 | 6.6 | 7.1 | 7.7 | 5.6 |
| Belgium | 16.5 | 16.8 | 16.9 | 16.1 | 16.1 | 16.2 | 16.1 | 16.3 | 16.1 | 14.8 |
| Canada | 6.7 | 6.2 | 6.0 | 6.0 | 5.9 | 5.0 | 5.0 | 1.0 | 1.4 | 0.7 |
| Czech Republic | 2.4 | 2.2 | 2.8 | 3.3 | 3.5 | 1.1 | -1.1 | 0.1 | -5.0 | -4.8 |
| Denmark | 27.9 | 28.1 | 27.5 | 27.5 | 26.9 | 26.8 | 26.9 | 27.0 | 26.7 | 26.3 |
| Finland | 21.2 | 20.3 | 20.1 | 19.6 | 18.8 | 18.8 | 17.5 | 17.2 | 17.7 | 16.3 |
| France | 7.6 | 7.1 | 7.3 | 7.3 | 7.3 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 |
| Germany | -2.8 | -3.3 | -3.3 | -2.6 | -1.9 | -1.6 | -1.4 | -0.7 | -0.1 | -2.5 |
| Greece ${ }^{1}$ | 0.0 | 0.0 | 0.7 | 0.0 | 0.8 | 0.0 | 1.8 | 0.7 | 1.1 | 2.0 |
| Hungary | 10.2 | 6.6 | 5.3 | 2.0 | 2.3 | 0.8 | 9.0 | 10.1 | 11.1 | 11.9 |
| Iceland | 15.7 | 16.4 | 18.2 | 19.1 | 19.9 | 20.1 | 20.2 | 19.0 | 19.2 | 17.7 |
| Ireland | 6.9 | 4.1 | 3.3 | 3.0 | 3.2 | 3.1 | 1.9 | 0.0 | 0.0 | 1.7 |
| Italy | 9.7 | 8.7 | 7.8 | 6.1 | 6.7 | 5.7 | 6.7 | 6.5 | 7.4 | 7.3 |
| Japan | 2.8 | 2.9 | 2.4 | 2.6 | 2.5 | 2.6 | 2.8 | 3.1 | 3.1 | 2.9 |
| Korea | 0.0 | 0.2 | 0.3 | 0.5 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 |
| Luxembourg | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 |
| Mexico | -5.9 | -5.2 | -3.8 | -3.2 | -2.7 | -3.3 | -2.8 | -2.4 | -2.6 | -1.7 |
| Netherlands | 2.9 | 3.0 | 3.0 | 2.6 | 3.0 | 3.4 | 3.3 | 3.6 | 4.2 | 4.5 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.8 | 18.8 | 18.9 | 19.0 | 19.1 | 18.2 | 17.3 |
| Norway | 13.2 | 15.4 | 15.4 | 15.1 | 15.0 | 14.0 | 14.1 | 14.3 | 14.2 | 14.1 |
| Poland | 2.5 | 1.6 | 1.4 | 1.6 | 1.6 | 1.9 | 2.2 | 0.0 | 0.0 | 0.0 |
| Portugal | 3.3 |  |  |  |  |  |  |  |  |  |

[^36]Table II.4c. Evolution of the tax burden, 2000-2009
Single parent with two children at $67 \%$ of average earnings Income tax plus employee contributions less cash benefits as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | -5.4 | -13.9 | -13.2 | -10.6 | -16.6 | -11.8 | -7.4 | -10.7 | -11.4 | -14.4 |
| Austria | 1.8 | 2.9 | 3.7 | 4.4 | 4.9 | 4.8 | 6.1 | 7.3 | 8.3 | 5.0 |
| Belgium | 15.9 | 17.0 | 17.1 | 16.5 | 16.6 | 16.9 | 17.1 | 17.1 | 16.5 | 14.9 |
| Canada | -10.9 | -4.4 | -11.6 | -12.9 | -12.6 | -12.4 | -11.4 | -15.1 | -18.5 | -20.0 |
| Czech Republic | -17.2 | -15.5 | -14.9 | -12.8 | -10.3 | -10.9 | -9.0 | -12.7 | -14.5 | -13.9 |
| Denmark | 14.4 | 13.8 | 13.2 | 13.1 | 12.4 | 12.1 | 12.5 | 13.2 | 13.2 | 13.2 |
| Finland | 10.3 | 9.6 | 9.8 | 9.8 | 8.5 | 9.4 | 8.9 | 9.5 | 9.1 | 8.2 |
| France | 14.0 | 13.6 | 13.5 | 13.8 | 14.0 | 14.2 | 14.3 | 14.4 | 14.6 | 14.4 |
| Germany | 17.7 | 17.2 | 17.4 | 18.4 | 19.0 | 19.5 | 20.0 | 20.2 | 20.3 | 17.9 |
| Greece | 15.9 | 15.9 | 16.6 | 16.0 | 16.8 | 16.0 | 17.8 | 16.7 | 17.1 | 18.0 |
| Hungary | 4.8 | 3.6 | 2.1 | -1.8 | 0.0 | -1.1 | -0.2 | 4.0 | 5.3 | 7.4 |
| Iceland | -9.5 | -9.0 | -4.2 | -1.8 | 0.1 | -0.5 | 0.6 | 0.6 | -0.2 | -1.0 |
| Ireland | 6.3 | 2.7 | -1.1 | -7.6 | -9.1 | -8.7 | -17.9 | -17.6 | -17.8 | -21.3 |
| Italy | 4.9 | 4.2 | 2.0 | 0.6 | 3.1 | 2.4 | 3.9 | -0.3 | 1.6 | 1.0 |
| Japan | 12.8 | 12.9 | 16.0 | 14.1 | 12.3 | 12.6 | 11.4 | 11.6 | 11.7 | 11.4 |
| Korea | 6.7 | 6.9 | 7.0 | 7.4 | 7.4 | 7.7 | 7.9 | 8.1 | 8.4 | 8.2 |
| Luxembourg | -6.4 | -5.9 | -9.1 | -8.7 | -8.6 | -8.0 | -7.9 | -6.8 | -7.8 | -11.2 |
| Mexico | -4.6 | -4.0 | -2.5 | -2.0 | -1.4 | -2.1 | -1.6 | -1.1 | -1.4 | -0.4 |
| Netherlands | 13.9 | 10.1 | 9.2 | 10.0 | 9.5 | 9.8 | 5.0 | 4.4 | 5.1 | 3.0 |
| New Zealand | -3.3 | -1.7 | -0.5 | 0.7 | 1.4 | -5.1 | -13.5 | -15.6 | -15.7 | -16.5 |
| Norway | 5.5 | 7.2 | 7.9 | 8.0 | 8.5 | 8.0 | 8.7 | 9.6 | 10.1 | 10.4 |
| Poland | 18.0 | 17.2 | 16.8 | 17.4 | 15.8 | 23.8 | 24.4 | 21.0 | 17.8 | 17.8 |
| Portugal | 9.0 | 4.0 | 6.0 | 5.0 | 6.2 | 5.4 | 5.9 | 5.8 | 5.0 | 1.7 |
| Slovak Republic | -3.9 | -1.0 | -2.1 | -0.9 | 1.2 | 1.5 | 1.8 | 3.0 | 4.2 | 0.6 |
| Spain | 6.5 | 7.3 | 7.9 | 7.4 | 7.9 | 8.4 | 8.9 | 6.5 | 6.7 | 6.9 |
| Sweden | 20.1 | 18.4 | 17.5 | 17.9 | 18.7 | 18.4 | 16.3 | 13.1 | 12.7 | 11.6 |
| Switzerland | 3.3 | 3.4 | 3.4 | 3.3 | 3.3 | 3.4 | 3.1 | 3.5 | 0.0 | 1.6 |
| Turkey | 27.2 | 29.7 | 28.9 | 28.4 | 29.4 | 29.5 | 29.2 | 29.3 | 23.8 | 23.1 |
| United Kingdom | 7.4 | 4.5 | 4.3 | 4.7 | 4.8 | 5.0 | 5.8 | 6.8 | 3.1 | 0.2 |
| United States | 2.4 | 1.4 | 1.3 | -1.4 | -1.4 | -1.2 | -0.3 | -1.6 | -6.0 | -6.3 |
| $\quad$ Unweighted average: |  |  |  |  |  |  |  |  | 4 |  |
|  | 5.9 | 5.6 | 5.4 | 5.2 | 5.4 | 5.6 | 5.4 | 4.8 | 4.0 | 3.1 |
| OECD | 8.1 | 9.0 | 8.5 | 8.1 | 8.3 | 8.4 | 7.8 | 7.4 | 7.2 | 5.6 |
| EU-19 | 7.3 | 6.8 | 6.5 | 6.9 | 7.3 | 7.0 | 6.6 | 6.3 | 5.0 |  |
|  |  |  |  |  |  |  |  |  |  |  |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

Table II.5a. Evolution of the tax burden, 2000-2009
One-earner married couple with two children at $100 \%$ of average earnings Income tax plus employee and employer contributions less cash benefits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 22.7 | 18.3 | 18.4 | 19.6 | 15.2 | 16.0 | 17.2 | 15.1 | 14.9 | 14.1 |
| Austria | 35.2 | 34.9 | 35.3 | 35.7 | 36.4 | 36.6 | 37.3 | 38.0 | 38.5 | 36.6 |
| Belgium | 42.6 | 42.6 | 42.4 | 41.6 | 42.7 | 40.3 | 40.3 | 40.3 | 40.0 | 38.8 |
| Canada | 23.9 | 22.4 | 22.3 | 21.5 | 21.5 | 21.5 | 21.9 | 19.4 | 19.0 | 18.3 |
| Czech Republic | 22.7 | 24.5 | 24.5 | 27.1 | 29.0 | 27.2 | 26.1 | 21.4 | 21.0 | 20.5 |
| Denmark | 30.4 | 30.0 | 29.4 | 29.3 | 28.8 | 28.6 | 28.9 | 29.2 | 29.0 | 28.8 |
| Finland | 40.7 | 39.5 | 39.4 | 38.7 | 38.0 | 38.4 | 37.9 | 38.2 | 38.3 | 37.0 |
| France | 40.7 | 40.5 | 40.7 | 41.1 | 41.4 | 41.6 | 41.7 | 41.8 | 42.1 | 41.7 |
| Germany | 35.3 | 34.8 | 34.8 | 35.9 | 35.0 | 35.4 | 35.8 | 35.6 | 35.3 | 33.7 |
| Greece ${ }^{1}$ | 38.7 | 38.5 | 40.5 | 40.8 | 42.2 | 42.0 | 42.9 | 42.1 | 41.8 | 41.7 |
| Hungary | 43.9 | 43.9 | 42.2 | 39.4 | 41.0 | 40.7 | 41.2 | 44.0 | 44.0 | 43.7 |
| Iceland | 4.8 | 5.1 | 8.4 | 10.1 | 11.7 | 11.5 | 12.0 | 11.0 | 9.9 | 8.6 |
| Ireland | 20.4 | 17.8 | 14.8 | 12.7 | 12.7 | 13.3 | 11.8 | 10.1 | 9.8 | 11.7 |
| Italy | 39.0 | 38.1 | 36.7 | 34.3 | 36.7 | 35.8 | 36.1 | 35.1 | 36.1 | 35.7 |
| Japan | 21.1 | 21.3 | 27.1 | 23.8 | 23.5 | 23.9 | 23.7 | 23.8 | 24.0 | 23.7 |
| Korea | 15.6 | 15.8 | 15.5 | 15.8 | 16.0 | 16.2 | 16.8 | 17.4 | 17.8 | 17.2 |
| Luxembourg | 13.9 | 12.4 | 9.9 | 10.1 | 10.2 | 10.9 | 11.4 | 12.7 | 11.9 | 11.2 |
| Mexico | 12.6 | 13.2 | 15.8 | 16.8 | 15.3 | 14.7 | 15.0 | 15.9 | 15.1 | 15.3 |
| Netherlands | 29.6 | 28.2 | 28.3 | 27.8 | 29.5 | 29.7 | 29.0 | 29.6 | 30.1 | 29.7 |
| New Zealand | 13.6 | 14.9 | 16.0 | 17.2 | 18.0 | 14.4 | 3.1 | 2.8 | 3.1 | 0.6 |
| Norway | 28.4 | 29.3 | 29.7 | 29.6 | 29.9 | 29.6 | 30.0 | 30.5 | 30.6 | 30.6 |
| Poland | 33.3 | 32.9 | 32.6 | 36.4 | 36.6 | 36.9 | 37.2 | 32.4 | 28.4 | 28.4 |
| Portugal | 30.2 | 27.1 | 28.2 | 27.7 | 28.4 | 27.5 | 27.8 | 27.5 | 26.7 | 26.3 |
| Slovak Republic | 30.4 | 32.0 | 31.3 | 31.9 | 28.1 | 23.1 | 23.7 | 24.4 | 25.3 | 22.7 |
| Spain | 32.1 | 32.7 | 33.1 | 32.5 | 32.9 | 33.2 | 33.6 | 32.8 | 32.0 | 32.3 |
| Sweden | 44.3 | 42.9 | 41.8 | 42.4 | 42.8 | 42.6 | 41.6 | 39.4 | 39.2 | 37.5 |
| Switzerland | 18.7 | 18.8 | 19.0 | 18.6 | 18.4 | 18.5 | 18.2 | 18.5 | 16.2 | 17.2 |
| Turkey ${ }^{2}$ | 40.4 | 43.6 | 42.5 | 42.2 | 42.8 | 42.8 | 42.7 | 42.7 | 38.6 | 36.2 |
| United Kingdom | 27.8 | 25.6 | 25.8 | 27.5 | 27.8 | 27.9 | 28.0 | 28.3 | 27.0 | 26.4 |
| United States | 20.6 | 20.1 | 20.1 | 17.3 | 17.3 | 17.4 | 17.8 | 17.4 | 15.2 | 13.7 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
| OECD | 28.5 | 28.1 | 28.2 | 28.2 | 28.3 | 27.9 | 27.7 | 27.2 | 26.7 | 26.0 |
| EU-15 | 33.4 | 32.4 | 32.1 | 31.9 | 32.4 | 32.3 | 32.3 | 32.0 | 31.8 | 31.3 |
| EU-19 | 33.2 | 32.6 | 32.2 | 32.2 | 32.6 | 32.2 | 32.2 | 31.7 | 31.4 | 30.8 |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

Table II.5b. Evolution of the tax burden, 2000-2009 One-earner married couple with two children at 100\% of average earnings Income Tax as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 25.1 | 22.7 | 23.2 | 23.7 | 23.7 | 24.0 | 24.0 | 23.4 | 22.6 | 20.9 |
| Austria | 11.7 | 12.1 | 12.4 | 12.8 | 13.1 | 12.9 | 13.3 | 13.8 | 14.2 | 12.5 |
| Belgium | 18.9 | 19.1 | 19.0 | 17.9 | 16.4 | 16.5 | 16.5 | 16.7 | 16.6 | 15.3 |
| Canada | 15.5 | 14.0 | 13.4 | 13.1 | 12.6 | 11.9 | 11.9 | 9.2 | 9.9 | 8.9 |
| Czech Republic | 4.2 | 4.0 | 4.5 | 4.9 | 5.2 | 1.0 | -2.5 | -1.6 | -5.6 | -5.4 |
| Denmark | 25.8 | 26.3 | 25.7 | 25.6 | 25.1 | 25.0 | 25.1 | 25.3 | 25.1 | 24.7 |
| Finland | 27.2 | 26.4 | 26.3 | 25.8 | 25.0 | 25.0 | 23.8 | 23.7 | 24.1 | 22.9 |
| France | 7.6 | 7.1 | 7.8 | 7.8 | 7.8 | 7.9 | 7.9 | 8.0 | 8.2 | 7.9 |
| Germany | 1.5 | 0.8 | 0.7 | 1.4 | 0.6 | 0.9 | 1.1 | 1.8 | 2.3 | 0.4 |
| Greece | 5.7 | 5.4 | 7.9 | 8.2 | 10.0 | 9.7 | 10.9 | 9.9 | 9.5 | 9.4 |
| Hungary | 18.3 | 18.2 | 17.3 | 14.3 | 15.3 | 14.9 | 21.0 | 21.8 | 21.3 | 21.2 |
| Iceland | 10.9 | 11.3 | 12.6 | 13.2 | 14.2 | 14.8 | 15.2 | 13.9 | 14.2 | 11.6 |
| Ireland | 9.0 | 6.9 | 6.6 | 6.4 | 6.7 | 9.1 | 6.0 | 4.7 | 4.4 | 5.6 |
| Italy | 15.3 | 14.0 | 12.6 | 11.8 | 12.4 | 11.0 | 11.9 | 11.7 | 12.5 | 12.4 |
| Japan | 2.9 | 3.0 | 2.4 | 2.6 | 3.5 | 3.5 | 3.8 | 4.3 | 4.3 | 4.1 |
| Korea | 1.4 | 1.7 | 1.6 | 1.7 | 1.6 | 1.5 | 1.9 | 2.2 | 2.1 | 1.5 |
| Luxembourg | 2.3 | 0.8 | 0.0 | 0.0 | 0.0 | 0.3 | 0.8 | 1.4 | 5.6 | 4.3 |
| Mexico | 0.8 | 1.5 | 2.7 | 3.2 | 3.7 | 3.1 | 3.5 | 4.6 | 3.8 | 4.0 |
| Netherlands | 4.8 | 10.1 | 10.5 | 9.9 | 10.6 | 10.9 | 12.9 | 14.2 | 15.0 | 16.3 |
| New Zealand | 19.4 | 19.4 | 19.5 | 19.7 | 20.0 | 20.4 | 21.1 | 21.5 | 21.1 | 18.5 |
| Norway | 18.1 | 19.6 | 19.7 | 19.4 | 19.3 | 18.7 | 18.8 | 19.3 | 19.2 | 19.0 |
| Poland | 4.8 | 4.1 | 4.0 | 4.1 | 4.1 | 4.3 | 4.5 | 0.0 | 0.0 | 0.0 |
| Portugal | 6.2 | 3.9 | 4.9 | 4.7 | 4.7 | 3.7 | 3.9 | 3.6 | 3.6 | 3.4 |
| Slovak Republic | 4.6 | 5.0 | 3.8 | 4.1 | -3.4 | -3.4 | -4.1 | -3.6 | -2.8 | -5.3 |
| Spain | 5.0 | 5.7 | 6.2 | 5.5 | 6.0 | 6.5 | 7.0 | 6.2 | 5.2 | 5.7 |
| Sweden | 26.7 | 25.4 | 23.6 | 24.2 | 24.5 | 24.2 | 23.9 | 20.6 | 19.9 | 18.3 |
| Switzerland | 5.4 | 5.5 | 5.6 | 5.6 | 5.8 | 5.8 | 5.3 | 5.6 | 5.0 | 5.0 |
| Turkey ${ }^{2}$ | 14.7 | 14.9 | 15.1 | 14.8 | 15.5 | 15.5 | 15.4 | 15.4 | 11.2 | 10.7 |
| United Kingdom | 17.4 | 15.3 | 15.4 | 15.6 | 15.7 | 15.8 | 15.9 | 16.0 | 14.8 | 14.5 |
| United States | 6.8 | 6.2 | 6.2 | 3.2 | 3.2 | 3.3 | 3.7 | 3.3 | 2.2 | -2.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 11.3 | 11.0 | 11.0 | 10.8 | 10.8 | 10.6 | 10.8 | 10.6 | 10.3 | 9.5 |
| OECD | 12.3 | 12.0 | 12.0 | 11.8 | 11.9 | 11.9 | 12.1 | 11.8 | 12.1 | 11.6 |
|  | 11.4 | 11.1 | 11.0 | 10.8 | 10.5 | 10.3 | 10.5 | 10.2 | 10.2 | 9.7 |
|  |  |  |  |  |  |  |  |  |  |  |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

Table II.5c. Evolution of the tax burden, 2000-2009
One-earner married couple with two children at $100 \%$ of average earnings Income tax plus employee contributions less cash benefits as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 17.7 | 13.2 | 13.4 | 14.8 | 10.1 | 10.9 | 12.3 | 10.0 | 9.8 | 8.6 |
| Austria | 15.1 | 15.9 | 16.4 | 16.9 | 17.9 | 18.2 | 19.1 | 19.9 | 20.7 | 18.1 |
| Belgium | 23.7 | 24.5 | 24.4 | 23.4 | 22.0 | 22.1 | 22.1 | 22.1 | 21.6 | 20.2 |
| Canada | 15.0 | 13.5 | 13.1 | 12.5 | 12.2 | 12.3 | 12.8 | 10.1 | 9.7 | 8.8 |
| Czech Republic | -4.3 | -2.0 | -1.9 | 1.5 | 4.1 | 1.7 | 0.2 | -6.1 | -6.6 | -6.5 |
| Denmark | 30.5 | 30.0 | 29.4 | 29.3 | 28.8 | 28.6 | 28.9 | 29.2 | 29.0 | 28.8 |
| Finland | 25.3 | 24.4 | 24.2 | 23.9 | 23.1 | 23.6 | 23.1 | 23.3 | 23.5 | 22.6 |
| France | 16.3 | 15.9 | 16.4 | 16.7 | 16.8 | 16.9 | 17.1 | 17.2 | 17.6 | 17.1 |
| Germany | 22.0 | 21.4 | 21.4 | 22.4 | 21.5 | 22.0 | 22.6 | 22.7 | 22.7 | 20.8 |
| Greece | 21.6 | 21.3 | 23.8 | 24.2 | 26.0 | 25.7 | 26.9 | 25.9 | 25.5 | 25.4 |
| Hungary | 20.4 | 21.8 | 20.7 | 17.5 | 19.7 | 19.6 | 20.8 | 24.7 | 24.6 | 25.3 |
| Iceland | 0.3 | 0.1 | 3.6 | 5.0 | 6.6 | 6.4 | 6.9 | 6.2 | 5.1 | 3.0 |
| Ireland | 10.8 | 7.9 | 5.6 | 3.3 | 3.3 | 4.0 | 2.3 | 0.4 | 0.1 | 2.2 |
| Italy | 18.2 | 17.1 | 15.7 | 12.6 | 15.8 | 14.6 | 15.7 | 14.3 | 15.6 | 15.1 |
| Japan | 12.9 | 13.0 | 16.1 | 14.2 | 13.9 | 14.2 | 13.6 | 14.0 | 14.1 | 13.8 |
| Korea | 8.1 | 8.4 | 8.3 | 8.6 | 8.6 | 8.6 | 9.1 | 9.6 | 9.7 | 9.1 |
| Luxembourg | 2.0 | 0.7 | -2.2 | -1.9 | -1.9 | -1.2 | -0.5 | 0.9 | 2.1 | 0.9 |
| Mexico | 2.4 | 3.0 | 4.2 | 4.7 | 5.2 | 4.6 | 5.0 | 6.0 | 5.1 | 5.3 |
| Netherlands | 22.1 | 20.5 | 20.5 | 20.8 | 22.3 | 22.3 | 22.4 | 22.4 | 22.9 | 22.6 |
| New Zealand | 13.6 | 14.9 | 16.0 | 17.2 | 18.0 | 14.4 | 3.1 | 2.8 | 3.1 | 0.6 |
| Norway | 19.3 | 20.3 | 20.7 | 20.6 | 20.8 | 20.3 | 20.7 | 21.5 | 21.7 | 21.8 |
| Poland | 22.1 | 21.6 | 21.3 | 25.7 | 25.9 | 26.3 | 26.7 | 21.0 | 17.8 | 17.8 |
| Portugal | 13.6 | 9.8 | 11.2 | 10.5 | 11.3 | 10.3 | 10.7 | 10.3 | 9.3 | 8.7 |
| Slovak Republic | 4.0 | 6.2 | 5.1 | 5.9 | 2.8 | 3.0 | 3.7 | 4.6 | 5.7 | 2.4 |
| Spain | 11.4 | 12.1 | 12.6 | 11.8 | 12.4 | 12.8 | 13.3 | 12.5 | 11.5 | 12.0 |
| Sweden | 26.0 | 24.2 | 22.7 | 23.5 | 24.1 | 24.0 | 22.8 | 19.8 | 19.4 | 17.9 |
| Switzerland | 9.3 | 9.5 | 9.6 | 9.4 | 9.4 | 9.5 | 9.1 | 9.5 | 7.0 | 8.1 |
| Turkey | 28.7 | 30.9 | 30.1 | 29.8 | 30.5 | 30.5 | 30.4 | 30.4 | 26.2 | 25.7 |
| United Kingdom | 20.6 | 18.3 | 18.6 | 19.8 | 20.1 | 20.2 | 20.3 | 20.5 | 19.1 | 18.5 |
| United States | 14.4 | 13.8 | 13.8 | 10.8 | 10.9 | 10.9 | 11.4 | 10.9 | 6.8 | 5.2 |
| $\quad$ Unweighted average: |  |  |  |  |  |  |  |  | 14.6 | 14.0 |
|  | 15.4 | 15.1 | 15.2 | 15.2 | 15.4 | 15.2 | 15.1 | 14.6 | 13.3 |  |
| OECD | 18.6 | 17.6 | 17.4 | 17.1 | 17.6 | 17.6 | 17.8 | 17.4 | 17.4 | 16.7 |
| EU-15 | 16.9 | 16.4 | 16.1 | 16.2 | 16.6 | 16.6 | 16.7 | 16.1 | 15.9 | 15.3 |
|  |  |  |  |  |  |  |  |  |  |  |

[^37]Table II.6a. Evolution of the tax burden, 2000-2009
Two-earner married couple with two children, one at 100\% average earnings and the other at 33\% Income tax plus employee and employer contributions less cash benefits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 24.1 | 20.6 | 21.0 | 21.5 | 18.2 | 20.5 | 20.5 | 19.7 | 19.1 | 17.9 |
| Austria | 36.3 | 35.8 | 36.1 | 36.4 | 37.4 | 37.5 | 38.0 | 38.5 | 38.8 | 36.8 |
| Belgium | 44.3 | 44.0 | 43.7 | 42.3 | 43.6 | 41.4 | 41.3 | 41.3 | 41.2 | 40.3 |
| Canada | 27.4 | 26.2 | 26.3 | 25.6 | 25.6 | 25.4 | 25.7 | 23.9 | 24.0 | 23.5 |
| Czech Republic | 31.6 | 32.9 | 32.9 | 34.2 | 35.7 | 35.2 | 33.6 | 29.6 | 30.7 | 30.0 |
| Denmark | 35.3 | 34.7 | 34.0 | 34.0 | 33.5 | 33.4 | 33.5 | 33.8 | 33.5 | 33.2 |
| Finland | 39.7 | 38.3 | 38.1 | 37.3 | 36.5 | 36.9 | 36.4 | 36.4 | 36.4 | 35.1 |
| France | 41.0 | 40.6 | 40.6 | 41.0 | 40.1 | 40.0 | 39.7 | 39.3 | 39.5 | 38.6 |
| Germany | 41.2 | 40.5 | 40.5 | 41.4 | 40.6 | 40.8 | 41.1 | 40.8 | 40.5 | 39.1 |
| Greece | 37.6 | 37.4 | 38.9 | 39.2 | 40.3 | 40.1 | 40.8 | 40.2 | 40.0 | 39.9 |
| Hungary | 44.7 | 44.7 | 42.8 | 39.1 | 40.4 | 40.0 | 40.3 | 42.8 | 42.9 | 42.5 |
| Iceland | 13.9 | 14.6 | 17.7 | 19.4 | 20.6 | 20.3 | 20.2 | 19.1 | 18.1 | 17.6 |
| Ireland | 23.6 | 20.4 | 17.8 | 16.0 | 15.5 | 15.6 | 14.1 | 12.4 | 12.3 | 13.7 |
| Italy | 40.9 | 40.3 | 38.9 | 37.9 | 38.3 | 38.0 | 38.1 | 37.6 | 38.0 | 38.0 |
| Japan | 22.5 | 22.6 | 28.4 | 25.2 | 24.3 | 24.7 | 24.8 | 25.1 | 25.2 | 24.9 |
| Korea | 15.3 | 15.6 | 15.4 | 15.6 | 15.8 | 16.0 | 16.6 | 17.2 | 17.6 | 17.3 |
| Luxembourg | 18.0 | 16.8 | 13.7 | 14.2 | 14.6 | 15.6 | 16.1 | 17.3 | 16.5 | 15.6 |
| Mexico | 9.5 | 10.4 | 13.1 | 14.2 | 12.9 | 12.2 | 12.7 | 13.7 | 13.1 | 13.4 |
| Netherlands | 34.0 | 31.2 | 31.2 | 31.4 | 32.2 | 32.2 | 29.5 | 29.4 | 29.9 | 29.1 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 11.6 | 11.4 | 11.2 | 8.8 |
| Norway | 30.8 | 32.0 | 31.9 | 31.6 | 31.9 | 31.3 | 31.3 | 31.4 | 31.5 | 31.5 |
| Poland | 34.6 | 34.1 | 36.5 | 36.8 | 37.0 | 37.3 | 37.6 | 32.4 | 28.8 | 28.9 |
| Portugal | 30.6 | 28.2 | 29.1 | 28.6 | 29.4 | 28.7 | 29.0 | 28.7 | 28.8 | 28.4 |
| Slovak Republic | 34.9 | 36.1 | 35.3 | 35.7 | 33.6 | 28.9 | 29.4 | 29.4 | 30.0 | 26.5 |
| Spain | 34.9 | 35.2 | 35.4 | 34.9 | 35.1 | 35.3 | 35.5 | 35.0 | 34.3 | 34.5 |
| Sweden | 44.7 | 43.4 | 42.2 | 42.6 | 43.0 | 42.5 | 41.6 | 39.1 | 38.8 | 37.2 |
| Switzerland | 21.1 | 21.3 | 21.5 | 21.1 | 20.9 | 21.0 | 20.6 | 21.0 | 19.3 | 20.0 |
| Turkey ${ }^{2}$ | 39.7 | 42.9 | 41.8 | 41.4 | 42.2 | 42.4 | 42.3 | 42.3 | 39.4 | 37.2 |
| United Kingdom | 25.5 | 23.6 | 23.8 | 25.5 | 25.9 | 25.9 | 26.1 | 26.3 | 25.3 | 24.6 |
| United States | 24.2 | 23.8 | 23.7 | 21.6 | 21.6 | 21.6 | 21.9 | 21.7 | 20.6 | 21.7 |
| $\quad$ Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 30.7 | 30.2 | 30.4 | 30.1 | 30.2 | 30.0 | 29.7 | 29.2 | 28.8 | 28.2 |
| OECD | 35.2 | 34.0 | 33.6 | 33.5 | 33.7 | 33.6 | 33.4 | 33.1 | 32.9 | 32.3 |
| EU-15 | 35.4 | 34.6 | 34.3 | 34.1 | 34.3 | 34.0 | 33.8 | 33.2 | 33.0 | 32.2 |

[^38]Table II.6b. Evolution of the tax burden, 2000-2009
Two-earner married couple with two children, one at $100 \%$ average earnings and the other at $33 \%$
Income Tax as a \% of gross wage earnings
Income Tax as a \% of gross wage earnings

|  |  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 21.5 | 19.2 | 19.6 | 20.2 | 20.3 | 20.8 | 20.6 | 19.6 | 19.0 | 17.3 |
| Australia | 9.4 | 9.7 | 9.9 | 10.2 | 11.0 | 10.8 | 11.1 | 11.4 | 11.7 | 10.5 |
| Austria | 24.0 | 24.3 | 23.7 | 22.3 | 20.5 | 21.9 | 22.0 | 22.1 | 22.2 | 21.2 |
| Belgium | 16.6 | 15.3 | 14.9 | 14.8 | 14.4 | 13.7 | 13.6 | 11.8 | 12.1 | 11.5 |
| Canada | 5.4 | 5.2 | 5.6 | 6.0 | 6.3 | 5.2 | 2.8 | 3.7 | 2.6 | 2.6 |
| Czech Republic | 27.9 | 28.1 | 27.5 | 27.5 | 27.0 | 26.9 | 27.0 | 27.1 | 26.8 | 26.4 |
| Denmark | 23.7 | 22.8 | 22.7 | 22.1 | 21.3 | 21.2 | 20.1 | 19.8 | 20.1 | 19.0 |
| Finland | 9.5 | 8.9 | 8.5 | 8.4 | 8.3 | 8.2 | 7.8 | 7.3 | 7.5 | 6.3 |
| France | 8.7 | 7.7 | 7.6 | 8.1 | 7.3 | 7.4 | 7.5 | 8.0 | 8.5 | 6.9 |
| Germany | 4.3 | 4.0 | 6.0 | 6.2 | 7.5 | 7.3 | 8.2 | 7.4 | 7.1 | 7.1 |
| Greece | 15.7 | 16.0 | 14.7 | 10.7 | 11.5 | 11.2 | 15.7 | 16.4 | 16.1 | 16.2 |
| Hungary | 15.8 | 16.5 | 18.3 | 19.1 | 19.9 | 20.1 | 20.2 | 19.0 | 19.2 | 17.7 |
| Iceland | 13.7 | 10.8 | 10.2 | 9.7 | 9.4 | 9.4 | 8.1 | 6.6 | 6.6 | 7.4 |
| Ireland | 14.0 | 13.3 | 11.9 | 10.5 | 10.9 | 10.4 | 11.1 | 10.9 | 11.3 | 11.3 |
| Italy | 4.4 | 4.5 | 4.0 | 4.2 | 4.2 | 4.2 | 4.5 | 5.1 | 5.1 | 4.9 |
| Japan | 1.0 | 1.5 | 1.4 | 1.5 | 1.4 | 1.4 | 1.8 | 2.0 | 1.9 | 1.6 |
| Korea | 3.9 | 2.7 | 0.8 | 1.3 | 1.7 | 2.2 | 2.8 | 3.4 | 6.8 | 5.3 |
| Luxembourg | -4.2 | -3.4 | -2.0 | -1.4 | -0.7 | -1.5 | -0.9 | 0.2 | -0.4 | -0.1 |
| Mexico | 7.3 | 8.2 | 8.5 | 7.8 | 8.1 | 8.5 | 10.1 | 11.1 | 11.6 | 12.6 |
| Netherlands | 18.6 | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 20.4 | 19.7 | 17.3 |
| New Zealand | 19.2 | 20.8 | 20.5 | 20.0 | 20.0 | 19.1 | 18.7 | 18.9 | 18.9 | 18.8 |
| Norway | 5.3 | 4.6 | 4.4 | 4.6 | 4.6 | 4.7 | 4.9 | 0.0 | 0.5 | 0.5 |
| Poland | 5.7 | 4.0 | 4.8 | 4.6 | 4.6 | 3.7 | 4.0 | 3.7 | 3.7 | 3.6 |
| Portugal | 12.2 |  |  |  |  |  |  |  |  |  |

[^39]Table II.6c. Evolution of the tax burden, 2000-2009
Two-earner married couple with two children, one at 100\% average earnings and the other at 33\% Income tax plus employee contributions less cash benefits as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 19.2 | 15.6 | 16.1 | 16.8 | 13.2 | 15.7 | 15.8 | 14.9 | 14.3 | 12.7 |
| Austria | 16.5 | 17.0 | 17.4 | 17.8 | 19.2 | 19.3 | 19.9 | 20.5 | 21.1 | 18.4 |
| Belgium | 29.3 | 29.6 | 29.2 | 27.5 | 25.8 | 26.8 | 26.5 | 26.5 | 26.2 | 25.2 |
| Canada | 19.1 | 17.8 | 17.7 | 17.2 | 17.0 | 16.8 | 17.1 | 15.2 | 15.4 | 14.8 |
| Czech Republic | 7.7 | 9.4 | 9.4 | 11.2 | 13.2 | 12.5 | 10.3 | 4.9 | 6.4 | 6.2 |
| Denmark | 35.4 | 34.7 | 34.0 | 34.0 | 33.5 | 33.4 | 33.5 | 33.8 | 33.5 | 33.2 |
| Finland | 24.0 | 22.8 | 22.6 | 22.2 | 21.3 | 21.7 | 21.1 | 21.1 | 21.1 | 20.2 |
| France | 19.4 | 18.8 | 18.3 | 18.5 | 18.5 | 18.4 | 18.1 | 17.6 | 17.9 | 16.7 |
| Germany | 29.2 | 28.2 | 28.2 | 29.1 | 28.2 | 28.6 | 29.0 | 28.9 | 28.9 | 27.3 |
| Greece | 20.2 | 19.9 | 21.9 | 22.2 | 23.5 | 23.3 | 24.2 | 23.4 | 23.1 | 23.1 |
| Hungary | 20.4 | 21.8 | 20.4 | 16.2 | 18.2 | 18.0 | 19.2 | 22.8 | 22.9 | 23.6 |
| Iceland | 9.8 | 10.1 | 13.4 | 14.8 | 16.1 | 15.7 | 15.6 | 14.8 | 13.7 | 12.5 |
| Ireland | 15.1 | 11.5 | 9.5 | 7.4 | 6.9 | 7.0 | 5.4 | 3.4 | 3.3 | 4.9 |
| Italy | 20.8 | 20.1 | 18.8 | 17.4 | 17.8 | 17.5 | 18.2 | 17.6 | 18.2 | 18.1 |
| Japan | 14.4 | 14.5 | 17.6 | 15.8 | 14.9 | 15.1 | 15.0 | 15.3 | 15.5 | 15.3 |
| Korea | 7.7 | 8.2 | 8.1 | 8.4 | 8.4 | 8.5 | 8.9 | 9.3 | 9.5 | 9.2 |
| Luxembourg | 6.6 | 5.6 | 2.0 | 2.7 | 3.1 | 4.0 | 4.7 | 6.0 | 7.1 | 5.8 |
| Mexico | -2.7 | -1.9 | -0.6 | 0.1 | 0.8 | 0.0 | 0.5 | 1.5 | 0.9 | 1.2 |
| Netherlands | 26.2 | 23.1 | 23.0 | 23.8 | 24.3 | 24.2 | 23.2 | 22.8 | 23.1 | 22.5 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 11.6 | 11.4 | 11.2 | 8.8 |
| Norway | 22.0 | 23.3 | 23.2 | 22.9 | 23.0 | 22.3 | 22.1 | 22.6 | 22.7 | 22.7 |
| Poland | 23.6 | 23.1 | 25.8 | 26.1 | 26.3 | 26.7 | 27.1 | 21.0 | 18.3 | 18.3 |
| Portugal | 14.1 | 11.1 | 12.3 | 11.7 | 12.6 | 11.7 | 12.1 | 11.8 | 11.8 | 11.4 |
| Slovak Republic | 10.1 | 11.9 | 10.5 | 11.1 | 10.2 | 10.3 | 10.9 | 10.9 | 11.7 | 7.3 |
| Spain | 15.0 | 15.3 | 15.6 | 15.0 | 15.3 | 15.5 | 15.7 | 15.4 | 14.5 | 14.9 |
| Sweden | 26.5 | 24.8 | 23.3 | 23.8 | 24.3 | 23.9 | 22.7 | 19.4 | 18.9 | 17.4 |
| Switzerland | 12.0 | 12.2 | 12.4 | 12.1 | 12.1 | 12.3 | 11.9 | 12.3 | 10.4 | 11.1 |
| Turkey |  | 28.0 | 30.1 | 29.3 | 28.8 | 29.8 | 30.0 | 29.9 | 29.9 | 27.1 |
| United Kingdom | 18.8 | 16.9 | 17.2 | 18.4 | 18.7 | 18.8 | 18.9 | 19.1 | 18.1 | 17.4 |
| United States | 18.2 | 17.7 | 17.7 | 15.4 | 15.4 | 15.4 | 15.8 | 15.5 | 12.0 | 13.1 |
| $\quad$ Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 18.2 | 17.7 | 17.8 | 17.6 | 17.7 | 17.8 | 17.5 | 17.0 | 16.6 | 16.0 |
| OECD | 21.1 | 20.0 | 19.5 | 19.4 | 19.5 | 19.6 | 19.5 | 19.2 | 19.1 | 18.4 |
|  | 19.9 | 19.2 | 18.9 | 18.7 | 19.0 | 19.0 | 19.0 | 18.3 | 18.2 | 17.5 |
| EU-15 |  |  |  |  |  |  |  |  |  |  |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

Table II.7a. Evolution of the tax burden, 2000-2009
Two-earner married couple with two children, one at 100\% average earnings and the other at 67\% Income tax plus employee and employer contributions less cash benefits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 26.2 | 23.0 | 23.4 | 23.9 | 21.2 | 23.1 | 24.0 | 23.5 | 22.9 | 22.2 |
| Austria | 39.0 | 38.6 | 39.0 | 39.4 | 40.3 | 40.2 | 40.7 | 41.2 | 41.7 | 40.0 |
| Belgium | 50.9 | 50.6 | 50.3 | 49.2 | 48.1 | 48.2 | 48.2 | 48.3 | 48.1 | 47.4 |
| Canada | 30.0 | 29.0 | 29.1 | 28.4 | 28.6 | 28.5 | 28.8 | 27.3 | 27.3 | 26.9 |
| Czech Republic | 36.5 | 36.6 | 36.9 | 39.0 | 39.3 | 38.9 | 37.8 | 34.1 | 34.6 | 33.9 |
| Denmark | 38.4 | 37.7 | 36.8 | 36.7 | 35.4 | 35.3 | 35.4 | 35.6 | 35.3 | 35.0 |
| Finland | 41.6 | 40.3 | 40.0 | 39.2 | 38.5 | 38.9 | 38.3 | 38.3 | 38.4 | 37.0 |
| France | 44.2 | 44.4 | 44.3 | 43.5 | 42.7 | 42.5 | 44.1 | 44.1 | 44.2 | 44.0 |
| Germany | 45.4 | 44.6 | 44.7 | 45.6 | 44.7 | 44.7 | 45.0 | 44.6 | 44.3 | 43.1 |
| Greece | 37.8 | 37.5 | 39.0 | 39.1 | 40.4 | 40.2 | 41.2 | 40.9 | 40.7 | 40.7 |
| Hungary | 46.9 | 46.7 | 44.6 | 41.4 | 42.5 | 41.6 | 42.0 | 44.8 | 45.1 | 44.7 |
| Iceland | 20.4 | 20.8 | 23.4 | 24.9 | 25.8 | 25.4 | 25.0 | 23.9 | 22.9 | 22.9 |
| Ireland | 29.1 | 24.7 | 21.9 | 20.6 | 21.6 | 22.0 | 19.5 | 17.6 | 17.5 | 19.8 |
| Italy | 44.0 | 43.2 | 42.3 | 41.4 | 41.8 | 41.4 | 41.6 | 40.8 | 41.4 | 41.3 |
| Japan | 23.0 | 23.1 | 28.9 | 25.7 | 25.0 | 25.4 | 25.7 | 26.0 | 26.2 | 25.9 |
| Korea | 15.4 | 15.6 | 15.4 | 15.6 | 15.9 | 16.1 | 16.7 | 17.4 | 17.8 | 17.4 |
| Luxembourg | 23.4 | 22.1 | 18.7 | 19.4 | 19.8 | 20.8 | 21.4 | 22.6 | 21.8 | 20.9 |
| Mexico | 10.4 | 11.1 | 13.9 | 14.8 | 13.4 | 12.8 | 13.2 | 14.0 | 13.4 | 13.9 |
| Netherlands | 37.7 | 34.9 | 35.0 | 35.2 | 36.2 | 36.5 | 32.7 | 32.8 | 33.2 | 31.6 |
| New Zealand | 19.0 | 19.1 | 19.2 | 19.3 | 19.5 | 19.8 | 17.5 | 17.3 | 17.1 | 15.3 |
| Norway | 33.0 | 33.8 | 33.6 | 33.3 | 33.5 | 32.8 | 33.1 | 33.2 | 33.3 | 33.3 |
| Poland | 37.7 | 35.4 | 37.3 | 37.6 | 37.7 | 38.0 | 38.3 | 33.9 | 30.4 | 30.3 |
| Portugal | 32.9 | 30.9 | 33.0 | 32.0 | 32.7 | 32.0 | 32.7 | 32.6 | 32.7 | 32.5 |
| Slovak Republic | 36.7 | 37.8 | 36.8 | 37.2 | 36.1 | 31.6 | 32.0 | 32.4 | 32.9 | 31.1 |
| Spain | 35.3 | 35.7 | 36.1 | 35.3 | 35.7 | 36.0 | 36.3 | 35.7 | 34.6 | 34.8 |
| Sweden | 46.0 | 44.9 | 43.8 | 44.2 | 44.6 | 44.2 | 43.3 | 41.0 | 40.5 | 39.0 |
| Switzerland | 24.2 | 24.3 | 24.4 | 24.0 | 23.8 | 24.0 | 23.6 | 24.0 | 22.4 | 23.0 |
| Turkey | 39.9 | 43.2 | 42.1 | 41.5 | 42.2 | 42.5 | 42.3 | 42.4 | 40.0 | 37.7 |
| United Kingdom | 28.3 | 26.8 | 27.0 | 28.6 | 28.9 | 29.9 | 29.3 | 29.8 | 28.7 | 28.2 |
| United States | 26.3 | 25.9 | 25.8 | 24.1 | 24.1 | 24.1 | 24.3 | 24.1 | 23.2 | 24.2 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 33.3 | 32.7 | 32.9 | 32.7 | 32.7 | 32.6 | 32.5 | 32.1 | 31.8 | 31.3 |
| OECD | 38.3 | 37.1 | 36.8 | 36.6 | 36.7 | 36.8 | 36.7 | 36.4 | 36.2 | 35.7 |
|  | 38.5 | 37.5 | 37.2 | 37.1 | 37.2 | 37.0 | 36.8 | 36.4 | 36.1 | 35.5 |
|  |  |  |  |  |  |  |  |  |  |  |

[^40]Table II．7b．Evolution of the tax burden，2000－2009

## Two－earner married couple with two children，one at 100\％average earnings and the other at 67\％ Income Tax as a \％of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 23.3 | 21.0 | 21.5 | 22.1 | 22.1 | 22.5 | 22.5 | 21.7 | 20.4 | 18.8 |
| Austria | 10.7 | 11.2 | 11.5 | 12.0 | 12.8 | 12.3 | 12.8 | 13.2 | 13.7 | 12.0 |
| Belgium | 26.4 | 26.4 | 26.1 | 24.9 | 23.9 | 24.0 | 23.9 | 24.0 | 24.1 | 23.2 |
| Canada | 17.7 | 16.5 | 16.2 | 16.1 | 15.8 | 15.0 | 15.1 | 13.5 | 13.8 | 13.3 |
| Czech Republic | 6.9 | 6.8 | 7.1 | 7.4 | 7.7 | 7.1 | 5.5 | 6.3 | 4.7 | 4.8 |
| Denmark | 30.6 | 30.9 | 29.9 | 29.9 | 28.6 | 28.5 | 28.5 | 28.7 | 28.4 | 28.0 |
| Finland | 24.8 | 24.0 | 23.8 | 23.3 | 22.5 | 22.5 | 21.3 | 21.1 | 21.6 | 20.2 |
| France | 10.7 | 10.7 | 11.0 | 10.8 | 10.7 | 11.0 | 11.0 | 10.9 | 11.0 | 10.9 |
| Germany | 13.7 | 12.6 | 12.7 | 13.1 | 12.3 | 12.1 | 12.2 | 12.6 | 13.0 | 11.7 |
| Greece | 4.5 | 4.1 | 6.1 | 6.0 | 7.7 | 7.4 | 8.7 | 8.3 | 8.0 | 8.1 |
| Hungary | 18.0 | 18.1 | 16.5 | 13.1 | 13.5 | 12.4 | 16.2 | 17.1 | 17.2 | 17.5 |
| Iceland | 19.7 | 20.3 | 22.0 | 22.7 | 23.3 | 23.3 | 23.2 | 22.1 | 22.2 | 21.3 |
| Ireland | 17.6 | 13.1 | 12.1 | 12.0 | 13.2 | 13.5 | 11.0 | 9.3 | 9.3 | 10.6 |
| Italy | 16.6 | 15.6 | 14.9 | 13.6 | 14.1 | 13.6 | 14.5 | 14.4 | 15.0 | 15.0 |
| Japan | 5.0 | 5.0 | 4.5 | 4.8 | 4.7 | 4.7 | 5.2 | 5.8 | 5.8 | 5.7 |
| Korea | 1.3 | 1.5 | 1.4 | 1.5 | 1.5 | 1.4 | 1.8 | 2.1 | 2.1 | 1.7 |
| Luxembourg | 8.2 | 7.0 | 4.5 | 5.1 | 5.5 | 6.2 | 6.9 | 7.6 | 10.4 | 8.9 |
| Mexico | -1.9 | -1.2 | 0.1 | 0.6 | 1.2 | 0.6 | 1.0 | 1.8 | 1.2 | 1.7 |
| Netherlands | 7.4 | 7.9 | 8.2 | 7.4 | 7.8 | 8.3 | 9.6 | 10.6 | 11.1 | 12.0 |
| New Zealand | 19.0 | 19.1 | 19.2 | 19.3 | 19.5 | 19.8 | 20.2 | 20.6 | 19.9 | 18.0 |
| Norway | 20.6 | 21.8 | 21.4 | 20.9 | 20.9 | 19.9 | 19.9 | 20.2 | 20.2 | 20.0 |
| Poland | 6.1 | 5.5 | 5.4 | 5.5 | 5.5 | 5.6 | 5.8 | 1.8 | 2.3 | 2.2 |
| Portugal | 8.1 | 6.6 | 8.4 | 8.0 | 8.1 | 7.3 | 7.8 | 7.6 | 7.7 | 7.5 |
| Slovak Republic | 5.7 | 6.0 | 4.8 | 5.1 | 4.5 | 4.5 | 4.1 | 4.4 | 4.9 | 3.0 |
| Spain | 9.2 | 9.7 | 10.2 | 9.2 | 9.7 | 10.1 | 10.5 | 10.0 | 8.5 | 9.0 |
| Sweden | 25.9 | 24.7 | 23.1 | 23.6 | 23.9 | 23.4 | 22.9 | 19.5 | 18.7 | 17.3 |
| Switzerland | 8.5 | 8.6 | 8.7 | 8.6 | 8.8 | 8.9 | 8.4 | 8.8 | 8.3 | 8.2 |
| Turkey ${ }^{2}$ | 14.1 | 14.4 | 14.6 | 14.0 | 14.8 | 15.1 | 14.9 | 15.0 | 12.8 | 12.4 |
| United Kingdom | 16.5 | 15.1 | 15.2 | 15.5 | 15.6 | 16.7 | 16.0 | 16.4 | 15.4 | 15.2 |
| United States | 12.8 | 12.4 | 12.3 | 10.5 | 10.5 | 10.5 | 10.7 | 10.5 | 10.4 | 8.7 |
| $\quad$ Unweighted average： |  |  |  |  |  |  |  |  |  |  |
| $\quad$ OECD | 13.6 | 13.2 | 13.1 | 12.9 | 13.0 | 12.9 | 13.1 | 12.9 | 12.7 | 12.2 |
| EU－15 | 15.4 | 14.7 | 14.5 | 14.3 | 14.4 | 14.5 | 14.5 | 14.3 | 14.4 | 14.0 |
|  | 14.1 | 13.5 | 13.2 | 12.9 | 13.0 | 13.0 | 13.1 | 12.8 | 12.9 | 12.5 |
|  |  |  |  |  |  |  |  |  |  |  |

1．The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families．
2．Turkey wage figures are based on the old definition of average worker（ISIC D，rev3．）

Table II.7c. Evolution of the tax burden, 2000-2009
Two-earner married couple with two children, one at $100 \%$ average earnings and the other at $67 \%$ Income tax plus employee contributions less cash beneftis as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 21.5 | 18.2 | 18.7 | 19.3 | 16.5 | 18.5 | 19.4 | 18.9 | 18.3 | 17.2 |
| Austria | 20.0 | 20.7 | 21.1 | 21.6 | 23.0 | 22.7 | 23.5 | 24.1 | 24.8 | 22.6 |
| Belgium | 34.9 | 35.3 | 35.0 | 33.8 | 32.8 | 32.9 | 32.9 | 32.9 | 32.7 | 31.8 |
| Canada | 22.0 | 20.8 | 20.8 | 20.2 | 20.2 | 20.2 | 20.5 | 18.8 | 19.0 | 18.5 |
| Czech Republic | 14.3 | 14.4 | 14.8 | 17.6 | 18.0 | 17.5 | 16.1 | 11.1 | 11.7 | 11.5 |
| Denmark | 38.5 | 37.7 | 36.8 | 36.7 | 35.4 | 35.3 | 35.4 | 35.6 | 35.3 | 35.0 |
| Finland | 26.5 | 25.3 | 25.0 | 24.6 | 23.8 | 24.2 | 23.5 | 23.5 | 23.6 | 22.5 |
| France | 21.3 | 21.4 | 21.4 | 21.5 | 21.6 | 21.8 | 22.0 | 21.9 | 22.1 | 21.9 |
| Germany | 34.2 | 33.2 | 33.3 | 34.1 | 33.2 | 33.3 | 33.7 | 33.5 | 33.5 | 32.1 |
| Greece | 20.4 | 20.0 | 22.0 | 22.0 | 23.7 | 23.4 | 24.7 | 24.3 | 24.0 | 24.1 |
| Hungary | 24.2 | 25.3 | 23.6 | 20.0 | 21.6 | 20.6 | 21.8 | 25.6 | 26.0 | 26.7 |
| Iceland | 16.6 | 16.7 | 19.4 | 20.6 | 21.6 | 21.1 | 20.7 | 19.8 | 18.8 | 18.1 |
| Ireland | 20.6 | 15.6 | 13.5 | 12.1 | 13.2 | 13.6 | 10.8 | 8.8 | 8.7 | 11.1 |
| Italy | 24.9 | 24.0 | 23.2 | 22.0 | 22.5 | 22.0 | 22.9 | 21.8 | 22.6 | 22.5 |
| Japan | 15.0 | 15.0 | 18.2 | 16.3 | 15.6 | 15.9 | 15.9 | 16.4 | 16.5 | 16.3 |
| Korea | 8.0 | 8.2 | 8.1 | 8.4 | 8.5 | 8.6 | 9.0 | 9.5 | 9.7 | 9.3 |
| Luxembourg | 12.7 | 11.7 | 7.8 | 8.5 | 9.0 | 10.0 | 10.8 | 12.1 | 13.1 | 11.7 |
| Mexico | -0.4 | 0.2 | 1.5 | 2.0 | 2.6 | 1.9 | 2.3 | 3.2 | 2.5 | 3.0 |
| Netherlands | 29.6 | 26.5 | 26.5 | 27.3 | 28.0 | 28.3 | 26.5 | 26.2 | 26.6 | 24.9 |
| New Zealand | 19.0 | 19.1 | 19.2 | 19.3 | 19.5 | 19.8 | 17.5 | 17.3 | 17.1 | 15.3 |
| Norway | 24.4 | 25.4 | 25.2 | 24.8 | 24.9 | 24.0 | 24.2 | 24.7 | 24.8 | 24.8 |
| Poland | 27.3 | 24.5 | 26.7 | 27.1 | 27.3 | 27.6 | 27.9 | 22.8 | 20.1 | 20.0 |
| Portugal | 17.0 | 14.5 | 17.1 | 15.9 | 16.7 | 15.9 | 16.8 | 16.6 | 16.7 | 16.4 |
| Slovak Republic | 12.6 | 14.1 | 12.7 | 13.2 | 13.6 | 13.7 | 14.2 | 14.7 | 15.3 | 13.0 |
| Spain | 15.5 | 16.1 | 16.5 | 15.5 | 16.0 | 16.4 | 16.8 | 16.3 | 14.8 | 15.3 |
| Sweden | 28.3 | 26.8 | 25.4 | 25.9 | 26.4 | 26.1 | 25.0 | 21.8 | 21.2 | 19.8 |
| Switzerland | 15.5 | 15.6 | 15.7 | 15.4 | 15.4 | 15.6 | 15.1 | 15.6 | 13.9 | 14.5 |
| Turkey |  | 28.1 | 30.4 | 29.6 | 29.0 | 29.8 | 30.1 | 29.9 | 30.0 | 27.8 |
| United Kingdom | 21.4 | 19.9 | 20.1 | 21.3 | 21.5 | 22.7 | 22.0 | 22.5 | 21.4 | 20.8 |
| United States | 20.5 | 20.1 | 20.0 | 18.1 | 18.1 | 18.1 | 18.4 | 18.2 | 15.3 | 16.4 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 21.1 | 20.6 | 20.6 | 20.5 | 20.7 | 20.7 | 20.7 | 20.3 | 19.9 | 19.5 |
| OECD | 24.4 | 23.2 | 23.0 | 22.9 | 23.1 | 23.2 | 23.1 | 22.8 | 22.7 | 22.2 |
|  | 23.4 | 22.5 | 22.2 | 22.1 | 22.5 | 22.5 | 22.5 | 21.9 | 21.8 | 21.3 |
|  |  |  |  |  |  |  |  |  |  |  |

[^41]Table II.8a. Evolution of the tax burden, 2000-2009
Two-earner married couple with no children, one at $100 \%$ average earnings and the other at $33 \%$ Income tax plus employee and employer contributions less cash beneits as a \% of labour costs

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 27.0 | 24.0 | 24.3 | 24.7 | 24.8 | 25.2 | 25.1 | 24.2 | 23.6 | 23.1 |
| Austria | 44.6 | 44.1 | 44.2 | 44.5 | 45.0 | 44.9 | 45.2 | 45.4 | 45.6 | 44.3 |
| Belgium | 51.2 | 50.6 | 50.2 | 48.8 | 49.9 | 48.0 | 47.8 | 47.9 | 48.0 | 47.3 |
| Canada | 30.3 | 29.3 | 29.4 | 29.1 | 29.2 | 28.9 | 28.8 | 28.0 | 28.1 | 27.6 |
| Czech Republic | 41.5 | 41.4 | 41.7 | 42.0 | 42.4 | 42.6 | 41.0 | 41.3 | 41.4 | 39.8 |
| Denmark | 40.4 | 39.7 | 39.0 | 39.0 | 38.6 | 38.5 | 38.5 | 38.6 | 38.3 | 37.9 |
| Finland | 45.0 | 43.4 | 43.0 | 42.1 | 41.4 | 41.5 | 40.9 | 40.7 | 40.5 | 39.1 |
| France | 45.6 | 45.4 | 45.4 | 45.7 | 44.8 | 44.7 | 44.4 | 43.8 | 43.9 | 44.0 |
| Germany | 47.5 | 46.6 | 47.1 | 47.9 | 46.9 | 47.3 | 47.4 | 47.0 | 46.6 | 46.0 |
| Greece | 37.4 | 37.2 | 38.7 | 39.2 | 40.2 | 40.0 | 40.7 | 40.8 | 40.5 | 40.4 |
| Hungary | 52.7 | 53.5 | 51.3 | 47.5 | 48.4 | 47.8 | 48.3 | 50.7 | 50.4 | 49.8 |
| Iceland | 19.8 | 20.9 | 22.6 | 23.8 | 24.5 | 24.7 | 24.8 | 23.4 | 23.6 | 22.7 |
| Ireland | 26.0 | 23.2 | 22.0 | 21.6 | 21.4 | 21.4 | 20.2 | 18.9 | 18.8 | 20.5 |
| Italy | 43.8 | 43.5 | 43.5 | 42.2 | 42.4 | 42.2 | 42.2 | 42.6 | 42.8 | 42.7 |
| Japan | 24.0 | 24.2 | 29.8 | 26.7 | 26.6 | 27.0 | 28.0 | 28.4 | 28.6 | 28.4 |
| Korea | 15.8 | 15.9 | 15.6 | 15.8 | 16.4 | 16.6 | 17.4 | 18.6 | 18.9 | 18.8 |
| Luxembourg | 29.3 | 27.8 | 25.9 | 26.2 | 26.5 | 27.1 | 27.5 | 28.3 | 27.0 | 26.0 |
| Mexico | 9.5 | 10.4 | 13.1 | 14.2 | 12.9 | 12.2 | 12.7 | 13.7 | 13.1 | 13.4 |
| Netherlands | 37.7 | 35.0 | 35.2 | 35.4 | 36.8 | 36.9 | 34.0 | 34.0 | 34.3 | 33.9 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 20.4 | 19.7 | 17.2 |
| Norway | 36.1 | 36.7 | 36.4 | 36.0 | 36.1 | 35.4 | 35.1 | 35.1 | 35.0 | 34.9 |
| Poland | 37.0 | 36.6 | 36.5 | 36.8 | 37.0 | 37.3 | 37.6 | 36.8 | 33.4 | 33.0 |
| Portugal | 33.8 | 32.7 | 33.2 | 33.1 | 33.1 | 32.4 | 32.6 | 32.4 | 32.4 | 32.3 |
| Slovak Republic | 40.5 | 41.6 | 41.4 | 41.8 | 40.1 | 35.7 | 36.1 | 35.6 | 36.0 | 33.1 |
| Spain | 36.0 | 36.2 | 36.4 | 36.0 | 36.1 | 36.3 | 36.4 | 36.2 | 35.5 | 35.6 |
| Sweden | 49.1 | 48.0 | 46.7 | 47.0 | 47.2 | 46.6 | 46.2 | 43.6 | 43.0 | 41.4 |
| Switzerland | 27.7 | 27.8 | 27.9 | 27.5 | 27.3 | 27.4 | 27.3 | 27.6 | 26.9 | 26.9 |
| Turkey | 39.7 | 42.9 | 41.8 | 41.4 | 42.2 | 42.4 | 42.3 | 42.3 | 40.0 | 37.8 |
| United Kingdom | 29.1 | 28.6 | 28.7 | 30.3 | 30.5 | 30.5 | 30.6 | 30.7 | 29.7 | 29.2 |
| United States | 28.7 | 28.7 | 28.5 | 27.8 | 27.8 | 27.7 | 27.8 | 27.6 | 27.3 | 27.6 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 34.8 | 34.5 | 34.6 | 34.4 | 34.5 | 34.3 | 34.2 | 34.1 | 33.8 | 33.2 |
| OECD | 39.8 | 38.8 | 38.6 | 38.6 | 38.7 | 38.6 | 38.3 | 38.0 | 37.8 | 37.4 |
| -15 | 40.4 | 39.7 | 39.5 | 39.3 | 39.4 | 39.0 | 38.8 | 38.7 | 38.3 | 37.7 |
|  |  |  |  |  |  |  |  |  |  |  |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

Table II.8b. Evolution of the tax burden, 2000-2009
Two-earner married couple with no children, one at $100 \%$ average earnings and the other at $33 \%$
Income Tax as a \% of gross wage earnings

|  |  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 22.3 | 19.2 | 19.6 | 20.2 | 20.3 | 20.8 | 20.6 | 19.6 | 19.0 | 18.2 |
| Australia | 9.4 | 9.7 | 9.9 | 10.2 | 11.0 | 10.8 | 11.1 | 11.4 | 11.7 | 10.8 |
| Austria | 25.9 | 26.1 | 25.6 | 24.1 | 22.4 | 23.8 | 23.9 | 24.0 | 24.1 | 23.2 |
| Belgium | 16.6 | 15.3 | 14.9 | 14.8 | 14.4 | 13.7 | 13.6 | 12.8 | 13.2 | 12.6 |
| Canada | 8.5 | 8.4 | 8.8 | 9.2 | 9.7 | 10.0 | 7.8 | 8.3 | 8.4 | 8.4 |
| Czech Republic | 27.9 | 28.1 | 27.5 | 27.5 | 27.0 | 26.9 | 27.0 | 27.1 | 26.8 | 26.4 |
| Denmark | 23.7 | 22.8 | 22.7 | 22.1 | 21.3 | 21.2 | 20.1 | 19.8 | 20.1 | 19.0 |
| Finland | 12.3 | 11.9 | 11.6 | 11.3 | 11.2 | 11.2 | 10.9 | 10.0 | 10.2 | 10.2 |
| France | 16.3 | 15.1 | 15.6 | 15.9 | 15.0 | 14.9 | 14.9 | 15.2 | 15.5 | 14.8 |
| Germany | 4.0 | 3.8 | 5.6 | 6.1 | 7.4 | 7.2 | 8.1 | 8.1 | 7.8 | 7.6 |
| Greece ${ }^{1}$ | 19.4 | 21.7 | 19.7 | 15.4 | 15.7 | 15.1 | 15.7 | 16.4 | 16.1 | 16.2 |
| Hungary | 15.8 | 16.5 | 18.3 | 19.1 | 19.9 | 20.1 | 20.2 | 19.0 | 19.2 | 17.7 |
| Iceland | 13.7 | 10.8 | 10.2 | 9.7 | 9.4 | 9.4 | 8.1 | 6.6 | 6.6 | 7.4 |
| Ireland | 15.5 | 15.2 | 15.6 | 13.9 | 14.2 | 13.9 | 14.5 | 14.6 | 14.9 | 14.9 |
| Italy | 6.2 | 6.2 | 5.6 | 5.9 | 5.9 | 5.8 | 6.4 | 7.1 | 7.1 | 6.9 |
| Japan | 1.6 | 1.8 | 1.6 | 1.7 | 2.0 | 2.1 | 2.6 | 3.5 | 3.4 | 3.2 |
| Korea | 7.7 | 6.3 | 4.4 | 4.8 | 5.1 | 5.5 | 6.0 | 6.5 | 6.8 | 5.3 |
| Luxembourg | -4.2 | -3.4 | -2.0 | -1.4 | -0.7 | -1.5 | -0.9 | 0.2 | -0.4 | -0.1 |
| Mexico | 7.3 | 8.2 | 8.6 | 7.8 | 8.2 | 8.6 | 10.2 | 11.2 | 11.8 | 12.7 |
| Netherlands | 18.6 | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 20.4 | 19.7 | 17.2 |
| New Zealand | 20.1 | 20.8 | 20.5 | 20.0 | 20.0 | 19.1 | 18.7 | 18.9 | 18.9 | 18.8 |
| Norway | 5.3 | 4.6 | 4.4 | 4.6 | 4.6 | 4.7 | 4.9 | 5.2 | 5.7 | 5.2 |
| Poland | 7.1 | 5.7 | 6.4 | 6.2 | 6.2 | 5.3 | 5.6 | 5.3 | 5.3 | 5.2 |
| Portugal | 5.9 | 6.6 | 6.3 | 6.7 | 5.6 | 5.5 | 5.9 | 5.4 | 5.9 | 2.1 |
| Slovak Republic | 10.1 | 10.3 | 10.5 | 10.0 | 10.2 | 10.4 | 10.6 | 10.6 | 9.7 | 10.0 |
| Spain | 25.3 | 23.9 | 22.2 | 22.6 | 22.9 | 22.3 | 21.8 | 18.2 | 17.5 | 16.0 |
| Sweden | 7.8 | 7.9 | 8.0 | 8.0 | 8.2 | 8.3 | 8.2 | 8.5 | 7.7 | 7.8 |
| Switzerland | 14.0 | 14.1 | 14.3 | 13.8 | 14.8 | 15.0 | 14.9 | 14.9 | 12.8 | 12.5 |
| Turkey ${ }^{2}$ | 15.1 | 14.9 | 15.0 | 15.3 | 15.4 | 15.4 | 15.5 | 15.5 | 14.6 | 14.2 |
| United Kingdom | 15.5 | 15.4 | 15.2 | 14.5 | 14.4 | 14.3 | 14.4 | 14.2 | 13.9 | 12.0 |
| United States |  |  |  |  |  |  |  |  |  |  |
| $\quad$ Unweighted average: | 13.2 | 12.9 | 12.8 | 12.6 | 12.7 | 12.7 | 12.7 | 12.6 | 12.5 | 11.9 |
|  | 13.7 | 14.2 | 14.1 | 13.8 | 13.8 | 13.8 | 13.9 | 13.6 | 13.6 | 13.2 |
|  | 13.4 | 13.2 | 12.8 | 12.8 | 12.8 | 12.8 | 12.6 | 12.6 | 12.1 |  |
|  |  |  |  |  |  |  |  |  |  |  |

[^42]Table II.8c. Evolution of the tax burden, 2000-2009
Two-earner married couple with no children, one at 100\% average earnings and the other at $33 \%$ Income tax plus employee contributions less cash benefits as a \% of gross wage earnings

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Australia | 22.3 | 19.2 | 19.6 | 20.2 | 20.3 | 20.8 | 20.6 | 19.6 | 19.0 | 18.2 |
| Austria | 27.5 | 27.8 | 28.0 | 28.3 | 29.0 | 28.9 | 29.2 | 29.5 | 29.8 | 28.1 |
| Belgium | 38.1 | 37.9 | 37.4 | 35.7 | 34.1 | 35.0 | 34.7 | 34.8 | 34.8 | 34.0 |
| Canada | 22.4 | 21.3 | 21.2 | 21.1 | 20.9 | 20.7 | 20.6 | 19.7 | 20.0 | 19.4 |
| Czech Republic | 21.0 | 20.9 | 21.3 | 21.7 | 22.2 | 22.5 | 20.3 | 20.8 | 20.9 | 19.4 |
| Denmark | 40.5 | 39.7 | 39.0 | 39.0 | 38.6 | 38.5 | 38.5 | 38.6 | 38.3 | 37.9 |
| Finland | 30.7 | 29.3 | 28.7 | 28.1 | 27.3 | 27.5 | 26.8 | 26.4 | 26.2 | 25.1 |
| France | 25.7 | 25.3 | 24.9 | 24.9 | 24.8 | 24.8 | 24.5 | 23.7 | 23.9 | 23.9 |
| Germany | 36.8 | 35.6 | 36.2 | 36.9 | 35.8 | 36.3 | 36.6 | 36.4 | 36.2 | 35.5 |
| Greece | 19.9 | 19.7 | 21.5 | 22.1 | 23.4 | 23.2 | 24.1 | 24.1 | 23.8 | 23.6 |
| Hungary | 31.9 | 34.2 | 32.2 | 27.9 | 29.2 | 28.6 | 30.1 | 33.4 | 33.1 | 33.2 |
| Iceland | 16.0 | 16.8 | 18.6 | 19.4 | 20.2 | 20.4 | 20.5 | 19.3 | 19.5 | 17.9 |
| Ireland | 17.8 | 14.7 | 14.1 | 13.7 | 13.4 | 13.4 | 12.1 | 10.6 | 10.6 | 12.4 |
| Italy | 24.7 | 24.4 | 24.8 | 23.1 | 23.4 | 23.1 | 23.7 | 24.1 | 24.4 | 24.4 |
| Japan | 16.2 | 16.2 | 19.2 | 17.4 | 17.4 | 17.7 | 18.6 | 19.2 | 19.3 | 19.1 |
| Korea | 8.3 | 8.5 | 8.3 | 8.6 | 9.1 | 9.2 | 9.7 | 10.8 | 11.0 | 10.8 |
| Luxembourg | 19.4 | 18.1 | 15.9 | 16.2 | 16.6 | 17.2 | 17.6 | 18.5 | 18.8 | 17.5 |
| Mexico | -2.7 | -1.9 | -0.6 | 0.1 | 0.8 | 0.0 | 0.5 | 1.5 | 0.9 | 1.2 |
| Netherlands | 30.4 | 27.4 | 27.4 | 28.3 | 29.3 | 29.4 | 28.1 | 27.8 | 28.0 | 27.6 |
| New Zealand | 18.6 | 18.6 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 | 20.4 | 19.7 | 17.2 |
| Norway | 27.9 | 28.6 | 28.3 | 27.8 | 27.8 | 26.9 | 26.5 | 26.7 | 26.7 | 26.6 |
| Poland | 26.5 | 25.9 | 25.8 | 26.1 | 26.3 | 26.7 | 27.1 | 26.2 | 23.5 | 23.0 |
| Portugal | 18.1 | 16.7 | 17.4 | 17.2 | 17.2 | 16.3 | 16.6 | 16.3 | 16.3 | 16.2 |
| Slovak Republic | 17.9 | 19.4 | 19.1 | 19.5 | 19.0 | 18.9 | 19.3 | 18.8 | 19.3 | 15.5 |
| Spain | 16.4 | 16.7 | 16.9 | 16.4 | 16.6 | 16.8 | 16.9 | 17.0 | 16.0 | 16.3 |
| Sweden | 32.3 | 30.9 | 29.2 | 29.6 | 29.9 | 29.3 | 28.8 | 25.2 | 24.5 | 23.0 |
| Switzerland | 19.4 | 19.4 | 19.5 | 19.3 | 19.2 | 19.3 | 19.3 | 19.5 | 18.8 | 18.9 |
| Turkey | 28.0 | 30.1 | 29.3 | 28.8 | 29.8 | 30.0 | 29.9 | 29.9 | 27.8 | 27.5 |
| United Kingdom | 22.7 | 22.3 | 22.5 | 23.6 | 23.7 | 23.8 | 23.8 | 23.9 | 22.9 | 22.4 |
| United States | 23.1 | 23.0 | 22.9 | 22.1 | 22.1 | 22.0 | 22.1 | 21.9 | 19.3 | 19.7 |
| $\quad$ Unweighted average: |  |  |  |  |  |  |  |  |  |  |
|  | 23.3 | 22.9 | 22.9 | 22.7 | 22.9 | 22.9 | 22.9 | 22.8 | 22.4 | 21.8 |
| OECD | 26.7 | 25.8 | 25.6 | 25.5 | 25.5 | 25.6 | 25.5 | 25.1 | 25.0 | 24.5 |
|  | 26.2 | 25.6 | 25.4 | 25.2 | 25.3 | 25.3 | 25.2 | 25.1 | 24.8 | 24.2 |
|  |  |  |  |  |  |  |  |  |  |  |

1. The AW for Greece overestimates the actual gross earnings because it includes earnings
linked to marriage and children which are not available to all families.
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

|  | 2000 |  | 2001 |  | 2002 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net |
| Australia | 30658 | 22655 | 31005 | 23955 | 32504 | 24974 | 34173 | 26086 | 35663 | 27225 | 36856 | 28003 | 39213 | 29802 | 40282 | 30861 | 40731 | 31543 | 42769 | 33344 |
| Austria | 33026 | 22800 | 33009 | 22646 | 34572 | 23646 | 36479 | 24807 | 39288 | 26315 | 40055 | 26918 | 41817 | 27939 | 42676 | 28335 | 43492 | 28702 | 44626 | 30011 |
| Belgium | 35516 | 20241 | 37385 | 21323 | 39678 | 22753 | 39410 | 22864 | 39832 | 23137 | 40766 | 23648 | 41649 | 24189 | 42498 | 24621 | 43551 | 25179 | 43547 | 25470 |
| Canada | 29849 | 22272 | 30572 | 23204 | 30720 | 23325 | 31168 | 23649 | 31650 | 24085 | 32807 | 24952 | 33702 | 25656 | 34362 | 26392 | 34902 | 26739 | 35403 | 27334 |
| Czech Republic | 11562 | 8944 | 12316 | 9540 | 12922 | 9958 | 13902 | 10662 | 14662 | 11178 | 15399 | 11692 | 16328 | 12663 | 17645 | 13596 | 19114 | 14584 | 19409 | 15103 |
| Denmark | 33499 | 18797 | 34494 | 19634 | 36436 | 21098 | 36445 | 21118 | 37667 | 22322 | 37287 | 22136 | 38794 | 22998 | 40618 | 24021 | 41804 | 24810 | 43649 | 26463 |
| Finland | 27175 | 17872 | 27788 | 18635 | 29399 | 19880 | 30080 | 20497 | 32219 | 22190 | 33552 | 23042 | 34468 | 23925 | 36999 | 25747 | 38505 | 26833 | 39482 | 27967 |
| France | 28465 | 20270 | 30008 | 21277 | 31134 | 22077 | 30742 | 21847 | 31505 | 22437 | 32699 | 23234 | 33513 | 23788 | 34818 | 25156 | 35538 | 25658 | 35976 | 25997 |
| Germany | 35575 | 20206 | 36840 | 21357 | 38646 | 22160 | 40522 | 22949 | 42503 | 24534 | 44643 | 25797 | 45634 | 26232 | 47353 | 27355 | 48265 | 27998 | 47717 | 27999 |
| Greece | 20150 | 16010 | 21250 | 16961 | 25422 | 19921 | 27147 | 21056 | 30001 | 22688 | 29451 | 22359 | 31702 | 23667 | 32157 | 23959 | 32498 | 24327 | 34142 | 25583 |
| Hungary | 10049 | 6465 | 11386 | 7019 | 12405 | 7877 | 12911 | 8652 | 13440 | 8811 | 14140 | 9375 | 15108 | 9776 | 16011 | 9797 | 17452 | 10770 | 18482 | 11430 |
| Iceland | 25476 | 19708 | 26582 | 20455 | 27326 | 20572 | 28560 | 21338 | 30691 | 22766 | 31975 | 23765 | 31693 | 23638 | 32959 | 24955 | 32525 | 24580 | 33656 | 25626 |
| Ireland | 29922 | 21713 | 31294 | 24083 | 33190 | 25829 | 33447 | 26010 | 36121 | 27715 | 38809 | 29666 | 39067 | 30654 | 40231 | 32455 | 41432 | 33475 | 40327 | 31897 |
| Italy | 25933 | 18451 | 26971 | 19344 | 26259 | 18732 | 26452 | 19115 | 26567 | 19088 | 27535 | 19884 | 28871 | 20632 | 30033 | 21324 | 31314 | 22117 | 31167 | 22027 |
| Japan | 32481 | 26958 | 33956 | 28168 | 34760 | 27807 | 35287 | 28850 | 36667 | 29980 | 38318 | 31235 | 40122 | 32318 | 41592 | 33209 | 42938 | 34239 | 41791 | 33395 |
| Korea | 26026 | 23723 | 27241 | 24759 | 30006 | 27338 | 31620 | 28714 | 33698 | 30422 | 36406 | 32820 | 39897 | 35670 | 42570 | 37454 | 43941 | 38631 | 45554 | 40190 |
| Luxembourg | 38171 | 27177 | 39805 | 28954 | 41142 | 31275 | 42007 | 31685 | 43982 | 32974 | 44218 | 32760 | 46567 | 34185 | 47838 | 34592 | 50883 | 36665 | 50960 | 37523 |
| Mexico | 7856 | 7668 | 8556 | 8301 | 8894 | 8517 | 9082 | 8656 | 9091 | 8618 | 9747 | 9298 | 9928 | 9435 | 10289 | 9673 | 10381 | 9848 | 10689 | 10121 |
| Netherlands | 35066 | 23408 | 37084 | 25772 | 38816 | 26950 | 39231 | 27052 | 41644 | 28095 | 43185 | 29145 | 45878 | 30947 | 47894 | 32341 | 49297 | 33224 | 50540 | 34489 |
| New Zealand | 24188 | 19504 | 24643 | 19855 | 25418 | 20468 | 25682 | 20626 | 26059 | 20847 | 26568 | 21143 | 28265 | 22310 | 29051 | 22794 | 29871 | 23572 | 30528 | 24904 |
| Norway | 32686 | 22652 | 35606 | 24410 | 37755 | 26130 | 38766 | 27073 | 40747 | 28487 | 42545 | 30197 | 44677 | 31680 | 46802 | 32976 | 48338 | 34091 | 50297 | 35543 |
| Poland | 12525 | 9043 | 13319 | 9663 | 13836 | 10048 | 14358 | 10386 | 14508 | 10465 | 14921 | 10718 | 15494 | 11077 | 17062 | 12354 | 17458 | 13120 | 18368 | 13913 |
| Portugal | 15609 | 12105 | 16360 | 12868 | 18813 | 14534 | 18898 | 14647 | 19134 | 14822 | 20519 | 16049 | 21966 | 17092 | 22602 | 17566 | 23915 | 18565 | 24752 | 19237 |
| Slovak Republic | 9356 | 7531 | 10253 | 8104 | 10833 | 8611 | 10868 | 8583 | 11638 | 9054 | 12679 | 9874 | 13497 | 10475 | 14515 | 11253 | 15647 | 12082 | 15931 | 12537 |
| Spain | 23378 | 18757 | 24160 | 19298 | 25174 | 20037 | 25516 | 20487 | 26121 | 20900 | 26720 | 21318 | 28065 | 22319 | 29372 | 23339 | 30591 | 24694 | 31546 | 25339 |
| Sweden | 28853 | 19122 | 29756 | 20117 | 30643 | 21258 | 31451 | 21626 | 33584 | 22998 | 33640 | 23149 | 34885 | 24111 | 37002 | 26791 | 38047 | 27805 | 38507 | 28761 |
| Switzerland | 35307 | 27556 | 36490 | 28471 | 38724 | 30206 | 39100 | 30612 | 40287 | 31569 | 40962 | 32072 | 42598 | 33353 | 45726 | 35695 | 45351 | 35635 | 45887 | 36012 |
| Turkey ${ }^{1}$ | 19607 | 13973 | 18107 | 12509 | 17240 | 12047 | 16330 | 11469 | 17191 | 11956 | 18946 | 13167 | 18023 | 12551 | 19192 | 13353 | 19658 | 14228 | 20050 | 14594 |
| United Kingdom | 39167 | 29058 | 41317 | 30769 | 42771 | 31806 | 43697 | 32021 | 46351 | 33914 | 47682 | 34879 | 48939 | 35781 | 50214 | 36674 | 50710 | 37718 | 50941 | 38054 |
| United States | 33129 | 24877 | 33998 | 25558 | 35026 | 26389 | 36084 | 27273 | 36739 | 27785 | 37637 | 28502 | 39377 | 29765 | 39481 | 29925 | 40256 | 31327.85 | 39923 | 30977 |
| Unweighted average: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| OECD | 26342 | 18984 | 27385 | 19900 | 28682 | 20874 | 29314 | 21347 | 30642 | 22246 | 31689 | 23026 | 32991 | 23954 | 34328 | 24952 | 35280 | 25759 | 35887 | 26395 |
| EU-15 | 29967 | 20399 | 31168 | 21536 | 32806 | 22797 | 33435 | 23185 | 35101 | 24275 | 36051 | 24932 | 37454 | 25897 | 38820 | 26952 | 39990 | 27851 | 40525 | 28454 |
| EU-19 | 25947 | 17788 | 27094 | 18808 | 28531 | 19918 | 29135 | 20319 | 30567 | 21244 | 31468 | 21876 | 32750 | 22760 | 34081 | 23751 | 35238 | 24649 | 35793 | 25253 |

Table II.10. Annual average gross wage earnings, single individual no children, 2000-2009 (national currency) ${ }^{1}$

|  | 2000 |  |  |  |  |  |  |  |  |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net | gross | net |
| Australia | 40218 | 29719 | 41313 | 1920 | 441 | 33377 | 46200 | 35267 | 48827 | 37274 | 51169 | 38879 | 55194 | 41948 | 57315 | 43911 | 60387 | 46765 | 63408 | 49434 |
| Austria | 29732 | 20527 | 30280 | 20774 | 30966 | 21180 | 32288 | 21957 | 34348 | 23006 | 35505 | 23860 | 36690 | 24514 | 37789 | 25091 | 38843 | 25634 | 39856 | 26803 |
| Belgium | 31644 | 18035 | 33109 | 1888 | 34330 | 19686 | 34643 | 20098 | 35704 | 20739 | 36673 | 21273 | 37674 | 21880 | 38659 | 22397 | 39727 | 22967 | 39723 | 23233 |
| nada | 36764 | 27431 | 37232 | 28259 | 37765 | 2867 | 38220 | 29000 | 38945 | 29636 | 39816 | 30283 | 40628 | 30928 | 41546 | 31909 | 42950 | 32905 | 43568 | 33638 |
| Czech Republic | 164327 | 127113 | 175159 | 135679 | 185030 | 142589 | 195219 | 149721 | 209489 | 159710 | 220461 | 167391 | 234796 | 182096 | 251856 | 194069 | 274476 | 209425 | 278717 | 216876 |
| Denmark | 281700 | 158071 | 292100 | 166264 | 302500 | 175158 | 311300 | 180382 | 316500 | 187564 | 320300 | 190147 | 330900 | 196170 | 346400 | 204856 | 359300 | 213234 | 375153 | 227441 |
| land | 037 | 781 | 28111 | 18851 | 9495 | 19945 | 3041 | 20724 | 31416 | 2163 | 32788 | 22517 | 33543 | 23283 | 35559 | 24744 | 7273 | 25975 | 38219 | 7072 |
| France | 26731 | 19035 | 27564 | 19544 | 28175 | 19979 | 28847 | 20500 | 29608 | 21086 | 30192 | 21453 | 30992 | 21998 | 31841 | 23005 | 32663 | 23583 | 33065 | 23894 |
| Germany | 34400 | 19538 | 35200 | 20407 | 36400 | 20872 | 37200 | 21067 | 38100 | 21993 | 38700 | 22363 | 39149 | 22505 | 40300 | 23281 | 41400 | 24015 | 40929 | 24016 |
| Greece | 13661 | 10854 | 14257 | 11379 | 16778 | 13147 | 18707 | 14510 | 20863 | 15777 | 21029 | 15965 | 22707 | 16952 | 23407 | 17440 | 23934 | 17916 | 25145 | 18841 |
| Hungary | 1084214 | 697527 | 1259940 | 776670 | 1425084 | 904901 | 1556892 | 1043367 | 1697268 | 1112667 | 1818360 | 1205600 | 1988652 | 1286740 | 2156016 | 1319328 | 2338752 | 1443306 | 2476768 | 1531752 |
| Iceland | 2148000 | 1661627 | 2364000 | 1819131 | 2496000 | 1879104 | 2700000 | 2017244 | 2892000 | 2145268 | 3168000 | 2354633 | 3480000 | 2595526 | 3792000 | 2871164 | 4068000 | 3074340 | 4209404 | 3205074 |
| Ireland | 28782 | 20885 | 31076 | 23915 | 33319 | 2593 | 33939 | 26392 | 36332 | 27877 | 39206 | 29969 | 39389 | 309 | 39478 | 31848 | 40862 | 33015 | 39772 | 31458 |
| Italy | 21191 | 15077 | 21785 | 15624 | 22200 | 15837 | 22599 | 16331 | 23183 | 16657 | 23863 | 17232 | 24649 | 17615 | 25216 | 17903 | 26304 | 18578 | 26181 | 18503 |
| Japan | 5026569 | 4171893 | 5075080 | 4209951 | 4997660 | 3997942 | 4929133 | 4030013 | 4927177 | 4028505 | 4964206 | 4046617 | 498887 | 4018572 | 4991993 | 3985848 | 5000499 | 3987450 | 4866905 | 3889163 |
| Korea | 19395847 | 17679599 | 20617658 | 18739111 | 23097663 | 1044012 | 25114192 | 22805660 | 26816239 | 4209198 | 28721809 | 25892253 | 30440171 | 215346 | 32233620 | 28359362 | 33467499 | 29423684 | 34696446 | 30610554 |
| Luxembou | 35875 | 25542 | 37745 | 27455 | 38442 | 29223 | 39587 | 29859 | 40575 | 30420 | 42135 | 31217 | 43621 | 32022 | 45284 | 32745 | 48372 | 34856 | 48445 | 35672 |
| Mexico | 47918 | 46768 | 54003 | 5238 | 58287 | 55815 | 61877 | 58970 | 65583 | 6216 | 69465 | 66264 | 73187 | 6955 | 77020 | 7241 | 81133 | 76972 | 83545 | 79101 |
| Netherlands | 31300 | 20894 | 33610 | 2335 | 35010 | 2430 | 36385 | 25090 | 37851 | 2553 | 38700 | 26118 | 40800 | 2752 | 42000 | 28361 | 43514 | 29327 | 44611 | 30443 |
| New Zealan | 34923 | 28159 | 36274 | 29226 | 37338 | 30067 | 38534 | 30948 | 39458 | 31567 | 40782 | 32454 | 42987 | 33931 | 44749 | 35112 | 46676 | 36833 | 47703 | 38914 |
| Norway | 298385 | 206788 | 326851 | 224076 | 343997 | 23807 | 353448 | 246837 | 366161 | 255986 | 378498 | 268644 | 397765 | 282046 | 420917 | 296570 | 439991 | 310313 | 457822 | 323530 |
| Poland | 23061 | 16649 | 2478 | 17981 | 25307 | 1838 | 26450 | 19132 | 26999 | 19475 | 27889 | 20033 | 29271 | 20925 | 32292 | 23382 | 33711 | 25333 | 35468 | 26865 |
| Portugal | 10922 | 8470 | 11544 | 9081 | 13322 | 10292 | 13350 | 10347 | 13700 | 10613 | 14042 | 10983 | 14893 | 11588 | 15345 | 11926 | 16093 | 12493 | 16657 | 12945 |
| Slovak Republic | 4918 | 3959 | 5349 | 4228 | 5718 | 4545 | 6034 | 4766 | 6663 | 5183 | 7176 | 5588 | 7675 | 5956 | 8167 | 6332 | 8788 | 6785 | 8947 | 7041 |
| Spain | 17162 | 13770 | 17874 | 14276 | 18462 | 14695 | 19220 | 15432 | 19828 | 15864 | 20439 | 16306 | 21150 | 16820 | 21896 | 17399 | 23218 | 18742 | 23943 | 19232 |
| Sweden | 263581 | 174686 | 278197 | 188079 | 286566 | 198801 | 293776 | 202004 | 305732 | 209363 | 315492 | 217096 | 324618 | 224362 | 336818 | 243870 | 352470 | 257589 | 356725 | 266444 |
| Switzerland | 65370 | 51018 | 67128 | 52376 | 68584 | 53498 | 69487 | 54403 | 70649 | 55361 | 71386 | 55893 | 72378 | 56670 | 74819 | 58406 | 74495 | 58535 | 75376 | 59154 |
| Turkey ${ }^{2}$ | 5545 | 3952 | 7752 | 5355 | 10561 | 7380 | 12636 | 8874 | 13959 | 9708 | 15737 | 10937 | 15645 | 10895 | 17238 | 11993 | 18833 | 13631 | 19209 | 13981 |
| United Kingdorr | 24910 | 18481 | 25893 | 19283 | 26844 | 19962 | 28019 | 20532 | 29312 | 21447 | 30334 | 22189 | 31419 | 22971 | 32955 | 24069 | 33592 | 24986 | 33745 | 25208 |
| United States | 33129 | 24877 | 33998 | 25558 | 35026 | 26389 | 36084 | 27273 | 36739 | 27785 | 37637 | 28502 | 39377 | 29765 | 39481 | 29925 | 40256 | 31328 | 39923 | 309 |

1. The annual average gross wage earnings in euro area countries are expressed in euros
2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)

## Part III

## Country Details, 2009

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

## (2008-2009 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 2009 <br> The tax/benefit position of single persons

## 1. Gross wage earnings

Principal Gross wage earnings
Spouse Gross wage earnings

| Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | none | none | none | 2 |
|  | 42272 | 63408 | 105680 | 42272 |
|  | 42272 | 63408 | 105680 | 42272 |
|  | 0 | 0 | 0 | 0 |

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)

| Total | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 42272 | 63408 | 105680 | 42272 |
|  |  |  |  |  |
|  | 6682 | 13022 | 28272 | 6682 |
|  | 634 | 951 | 1585 | 634 |
| Total | 7316 | 13974 | 29857 | 7316 |
|  |  |  |  |  |
|  | 709 | 0 | 0 | 709 |
|  | 0 | 0 | 0 | 750 |

Married or head of family
0
Children
Other
7. Central government income tax finally paid

| Total | 709 | 0 | 0 | 1459 |
| :---: | ---: | ---: | ---: | ---: |
|  | 6607 | 13974 | 29857 | 5857 |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 |
|  | 6607 | 13974 | 29857 | 5857 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 11939 |
|  | 0 | 0 | 0 | 11939 |
|  | 35665 | 49434 | 75823 | 48355 |
|  | 2707 | 4060 | 6767 | 2707 |
|  | $15.6 \%$ | $22.0 \%$ | $28.3 \%$ | $13.9 \%$ |
|  | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
|  | $15.6 \%$ | $22.0 \%$ | $28.3 \%$ | $-14.4 \%$ |
|  | $20.7 \%$ | $26.7 \%$ | $32.6 \%$ | $-7.5 \%$ |
|  |  |  |  |  |
|  | $35.5 \%$ | $31.5 \%$ | $41.5 \%$ | $35.5 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
|  | $39.4 \%$ | $35.6 \%$ | $45.0 \%$ | $39.4 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
|  |  |  |  |  |

## Australia 2009

## The tax/benefit position of married couples

1. Gross wage earnings

Principal Gross wage earnings
Spouse Gross wage earnings

Wage level (per cent of average wage)
Number of children

| $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: |
| 2 | 2 | 2 | none |
| 63408 | 84544 | 105680 | 84544 |
| 63408 | 63408 | 63408 | 63408 |
| 0 | 21136 | 42272 | 21136 |

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)
Income tax
Medicare Lev

|  | 13022 | 15293 | 19704 | 15293 |
| ---: | ---: | ---: | ---: | ---: |
|  | 951 | 1268 | 1585 | 1268 |
| Total | 13974 | 16561 | 21289 | 16561 |

6. Tax credits
Basic credit

| 0 | 1200 | 709 | 1200 |
| ---: | ---: | ---: | ---: |
| 750 | 750 | 750 | 0 |

Children
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions
10. Total payments to general government $(7+8+9)$
11. Cash transfers from general government

| For head of family |  | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| For two children |  | 7769 | 3891 | 1621 | 0 |
|  | Total | 7769 | 3891 | 1621 | 0 |
| ake-home pay (1-10+11) |  | 57954 | 73824 | 87470 | 69183 |
| mployers' payroll tax |  | 4060 | 5414 | 6767 | 5414 |

13. Employers' payroll tax
14. Average rates
Income tax
Employees' social security contributions
Total payments less cash transfers
Total tax wedge including employer payroll taxes

| $20.9 \%$ | $17.3 \%$ | $18.8 \%$ | $18.2 \%$ |
| ---: | ---: | ---: | ---: |
| $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| $8.6 \%$ | $12.7 \%$ | $17.2 \%$ | $18.2 \%$ |
| $14.1 \%$ | $17.9 \%$ | $22.2 \%$ | $23.1 \%$ |
|  |  |  |  |
| $51.5 \%$ | $31.5 \%$ | $61.5 \%$ | $31.5 \%$ |
| $20.0 \%$ | $16.5 \%$ | $65.5 \%$ | $16.5 \%$ |
| $54.4 \%$ | $35.6 \%$ | $63.8 \%$ | $35.6 \%$ |
| $24.4 \%$ | $21.5 \%$ | $67.6 \%$ | $21.5 \%$ |

The national currency is the Australian dollar (AUD). For the 2008-2009 income tax year AUD 1.28 was equal to USD 1. The average worker, which includes all adult full-time employees in industries falling under Categories C-K inclusive, earned AUD 63408 in 200809. The average worker in the manufacturing sector earned AUD 60779 in 2008-09.

## 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: A taxpayer may claim a tax credit where he or she contributes to the maintenance of a dependent spouse (legal or de facto). During 2008-09, this credit amount was AUD 2159 for a dependent spouse without dependent children. The credit reduces by AUD 1 for every AUD 4 by which the spouse's separate net 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 taxable income exceeds AUD 150000.
- Relief(s) for children: A refundable tax offset called the First Child Tax Offset, is also 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 1200 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 60000.
- 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 so that social security pensioners who are not of Age Pension age will not pay any tax while they are eligible for the maximum rate of their pension. In 2008-09 for single people it was worth at most AUD 2 240, with this amount reduced by AUD 0.125 for every dollar of private income over AUD 20 934. 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.
- From 1 July 2008, the Education Tax Refund is available to eligible families and independent students to help meet the cost of primary and secondary school education.

The maximum refund available is 50 per cent of eligible school education expenses up to AUD 750 for each eligible child in primary school (a refund of up to AUD 375) and up to AUD 1500 for each eligible child in secondary school (a refund of up to AUD 750). The calculations assume dependents are of primary school age and are eligible for the maximum refund.

- Other: No other standard relief available.


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

- 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.
- Relief for superannuation: Contributions to a low income spouse's superannuation attract an 18 per cent rebate up to a maximum rebate of AUD 3000.
- 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 1500 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 | 34000 | NIL +15 c for each AUD in excess of AUD 6000 |
| 34000 | 180000 | AUD $4200+30 \mathrm{c}$ for each AUD in excess of AUD 34000 |
| 80000 |  | AUD $18000+40 \mathrm{c}$ for each AUD in excess of AUD 80000 |
| 180000 and over | AUD $58000+45 \mathrm{c}$ for each AUD in excess of AUD 180000 |  |

To contribute towards the cost of basic medical and hospital care a Medicare Levy is imposed on the taxable incomes of resident taxpayers. In 2008-09 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 2008-09, an individual taxpayer does not pay the levy where their taxable income does not exceed AUD 17 794. A taxpayer in a couple or sole parent family does not pay the levy if the taxable family income does not exceed AUD 30 025. The threshold is increased by AUD 2757 for each dependent
child. Where an individual's taxable income exceeds AUD 17 794, or a family's income exceeds AUD 30025 (plus AUD 2757 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 family's taxable income.

For 2008-09, individual pensioners under Age Pension age do not pay the levy where their taxable income does not exceed AUD 25 299. Where taxable income exceeds AUD 25299 but does not exceed AUD 29763 shading in provisions apply under which the levy payable is 10 per cent of the excess of taxable income over AUD 25299.

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 2008-09 tax year this threshold was AUD 38180 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.

## 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 is 6.00 per cent from 1 July 2008 to 31 December 2008 and 5.75 per cent from 1 January 2009 to 30 June 2009 for employers with total Australian wages in excess of AUD in 2008-09. 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 623000 . 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. 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 2008-09, the base rate of Family Tax Benefit Part A (FTB(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 1945.45 for a dependent child aged under 18, and AUD 2379.80 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 270.10 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 4631.85 for each child aged under 13 years and AUD 5818.10 for each child aged 13 to 15 years for 2008-09. The higher benefit is also boosted by the LFS for families with three or more children. For 2008-09, the higher benefit tapers out at the rate of AUD 0.20 for each dollar of income over AUD 42559 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 $B(F T B(B))$ is targeted at single income couple and sole parent families. Eligibility for $\operatorname{FTB}(B)$ 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 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. From 1 July 2008, this threshold is AUD 4526 , 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 2008-09, the maximum payment is AUD 2675.45 per year if the youngest dependent child is aged between 5 and 18 years, and AUD 3693.80 per year if there is a child under 5 years. The attached calculations assume each dependant is between 5 and 16 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 lump sum Baby Bonus is paid to families for each baby born. The average value of the payment (including the Maternity Immunisation Allowance) in

2008-09 is AUD 5 242.37. This payment replaces the First Child Tax Offset for new births, while the tax offset form remains payable 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 16. In 2008-09 the maximum annual amount of Parenting Payment (Partnered) ( $\mathrm{PP}(\mathrm{P})$ ) was AUD 10 499.60, while the maximum annual amount of Parenting Payment (Single) (PP(S)) was AUD 14 576.70. 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 6500 . Under the $P P(P)$ income test, a spouse with little or no income (less than AUD 1612 per annum) receives a reduced Parenting Payment, tapering at a rate of AUD 0.60, when the higher earning partner's income exceeds AUD 19942 and would not receive any Parenting Payment when the higher earning partner's income exceeds AUD 37427 per year. PP(S) reduces by AUD 0.40 for each AUD 1 of income above AUD 3588 plus AUD 639.60 for each child. A sole parent with two qualifying dependants may be entitled to some taxable $\mathrm{PP}(\mathrm{S})$ in 2008-09 where private income does not exceed AUD 41 308.95. From 1 July 2006 some changes designed to assist people into paid work were made to Parenting Payment. Under these changes, Parenting Payment is only available to a member of a couple if their youngest child is aged under six years and to single parents if their youngest child is aged under eight years. Any income support for people with older children is generally delivered through Newstart allowance. 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 or regarded as 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 2008-09 the Newstart allowance for singles without dependants was AUD 11636.60 and for partnered individuals was AUD 10 499.60. 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 19942.
- A non-taxable supplementary payment called Pharmaceutical Allowance (PA) is payable with $\operatorname{PP}(\mathrm{S})$. This payment is added to the maximum basic rate of PPS 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 2008-09, the payment is AUD 153.40.
- A Telephone Allowance is available on a quarterly basis to eligible individuals, including individuals who receive the Parenting Payment (Single). The basic rate of the Telephone Allowance is AUD 22.77 per quarter for 2008-09, with a higher rate of AUD 34.23 available where a home Internet service is connected in the individual's or partner's name. The attached calculations assume the higher rate is applicable.


## 5. Main changes in the tax/benefit system since 1999

### 5.1. 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 2007-08 income year. See Section 1.1.3.


### 5.2. Cash transfers related to dependent children

- From 1 July 2000, the Family Tax Benefit (FTB) has replaced several forms of tax relief and cash transfers. See Sections 1.1.2 and 4.2.


### 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. 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.

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.

2009 Parameter values

|  | Country | Australia |  |
| :---: | :---: | :---: | :---: |
|  | Year | 2009 |  |
| Average earnings/yr | Ave_earn | 63408 |  |
| Spouse | spouse_cr | 2159 |  |
| 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 | 1200 |  |
|  | low_inc_lim | 30000 |  |
|  | low_inc_redn | 0.04 |  |
| Tax schedule | tax_sch | 0 | 6000 |
|  |  | 0.15 | 34000 |
|  |  | 0.30 | 80000 |
|  |  | 0.4 | 180000 |
|  |  | 0.45 |  |
| Medicare levy | medic_rate | 0.015 |  |
| exemption limits | sing_lim | 17794 |  |
| married/sole parent | m_lim | 30025 |  |
| + per child | ch_lim | 2757 |  |
| shading-in rate | shade_rate | 0.1 |  |
| Part A FTB max | FTB_A_max | 4631.85 |  |
| Part A FTB basic | FTB_A_base | 1945.45 |  |
| part A income limit 1 | FB_A_lim1 | 42559 |  |
| part A income limit 2 | FTB_A_lim2 | 94316 |  |
| reduction rate 1 | FBB_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 | 270.1 |  |
| Part B FTB | FTB_B | 2675.45 |  |
| part B partner income limit | FTB_B_lim | 4526 |  |
| reduction rate | FTB_B_taper | 0.2 |  |
| income limit (primary earner) | FTB_B_lim_p | 150000 |  |
| Parenting payment single | PPS | 14576.7 |  |
| reduction rate | PPS_taper | 0.4 |  |
| income limit | PPS_lim | 3588 |  |
| additional limit per child | PPS_ch_lim | 639.6 |  |
| Pharmaceutical allowance | PA | 153.4 |  |
| State pay-roll tax rate (NSW) | Pay_roll_rate | 0.05875 |  |
| Additional parameters |  |  |  |
| Parenting payment partnered | PPP | 10499.6 |  |
| reduction rate 1 | PPP_taper1 | 0.5 |  |
| reduction rate 2 | PPP_taper2 | 0.6 |  |
| income limit 1 | PPP_lim1 | 1612 |  |
| income limit 2 | PPP_lim2 | 6500 |  |
| partner income threshold | PPP_ptnr_lim | 19942 |  |
| partner income taper | PPP_ptnr_taper | 0.6 |  |
| Newstart allowance single | NSAS | 11636.6 |  |
| Newstart allowance partnered | NSAP | 10499.60 |  |
| 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 | 2240 |  |
| Pensioner tax offset threshold single | PTOS_thresh | 20934 |  |
| Pensioner tax offset taper rate | PTOS_taper | 0.125 |  |
| Education tax refund | Edu_TR | 375 |  |
| Telephone allowance | Tele_A | 136.92 |  |

## 2009 Tax equations

The equations for the Australian system in 2009 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,PPS_taper),IF(AND(Children=0,Married=0), taper2(NSAS,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1, NSA_taper2),IF(AND(Children=0,Married>0),taper3(NSAP, earn_princ,earn_spouse,NSA_lim1,NSA_lim2,NSA_taper1, NSA_taper2), IF(AND(Children>0,Married>0),taper3(NSAP, earn_princ,earn_spouse,NSA_lim1,NSA_lim2,NSA_taper1, NSA_taper2),0)))) |
| Credits in taxable income of spouse | taxbl_cr_spouse | S | IF(AND(Children>0,Married=0),0,IF(AND(Children=0,Married=0), 0,IF(AND(Children=0,Married>0),taper3(NSAP,earn_spouse, earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2),IF (AND(Children>0,Married>0),taper4(PPP,earn_spouse,earn_princ, PPP_lim1,PPP_lim2,PPP_taper1,PPP_taper2,PPP_ptnr_lim),0)))) |
| PPP/NSA Key |  | B | IF(AND(Children>0,Married>0), IF(taper3(NSAP,earn_princ, earn_spouse,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2)+ taper4(PPP,earn_spouse,earn_princ,PPP_lim1,PPP_lim2, PPP_taper1,PPP_taper2,PPP_ptnr_lim)>= taper3(NSAP,earn_spouse, earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2) + taper4(PPP,earn_princ,earn_spouse,PPP_lim1,PPP_lim2, PPP_taper1,PPP_taper2,PPP_ptnr_lim),0,1),2) |
| 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) |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| Beneficiary tax offset | ben_cr | B | $\begin{aligned} & \text { IF(AND(taxbl_cr>0, NOT(AND(Children>0, Married=0))), } \\ & \text { Tax(taxbl_cr, tax_sch), 0) } \end{aligned}$ |
| Total | tax_cr | B | spouse_cr+low_cr+pen_cr+ben_cr+Edu_TR |
| 7. CG 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 |
| 11. Cash transfers: |  |  |  |
| Family Tax Benefit (Part A) | ftbA | P | IF(PA>0,(FTB_A_max*Children+IF(Children>2,(Children-2)* FB_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)*FB_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,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 2009 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
7. Central government income tax finally paid
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 $(1-10+11)$
13. Employer's compulsory social security contributions

Employer's compulsory social security contributions payroll taxes

## 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

 26570100
none
39856

| 167 | 67 |
| ---: | ---: |
| none | 2 |
| 66426 | 26570 |

60
60
$60 \quad 60$

0
(otal

Total
4798

0
0
10163
132

479
132
1
1151
-

## Austria 2009 <br> 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 $(7+8+9)$
11. Cash transfers from general government

For head of family

|  | For two children |  | 4971 | 4971 | 4971 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | 4971 | 4971 | 4971 | 0 |
| 12. | Take-home pay (1-10+11) |  | 32634 | 43360 | 51431 | 38198 |
| 13. Employer's compulsory social security contributions |  |  |  |  |  |  |
|  | Employer's compulsory social security contributions |  | 8620 | 11494 | 14367 | 11494 |
|  | Payroll taxes |  | 2989 | 3986 | 4982 | 3986 |
|  |  | Total | 11609 | 15479 | 19349 | 15479 |
| 14. Average rates |  |  |  |  |  |  |
|  | Income tax |  | 12.5\% | 10.5\% | 12.0\% | 10.8\% |
|  | Employees' social security contributions |  | 18.1\% | 17.3\% | 18.1\% | 17.3\% |
|  | Total payments less cash transfers |  | 18.1\% | 18.4\% | 22.6\% | 28.1\% |
|  | Total tax wedge including employer's social security contributions |  | 36.6\% | 36.8\% | 40.0\% | 44.3\% |
| 15. Marginal rates |  |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner |  | 48.2\% | 48.2\% | 48.2\% | 48.2\% |
|  | Total payments less cash transfers: Spouse |  | 19.3\% | 15.1\% | 43.6\% | 15.1\% |
|  | Total tax wedge: Principal earner |  | 59.9\% | 59.9\% | 59.9\% | 59.9\% |
|  | Total tax wedge: Spouse |  | 37.5\% | 34.2\% | 56.3\% | 34.2\% |

The Austrian currency is the Euro (EUR). In 2009, EUR 0.72 was equal to USD 1. In that year, the average worker in Austria earned EUR 39856 (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 | 342 |
| More than 20 km | 630 | 1356 |
| More than 40 km | 1242 | 2361 |
| More than 60 km | 1857 | 3372 |

- 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.
- Deductibility of cost for child care (up to EUR 2.300 p.a. per child) and tax-free payments (up to EUR 500 p.a.) from employers to their employees for child care.


### 1.1.2.3. Adjustments

The data on which the gross earnings of an average production worker are based reflect amounts that form a category of tax-free income (Freibeträge). In order to make the tax calculations as realistic as possible, it is assumed in this Report that 2 per cent of the gross earnings are tax free.

### 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). 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 1.12.2) the maximum is EUR 240.
- Traffic (commuting) tax credit EUR 291.
- Sole earner's and sole parent's tax credit of EUR 364. The sole earner's credit is not given when a spouse's income exceeds EUR 2200 or EUR 6000 for a family with children. This tax credit is increased by EUR 130 for the first, by EUR 175 for the second and by EUR 220 for the third and every additional child. If there are children, this tax credit is nonwastable 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 of EUR 400. This credit 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 per month | Christmas and leave bonus ${ }^{1}$ | Employee ${ }^{2}$ | Employer ${ }^{3}$ |
| Health insurance | 4020 | 8040 | 3.95 | 3.70 |
| Unemployment insurance | 4020 | 8040 | 3 | 3.00 |
| Pension insurance | 4020 | 8040 | 10.25 | 12.55 |
| Accident insurance | 4020 | 8040 | - | 1.40 |
| Contribution to the labour chamber | 4020 | 1 | 0.50 | - |
| Contribution for the promotion of residential building | 4020 | 1 | 0.50 | 0.50 |
| Addition to secure wage payments in the case of bankruptcy | 4020 | 8040 | - | 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 357.74 per month.
3. Mid 2008, the employees' unemployment insurance rate was reduced for low earnings. In 2009, it is zero for monthly earnings up to EUR 1 128, 1\% up to EUR 1 230, 2\% up to EUR 1384 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 2009 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). Children under the age of 3 were exempted from the 7.30 EUR increase in 2004, as one of the parents of these children is entitled to a childcare transfer, introduced in 2002. The
entitled parent can choose between three alternatives: EUR 15.53 per day until the 36th month of birth, EUR 20.80 ( 24 month) or EUR 26.60 ( 18 month). The children's tax credit (EUR 50.90 monthly, see $\S 1.14$ ) is paid out together with the family allowance and therefore treated as a transfer.

There is a supplement to the family allowance of EUR 36.40 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 12 times the SSC ceiling. This supplement is paid out on application after an assessment of the very year.

In September 2008, an additional family allowance ("13th allowance") was introduced by doubling the allowance for every September. This means an increase of the annual allowances by $1 / 12$ (8.33\%).

## 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 earner's 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 700000 . 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 1st 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 1st 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 January 1st) 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 60 000) 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 2.300 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.

2009 Parameter values

| Average earnings/yr | Ave_earn | 39856 | (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 | 2\% |  |
| 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 | 364 |  |
| Children suppl. to SETC: 1st child | dsole1_cr | 130 |  |
| 2nd child | dsole2_cr | 175 |  |
| 3rd+ child | dsole3_cr | 220 |  |
| Spouse income not more than | sole_lim0 | 2200 |  |
| 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 | 4020 |  |
| lower limit | SSC_low | 357.74 |  |
| Employees' contr. rates | health_rate | 3.95\% |  |
|  | unemp_rate | 0\% | 1128 |
|  |  | 1\% | 1230 |
|  |  | 2\% | 1384 |
|  |  | 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 | 1370.2 |  |
| 2nd child | CB_2 | 1536.6 |  |
| 3rd child | CB_3 | 1825.2 |  |
| 4th+ child | CB_4 | 2020.2 |  |
| suppl. > 3 years | CB03sppl | 94.9 |  |
| suppl. > 10 years | CB10sppl | 331.5 |  |
| suppl. > 19 years | CB19sppl | 614.9 |  |
| Child tax credit | child_cr_1 | 700.8 |  |

## 2009 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 |
| 4 | Number of children | child | 0 or 2 in Taxing Wages output tables |
| 5 | Gross earnings | earn | =Ave_earn*percent |
| 6 | Current income | cearn | =(1-non_cur_pc)*earn |
| 7 | Basic allowance | allow | $=\left(\right.$ earn $>14^{*}$ SSC_low) ${ }^{*}$ Taper(Basic_al;cearn-SSCc-work_reltaxfrinc;Basic_al_thrsh;Basic_al_rdn) |
| 8 | SSC on curr. inc. | SSCc | ```=(empl_14+unemp(earn,unemp_rate)+others_rate)* MIN(12*SSC_ceil;cearn)*(cearn>12*SSC_low)``` |
| 9 | Work related expenses | work_rel | =work_rel |
| 10 | Tax-free income | taxfrinc | =tax_free*earn |
| 11 | Child allowance | Child_al_princ | IF(cearn_spouse-allow_spouse-SSCc_spouse-work_rel_spouse-taxfrinc_spouse11945<0,Child_al_1, Child_al_2)*child |
|  |  | Child_al_spouse | IF(Child_al_princ=child*Child_al_2, Child_al_2, 0)*Child |
| 12 | Tax base for schedule | ctbase | $=\left(\right.$ earn>14*SSC_low)* ${ }^{\left.\text {(cearn-allow-SSCc-work_rel-taxfrinc-child_al*}{ }^{*} \text { child }\right) ~}$ |
| 13 | Gross tax on current income | gtaxcur | = Tax(ctbase;tax_sch) |
| 14 | Basic tax credit | btaxcr | $=0$ |
| 15 | Married or head of familiy | headcr | $=($ earn_sp<lF(child>0;sole_lim1;sole_lim0) $) *($ sole_cr+(child>0)* dsole1_cr+(child>1)* dsole2_cr <br> +(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 | =IF(itcur>-headcr; itcur;MAX(-0, * SSC-(child>0)*headcr; -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_cur_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 | =((empr_14+others_empr)*MIN(12*SSC_ceil;cearn)+empr_14*MIN(12*SSC_ceil;ncearn)) |
| 30 | Pay-roll taxes | payroll | =payroll_rate*earn |
| 31 | Cash transfers | cash | $=I F\left(\right.$ child $<2 ;$ child $^{\star}$ (CB_1+CB10sppl);CB_1+CB_2+ (child-2)*(CB_3+CB03suppl) <br> $+2^{*}$ CB10sppl+child* ${ }^{*}$ child_cr_1 (for singles and spouses in the married couple cases) |
| 32 | Take-home pay |  | =earn-inctax-SSC+cash |
| 33 | Wage cost |  | =earn+SSCftpayroll |
|  | Non-wastable tax credits |  |  |
|  | Tax expenditure component | taxexp | =-MIN(inctax;-headcr-wage_cr-(othcr of spouse>0)*MAX(wage_cr;-inctax of spouse))-transfer |
|  | Cash transfer component | transfer | $=1 F($ inctax $<0$,-inctax,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.

## 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 2009

## The tax/benefit position of single persons

1. Gross wage earnings

| Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | none | none | none | 2 |
|  | 26482 | 39723 | 66205 | 26482 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children

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 famil
Children
Other
7. Central government income tax finally paid
8. State and local taxes
9. Employees' compulsory social security contributions

Gross earnings
Taxable income
10. Total payments to general government $(7+8+9)$

|  | 3461 | 5192 | 8653 | 3461 |
| ---: | ---: | ---: | ---: | ---: |
|  | 172 | 361 | 651 | 172 |
| Total | 3633 | 5553 | 9304 | 3633 |
|  | 9104 | 16490 | 32088 | 7558 |

11. Cash transfers from general government

For head of family
For two children
12. Take-home pay (1-10+11)

| Total | 0 | 0 | 0 | 3611 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 3611 |
|  | 17378 | 23233 | 34117 | 22534 |
|  | 7528 | 12092 | 20128 | 7528 |
|  |  |  |  |  |
|  | $20.7 \%$ | $27.5 \%$ | $34.4 \%$ | $14.8 \%$ |
| $13.7 \%$ | $14.0 \%$ | $14.1 \%$ | $13.7 \%$ |  |
| $34.4 \%$ | $41.5 \%$ | $48.5 \%$ | $14.9 \%$ |  |
| $48.9 \%$ | $55.2 \%$ | $60.5 \%$ | $33.7 \%$ |  |
|  |  |  |  |  |
|  | $61.4 \%$ | $54.9 \%$ | $59.4 \%$ | $61.4 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
| $71.3 \%$ | $66.5 \%$ | $68.4 \%$ | $71.3 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |
|  |  |  |  |  |

## Belgium 2009

## 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 | none |
| 52964 | 66205 | 52964 |

2. Standard tax allowances
Basic allowance
Married or head of family

Dependent children
Deduction for social security contributions and income taxes 5192
Work-related expenses

| 2 |
| :--- |

Basic allowance 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

|  | 3345 | 3280 | 3280 | 3280 |
| :--- | ---: | ---: | ---: | ---: |
|  | 996 | 983 | 983 | 0 |
|  |  |  |  |  |
| Total | 4341 | 4263 | 4263 | 3280 |
|  | 5664 | 10461 | 14296 | 11444 |
|  | 419 | 774 | 1058 | 847 |
|  |  |  |  |  |
|  | 5192 | 5192 | 8653 | 5192 |
|  | 361 | 505 | 627 | 505 |
| Total | 5553 | 5697 | 9280 | 5697 |
|  | 11636 | 16932 | 24634 | 17987 |

10. Total payments to general government $(7+8+9)$

11636
17987
11. Cash transfers from general government

For head of family
For two children

| Total | 3611 | 3611 | 3611 | 0 |
| ---: | ---: | ---: | ---: | ---: |
|  | 3611 | 3611 | 3611 | 0 |
|  | 31698 | 39643 | 45181 | 34977 |
|  | 12092 | 13397 | 19621 | 13397 |
|  |  |  |  |  |
|  | $15.3 \%$ | $21.2 \%$ | $23.2 \%$ | $23.2 \%$ |
|  | $14.0 \%$ | $10.8 \%$ | $14.0 \%$ | $10.8 \%$ |
|  | $20.2 \%$ | $25.2 \%$ | $31.8 \%$ | $34.0 \%$ |
|  | $38.8 \%$ | $40.3 \%$ | $47.4 \%$ | $47.3 \%$ |
|  |  |  |  |  |
|  | $54.9 \%$ | $54.9 \%$ | $54.9 \%$ | $54.9 \%$ |
|  | $40.0 \%$ | $31.8 \%$ | $54.9 \%$ | $31.8 \%$ |
| $66.5 \%$ | $66.5 \%$ | $66.5 \%$ | $66.5 \%$ |  |
| $45.4 \%$ | $54.8 \%$ | $66.5 \%$ | $54.8 \%$ |  |

The national currency is the euro. In 2009, EUR 0.72 was equal to USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 39723.

## 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 3590 per spouse and is computed as follows:

| Gross earnings less social insurance contributions (EUR) | Rate $(\%)$ |
| :--- | :---: |
| Below $\quad 5200$ | 28.7 |
| Between | 5200 and 10320 |
| Between 10320 and 17180 | 10 |
| Above | 17180 |

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 3590 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 kms 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 9280.

### 1.1.2.4. Exempt income

The base amount is:

| Taxable income (S) | Fixed amount | Variable amount |
| :---: | :---: | :---: |
| $0-23910$ | 6690 | 0 |
| $23910-24$ 170 | 6430 | 24 170-S |
| 24170 and up | 6430 | 0 |

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

- 1 child
- 2 children 3520
- 3 children

7890

- 4 children 12760
- > 4 children

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 1370
- Handicapped spouse 1370
- Other handicapped dependants 1370
- Widow(er) with dependent child(ren) 1370
- Single father or mother 1370

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

| Taxable income (EUR) | Marginal rate (\%) |
| ---: | :---: |
| $0-7900$ | 25 |
| $7900-11250$ | 30 |
| $11250-18740$ | 40 |
| $18740-34360$ | 45 |
| $34360-$ and above | 50 |

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

### 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 |  |
| :---: | ---: | :---: |
| $\mathrm{L}_{1}$ |  |  |
|  | 4520 | 0 |
| 4520 | 6030 | $B \times\left(\mathbf{R}-\mathrm{L}_{1}\right) /\left(\mathrm{L}_{2}-\mathrm{L}_{1}\right)$ |
| 6030 | 15070 | $B$ |
| 15070 | 19590 | $B \times\left(L_{2}-\mathbf{R}\right) /\left(L_{2}-L_{1}\right)$ |
| 19590 | And above | 0 |

For 2008 income, the amount of the base (B) was EUR 610.

## 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) :

| 2008 | Employee | Employer | Total |
| :--- | :---: | ---: | ---: |
| Unemployment | 0.87 | 3.15 | 4.02 |
| 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 | 7.50 | 7 | 7 |
| Pensions |  | 8.86 | 16.36 |
| Child care | 0.05 | 0.05 |  |
| Work-related illnesses | 1.01 | 1.01 |  |
| Work-related accidents |  | 0.3 | 0.3 |
| Education leave | 0.06 | 0.06 |  |
| Business closures | 0.25 | 0.25 |  |
| Wage restraint | 13.07 | 7.59 | 7.59 |
| Total |  | 34.47 | 47.79 |

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 in 2009 is as follows:

| Gross annual earnings (S) in EUR | Fixed amount | Variable amount |
| :--- | :---: | :---: |
| $0-23482.84$ | 1600 | $0.162(23$ 482.84-S) |
| $23482.84-48000$ | 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 01.10.2008 is as follows:

| Gross annual salary (S) in EUR | Reduction in euros |
| :--- | :---: |
| $0<$ S < 16 649.88 | 2100 |
| $16649.88<$ S < 20 322.00 | Min $(2100,(2100-0.2798(S-16$ 649.88)) |
| $20322.00<$ S < 26 444.64 | Min (1716, (1716-0.1752 (S-16 649.88)) |
| $S>26444.64$ | 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. In 2008 these premiums apply to gross wages (including holiday pay and extra-legal remunerations) with a minimum of EUR 5717.93 and a maximum of EUR 35 099.83). 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 <br> 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 | 1206.30 | 1054.92 | 1282.34 | 1303.99 | 1416.30 | 1390.53 | 1449.24 |
| 2nd child | 1877.46 | 1906.08 | 2306.90 | 2328.55 | 2533.26 | 2507.49 | 2602.44 |
| 3rd child | 2790.54 | 2819.16 | 3219.98 | 3241.63 | 3446.34 | 3420.57 | 3515.52 |

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.

2009 Parameter values

|  | Ave_earn | 39723 | Secretariat estimate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Work-related expenses | work_rel_max | 3590 |  |  |  |
|  | work_rel_sch | 0.287 | 5200 |  |  |
|  |  | 0.1 | 10320 |  |  |
|  |  | 0.05 | 17180 |  |  |
|  |  | 0.03 |  |  |  |
| Tax credits (tranche exonérée) | single_cr | 6430 |  |  |  |
|  | Married_cr | 6430 |  |  |  |
|  | Supp_cr_base | 260 |  |  |  |
|  | supp_cr_thrsh1 | 23910 |  |  |  |
| One child | child_cr1 | 1370 |  |  |  |
| Two children | child_cr2 | 3520 |  |  |  |
| Single parents | s_parent_cr | 1370 |  |  |  |
| Maximum Child Credit Payment | child_cr_max | 400 |  |  |  |
| Basic Credit | basic_cr_base | 0 |  |  |  |
|  | basic_cr_thrsh1 | 4520 |  |  |  |
|  | basic_cr_thrsh2 | 6030 |  |  |  |
|  | basic_cr_thrsh3 | 15070 |  |  |  |
|  | basic_cr_thrsh4 | 19590 |  |  |  |
| Income tax schedule |  | tax_rate1 |  |  |  |
|  | tax_sch | 0.25 | 7900 |  |  |
|  |  | 0.30 | 11250 |  |  |
|  |  | 0.40 | 18740 |  |  |
|  |  | 0.45 | 34360 |  |  |
|  |  | 0.50 |  |  |  |
|  | quote_max | 9280 |  |  |  |
|  | 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) | 16649.88 | 16649.88 | 2100 | 0.1752 |
|  |  | 20322.00 | 16649.88 | 1716 | 0.2798 |
|  |  | 26444.64 | 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 | 0.3447 |  |  |  |
|  | SSC_empr_redn | 0 | 1600 | 0.1620 | 23482.84 |
|  |  | 23482.84 | 1600 | 0 | 48000 |
|  |  | 48000 | 1600 | -0.06 | 48000 |
|  |  | 9999999 | 0 | 0 |  |
| Child benefit (age 7-10) | CB_1 | 1303.99 |  |  |  |
| Second child (age 11-12) | CB_2 | 2306.90 |  |  |  |
| Third child (age 11-12) | CB_3 | 3219.98 |  |  |  |

## 2009 Tax equations

The equations for the Belgian system in 2009 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, $^{\text {(Max }}$ 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)*child_cr1+(children=2)*child_cr2 |
| Family exemption amount | fam_ex_inc | B | IF(Married,married_cr,single_cr+(Children>0)*s_paren t_cr)+IF(tax_inc_adj<=0,0,IF(tax_inc_adj<=supp_cr_th rsh1,supp_cr_base,MAX(0,supp_cr_base+supp_cr_th rsh1-tax_inc_adjj)) |
| 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), - <br> (MIN(MAX ((ex_inc_int_princ-tax_inc_adj_princ), 0), |
| 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,``` |
| 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)*Pa rameters!child_cr2), (positive(ex_inc_int-tax_inc_int), tax_sch), children*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 |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 9. Employees' soc security | SSC | B | $\begin{aligned} & \text { Positive((earn) }{ }^{\star} \text { SSC_rt-MIN(VLOOKUP( earn, } \\ & \text { SSC_redn,3), VLOOKUP(earn, SSC_redn, 3)- } \\ & \text { VLOOKUP(earn, SSC_redn, 4)*(earn-VLOOKUP(earn, } \\ & \text { SSC_redn, 2)))) } \end{aligned}$ |
|  | SSC_special | J | positive(Tax(tax_inc_total, SSC_special) |
|  | SSC_total |  | SSC+SSC_special |
| 11. Cash transfers | cash_trans | J | (Children>0)*CB_1+(Children>1)* ${ }^{*}$ CB_2 |
| 13. Employer's soc security | empr_sch | B | Positive(earn*SSC_empr_rt-(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 2009

## The tax/benefit position of single persons

## 1. Gross wage earnings

Wage level (per cent of average wage) 67
Number of children none
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(CPP \& EI)
7. Central government income tax finally paid
8. State and local taxes
9. Employees' compulsory social security contributions
Gross earnings
Taxable income (Provincial Health Care Levy)
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 $(1-10+11)$
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

| Total | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
|  | 0 | 0 | 0 | 0 |
|  | 29045 | 43568 | 72613 | 29045 |
|  | 4357 | 6734 | 13124 | 4357 |
|  | 1705 | 1705 | 1705 | 1705 |
|  | 0 | 0 | 0 | 1548 |
|  | 0 | 0 | 0 | 627 |
|  | 265 | 407 | 428 | 265 |
| Total | 1970 | 2112 | 2132 | 4144 |
|  | 2387 | 4622 | 10992 | 212 |
|  | 1113 | 2143 | 4899 | 0 |
|  | 1767 | 2715 | 2850 | 1767 |
|  | 300 | 450 | 750 | 300 |
| Total | 2067 | 3165 | 3600 | 2067 |
|  | 5567 | 9930 | 19491 | 2279 |
|  | 380 | 0 | 0 | 380 |
|  | 0 | 0 | 0 | 7702 |
| Total | 380 | 0 | 0 | 8082 |
|  | 23858 | 33638 | 53121 | 34847 |
|  | 3313 | 5025 | 6505 | 3313 |
|  | 12.1\% | 15.5\% | 21.9\% | 0.7\% |
|  | 7.1\% | 7.3\% | 5.0\% | 7.1\% |
|  | 17.9\% | 22.8\% | 26.8\% | -20.0\% |
|  | 26.3\% | 30.8\% | 32.9\% | -7.7\% |
|  | 26\% | 35.1\% | 33.0\% | 55.7\% |
|  | n.a. | n.a. | n.a. | n.a. |
|  | 34.2\% | 40.7\% | 35.9\% | 60.4\% |

## Canada 2009

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 | 43568 | 58090 | 72613 | 58090 |
| 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) | 43568 | 58090 | 72613 | 58090 |
| 5. | Central government income tax liability (exclusive of tax credits) | 6734 | 8912 | 11091 | 8912 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 1705 | 3409 | 3409 | 3409 |
|  | Married or head of family | 1548 | 0 | 0 | 0 |
|  | Children | 627 | 627 | 627 | 0 |
|  | Other(CPP \& EI) | 407 | 527 | 672 | 527 |
|  | Total | 4287 | 4563 | 4708 | 3936 |
| 7. | Central government income tax finally paid (5-6) | 2447 | 4350 | 6383 | 4976 |
| 8. | State and local taxes | 1447 | 2319 | 3256 | 2319 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 2715 | 3512 | 4482 | 3512 |
|  | Taxable income (Provincial Health Care Levy) | 450 | 450 | 750 | 450 |
|  | Total | 3165 | 3962 | 5232 | 3962 |
| 10. | Total payments to general government (7+8+9) | 7059 | 10630 | 14870 | 11257 |
| 11. Cash transfers from general government |  |  |  |  |  |
|  | For head of family | 0 | 0 | 0 | 0 |
|  | For two children | 3206 | 2008 | 1427 | 0 |
|  | Total | 3206 | 2008 | 1427 | 0 |
| 12. | Take-home pay (1-10+11) | 39714 | 49467 | 59169 | 46833 |
| 13. | Employer's compulsory social security contributions | 5025 | 6595 | 8338 | 6595 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 8.9\% | 11.5\% | 13.3\% | 12.6\% |
|  | Employees' social security contributions | 7.3\% | 6.8\% | 7.2\% | 6.8\% |
|  | Total payments less cash transfers | 8.8\% | 14.8\% | 18.5\% | 19.4\% |
|  | Total tax wedge including employer's social security contributions | 18.3\% | 23.5\% | 26.9\% | 27.6\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 64.9\% | 39.1\% | 39.1\% | 35.1\% |
|  | Total payments less cash transfers: Spouse | 32.8\% | 36.0\% | 30.3\% | 32.0\% |
|  | Total tax wedge: Principal earner | 68.0\% | 44.4\% | 44.4\% | 40.7\% |
|  | Total tax wedge: Spouse | 39.4\% | 42.8\% | 37.8\% | 39.3\% |

The national currency is the Canadian dollar (CAD). In 2009, CAD 1.14 was equal to USD 1. In that year, the average worker earned CAD 43568 (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 1 548.00.
- Credit for Spouse or Eligible Dependant: A taxpayer supporting a spouse or other eligible dependant receives a tax credit of CAD 1548.00 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 313.35 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 2 118.60) and their Employment Insurance premiums (to a maximum of CAD 731.79).
- 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 925 for single individuals without dependents and CAD 1680 for families (couples and single parents). The credit will be reduced by 15 per cent of net family income in excess of CAD 10500 for single individuals and CAD 14500 for families. This is the default national design presented in Budget 2009; provinces may choose to propose jurisdiction-specific changes to this design, subject to certain principles.
- Canada Employment Tax Credit: A tax credit on employment income of up to CAD 156.60.


### 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 2011.
- 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 22000.
- 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 21000 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 21000 , 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

## 2009 Federal income tax rates

| Taxable Income (CAD) | Rate (\%) |
| :--- | :---: |
| $0-40726$ | 15 |
| $40726-81452$ | 22 |
| $81452-136264$ | 26 |
| 126264 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 Quebec, 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. Quebec 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 36848 | 6.05 |
| CAD 36848 to CAD 73698 | 9.15 |
| Over CAD 73698 | 11.16 |

Surtax

| Provincial tax after accounting for wastable credits | Surtax rate |
| :--- | :--- |
| Amounts exceeding CAD 4257 | $20 \%$ of the excess amount |
| Amounts exceeding CAD 5 370 | $36 \%$ of the excess amount |

Wastable tax credits

- A basic tax credit of CAD 537.30.
- A maximum credit of CAD 456.23 for a dependant spouse that is withdrawn as the income of the spouse exceeds CAD 754 and is completely withdrawn when the income of the spouse is at least CAD 8295.
- 6.05 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 205 plus CAD 379 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 (Quebec Pension Plan in the province of Quebec). For 2009, 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 2 118.60. Income subject to contributions is earnings (wages and
salaries) less a CAD 3500 basic exemption. The maximum contribution of CAD 2118.60 is reached at an earnings level of CAD 46300 i.e. (CAD $46300-C A D 3500) \times 0.0495=C A D 2118.60$. 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 (Quebec Pension Plan in the province of Quebec) on their own behalf. However, the self-employed are required to contribute at the combined employer/employee rate of 9.9 per cent of earnings up to a maximum of CAD 4 237.20. The self-employed can deduct the employer portion of their contribution from income, equal to 50 per cent of the total contribution or CAD 2 118.60. 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, Quebec, 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 200600 . The following table provides further details on the structure that is applicable in 2009.

| The Ontario Health Premium |  |  |
| :---: | :---: | :---: |
| Taxable income | Fixed component (CAD) | variable Component |
| 0 to CAD 20000 | 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 |  |
| CAD 72000 to CAD 72600 | 600 | $25 \%$ of the amount of taxable income in excess of CAD 72600 |
| CAD 72600 to CAD 200000 | 750 |  |
| CAD 200000 to CAD 200600 | 750 | $25 \%$ of the amount of taxable income in excess of CAD 200000 |
| 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 2009, employees are required to contribute at the rate of 1.73 per cent of insurable earnings. Insurable earnings are earnings (wages and salaries) up to a maximum of CAD 42300 per year. The maximum employee contribution is therefore CAD 731.79 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 2118.60 .

### 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 (Quebec 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, 2.42 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, 2.68 per cent of the wages paid to each employee to a maximum of CAD 74600.

## 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 (ССТВ) provides CAD 1347 per child under age 18 plus a CAD 94 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 40930 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 2086 for one child, plus CAD 1846 for a second child, plus CAD 1756 for the third and each additional child. The NCB is phased out based on family net income in excess of CAD 23 832. 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 100 per month 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. 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 249, paid out quarterly, for each adult 19 years of age or older and CAD 131 for each dependent child under the age of 19. Single tax filers with an employment income higher than CAD 8088 receive an additional CAD 131 and an additional CAD 249 if they have at least one child. The total amount is reduced at a rate of five percent of net family income over CAD 32 473. 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. When fully mature, this measure will replace 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 5000 . 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 20750.

Ontario has introduced a new "sales tax credit" that provides a relief of up to CAD 260 for each adult and each child. It is reduced by four per cent of adjusted family net income over CAD 20000 for single people and over CAD 25000 for families. The amount is paid directly to families.

## 4. Main changes in the tax/benefit system since 2008

The basic personal amount, the credit for a spouse or an eligible dependant and the upper limit of the 15 per cent and the 22 per cent personal income tax brackets for 2009 have been increased by 7.5 per cent above their 2008 levels to, respectively, CAD 1 548, CAD 1 548, CAD 40726 and CAD 81452.

[^43]The calculation of the National Child Benefit (NCB) supplement and the Canada Child Tax Benefit (CCTB) will reflect the new upper limit for the 15 per cent tax bracket (indexed to reflect the fact that entitlement during the 2010-11 benefit year is based on 2009 income). As a result, low-income families are able to earn an additional CAD 1894 and still receive their maximum NCB. They will also be able to earn this additional amount before their NCB is phased out or before their base benefit under the ССТВ begins to be phased out.

The total dollar amount of tax relief from the Working income tax Benefit (WITB) has been effectively doubled. The enhanced WITB will provide up to CAD 925 to single individuals and up to CAD 1680 per year to couples and single parents. Provinces and territories continue to have the flexibility to propose jurisdiction-specific changes to the design of the WITB to better harmonize it with their existing programs, subject to the broad principles outlined in Budget 2007.

## 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.

## 2009 Parameter values

| Average earnings/yr | Ave_earn | 43568 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Tax credits | Basic_cred | 1548.00 |  |
| Spouse | Spouse_cred | 1548.00 |  |
| Withdrawal rate | Sp_crd_wth | 0.15 |  |
| Threshold | Sp_crd_thrsh | 0 |  |
| Canada Employment Tax Credit | Empl_crd | 156.60 |  |
| Child tax credit | Dep_ch_crd | 313.35 |  |
| Canada Child Tax Benefit) | Ch_credit | 1347 |  |
| Child under 7 | Ch_crd_und7 | 0 |  |
| Additional for 3rd+ | Ch_crd_3rd | 94 |  |
| Reduction rate: 1 child | Ch_crd_red1 | 0.02 |  |
| Redn. rate: 2 or more | Ch_crd_red2 | 0.04 |  |
| Threshold | Ch_crd_thrsh | 40930 |  |
| National Child Benefit Supplement | WIS_crd_1st | 2086 |  |
|  | WIS_crd_2nd | 1846 |  |
|  | WIS_crd_3rd | 1756 |  |
| Threshold to start phase-out | WIS_phout_st | 23832 |  |
| Threshold to end phase-out | WIS_phout_end | 40930 |  |
| 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 | 925 |  |
| WITB - Addl. maximum credit (fam.) | WITB_max_fam | 755 |  |
| WITB - Reduction rate | WITB_phzout_rt | 0.15 |  |

## 2009 Parameter values (cont.)

| WITB - Threshold | WITB_phzout_thrsh | 10500 |  |
| :---: | :---: | :---: | :---: |
| WITB - Addl. threshold (fam.) | WITB_phzn_thrsh_fam | 14500 |  |
| Federal tax schedule | Fed_sch | 0.15 | 40726 |
|  |  | 0.22 | 81452 |
|  |  | 0.26 | 126264 |
|  |  | 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 | 2118.60 |  |
| Unemployment ins. rate | Unemp_rate | 0.0173 |  |
| max. contrib. | Unemp_max | 731.79 |  |
| tax credit rate | Unemp_crd_rate | 0.15 |  |
| employer contrib. mult. | Unemp_emplr | 1.4 |  |
| GST adult credit | GST_crd_ad | 249 |  |
| child credit | GST_crd_ch | 131 |  |
| threshold | GST_crd_thrsh | 32473 |  |
| reduction rate | GST_crd_redn | 0.05 |  |
| single supplement | GST_crd_sgsp | 131 |  |
| single supplement eligibility threshold | GST_sgsp_thrsh | 8088 |  |
| single supplement phase-in rate | GST_sgsp_rate | 0.02 |  |
| Province: Ontario |  |  |  |
| Tax credits | P_basic_crd | 537.30 |  |
| Spouse | P_spouse_crd | 456.23 |  |
| withdrawl rate | P_sp_crd_wd | 0.0605 |  |
| threshold | P_sp_crd_thr | 754 |  |
| \% of BFT | P_pct_bft | 0.375 |  |
| Unemployment tax credit rate | P_unem_tc_rt | 0.0605 |  |
| Surtax rate 1 | P_sur_rt1 | 0.2 |  |
| threshold | P_sur_thr1 | 4257 |  |
| rate 2 | P_sur_rt2 | 0.36 |  |
| threshold | P_sur_thr2 | 5270 |  |
| Tax reduction | P_tax_red | 205 |  |
| amount per dependent | P_tr_chld | 379 |  |
| amount per disabled dep. | P_tr_dis_ch | 379 |  |
| Provincial tax schedule | Prov_sch | 0.0605 | 36848 |
|  |  | 0.0915 | 73698 |
|  |  | 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 | 20750 |  |
| 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 |  |
| Property and sales tax credits |  |  |  |
| Sales tax credit adult | P_sales_cred | 260 |  |
| Sales tax credit child | P_salcr_chd | 260 |  |
| threshold | P_ps_thresh | 20000 |  |

2009 Parameter values (cont.)

| threshold seniors | P_ps_thr_sen | 25000 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| reduction rate | P_ps_red_rt | 0.02 |  |  |
| reduction rate seniors | P_ps_rr_sen | 0.04 |  |  |
| max credit | P_ps_max_cr | 900 |  |  |
| max credit seniors | P_ps_mxcr_sen | 1025 |  |  |
| 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 | 0.0268 |  |  |
| Employer Workers Compensation Levy Ceiling | emp_workcomp_ceil | 74600 |  |  |
| Maximum number of children under the age of 7 | children_und7_max | 1 |  |  |

## 2009 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) , 0) |
| 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_rt*MAX(0,earn_total-WITB_phzin_thrsh)))- <br> MAX(0,WITB_phzout_rt*MAX(0,earn_total(WITB_phzout_thrsh+WITB_phzn_thrsh_fam)))), MAX(0,MIN(WITB_max,(WITB_phzn_rt*MAX(0,earn_total-WITB_phzin_thrsh)))- <br> MAX(0,WITB_phzout_rt*MAX(0,earn_totalWITB_phzout_thrsh))))) |
| 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_rt*SSC+IF(AND(Married=0, Children>0), P_spouse_crd, Married*Taper(P_spouse_crd, earn_spouse, 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_schProv_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_surtaxProv_tax_redn) |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 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 |
| 11. Cash transfers (nonwastable) |  |  |  |
| Child Tax Benefit | CTB | P | (Children>0)* $($ Taper(Children*Ch_credit + MAXA ((Children-2), <br> 0)*Ch_crd_3rd+MINA(Children, <br> 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, WIS_crd_1st+WIS_crd_2nd+(Children-2)* WIS_crd_3rd)), <br> $0)-$ MAXA ((earn_total-WIS_phout_st), 0) ${ }^{*}$ IF(Children=1, <br> WIS_redn1, IF(Children=2, WIS_redn2, WIS_redn3)), 0) |
| GST Credit - Total | GST_Cr | P | Taper((GST_crd_ad+(Married=1)*(GST_crd_ad+Children*GS T_crd_ch)+(Married=0)* $($ Children>0)*(GST_crd_ad+GST_crd _sgsp+Positive(Children- <br> 1)*GST_crd_ch)+(Married=0)* ${ }^{*}$ Children=0)*Positive(MIN(GS T_crd_sgsp, (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(MIN(GST_crd_sgsp, (earn_totalGST_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)- <br> P_ch_crd_th)* MIN(Children,children_und7_max,3)*P_pct_ea rn,Positive((P_und7_max+IF(Married=0,P_sps_und7,0))*MIN (Children,children_und7_max))),earn_total,P_thrsh_red,P_re dn_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,P_ps_thresh,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

## 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 2009

## The tax/benefit position of single persons

1. Gross wage earnings

| Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | none | none | none | 2 |
|  | 185811 | 278717 | 464528 | 185811 |

2. Standard tax allowances

Basic allowance

| 0 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 20439 | 30659 | 51098 | 20439 |

Deduction for social security contributions and income taxes 20439

30659
51098
20439
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)

| Total | 20439 | 30659 | 51098 | 20439 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 248987 | 373481 | 622468 | 248987 |
|  | 37348 | 56022 | 93370 | 37348 |

6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid
8. State and local taxes
9. Employees' compulsory social security contributions

| Gross earnings |  | 20439 | 30659 | 51098 | 20439 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable income |  |  |  |  |  |
|  | Total | 20439 | 30659 | 51098 | 20439 |
| 10. Total payments to general government (7+8+9) |  | 32947 | 61841 | 119628 | 11587 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 37506 |
|  | Total | 0 | 0 | 0 | 37506 |
| 12. Take-home pay (1-10+11) |  | 152864 | 216876 | 344900 | 211730 |
| 13. Employer's compulsory social security contributions |  | 63176 | 94764 | 157940 | 63176 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 6.7\% | 11.2\% | 14.8\% | -4.8\% |
| Employees' social security contributions |  | 11.0\% | 11.0\% | 11.0\% | 11.0\% |
| Total payments less cash transfers |  | 17.7\% | 22.2\% | 25.8\% | -13.9\% |
| Total tax wedge including employer's social security contributions |  | 38.6\% | 41.9\% | 44.6\% | 15.0\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 31.1\% | 31.1\% | 31.1\% | 40.7\% |
| Total payments less cash transfers: Spouse |  | n.a. | n.a. | n.a. | n.a. |
| Total tax wedge: Principal earner |  | 48.6\% | 48.6\% | 48.6\% | 55.7\% |
| Total tax wedge: Spouse |  | n.a. | n.a. | n.a. | n.a. |

## Czech Republic 2009

## 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 | 278717 | 371623 | 464528 | 371623 |
| 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 | 30659 | 40878 | 51098 | 40878 |
|  | Work-related expenses |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 30659 | 40878 | 51098 | 40878 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 373481 | 497974 | 622468 | 497974 |
| 5. | Central government income tax liability (exclusive of tax credits) | 56022 | 74696 | 93370 | 74696 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other | 71040 | 46200 | 46200 | 24840 |
|  | Total | 71040 | 46200 | 46200 | 24840 |
| 7. | Central government income tax finally paid (5-6) | -15018 | 9822 | 22330 | 31182 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 30659 | 40878 | 51098 | 40878 |
|  | Taxable income |  |  |  |  |
|  | Total | 30659 | 40878 | 51098 | 40878 |
| 10. | Total payments to general government (7+8+9) | 15641 | 50701 | 73428 | 72061 |
| 11. | Cash transfers from general government |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 33717 | 27569 | 20110 | 0 |
|  | Total | 33717 | 27569 | 20110 | 0 |
| 12. | Take-home pay (1-10+11) | 296793 | 348491 | 411210 | 299562 |
| 13. | Employer's compulsory social security contributions | 94764 | 126352 | 157940 | 126352 |
| 14. | Average rates |  |  |  |  |
|  | Income tax | -5.4\% | 2.6\% | 4.8\% | 8.4\% |
|  | Employees' social security contributions | 11.0\% | 11.0\% | 11.0\% | 11.0\% |
|  | Total payments less cash transfers | -6.5\% | 6.2\% | 11.5\% | 19.4\% |
|  | Total tax wedge including employer's social security contributions | 20.5\% | 30.0\% | 33.9\% | 39.8\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 38.4\% | 38.4\% | 38.4\% | 31.1\% |
|  | Total payments less cash transfers: Spouse | 44.4\% | 20.5\% | 38.4\% | 11.0\% |
|  | Total tax wedge: Principal earner | 54.0\% | 54.0\% | 54.0\% | 48.6\% |
|  | Total tax wedge: Spouse | 58.5\% | 40.6\% | 54.0\% | 33.6\% |

The national currency is the Koruny (CZK). In 2009, CZK 19.05 was equal to USD 1 (national estimate). In that year, the average worker earned CZK 278717 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Central government income taxes

### 1.1.1. Tax unit

- The tax unit is the individual. The possibility of joint taxation, which was introduced in 2005, has been abolished since 2008.


### 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 deductible for income tax purposes.


### 1.1.2.2. Main non-standard tax reliefs

- 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 abovementioned 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 $15 \%$.

### 1.1.2.4. Tax credits

- Credit of CZK 24840 per taxpayer, introduced in 2008.
- 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 10680 (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

### 2.1. Employees' contributions

Compulsory contributions of 11 per cent of gross wages and salaries (with no limit) 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 (with no limit).
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 <br> 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 dependant 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 $-\frac{\text { child's basic personal requirement * } \text { net family income }}{\mathrm{LM}^{*} 2}$

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 2009

Main changes in the tax and benefit systems in force since January 2009:

- The ceiling for spouse tax credit eligibility was increased from CZK 34000 to CZK 68000 in the taxable period.
- Employees' contributions were reduced by 1.5 per cent.
- Employers' contribution were reduced by 1 per cent.
- A ceiling on social security contributions of four times the average wage has been introduced. The estimate of the ceiling on social security contributions is CZK 94220 per month for 2009, i.e. CZK 1130640 per year.


## 5. Memorandum items

### 5.1. Identification of average wage 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 2008.

### 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.

2009 Parameter values

|  | Ave_earn | 278717 | Secretariat 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 | 10680 |  |
| Tax credit for individuals | tax_cr_base | 24840 |  |
| 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 |  |
|  | basic_household | 5480 | 2880 |
|  | basic_child | 1960 | 5480 |
|  | house_exp | 1 | 7080 |
|  |  | 2 | 9040 |

## 2009 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_cr_ch | P | children*child_cr |
| Tax credit for children | tax_cr_bas | B | tax_cr_bas |
| Basic tax credit | tax_cr_spouse | P | Married*tax_cr_spo |

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 2009

## The tax/benefit position of single persons



## Denmark 2009

## 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 | 375153 | 500204 | 625255 | 500204 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 30012 | 40016 | 50020 | 40016 |
|  | Work-related expenses | 8556 | 17112 | 17112 | 17112 |
|  | Other |  |  |  |  |
|  | Total | 38568 | 57128 | 67132 | 57128 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
|  | Earnings tax credit deduction | 13600 | 13600 | 13600 | 13600 |
|  | Total | -13600 | -13600 | -13600 | -13600 |
| 4. | Central government taxable income (1-2 + 3) | 322985 | 424161 | 533893 | 424161 |
| 5. | Central government income tax liability (exclusive of tax credits) | 43179 | 57017 | 71594 | 57017 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 16782 | 11188 | 11188 | 11188 |
| Married or head of family |  |  |  |  |  |
| Children |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 16782 | 11188 | 11188 | 11188 |
| 7. | Central government income tax finally paid (5-6) | 31991 | 45829 | 60406 | 45829 |
| 8. | State and local taxes | 60598 | 86448 | 114483 | 86448 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 38568 | 57128 | 67132 | 57128 |
|  | Taxable income |  |  |  |  |
|  | Total | 38568 | 57128 | 67132 | 57128 |
| 10. | Total payments to general government (7+8+9) | 131158 | 189405 | 242022 | 189405 |
| 11. | Cash transfers from general governmen |  |  |  |  |
|  | For head of family |  |  |  |  |
|  | For two children | 23236 | 23236 | 23236 | 0 |
|  | Total | 23236 | 23236 | 23236 | 0 |
| 12. | Take-home pay (1-10+11) | 267231 | 334035 | 406469 | 310799 |
| 13. | Employer's compulsory social security contributions | 0 | 0 | 0 | 0 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 24.7\% | 26.4\% | 28.0\% | 26.4\% |
|  | Employees' social security contributions | 10.3\% | 11.4\% | 10.7\% | 11.4\% |
|  | Total payments less cash transfers | 28.8\% | 33.2\% | 35.0\% | 37.9\% |
|  | Total tax wedge including employer's social security contributions | 28.8\% | 33.2\% | 35.0\% | 37.9\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 43.5\% | 43.5\% | 43.5\% | 43.5\% |
|  | Total payments less cash transfers: Spouse | 46.6\% | 42.1\% | 42.1\% | 42.1\% |
|  | Total tax wedge: Principal earner | 43.5\% | 43.5\% | 43.5\% | 43.5\% |
|  | Total tax wedge: Spouse | 46.6\% | 42.1\% | 42.1\% | 42.1\% |

The national currency is the Kroner (DKK). In 2009, DKK 5.36 was equal to USD. In that year, the average worker earned DKK 375153 (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 ( 24.8 pct .), the church tax rate ( 0.7 pct .) plus the 8.0 per cent health tax rate that is paid to the state ( 33.5 per cent on average) multiplied by the value of the deduction.

### 1.1.2. Main non-standard tax reliefs

- 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 km: DKK 1.90 per km. Above 100 km : DKK 0.95 per km as a standard, but transport from municipalities placed in the outskirts of the country gives a credit of DKK 1.90 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 | 5.04 per cent of DKK $42900=$ DKK 2162 |
| :--- | :--- |
| For central government health tax | 8.0 per cent of DKK 42 $900=$ DKK 3432 |
| For local government income tax and church tax (average rate) | 25.549 per cent of DKK $42900=$ DKK 10960 |

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 5.04 per cent.

Medium tax bracket to the central government is assessed on the part of the aggregate of personal income and positive net capital income above DKK 347200 at the rate of 6 per cent. If a married individual cannot utilise the total allowance of DKK 347 200, the unutilised part is transferred to the spouse.

Top tax bracket to the central government is assessed on the excess of DKK 347200 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 347 200, the unutilised part is not transferred to the spouse.

If the marginal tax rate including local tax but excluding church tax exceeds 59 per cent, the top tax bracket rate is reduced by the difference between the marginal tax rate and 59 per cent. There is no reduction at the average local tax rate in 2009.

### 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: $\quad 22.7$ per cent (municipalities)
Highest rate: $\quad 27.8$ per cent (municipalities)
Average rate: $\quad 25.549$ per cent (municipalities: 24.818; church: 0.731 )
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 are required to make a fixed contribution of DKK 8556 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 3 480) while the other part consists of a voluntary contribution to an early retirement scheme (DKK 5 076).

In this Report, both contributions are included. However, an administration charge paid to the unemployment fund is not included. It varies between funds from DKK 696 to DKK 1 817. The mean charge across all 29 funds in Denmark is approximately DKK 1309. The typical charge for an industrial worker is DKK 1728.

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 nor on capital income.

Normally, a compulsory contribution of 1 per cent of employees' gross earnings is 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 2009, this contribution was suspended (see Section 4). 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

[^44]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.

### 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 fulltime 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 |
| :--- | :---: |
| $0-2$ | 4107 |
| $3-6$ | 3251 |
| $7-17$ | 2558 |

The transfer is independent of the parents' income. There are additional special amounts for single parents: the transfer for each dependent child is DKK 4696 per year and a yearly transfer of DKK 4780 regardless of the number of children. In addition, there is a state transfer of DKK 11988 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.

## 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 2002-2005. 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 was reduced in 2005 from 5.5 per cent to 5.48 per cent as a compensation for the increase in local income taxes from 33.31 per cent in 2004 to 33.33 per cent in 2005 . In 2008 it was again necessary to compensate for an increase in local income taxes. The low tax bracket was to be reduced from 5.48 to 5.26 per cent. But since the 2008 advanced statements had already been
issued, it was instead agreed upon to keep the low tax bracket at 5.48 per cent in 2008, to reduce it to 5.04 per cent in 2009, and increase it to 5.26 per cent in 2010.

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. In September 2007 this 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.

Government had originally planned to implement certain tax reductions gradually over the period 2004-2007. However, in order to stimulate the economy, the Danish government decided in the spring of 2004 to implement these reductions immediately in 2004 as part of the "Spring Package". Another element in the "Spring Package" was a temporary suspension in 2004 and 2005 of the employees' 1 per cent contribution to the individual Labour Market Supplementary Pension Scheme, which aimed at stimulating private consumption. The suspension period was subsequently lengthened to 2006 and 2007, with a further extension to 2009.

From the 1st of 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. In 2009 there has been a further increase in the average municipal tax to 24.818 per cent. 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 in 2008 and 2009. 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 agreed upon a major tax reform. The reform is to be implemented starting in 2010. Main elements of the reform concern the level of labour taxation; the low tax bracket is decreased to 3.76 per cent in 2010, the middle tax bracket is suspended and the threshold for the top tax bracket is to be increased both in 2010 and 2011.

## 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 nonstandard tax relief. The employer's contribution is not included in the gross wage income of the employee.

2009 Parameter values

|  | Ave_earn | 375153 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Central taxes | Health_tax_rate | 0.08 |  |
|  | Low_rate | 0.0504 |  |
|  | Medium_thrsh | 347200 |  |
|  | Medium_rate | 0.06 |  |
|  | Top_thrsh | 347200 |  |
|  | Top_rate | 0.15 |  |
|  | Marg_rate_ceil | 0.59 |  |
|  | Adj_top_rate | 0.15 |  |
|  | Temp_tax_rate | 0 |  |
|  | Temp_tax_thrsh | 0 |  |
|  | Personal_al | 42900 |  |
| Local taxes | gener_rate | 0.24818 |  |
|  | church_rate | 0.00731 |  |
| Total local tax rate | Local_rates | 0.25549 |  |
| Earned income tax credit scheme | earncredit_rate | 0.0425 |  |
|  | earncredit_max | 13600 |  |
| Child transfers | Child_3to6 | 13004 |  |
|  | Child_7to17 | 10232 |  |
| For single parents | Sing_par_basic | 4780 |  |
|  | Sing_par_ch | 16684 |  |
| Individual Labour Market Pension Scheme | Pension_rate | 0 |  |
| Employees soc. security: |  |  |  |
| Suppl. pension scheme | Pension | 1080 |  |
| Unempl. insurance | Unemp | 8556 |  |
| SSC rate | SSC_rate | 0.08 |  |
|  |  |  |  |
| Employer soc. security: |  |  |  |
| Suppl. pension scheme | Pension_empr | 2160 |  |
| Refunded By Government | Pension_ref | 0 |  |
| SSC rate | SSC_empr | 0 |  |

## 2009 Tax equations

The equations for the Danish system in 2009 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-Medium_thrsh-Married*Positive(Medium_thrsh-pers_inc_spouse))+Adj_top_rate*Positive(tax_inc_princTop_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_spouse-Medium_thrsh)+Adj_top_rate*Positive(tax_inc_spouse-Top_thrsh) |
|  | 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_alpers_inc_spouse)*Low_rate |
|  | health_tax_cr_princ | P | Health_tax_rate ${ }^{*}$ (Personal_al+Married ${ }^{*}$ Positive(Personal_altax_inc_spouse)) |
|  | tax_cr_spouse | S | Personal_al*Low_rate |
|  | health_tax_cr_spouse | S | (Married=1)*Health_tax_rate*Personal_al |
| 7. CG tax | CG_tax | B | Positive(CG_tax_excl-tax_cr)+Positive(CG_health_tax_exclhealth_tax_cr) |
| 8. State and local taxes | local_tax_princ | P | Positive((Local_rates)* ${ }^{*}$ (tax_inc_princ-Personal_al-Married*Positive(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- <br> 1)*Child_7to17+(Married=0)* (Sing_par_basic+Children*Sing_par_ <br> ch)) |
| 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

## 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 2009
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 | 25479 | 38219 | 63698 | 25479 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 1325 | 1987 | 3312 | 1325 |
|  | Work-related expenses | 620 | 620 | 620 | 620 |
|  | Other |  |  |  |  |
|  | Total | 1945 | 2607 | 3932 | 1945 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 23534 | 35612 | 59766 | 23534 |
| 5. | Central government income tax liability (exclusive of tax credits) | 940 | 3127 | 8441 | 940 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 600 | 545 | 239 | 600 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 600 | 545 | 239 | 600 |
| 7. | Central government income tax finally paid | 340 | 2582 | 8201 | 340 |
| 8. | State and local taxes | 3802 | 6154 | 10857 | 3802 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1587 | 2411 | 4060 | 1587 |
|  | Taxable income |  |  |  |  |
|  | Total | 1587 | 2411 | 4060 | 1587 |
| 10. | Total payments to general government (7+8+9) | 5729 | 11147 | 23119 | 5729 |
| 11. Cash transfers from general governmen For head of family |  |  |  |  |  |
|  |  |  |  |  |  |
|  | For two children | 0 | 0 | 0 | 3644 |
|  | Total | 0 | 0 | 0 | 3644 |
| 12. | Take-home pay (1-10+11) | 19750 | 27072 | 40580 | 23395 |
| 13. | Employer's compulsory social security contributions | 5860 | 8790 | 14651 | 5860 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 16.3\% | 22.9\% | 29.9\% | 16.3\% |
|  | Employees' social security contributions | 6.2\% | 6.3\% | 6.4\% | 6.2\% |
|  | Total payments less cash transfers | 22.5\% | 29.2\% | 36.3\% | 8.2\% |
|  | Total tax wedge including employer's social security contributions | 37.0\% | 42.4\% | 48.2\% | 25.4\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 42.0\% | 47.0\% | 47.0\% | 42.0\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 52.8\% | 56.9\% | 56.9\% | 52.8\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Finland 2009

## The tax/benefit position of married couples

## 1. Gross wage earnings

| Wage level (per cent of average wage) | $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | 2 | 2 | 2 | none |
|  | 38219 | 50959 | 63698 | 50959 |

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

| Total | 545 | 1077 | 1145 | 1077 |
| :---: | ---: | ---: | ---: | ---: |
|  | 2582 | 2582 | 2922 | 2582 |
|  | 6154 | 7085 | 9956 | 7085 |
|  |  |  |  |  |
|  | 2411 | 3138 | 3998 | 3138 |
|  |  |  |  |  |
| Total | 2411 | 3138 | 3998 | 3138 |
|  | 11147 | 12805 | 16876 | 12805 |

10. Total payments to general government $(\mathbf{7 + 8 + 9 )}$
11. Cash transfers from general government

For head of family

| For two children |  |  | 2526 | 2526 | 2526 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | 2526 | 2526 | 2526 | 0 |
| 12. | Take-home pay (1-10+11) |  | 29598 | 40680 | 49348 | 38154 |
| 13. | Employer's compulsory social security contributions |  | 8790 | 11721 | 14651 | 11721 |
| 14. Average rates |  |  |  |  |  |  |
|  | Income tax |  | 22.9\% | 19.0\% | 20.2\% | 19.0\% |
|  | Employees' social security contributions |  | 6.3\% | 6.2\% | 6.3\% | 6.2\% |
|  | Total payments less cash transfers |  | 22.6\% | 20.2\% | 22.5\% | 25.1\% |
|  | Total tax wedge including employer's social security contributions |  | 37.0\% | 35.1\% | 37.0\% | 39.1\% |
| 15. Marginal rates |  |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner |  | 47.0\% | 47.0\% | 47.0\% | 47.0\% |
|  | Total payments less cash transfers: Spouse |  | 13.0\% | 22.6\% | 42.0\% | 22.6\% |
|  | Total tax wedge: Principal earner |  | 56.9\% | 56.9\% | 56.9\% | 56.9\% |
|  | Total tax wedge: Spouse |  | 29.3\% | 37.1\% | 52.8\% | 37.1\% |

The national currency is the euro (EUR). In 2009, EUR 0.72 was equal to USD 1. In that year, the average worker earned EUR 38219 (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 5.2 per cent of income exceeding EUR 2500 , until it reaches its maximum of EUR 600. 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 88000.


### 1.1.2.2. Main non-standard tax reliefs

- 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 <br> (EUR ) | Tax on excess income <br> in bracket (\%) |
| :--- | ---: | :---: |
| $13100-21700$ | 8 | 7 |
| $21700-35300$ | 610 | 18 |
| $35300-64500$ | 3058 | 22 |
| 64500 and more | 9482 | 30.5 |

### 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 2009 the tax rate varies between 16.5 and 21 per cent, the average rate being approximately 18.59 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 7230 , until it reaches its maximum of EUR 3570 . 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 1 480, is reduced by 20 per cent of the income exceeding EUR 1480.


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

### 2.1. Employee contributions

### 2.1.1. Rate and ceiling

In 2009, the rate of the health insurance contribution for medical care paid by an employee is 1.28 per cent. The tax base for this contribution is net taxable income for municipal income tax purposes. The amount of the health insurance contribution for daily allowance is 0.7 per cent of gross salary.

In addition there is an employees' pension insurance contribution which amounts to 4.3 per cent of gross salary and an employees' unemployment insurance contribution equal to 0.2 per cent of gross salary. For employees aged 53 or older, the pension insurance contribution amounts to 5.4 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 2009 is 23 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 2009 the following allowances (EUR):

| For the first child | 1200 |
| :--- | :--- |
| For the second child | 1326 |
| For the third child | 1692 |
| For the fourth child | 1938 |
| Fifth and subsequent child | 2184 |

The child subsidy for a single parent is increased by an annual amount of EUR 559.2 for each child.

## 4. Main changes in the tax/benefit system since 2008

In January 2009 the central government tax brackets were adjusted by about four per cent. The first central government marginal tax rate was lowered by 1.5 percentage points, the second by 1 percentage point, the third by 1.5 percentage points and the fourth marginal tax rate was lowered by 1 percentage point.

The maximum amount of the earned income tax credit in state taxation was raised from EUR 400 to EUR 600.

The rate of the employees' health insurance contribution for medical care was raised from 1.24 per cent to 1.28 per cent and the rate of the employees' health insurance contribution for daily allowance was raised from 0.67 per cent to 0.7 per cent. The rate of the employees' unemployment insurance contribution was lowered from 0.34 per cent to 0.2 per cent and the rate of the employees' pension insurance contribution was raised from 4.1 per cent to 4.3 per cent.

The child subsidy for the third child was raised from EUR 1572 to EUR 1 692, the child subsidy for the fourth child was raised from EUR 1818 to EUR 1938 and the child subsidy for the fifth child was raised from EUR 2064 to EUR 2184.

## 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.

2009 Parameter values

|  | Ave_earn | 38219 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Expenses | Work_exp_max | 620 |  |
|  | Work_exp_rate | 1 |  |
| Allowances | al_SSC_rate | 0.052 |  |
| State tax | Tax_min | 8 |  |
| Tax schedule | Tax_sch | 0 | 13100 |
|  |  | 0.07 | 21700 |
|  |  | 0.18 | 35300 |
|  |  | 0.22 | 64500 |
|  |  | 0.305 |  |
| Earned income tax credit | eitc_thrsh | 2500 |  |
|  | eitc_rate | 0.052 |  |
|  | eitc_redn_thrsh | 33000 |  |
|  | eitc_redn_rate | 0.012 |  |
|  | eitc_max | 600 |  |
| 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 |  |
| Iow income | SL_max | 1480 |  |
|  | SL_rate | 0.2 |  |
| Local intax | Local_rate | 0.1859 |  |
|  | Church_rate | 0 |  |
|  | Local_tot | 0.1859 |  |
| Soc. sec. taxpayer | SSC_rate | 0.0128 |  |
| progressive | SSC_prog_rate | 0 |  |
| Prog. lim. | SSC_prog_thrsh | - |  |
| soc. sec. empr | SSC_empr | 0.23 |  |
| Cash transfer | ch_1 | 1200 |  |
|  | ch_2 | 1326 |  |
|  | ch_3 | 1692 |  |
|  | ch_4 | 1938 |  |
|  | ch_5 | 2184 |  |
|  | ch_small | 0 |  |
|  | ch_lone | 559.2 |  |

## 2009 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_redn_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, al_rate*(al_thrsh2- <br> al_thrsh1)+al_rate2*(earn-al_thrsh2), Positive(earn-al_thrsh)))- <br> MIN(al_max, al_redn_rate* 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 | ```(Children>0)*ch_1+(Children>1)*ch_2+ (Children>2)*ch_3+ (Children>3)*ch_4+ Positive(Children-4)*ch_4 +(Married=0)*Children*ch_Ione``` |
| 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 2009

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 | 22043 | 33065 | 55109 | 22043 |
| 2. Standard tax allowances |  |  |  |  |  |
| Basic allowance |  |  |  |  |  |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 4110 | 6166 | 9954 | 4110 |
|  | Work-related expenses | 1793 | 2690 | 4516 | 1793 |
| Other |  |  |  |  |  |
|  | Total | 5904 | 8856 | 14469 | 5904 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 16140 | 24210 | 40640 | 16140 |
| 5. | Central government income tax liability (exclusive of tax credits) | 2656 | 4641 | 11006 | 1711 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other | 0 | 0 | 0 | 72 |
|  | Total | 0 | 0 | 0 | 72 |
| 7. | Central government income tax finally paid | 2656 | 4641 | 11006 | 1639 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings | 3020 | 4530 | 7227 | 3020 |
| Taxable income |  |  |  |  |  |
|  | Total | 3020 | 4530 | 7227 | 3020 |
| 10. | Total payments to general government (7+8+9) | 5676 | 9171 | 18234 | 4659 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family (Gross) |  |  |  |  |  |
|  | For two children (Gross) | 0 | 0 | 0 | 1494 |
| CRDS Deducted |  | 0 | 0 | 0 | -7 |
|  | Total | 0 | 0 | 0 | 1487 |
| 12. | Take-home pay (1-10+11) | 16367 | 23894 | 36875 | 18872 |
| 13. | Employers' compulsory social security contributions | 7810 | 13987 | 23477 | 7810 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 12.0\% | 14.0\% | 20.0\% | 7.4\% |
|  | Employees' social security contributions | 13.7\% | 13.7\% | 13.1\% | 13.7\% |
|  | Total payments less cash transfers | 25.7\% | 27.7\% | 33.1\% | 14.4\% |
|  | Total tax wedge including employer's social security contributions | 45.2\% | 49.2\% | 53.1\% | 36.8\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 31.7\% | 31.7\% | 42.3\% | 21.5\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 63.2\% | 52.0\% | 59.7\% | 57.7\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## France 2009

The tax/benefit position of married couples

1. Gross wage earnings

| Wage level (per cent of average wage) | $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | 2 | 2 | 2 | none |
|  | 33065 | 44087 | 55109 | 44087 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children

| Deduction for social security contributions and income taxes | 6166 | 8221 | 10276 | 8221 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Work-related expenses | 2690 | 3587 | 4483 | 3587 |  |
| Other | Total | 8856 | 11808 | 14759 | 11808 |
|  | 0 | 0 | 0 | 0 |  |
| Tax credits or cash transfers included in taxable income | 24210 | 32279 | 40349 | 32279 |  |
| Central government taxable income (1-2 + 3) | 2684 | 4205 | 5983 | 5312 |  |

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 |  | 4530 | 6040 | 7550 | 6040 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable income |  |  |  |  |  |
|  | Total | 4530 | 6040 | 7550 | 6040 |
| 10. Total payments to general government (7+8+9) |  | 7135 | 8828 | 13533 | 10530 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family (Gross) |  |  |  |  |  |
| For two children (Gross) |  | 1494 | 1494 | 1494 | 0 |
| CRDS Deducted |  | -7 | -7 | -7 | 0 |
|  | Total | 1487 | 1487 | 1487 | 0 |
| 12. Take-home pay (1-10+11) |  | 27417 | 36746 | 43063 | 33557 |
| 13. Employers' compulsory social security contributions |  | 13987 | 15783 | 21797 | 15783 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 7.9\% | 6.3\% | 10.9\% | 10.2\% |
| Employees' social security contributions |  | 13.7\% | 13.7\% | 13.7\% | 13.7\% |
| Total payments less cash transfers |  | 17.1\% | 16.7\% | 21.9\% | 23.9\% |
| Total tax wedge including employer's social security contributions |  | 41.7\% | 38.6\% | 44.0\% | 44.0\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 23.5\% | 23.5\% | 31.7\% | 31.7\% |
| Total payments less cash transfers: Spouse |  | 15.4\% | 22.7\% | 31.7\% | 30.9\% |
| Total tax wedge: Principal earner |  | 46.2\% | 46.2\% | 52.0\% | 52.0\% |
| Total tax wedge: Spouse |  | 27.2\% | 33.5\% | 63.2\% | 40.6\% |

The national currency is now the euro (EUR). In 2009, EUR 0.72 equalled USD 1. In that year, the average worker earned EUR 33065 (Secretariat estimate).

## 1. Personal income tax system

### 1.1. Tax levied by the central government on 2008 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 civil de 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 413 and a ceiling of EUR 13 893).
- Repeal of the standard deduction equal to $20 \%$ of net pay after the above allowance is deducted, and incorporation into the rates of each tax bracket.
- 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, a 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 2292 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 3964.

[^45]
### 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 2 300), 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 2008. 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 wageearner). 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 for family responsibilities |  |
| :---: | :---: | :---: | :---: | :---: |
| Single person with no children | EUR 3 743<R<= EUR 12475 <br> EUR 12 475< R<= EUR 17451 | $\begin{aligned} & \mathrm{R}^{\star} 7.7 \% \\ & \text { (EUR } 17 \text { 451-R) * 19.3\% } \end{aligned}$ | - |  |
| Two-earner couple (married/PACSed) | EUR 3 743<R<= EUR 12475 <br> EUR 12 475< R<= EUR 17451 | $\begin{aligned} & \mathrm{R}^{\star} 7.7 \% \\ & \text { (EUR } 17 \text { 451-R) * } 19.3 \% \end{aligned}$ | Childless | Two children EUR 72 EUR 72 |
| Single-earner couple (married/ PACSed) | EUR $3743<$ R<= EUR 12475 <br> EUR 12475 < R<= EUR 17451 <br> EUR 17 451< R <= EUR 24950 <br> EUR 24 950< R<= EUR 26572 | R*7.7\% + EUR 83 <br> (EUR 17 451-R)*19.3\%+ EUR 83 <br> EUR 83 <br> (EUR $26572-R)^{*} 5.1 \%$ | Childless | Two children <br> 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 17 451< R <= EUR 26572 | $\begin{aligned} & \mathrm{R}^{\star} 7.7 \% \\ & \text { (EUR } 17 \text { 451-R) * } 19.3 \% \\ & 0 \end{aligned}$ | EUR 108 <br> EUR 108 <br> 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).

From 2010, the PPE will be 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. However, the eight family types studied here earn too high an income to receive this new benefit.

### 1.1.2.4. Tax exemption on overtime work

Since the 21 August 2007 Act, overtime work is exempted from employee contributions, universal social contributions and personal income tax. Employer contributions are also reduced.

### 1.1.2.5. Tax credit for low earning households

A refundable tax credit is implemented in 2009 (on 2008 income) for low earning households. For households with a taxable income under EUR 11673 per share, the tax credit is equal to two thirds of the calculated tax before reductions and credits. For households with a taxable income between EUR 11673 and EUR 12475 the tax credit is decreasing from two thirds of the calculated tax before reductions and credits at EUR 11673 to 0 at EUR 12475.

This refundable tax should be deleted in 2010.

### 1.1.3. Tax schedule*

|  | Fraction of taxable income (1 share, in euros) | Rate (in \%) |
| :--- | :--- | :---: |
| 1st bracket | Up to 5852 | 0 |
| 2nd bracket | From 5852 to 11673 | 5.5 |
| 3rd bracket | From 11673 to 25926 | 14 |
| 4th bracket | From 25926 to 69505 | 30 |
| 5th bracket | Above 69505 | 40 |

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 862, 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.

### 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.

[^46]- 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, or 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, or 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 2009, the ceiling was EUR 2859 (or EUR 34308 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.


### 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 2009 was an estimated EUR 15 952. 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 389.20 as of 1 January 2008.
- Rate: two children: $32 \%$; per additional child: $41 \%$.
- Family supplement: $41.65 \%$ of the BMAF at 1 January 2009. 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.
- 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.


## 2009 Parameter values

| AW earnings | Ave_earn | 33065 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Work expenses | work_rel_fl | 413 |  |
|  | work_rel_ceil | 13893 |  |
|  | work_rel_rate | 0.1 |  |
| Basic allowance | basic_al_rate |  |  |
|  | basic_al_max |  |  |
| Tax schedule | tax_sch | 0 | 5852 |
|  |  | 0.055 | 11673 |
|  |  | 0.14 | 25926 |
|  |  | 0.30 | 69505 |
|  |  | 0.40 |  |
|  | limit_demipart | 2292 |  |
|  | limit_sp_demipart1 | 3964 |  |
| Décote value | decote | 862 |  |
|  | tax_min | 61 |  |
| Prime pour l'emploi | rev_ref_sing | 16251 |  |
|  | rev_ref_mar | 32498 |  |
|  | maj_dem_part | 4490 |  |
|  | rate1 | 0.077 |  |
|  | rate2 | 0.193 |  |
|  | extra_pers | 36 |  |
|  | rate3 | 0.051 |  |
|  | seuil1 | 3743 |  |
|  | seuil2 | 12475 |  |
|  | seuil3 | 17451 |  |
|  | seuil4 | 24950 |  |

## 2009 Parameter values (cont.)

|  | 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 | 0.05000 |  |
| Social security contributions | pension_rate | 0.0665 |  |
|  | Pension_rate | 0.001 |  |
|  | SSC_ceil | 34308 |  |
|  | 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 | 0.83 |  |
|  | pens_empr2 | 0.016 |  |
|  | sickness_empr | 0.131 |  |
| Unemployment (incl. "garantie de salaire") | unemp_empr | 0.0415 |  |
| Accidents | accidents_empr | 0.023 |  |
| Family Allowance | SMIC | 15952 | estimate |
|  | fam_empr | 0.054 |  |
| Extra pension (incl. AGFF) | pens_empr_ex | 0.057 |  |
|  | pens_empr_ex2 | 0.133 |  |
| Others | others_empr1 | 0.305 |  |
|  | 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 | 1493.53 |  |
| Third and subsequent | CB_3 | 1914.86 |  |
| Derivation of minimum income | SMIC_horraire | 8.77 |  |
|  | SMIC_heures | 1820 |  |
|  | minrevtp | 15961.4 |  |
| Tax credit for low earning households | min_thresh | 11673 |  |
|  | max_thresh | 12475 |  |

## 2009 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, Children1) $+0.5^{*}(\text { Married }=0)^{*}($ 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 | B | MIN(work_rel_ceil, MAX(work_rel_rate* earn_dec, MIN(work_rel_fl, earn_total))) |
| Basic | basic_al | B |  |
| 3. Credits in taxable income | taxbl_cr | B | 0 |
| 4. CG taxable income | tax_inc | B | earn_dec-work_exp-basic_al |
| 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)- <br> (Children>0)* (limit_sp_demipart1+limit_demipart* ${ }^{\star}$ (quotie nt-2)) )) |
| Adjusted for decote | adj_tax | J | $\operatorname{MIN}(1.5 *$ 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) |
| 6. Tax credits : |  |  |  |
| Prime pour l'emploi | PPE_main | B | $=$ SI (\$AL7< $\left(\right.$ (Married=0) ${ }^{\star}$ rev_ref_sing+(Married=1)*rev_re f_mar+maj_dem_part*Children);1;0)*SI(AF7>=seuil1;(Mar ried $=1)^{*}(\mathrm{AG} 7$ <seuil1)*SI(AF7*MAX (minrevtp/ <br> AA7;1)>seuil4;Positive(seuil5-AF7*MAX(minrevtp/ <br> AA7;1))*rate3* (((AA7/minrevtp)>=1)+((AA7/ <br> minrevtp)<=maj_tp_seuil)*MIN(AA7/ <br> minrevtp; 1$)^{*}(1+$ maj_tp $)+(($ AA $7 /$ <br> minrevtp) $>$ maj_tp_seuil)* $((A A 7 / \text { minrevtp })<1)^{\star}((1-$ <br> maj_tp)*MIN(AA7/minrevtp;1)+maj_tp));ppe_mar_1earn) <br> + (AF7*MAX(minrevtp/ <br> AA7;1)<seuil2)*rate1*AF7*MAX(minrevtp/AA7;1)* (((AA7/ <br> minrevtp) $>=1)+(($ AA7/ <br> minrevtp)<=maj_tp_seuil)*MIN(AA7/ <br> minrevtp; 1$)^{*}(1+$ maj_tp $)+(($ AA7/ <br> minrevtp) $>$ maj_tp_seuil $)^{\star}((A A 7 / \text { minrevtp })<1)^{\star}((1-$ <br> maj_tp)*MIN(AA7/ <br> minrevtp;1)+maj_tp))+(AF7*MAX(minrevtp/ <br> AA7;1)>=seuil2)*Positive(seuil3-AF7*MAX(minrevtp/ <br> AA7;1))*rate2* $(((A A 7 /$ minrevtp $)>=1)+(($ AA7/ <br> minrevtp)<=maj_tp_seuil)*MIN(AA7/ <br> minrevtp;1)*(1+maj_tp)+((AA7/ <br> minrevtp) $>$ maj_tp_seuil $)^{\star}((\text { AA7/minrevtp })<1)^{*}((1-$ <br> maj_tp)*MIN(AA7/minrevtp;1)+maj_tp));0) |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| Tax credit for low earning households | inc_crd_sch_tax | J | MAX(quotent*Tax(min_thresh,tax_sch),IF(Married,2*Tax(( quotent*min_thresh)/2,tax_sch)-limit_demipart*(quotent2), Tax((quotent*min_thresh),tax_sch)(Children>0)* ${ }^{*}$ limit_sp_demipart1+limit_demipart* ${ }^{\star}$ (quote nt-2) )) ) |
|  | inc_crd_inc_tax | J | (((Positive)(MINA(inc_crd_sch_tax,1.5*inc_crd_sch_taxdecote/2)))>=tax_min) <br> * (Positive(MINA(inc_crd_sch_tax,1.5*inc_crd_sch_taxdecote/2)))) |
|  | inc_crd | J | IF((tax_inc/quotent)<min_thresh,(2/3)*inc_tax,IF((tax_inc/ quotent)<max_thresh,2/3*inc_crd_inc_tax*Positive(1-(((tax_inc/quotent)-min_thresh)/(max_threshmin_thresh))),0)) |
| Additional flat rate allowance | add_all | J | $=S I\left(A L 7<\left((\text { Married }=0)^{*}\right.\right.$ rev_ref_sing+(Married=1)*rev_ref _mar+maj_dem_part*Children);1;0)*OU((AF7>=seuil1);(A G7>=seuil1) ) * (SI(OU(SI(AF7>0;ET(AF7>=seuil1;AF7*MAX (minrevtp/ <br> AA7;1)<=seuil3);0);SI(AG7>0;ET(AG7>=seuil1;AG7*MAX( minrevtp/ <br> AB7;1)<=seuil3);0));extra_pers*Children;SI(OU(SI(AF7>0; ET(seuil3<AF7*MAX(minrevtp/AA7;1);AF7*MAX(minrevtp/ AA7;1)<=seuil5;AG7<seuil1);0);SI(AG7>0;ET(seuil3<AG7* MAX(minrevtp/AB7;1);AG7*MAX(minrevtp/ AB7;1)<=seuil5;AA7<seuil1);0));extra_pers*(Children>0);0 ))+(Married=0)*(Children>0)*extra_pers) |
| Total NWTC | tax_cr | J | PPE_main+add_all+inc_crd |
| 7. CG tax | CG_tax | J | inc_tax+CSG_CRDS_noded+CSG_ded-tax_cr |
| 8. State and local taxes | local_tax | J | 0 |
|  | SSC | B | pension_rate*MINA(earn, <br> SSC_ceil)+sickness_rate*earn+unemp_rate1*MINA(earn, SSC_ceil)+(earn>SSC_ceil)*unemp_rate2*MINA(earnSSC_ceil, 3*SSC_ceil)+pens_rate_ex*MINA(earn, SSC_ceil)+(earn>SSC_ceil)*pens_rate_ex2*MINA(earnSSC_ceil, $3^{*}$ SSC_ceil-SSC_ceil)+pens_widow*earn |
| 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)*(earn- SSC_ceil)+(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 |
| Memorandum item: Non-wastable tax credit |  |  |  |
| Tax expenditure component | taxexp | P | tax_cr-transfer |
| Cash transfer component | transfer | P | 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.

## 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 2009 <br> The tax/benefit position of single persons

1. Gross wage earnings

Wage level (per cent of average wage) 67
Number of children none
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
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

|  | Total | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12. Take-home pay (1-10+11) |  | 17610 | 24016 | 37170 | 22400 |
| 13. Employers' compulsory social security contributions |  | 5314 | 7971 | 10938 | 5314 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 14.8\% | 20.7\% | 28.7\% | -2.5\% |
| Employees' social security contributions |  | 20.6\% | 20.6\% | 16.8\% | 20.4\% |
| Total payments less cash transfers |  | 35.5\% | 41.3\% | 45.5\% | 17.9\% |
| Total tax wedge including employer's social security contributions |  | 46.0\% | 50.9\% | 53.0\% | 31.3\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 50.0\% | 56.1\% | 44.3\% | 47.6\% |
| Total payments less cash transfers: Spouse |  | n.a. | n.a. | n.a. | n.a. |
| Total tax wedge: Principal earner |  | 58.1\% | 63.3\% | 44.3\% | 56.2\% |
| Total tax wedge: Spouse |  | n.a. | n.a. | n.a. | n.a. |

## Germany 2009

## The tax/benefit position of married couples

Wage level (per cent of average wage) 100-0
Number of children

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 41
Other
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions
Gross earnings

8339
Taxable income
10. Total payments to general government $(7+8+9)$
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) | 32414 | 39676 | 46343 | 35221 |
| 13. Employers' compulsory social security contributions | 7971 | 10628 | 13285 | 10628 |
| 14. Average rates |  |  |  |  |
| Income tax | 0.4\% | 6.9\% | 11.7\% | 14.8\% |
| Employees' social security contributions | 20.4\% | 20.4\% | 20.4\% | 20.6\% |
| Total payments less cash transfers | 20.8\% | 27.3\% | 32.1\% | 35.5\% |
| Total tax wedge including employer's social security contributions | 33.7\% | 39.1\% | 43.1\% | 46.0\% |
| 15. Marginal rates |  |  |  |  |
| Total payments less cash transfers: Principal earner | 45.5\% | 49.6\% | 52.7\% | 50.0\% |
| Total payments less cash transfers: Spouse | 46.8\% | 49.6\% | 52.7\% | 50.0\% |
| Total tax wedge: Principal earner | 54.4\% | 57.8\% | 60.4\% | 58.1\% |
| Total tax wedge: Spouse | 55.4\% | 57.8\% | 60.4\% | 58.1\% |

The national currency is the Euro (EUR). In 2009, EUR 0.72 was equal to USD 1. The average worker earned EUR 40929 (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: There are tax credits of EUR 1968 for the first, for the second child of EUR 2 040, for the third child and fourth child of EUR 2340 and subsequent children. Additionally there is a one-off payment of EUR 100 per child which is only paid in the year 2009. If the value of the tax credit is less than the relief calculated applying the tax allowances (EUR 1932 for the subsistence of a child and an additional EUR 1080 for minding and education or training needs), the taxpayer obtains the tax allowance instead of the tax credit. For jointly assessed parents, the amount of the allowance is doubled. 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 and employer contributions) are added up. Step 2: the resulting amount is limited to EUR 20000 . 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, which is diminished by the (tax-free) contributions of the employer, is deductible from income. Other social security expenses (health, unemployment and care insurance) up to the amount of EUR 1500 are deductible as well. If the resulting amount is lower than the allowance calculation according to the old scheme, the old allowance will be received (for more details on the old scheme: see previous editions of this Report).
- Work-related expenses: EUR 920 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 or disbursed church taxes. 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

- 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.
- 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:

$$
Y=\frac{X-7834}{10000} \quad Z=\frac{X-13139}{10000}
$$

The income tax liability (amounts in EUR) is calculated as follows:

1. $\mathrm{T}=0$ for $\mathrm{X} \leq 7834$
2. $T=(939.68 Y+1400) Y$ for $7835 \leq X \leq 13139$
3. $T=(228.74 Z+2397) Z+1007$ for $12740 \leq X \leq 52551$
4. $\mathrm{T}=0.42 \mathrm{X}-8064$ for $52152 \leq \mathrm{X} \leq 250400$
5. $T=0.45 \mathrm{X}-15576$ for $250401 \leq \mathrm{X}$

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 972/1 944 (singles/couples). 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, care and unemployment insurances are fixed by the government. The insurance contribution rate applied by health insurance funds is different. The German government publishes an average contribution rate for statutory health insurance which is used in this Report.

### 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 employee 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 employer pays 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 employee 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 2009, that is 9.95 per cent of the employee's gross wage earnings, up to a contribution ceiling of EUR 64800.

### 2.1.2. Sickness

In 2009, employers pay 7.3 per cent and employees pay 8.2 per cent of the gross wage. The contribution ceiling is EUR 44 100. From 1 July 2009 the rate is decreased to 7.0 per cent for employers respectively 7.9 per cent for employees. 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 2009, the contribution rate is 2.8 per cent of assessable income. Employee and employer each pay 1.4 per cent. The contribution ceiling is EUR 64800.

### 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. From 1 July 2008 the rate is 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 as of 1 July 2008. The assessable income is scaled according to the gross wage earnings but there is a contribution ceiling of EUR 44100 in 2009.

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 0.85 per cent to 1.1 per cent and 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 4800 , 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. (Pensions, sickness, unemployment, care):

See Section 2.1.

### 2.2.2. 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 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.

### 2.2.3. Family allowances

None.

### 2.2.4. 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:

| Year | Child credit |  |  |  | Child allowance |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | First child | Second child | Third child | Fourth and subsequent children |  |
| 1997 | 1350 | 1350 | 1841 | 2147 | 3534 |
| 1999 | 1534 | 1534 | 1841 | 2147 | 3534 |
| 2000 | 1657 | 1657 | 1841 | 2147 | 5080 |
| 2002 | 1848 | 1848 | 1848 | 2148 | 5808 |
| 2009* | 1968 | 1968 | 2040 | 2340 | 6024 |

* 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 capitalbased employee pension schemes based on a contract between the employer and the 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 250.000 (EUR 500.000 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 are increased by EUR 400.

## 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.

## 2009 Parameter values

| AW earnings | Ave_earn | 40929 | Secretariat estimate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tax allowances | Child_al | 6024 |  |  |  |  |
| Lone parents | Lone_al | 1308 |  |  |  |  |
| Work related | Work_rel_al | 920 |  |  |  |  |
| SSC allowance | SSC_dn | 3068 |  |  |  |  |
|  | 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 | 7834 |  |  |  |  |
|  | Tax_thrsh2 | 13139 |  |  |  |  |
| Top rate tax reduction | Reduction | 8064 |  |  |  |  |
|  | Reduction2 | 15576 |  |  |  |  |
| Tax equation rates |  |  |  |  |  |  |
| tax_eqn_rates | Squared | Single | Constant |  |  |  |
| z | 228.74 | 2397 | 1007 |  |  |  |
| $y$ | 939.68 | 1400 | 0 |  |  |  |
| Income tax rate stage | tax_first_stage | 7834 |  |  |  |  |
|  | tax_second_stage | 13139 |  |  |  |  |
|  | tax_third_stage | 52551 |  |  |  |  |
|  | tax_fourth_stage | 250400 |  |  |  |  |
| Solidarity Surcharge | surcharge | 0.055 |  |  |  |  |
| Solidarity Exemption Limit | surcharge_limit | 972 |  |  |  |  |
| Alternative Surcharge Rate | surcharge_alt | 0.2 |  |  |  |  |
| Child credit | Ch_cred | 2068 |  |  |  |  |
| Social security | Sickness | Pension | Unemployment | Care | Alternative employer rate | SSC Factor F |
| period_1 | 6 | 12 | 12 | 12 | 12 | 12 |
| period_2 | 6 |  |  |  |  |  |
| sum (Month's) | 12 | 12 | 12 | 12 | 12 | 12 |
| employer_1 | 0.073 | 0.0995 | 0.014 | 0.00975 |  | 0.7472 |
| employer_2 | 0.07 |  |  |  |  |  |
| employee_1 | 0.082 | 0.0995 | 0.014 | 0.00975 |  | 0.7472 |
| employee_2 | 0.079 |  |  |  |  |  |
| childless_1 | 0.082 | 0.0995 | 0.014 | 0.01225 |  | 0.7472 |
| childless_2 | 0.079 |  |  |  |  |  |
| ceil | 44100 | 64800 | 64800 | 44100 |  |  |
| SSC Floor | SSC_floor | 9600 |  |  |  |  |
| Intermediate SSC Ceiling | SSC_floor1 | 4800 |  |  |  |  |

## 2009 Tax equations

The equations for the German system in 2009 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 | Ione_allce | J | Lone_al* (Children>0)* (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. CG 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 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.

## Greece 2009

## The tax/benefit position of single persons

1. Gross wage earnings

Wage level (per cent of average wage) 67

| Number of children | none | none | none | 2 |
| :--- | ---: | ---: | ---: | ---: |
|  | 16763 | 25145 | 41908 | 18440 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children

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
8. State and local taxes
9. Employees' compulsory social security contributions

| Gross earnings | 2682 | 4023 | 6705 | 2950 |
| :--- | :--- | :--- | :--- | :--- |
| Taxable income | Total | 2682 | 4023 | 6705 |
|  |  |  |  |  |
| 10. Total payments to general government $(\mathbf{7 + 8 + 9 )}$ |  | 3202 | 6304 | 13026 |

2682
4023
6705
2950
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 | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  | 520 | 2280 | 6321 | 372 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 2682 | 4023 | 6705 | 2950 |
|  |  |  |  |  |
| Total | 2682 | 4023 | 6705 | 2950 |
|  | 3202 | 6304 | 13026 | 3323 |

Total payments less cash transfers: Spouse
Total tax wedge: Principal earner
Total tax wedge: Spouse

|  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Total | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 |
|  | 13561 | 18841 | 28882 | 15117 |
|  | 4704 | 7056 | 11759 | 5174 |
|  |  |  |  |  |
|  | $3.1 \%$ | $9.1 \%$ | $15.1 \%$ | $2.0 \%$ |
| $16.0 \%$ | $16.0 \%$ | $16.0 \%$ | $16.0 \%$ |  |
| $19.1 \%$ | $25.1 \%$ | $31.1 \%$ | $18.0 \%$ |  |
| $36.8 \%$ | $41.5 \%$ | $46.2 \%$ | $36.0 \%$ |  |
|  |  |  |  |  |
|  | $37.0 \%$ | $37.0 \%$ | $45.4 \%$ | $37.0 \%$ |
| n.a. | n.a. | n.a. | n.a. |  |
| $50.8 \%$ | $50.8 \%$ | $57.4 \%$ | $50.8 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |
|  |  |  |  |  |

## Greece 2009

## 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 | 30174 | 40232 | 50290 | 36879 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 4828 | 6437 | 8046 | 5901 |
|  | Work-related expenses |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 4828 | 6437 | 8046 | 5901 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 25346 | 33795 | 42243 | 30979 |
| 5. | Central government income tax liability (exclusive of tax credits) | 2837 | 2837 | 4061 | 2808 |
| 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) | 2837 | 2837 | 4061 | 2808 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 4828 | 6437 | 8046 | 5901 |
|  | Taxable income |  |  |  |  |
|  | Total | 4828 | 6437 | 8046 | 5901 |
| 10. | Total payments to general government (7+8+9) | 7664 | 9274 | 12107 | 8709 |
| 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) | 22510 | 30958 | 38183 | 28170 |
| 13. | Employer's compulsory social security contributions | 8467 | 11289 | 14111 | 10348 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 9.4\% | 7.1\% | 8.1\% | 7.6\% |
|  | Employees' social security contributions | 16.0\% | 16.0\% | 16.0\% | 16.0\% |
|  | Total payments less cash transfers | 25.4\% | 23.1\% | 24.1\% | 23.6\% |
|  | Total tax wedge including employer's social security contributions | 41.7\% | 39.9\% | 40.7\% | 40.4\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 37.0\% | 37.0\% | 37.0\% | 37.0\% |
|  | Total payments less cash transfers: Spouse | 16.0\% | 16.0\% | 37.0\% | 16.0\% |
|  | Total tax wedge: Principal earner | 50.8\% | 50.8\% | 50.8\% | 50.8\% |
|  | Total tax wedge: Spouse | 34.4\% | 34.4\% | 50.8\% | 34.4\% |

The national currency is the euro (EUR). In 2009, EUR 0.72 was equal to USD 1. In 2009, the average worker earned EUR 25 145* (Secretariat estimate).

## 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. Individuals who have a yearly income of more than EUR 3000 (or EUR 6000 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. Children under the age of 18 are, in principle, taxed jointly with 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.
- All bank interest payments on mortgage loans are deductible from taxable income if the loans have been used to finance the acquisition of the taxpayer's main residence and if they have been taken before the 31st of December 2002.


### 1.1.2.2. Non-standard tax reliefs

- Main non-standard tax allowances related to actual expenses incurred that are deductible from total declared taxable income:
* Donations to the State, municipalities and communities, state universities, the church, the monasteries on Mount Athos, the World Patriarchate of Constantinople, the Patriarchate of Alexandria and Jerusalem, the Sacred Monastery of Mount Sinai, the State and municipal nursing homes and private hospitals which are subsidised from State budget and the Archaeological Resources Fund.

[^47]* Donations to public or private non-profit making legal persons which have been or are being legally constituted for cultural purposes are deductible up to 30 per cent of total taxable income but only if the donation exceeds EUR 100.
* Amounts donated to philanthropic institutions, non-profit making bodies which provide educational services or grant scholarships, Greek legal persons governed by private or public law which have been or are being set up for philanthropic purposes and legally constituted sports clubs recognised by the Secretariat-General for Sports.
* 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 amount of deduction cannot exceed 10 per cent of the tax-free income step of the taxpayer's income tax schedule (in 2008, the deduction cannot exceed EUR 1 200).
* Expenses paid to doctors for the taxable person, his/her spouse and his/her dependents
* Fees paid to lawyers for the provision of law advice for the taxable person, his/her spouse and his/her dependents.
*The amount of rent paid for the main residence of the taxpayer or his/her family's main residence, provided that the taxpayer is under 40 years old and the residence is located outside of the urban areas of Attica and Thessalonica. This deduction is offered during the first 5 years of the loan.
* The amount of rent paid by the taxpayer at the location where he is detached, given that he leases the private residence that he owns elsewhere. The deduction cannot exceed EUR 300 per month. Taxpayers who receive a housing allowance are not entitled to this deduction.
* 20 per cent of the amount - and up to EUR 3000 - paid to mutual funds that invest in Greek bonds and shares that are listed on the Athens Stock Exchange, for shares of mutual funds bought after 1-1-2005 and withheld until 31-12-2009.
* 20 per cent of the amount - and up to EUR 700 - spent on the installation of natural gas systems, solar panel systems, thermal insulation and teleheating systems.
EUR 2400 for the taxpayer with invalidity of over 67 per cent and for any dependent handicapped person with invalidity of over 67 per cent living with the taxpayer.
* 40 per cent of the amount of certain expenses (incurred by the taxable person, his/her spouse and dependent children) as defined by law and up to EUR 8 000. Among these are expenses for maintenance and repair of buildings as well as expenses for the provision of services by restaurants, beauty salons, etc.
- Non-standard tax credits related to actual expenses incurred:
* 20 per cent of the total annual amount of rent paid for the taxpayer's main residence, not exceeding EUR 1 200, 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 240).

[^48] provided that the dwelling is situated in the same region of the school or university.

* 20 per cent of the educational expenses incurred by the taxpayer for himself or for his dependent children up to a maximum of EUR 1200 per person. The expenses paid by divorced parents are also included. The tax credit cannot exceed EUR 240.

Note: The amount of each of these expenses that form the basis of the tax credit cannot exceed 10 per cent of the first tax free income step of the taxpayer's income tax schedule (for 2008 the deduction cannot exceed EUR 1 200). All expenses have to be declared; they are calculated jointly for both spouses and are attributed to each spouse according to their declared income.

* 20 per cent of the expenses for hospital care of the taxpayer and his/her dependents. The total credit cannot exceed EUR 6000 . Medical 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
* 20 per cent of the annual interest of mortgage loans taken after 1 January 2003 for the principal residence of the taxpayer. The relief is limited where the financed amount does not exceed EUR 200000.
* 20 per cent of the interest paid on loans granted 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 deriving from the part of the loan that does not exceed EUR 200 000. The credit only applies to loans taken after 1 January 2003.
* 20 per cent of the amount of alimony (with a maximum of EUR 3000 ) that is paid to a spouse and is adjudicated/or agreed by notary deed. The tax reduction cannot exceed EUR 600.
* 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 on 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.

Note: Taxpayers who reside abroad but derive taxable income from sources in Greece are not eligible for these deductions, with the exception of residents of the EU member states who derive at least 90 per cent of their total income from sources in Greece.

* Spouses: if a wife earns taxable income, following additional amounts are taxdeductible: a) medical expenses of the wife, her children from a former marriage, her children born out of wedlock, her parents and orphaned relatives of first and second degree of kind, b) interest arising from first-home loans, c) additional child expenses when the wife works in a border area. If from the joint tax return submitted by the spouses no tax obligation arises for one of them, or the payable amount of tax is less than the sum of the deductions (medical expenses, rent of main residence of children who are studying, expenses for additional outside or home tuition, deductions for children because of service in border areas) then the whole amount of the deductions or the ensuing difference is attributed to the payable tax of the other spouse.


### 1.1.2.3. Tax calculation

For income tax purposes, there are six categories of taxable income: income from immovable property (Category 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).

The 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 (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). If the taxpayer's final tax liability exceeds the aggregate of the amounts already withheld or prepaid, the tax is generally payable in three equal bimonthly instalments. Any excess tax paid or withheld will be refunded.

### 1.2. Rate schedule

The following progressive rate schedules apply:
Tax schedule for wage-earners and pensioners for income earned in 2009

| Income step (EUR) |  |  | Total |  |
| :--- | :---: | ---: | ---: | ---: |
|  | Tax rate \% |  | Income (EUR) | Tax (EUR) |
|  |  |  | 12000 | 0 |
| 18000 | 0 | 4500 | 30000 | 4500 |
| 45000 | 25 | 15750 | 75000 | 20250 |
| Above 75000 | 35 |  |  |  |

Note: Married persons must submit a joint return, but taxes, duties and levies are calculated separately on the income declared by each spouse.

Tax schedule for non salaried persons - self employed for income earned in 2009

| Income step (EUR) | Tax rate \% | Tax for the step (EUR) | Total |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Income (EUR) | Tax (EUR) |
| 10500 | 0 | 0 | 10500 | 0 |
| 11500 | 15 | 225 | 12000 | 225 |
| 18000 | 25 | 4500 | 30000 | 4725 |
| 45000 | 35 | 15750 | 75000 | 20475 |
| Above 75000 | 40 |  |  |  |

Note: Married persons must submit a joint return, but taxes, duties and levies are calculated separately on the income declared by each spouse.

The tax free amount of income in respect of dependent children is increased as follows:

- by EUR 1000 if the family comprises one child;
- by EUR 2000 if the family comprises two children;
- by EUR 10000 if the family comprises three children and with an additional EUR 1000 for each additional child.

The income tax schedule for wage-earners with one dependent child (income earned in 2009):

| Income step (EUR) | Tax rate \% |  | Total |  |
| :--- | :---: | :---: | :---: | ---: |
|  |  |  |  |  |
|  |  |  | Income (EUR) | Tax (EUR) |
| 13000 | 0 | 0 | 13000 | 0 |
| 45000 | 25 | 4250 | 30000 | 4250 |
| Above 75000 | 35 | 15750 | 75000 | 20000 |

The income tax schedule for wage-earners with two dependent children (income earned in 2009):

| Income step (EUR) |  |  | Total |  |
| :--- | :---: | :---: | :---: | ---: |
|  | Tax rate \% |  | Income (EUR) | Tax (EUR) |
|  |  | 0 | 14000 | 0 |
| 16000 | 0 | 4000 | 30000 | 4000 |
| 45000 | 25 | 15750 | 75000 | 19750 |
| Above 75000 | 35 |  |  |  |

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 (ETAM) 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 (\%) (as from 1-1-03):

|  | Employer | Employee | Total |
| :--- | ---: | ---: | ---: |
| 1. Social Insurance Organisation (IKA) | 18.43 | 9.22 | 27.65 |
| 2. Subsidiary Social Insurance Fund (ETAM) | 3.00 | 3.00 | 6.00 |
| 3. Other funds | 6.63 | 3.78 | 10.41 |
| Total | $\mathbf{2 8 . 0 6}$ | $\mathbf{1 6 . 0 0}$ | $\mathbf{4 4 . 0 6}$ |

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 (2009-ceiling). On the other hand, for individuals who have started working after 1-1-1993, the social security contributions ceiling is EUR 5 543.35.

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.

## 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 2007 the monthly state benefit for a family that has a 3rd child is EUR 164.45. This benefit is taxfree 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 41.10 for each of every unmarried child under the age of 23 . The Law also provides for a multi-children pension of EUR 94.58 that is given to the mother who no longer is the beneficiary of the monthly multi-children allowance of EUR 41.10. 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 2006

As of 2006, tax rates range between 0 per cent and 40 per cent. As of 2008, the tax brackets have changed and rates have been lowered. The tax-free first tax bracket increased to EUR 12000 in 2007. A number of non-standard tax allowances have been introduced during the last years.

Since 2007, the monthly benefit for more than 2 children is free of tax. As from 2006, a lump sum allowance of EUR 2000 is given to every mother for every of her 3rd and additional child.

## 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, employers' Social Security contributions, 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.

1. Structure of earnings survey. This survey is conducted every 4 years. 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.
2. 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 C to K 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 average wage in 2002 was EUR 16776 and in 2006 was EUR 23 163. According to the "Quarterly survey of labour cost index", the compensation index for the period 2006-2008 increased by 6.0305 per cent in 2007 and 3.4557 per cent in 2008, implying an average wage of EUR 25409 in 2008. At the same time, the compensation index decreased by 1.69 per cent in the 1st quarter of 2009. The country estimate for the average wage of gross income in 2009 is therefore EUR 24979 (with the ISIC Rev. 3.1 classification and EUR 24141 with the ISIC Rev. 4 classification). It is pointed out that from 2009 onwards the surveys are conducted with the new ISIC Rev. 4 (sectors B-N) classification. The 2002 and 2006 surveys do not include the Primary sector, the Public sector, as well as the sectors of Health and Education.

### 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.

### 5.3. Effect on taxes and subsidies when the wife earns income

On the wife's tax/benefit position
The wife who is employed receives the same tax treatment as every other taxpayer.
On the husband's reliefs and cash transfers
The family subsidies payable to the husband by his employer are not affected. However, in the case of subsidies granted by the Manpower Employment Organisation (OAED), only one of the spouses is entitled to the transfer.

2009 Parameter values

| Average earnings/yr | Ave_earn | 25145 | Secretariat estimate |
| :--- | :--- | :--- | :--- |
| Tax credit | Child_cred | 0 |  |
| Rates of family subsidies | Wife_sub | 0.1 |  |
| Paid by employers | Child_sub | 0.05 | 12000 (Low_thrsh) |
| Children (up to 3) | Tax_sch | 0 | 30000 (Medium_thrsh) |
| Income tax schedule | Low_rate | 0.25 | 75000 (Top_thrsh) |
|  | Medium_rate | 0.35 |  |
|  | Top_rate | 0.4 |  |
|  | Bandaugment_ch | 1000 |  |
|  | Bandaugment_ch3 | 10000 | 0.16 |
|  | SSC_rate | 0.2806 |  |
|  | SSC_rate_empr | 77606.9 |  |
|  | SSC_ceil | 1 |  |

## 2009 Tax equations

The equations for the Greek system in 2009 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* ${ }^{\text {(1+Married* }}$ 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 |  |  |
| 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+(Children=3)*Bandaugment_ch3+IF(Children >3,Bandagument_ch3+(Children-3)*Bandaugment_ch,0) |
|  |  | S | IF(earn_spouse>0, <br> IF(tax_inc_princ<Effect_low_band_princ,MIN(band_increas <br> e_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 | Positive(MINA(tax_inc,Medium_thrsh)- <br> Effect_low_band)*Low_rate+ <br> Positive(MINA(tax_inc,Top_thrsh)- <br> MAXA(Effect_low_band,Medium_thrsh))*Medium_rate+ <br> Positive(tax_inc- <br> MAXA(Effect_low_band,Top_thrsh))*Top_rate |
| 6. Tax credits: | tax_cr |  |  |
| 7. CG 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),SS C_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 2009

## 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
Wage level (per cent of average wage)

| Number of children | none | none | none | 2 |
| :--- | ---: | ---: | ---: | ---: |
|  | 1651179 | 2476768 | 4127947 | 1651179 |

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)

Central government income tax liability (exclusive of tax credits)
Surtax
6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid
8. State and local taxes
9. Employees' compulsory social security contributions

Gross earnings

| Total | 99974 | 25671 | 0 | 99974 |
| :--- | ---: | ---: | ---: | ---: |
|  | 197238 | 523966 | 1144061 | 197238 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 280700 | 421051 | 701751 | 280700 |
|  |  |  |  |  |
| Total | 280700 | 421051 | 701751 | 280700 |
|  | 477939 | 945016 | 1845812 | 477939 |

10. Total payments to general government $(7+8+9)$
11. Cash transfers from general government

For head of family
For two children

|  | 0 | 0 | 0 | 355200 |
| :---: | ---: | ---: | ---: | ---: |
| Total | 0 | 0 | 0 | 355200 |
|  | 1173240 | 1531752 | 2282135 | 1528440 |
|  |  |  |  |  |
|  | 487098 | 749666 | 1278043 | 487098 |
|  | 48168 | 60552 | 85319 | 48168 |
| Total | 535265 | 810217 | 1363362 | 535265 |
|  |  |  |  |  |
|  | $11.9 \%$ | $21.2 \%$ | $27.7 \%$ | $11.9 \%$ |
|  | $17.0 \%$ | $17.0 \%$ | $17.0 \%$ | $17.0 \%$ |
|  | $28.9 \%$ | $38.2 \%$ | $44.7 \%$ | $7.4 \%$ |
|  | $46.3 \%$ | $53.4 \%$ | $58.4 \%$ | $30.1 \%$ |
|  |  |  |  |  |
|  | $44.0 \%$ | $62.0 \%$ | $53.0 \%$ | $44.0 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
|  | $57.3 \%$ | $71.5 \%$ | $64.8 \%$ | $57.3 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |

## Hungary 2009 <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 | 2476768 | 3302357 | 4127947 | 3302357 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance |  |  |  |  |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 0 | 0 | 0 | 0 |
|  | Work-related expenses | 0 | 0 | 0 | 0 |
|  | 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) | 2476768 | 3302357 | 4127947 | 3302357 |
| 5. | Central government income tax liability (exclusive of tax credits) |  |  |  |  |
|  | Central government income tax liability (exclusive of tax credits) | 549636 | 698243 | 846849 | 698243 |
|  | Surtax | 0 | 0 | 0 | 0 |
|  | Total | 549636 | 698243 | 846849 | 698243 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 25671 | 161751 | 125645 | 161751 |
|  | Married or head of family |  |  |  |  |
|  | Children | 0 | 0 | 0 | 0 |
|  | Other |  |  |  |  |
|  | Total | 25671 | 161751 | 125645 | 161751 |
| 7. | Central government income tax finally paid (5-6) | 523966 | 536492 | 721204 | 536492 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 421051 | 561401 | 701751 | 561401 |
|  | Taxable income |  |  |  |  |
|  | Total | 421051 | 561401 | 701751 | 561401 |
| 10. | Total payments to general government (7+8+9) | 945016 | 1097892 | 1422955 | 1097892 |
| 11. Cash transfers from general governme For head of family |  |  |  |  |  |
|  |  |  |  |  |  |
|  | For two children | 319200 | 319200 | 319200 | 0 |
|  | Total | 319200 | 319200 | 319200 | 0 |
| 12. | Take-home pay (1-10+11) | 1850952 | 2523665 | 3024192 | 2204465 |
| 13. Employer's wage dependent contributions and taxes |  |  |  |  |  |
|  | Employer's compulsory social security contributions | 749666 | 993215 | 1236763 | 993215 |
|  | Payroll taxes | 60552 | 96335 | 108719 | 96335 |
|  | Total | 810217 | 1089550 | 1345483 | 1089550 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 21.2\% | 16.2\% | 17.5\% | 16.2\% |
|  | Employees' social security contributions | 17.0\% | 17.0\% | 17.0\% | 17.0\% |
|  | Total payments less cash transfers | 25.3\% | 23.6\% | 26.7\% | 33.2\% |
|  | Total tax wedge including employer's social security contributions | 43.7\% | 42.5\% | 44.7\% | 49.8\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 62.0\% | 62.0\% | 62.0\% | 62.0\% |
|  | Total payments less cash transfers: Spouse | 18.5\% | 35.0\% | 44.0\% | 35.0\% |
|  | Total tax wedge: Principal earner | 71.5\% | 71.5\% | 71.5\% | 71.5\% |
|  | Total tax wedge: Spouse | 39.1\% | 50.4\% | 57.3\% | 50.4\% |

The national currency is the Forint (HUF). In 2009, HUF 202.06 was equal to USD 1. In that year, the average worker earned HUF 2476768 (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 18 per cent of wage income earned, with a monthly maximum of HUF 11 340. If the worker's annual income exceeds HUF 1250 000, the tax credit is reduced at the rate of HUF 0.09 for every HUF 1 above this limit. The credit if fully extinguished once income reaches HUF 2762000.
- Tax credit for children: For families having at least three children, tax liability can be reduced by the child tax credit, which amounts to HUF 4000 per month/each dependent. This credit can be applied by a pregnant woman (or her husband) as from the 91st day after conception until birth of the child. The tax credit may be claimed by one spouse or be split between the spouses. If parent's total annual income exceeds a limit defined in the legislation (the income limit differs according to the number of children, e.g. for families with three children it amounts to HUF 6 million), the credit is reduced at the rate of HUF 0.2 for every HUF 1 above the limit.


### 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 certain insurance schemes, education-related expenses, bodily disability, agricultural activities, grants made for public purposes and allotted to foundations. Tax deduction is available for pensioners and those having income from abroad.


### 1.1.3. Tax schedule

| Taxable income (HUF) |  |  |  |
| :---: | :---: | :---: | :---: |
| Lower limit | Upper limit | Tax on lower limit (HUF) | Tax rate on income in bracket (\%) |
| 0 | 1900000 | 0 | 18 |
| 1900001 | And above | 342000 | 36 |

Private persons with a combined annual income of more than HUF 7446000 must pay a surtax. The tax base is the portion of the income over HUF 7446000 ; the tax rate is 4 per cent.

### 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 activities, employment and business activities.

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

### 2.1. Employees' contributions

### 2.1.1. Pensions

A new pension system became effective on 1 January 1998. The pension system now has three pillars and consists of a public scheme, private pension funds and voluntary mutual insurance funds/insurance companies/employer pension institutions. Participation in the public scheme is obligatory for all employees. At the same time, the first group of employees (e.g. who first join(ed) the social security system in 2009 and had not reached the age of 35 at that time) were/are obliged to enter a private pension fund (2nd pillar). On the other hand, the second group of employees (e.g. who has joined the social security scheme before 2009 and had not reached the age of 30 in 2009) had/has the opportunity to enter a private pension fund. Employees remaining in the public scheme continue to pay 9.5 per cent contributions to the state pension fund (the public scheme). For the purpose of this report, a pension contribution (payable to the state pension fund) of 9.5 per cent has been taken into account. The maximum annual amount of this contribution is HUF 707370.

### 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 AW 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 5 per cent of gross earnings in the period January-June 2009. As from July 2009 the rate of health security contribution is 2 per cent on the gross earnings not exceeding twice the minimum wage, and 5 per cent on the gross earnings exceeding twice the minimum wage. In 2009, the minimum wage amounts to HUF 71500 per month.

### 2.2.3. Unemployment

The employer has to pay 3 per cent of gross earnings (employer's contribution) in the period January-June 2009. As from July 2009 the rate of employer's contribution is 1 per cent on the gross earnings not exceeding twice the minimum wage, and 3 per cent on the gross earnings exceeding twice the minimum wage.

### 2.2.4. Others

None. 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 reflect payroll taxes that consist of the employee lump sum health contribution as well as a percentage rate training contribution. The lump sum health contribution amounts to HUF 1950 per month (HUF 23400 on a yearly basis). The training contribution amounts to 1.5 per cent of salaries paid.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status

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 2008

The income bracket in the progressive tax rate structure has been indexed.
The income ceiling related to the surtax was increased to HUF 7446000.

As of July 2009, employers' contributions were reduced, in total, by 5 percentage points for income up to twice the minimum wage.

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

After 1998 (when the pension reform was introduced), private individuals have had the opportunity or were/are obliged to enter private pension funds (the second pillar of the social security system). According to the relevant legislation in force, payments made by employers (on behalf of their employees or to supplement the payments of employees) to private pension funds 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 of 2009, 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 exempt from the personal income tax and social security contributions. 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 according to the progressive tax rate structure and social security contributions, plus training contributions are also payable. Sponsor's donations paid by the employer to its employees' voluntary mutual insurance fund are taxable according to the progressive tax rate schedule. In addition, employees can apply a 30 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 (including taxable contributions made by the employer). 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 of 2009, 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 exempt from the personal income tax and social security contributions. Contributions in excess of this limit are taxable according to the progressive tax rate structure and social security contributions, plus training contribution are also payable. In addition, employees can apply a 30 per cent tax credit (with limitations, e.g. the maximum amount of HUF 100000 per year) on these taxable payments.

2009 Parameter values

|  | Ave_earn | 2476768 | Secretariat estimate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Child allowance (per child) | child_al | 0 |  |  |  |
| Social security allowance | SSC_al | 0 |  |  |  |
| Income tax schedule | tax_sch | 0.18 | 1900000 |  |  |
|  |  | 0.36 |  |  |  |
| Surtax | Surtax_rate | 0.04 |  |  |  |
|  | Surtax_limit | 7446000 |  |  |  |
| Social security contributions | SSC_unemp | 0.015 |  |  |  |
|  | SSC_p | 0.095 |  |  |  |
|  | SSC_lim | 7446000 |  |  |  |
|  | SSC_h | 0.06 |  |  |  |
| Tax credits | tax_cr_pe | 0.18 |  |  |  |
|  | tax_cr_ce | 11340 |  |  |  |
|  | tax_cr_li | 1250000 |  |  |  |
|  | tax_cr_ra | 0.09 |  |  |  |
|  | CL_rates | 1 | 0 |  |  |
|  |  | 2 | 0 |  |  |
|  |  | 3 | 48000 |  |  |
|  |  | 4 | 48000 |  |  |
|  | CL_limits | 3 | 6000000 |  |  |
|  |  | 4 | 6500000 |  |  |
|  | CL_limit_rate | 0.2 |  |  |  |
| Employers | SSC_empr_1 | 0.32 |  |  |  |
|  | SSC_empr_2 | 0.27 | 143000 |  |  |
|  |  | 0.32 |  |  |  |
| Payroll taxes | payroll_rate1 | 23400 |  |  |  |
|  | payroll_rate2 | 0.015 |  |  |  |
|  |  | \# of children | 1 | 2 | $3+$ |
| Transfers for children | CB_rates | 0 | 12200 | 13300 | 16000 |
| (monthly) |  | 1 | 13700 | 14800 | 17000 |

## 2009 Tax equations

The equations for the Hungarian system in 2009 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: |  |  |  |
| Children | child_all | P | 0 |
| Total | 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) |
| Surtax | Surtax | B | MAX(0, tax_inc-Surtax_limit)*Surtax_rate |
| 6. Tax credits | tax_cr | B | MIN(CG_tax_excl, MAX(0, MIN(earn*tax_cr_pe, tax_cr_ce*12)-MAX(0, (earn-tax_cr_li)*tax_cr_ra))+MAX(0, MIN(MAX(CG_tax_excl-Employee Tax Credit, 0), IF(Children<3,0,MAX(0,Children*VLOOKUP(Children,CL_rat es,2)-MAX(0,(earn- <br> VLOOKUP(Children,CL_limits,2)))*CL_limit_rate))))) |
| 7. CG tax | CG_tax | B | CG_tax_excl-tax_cr+Surtax |
| 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/2*SSC_empr_1+Tax(earn/12,SSC_empr_2)*6 |
| Employer's payroll taxes | Payroll | B | IF(earn>0, payroll_rate1, 0)+earn*payroll_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.

## 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 2009 <br> The tax/benefit position of single persons

1. Gross wage earnings

Wage level (per cent of average wage) 67

| Number of children | none | none | none | 67 |
| :--- | ---: | ---: | ---: | ---: |
|  | 2806269 | 4209404 | 7015673 | 2806269 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
$112251 \quad 168376 \quad 280627112251$
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
8. State and local taxes

| Total | 506466 | 506466 | 506466 | 506466 |
| :---: | ---: | ---: | ---: | ---: |
|  | 142792 | 467422 | 1116680 | 142792 |
|  | 352916 | 529375 | 882291 | 352916 |
|  |  |  |  |  |
|  | 7534 | 7534 | 7534 | 7534 |
|  |  |  |  |  |
| Total | 7534 | 7534 | 7534 | 7534 |
|  | 503243 | 1004330 | 2006505 | 503243 |
|  | 2303026 | 3205074 | 5009168 | 2303026 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 530468 |
|  | 0303026 | 3205074 | 5009168 | 2833494 |
|  | 173147 | 259720 | 432867 | 173147 |
|  |  |  |  |  |
|  | $17.7 \%$ | $23.7 \%$ | $28.5 \%$ | $17.7 \%$ |
|  | $0.3 \%$ | $0.2 \%$ | $0.1 \%$ | $0.3 \%$ |
|  | $17.9 \%$ | $23.9 \%$ | $28.6 \%$ | $-1.0 \%$ |
|  | $22.7 \%$ | $28.3 \%$ | $32.7 \%$ | $4.9 \%$ |
|  |  |  |  |  |
|  | $35.7 \%$ | $35.7 \%$ | $35.7 \%$ | $40.5 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
|  | $39.4 \%$ | $39.4 \%$ | $39.4 \%$ | $44.0 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
|  |  |  |  |  |

## Iceland 2009

## The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage) 100-0
Number of children 2
2. Standard tax allowances

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)
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

| $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: |
| 2 | 2 | none |
| 5612538 | 7015673 | 5612538 |

$42094045612538 \quad 7015673 \quad 5612538$

| Total | 168376 | 224502 | 280627 | 224502 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 4041028 | 5388037 | 6735046 | 5388037 |

1298517

836474

| Total | 973888 | 836474 | 1012932 | 836474 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 462043 | 610214 | 462043 |
|  | 490330 | 529375 | 882291 | 529375 |
|  |  |  |  |  |
|  | 7534 | 15068 | 15068 | 15068 |
|  |  |  |  |  |
| Total | 7534 | 15068 | 15068 | 15068 |
|  | 497864 | 1006486 | 1507573 | 1006486 |

Total | 372794 | 305444 | 238093 | 0 |  |
| ---: | ---: | ---: | ---: | ---: |
|  | 372794 | 305444 | 238093 | 0 |
|  | 4084334 | 4911496 | 5746193 | 4606053 |
|  | 259720 | 346294 | 432867 | 346294 |
|  |  |  |  |  |
|  | $11.6 \%$ | $17.7 \%$ | $21.3 \%$ | $17.7 \%$ |
| $0.2 \%$ | $0.3 \%$ | $0.2 \%$ | $0.3 \%$ |  |
| $3.0 \%$ | $12.5 \%$ | $18.1 \%$ | $17.9 \%$ |  |
|  | $8.6 \%$ | $17.6 \%$ | $22.9 \%$ | $22.7 \%$ |
|  |  |  |  |  |
|  |  |  |  |  |
|  | $40.5 \%$ | $40.5 \%$ | $40.5 \%$ | $35.7 \%$ |
| $41.0 \%$ | $40.5 \%$ | $40.5 \%$ | $35.7 \%$ |  |
| $44.0 \%$ | $44.0 \%$ | $44.0 \%$ | $39.4 \%$ |  |
| $44.5 \%$ | $44.0 \%$ | $44.0 \%$ | $39.4 \%$ |  |

The national currency is the Króna (plural: Krónur) (ISK). In 2009, ISK 123.66 was equal to USD 1. In 2009, the average worker is expected to earn ISK 4209404 (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 506466 in 2009, 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, which amounts to 4 per cent of wages, 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 considered to be a non-standard relief in this Report. This rate is temporarily increased to 6 per cent for the period 1 March 2009 to 1 October 2010.


### 1.1.2.2. Main non-standard tax reliefs

- 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 2009 is ISK 246944 for a single person, ISK 317589 for a single parent and ISK 408374 for a married couple. The following constraints apply to interest rebates: 1) They can't 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 554364 for an individual, ISK 727762 for a single parent and ISK 901158 for a couple. 3) Six 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 7119124 for a single individual and ISK 11390599 for a couple and are eliminated altogether at a 60 per cent higher amount. (These amounts are based on income in the year 2009 but are paid out in 2010.)

[^49]- Seamen are entitled to a special credit against income tax of ISK 987 per day at sea in 2009.


### 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 central government income tax rate in 2009 is 24.10 per cent and applies to all personal income in excess of ISK 113456 per month (ISK 1361468 per year). For the period 1 July to 31 December 2009, an additional 8 per cent income tax is due on income greater than ISK 700000 per month. Tax relief is provided by the basic credit described in Section 1.1.2.1.

The tax on capital income is 10 per cent. It is levied on all capital income of individuals, such as interest, dividends, rents, etc. Such capital income is not subject to the personal income tax described above.

### 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 11.24 and 13.28 per cent between municipalities. The average rate in 2009 is 13.10 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 7534 in 2009, provided the individual's taxable income was at least ISK 1361468.

### 2.2. Employers' contributions

Employers have to pay a social security tax on total wages of 5.34 per cent. As of 1 July 2009, this rate has increased to 7.00 per cent. In addition a 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 plus a fixed amount for each child under the age of seven. In 2009 they are as follows (in ISK per year):

| For each child under the age of seven regardless of income: | 61191 |
| :---: | :---: |
| Children under the age of eighteen at the end of 2009: |  |
| 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: |  |
| For one child | 2 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 2009 but are paid out in 2010 (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, increasing to 8 per cent as of the beginning of 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 at the beginning of 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 at the time 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

In 1997-2006, the government pursued a policy of reducing the marginal tax rate. It did so with a reduction of 1.1 percentage points at the beginning of 1997, by 0.9 percentage points at the beginning of 1998 and by 1 percentage point at the beginning of 1999. From 2001, the rate was lowered by 0.33 percentage points to compensate for a similar increase in local government rates. In 2002, the rate was further lowered by 0.33 percentage points and in 2005-2007 it was lowered by 1 percentage point each year. This development was reversed in 2009 when policy responded to the heavy debt burden placed on the Treasury in a severe financial and economic crisis, by raising the income tax rate by 1.35 percentage
points on 1 January 2009. From 1998 onwards, the combined central government and average local government personal income tax rate has been as follows:

|  | Central government general <br> tax rate (\%) | Municipal tax rate (\%) | Total tax rate (\%) | Central government surtax (\%) |
| :---: | :---: | :---: | :---: | :---: |
| 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 |

### 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. From the fiscal year 2006 onwards, the tax has been abolished.

### 4.4. A revision of the child benefit system

Child benefits are granted for each child, subject to income thresholds. The amendments to tax legislation that came into effect at the end of 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 2004-2009, benefits are as follows (in ISK per year):

|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| For all children under the age of seven | 37397 | 46747 | 56096 | 57891 | 61191 | 61191 |
| Children under the age of sixteen: |  |  |  |  |  |  |
| First child | 126952 | 139647 | 139647 | 144116 | 152331 | 152331 |
| Each additional child | 151114 | 166226 | 166226 | 171545 | 181323 | 181323 |
| Benefits for single parents: |  |  |  |  |  |  |
| First child | 211447 | 232591 | 232591 | 240034 | 253716 | 253716 |
| Each additional child | 216902 | 238592 | 238592 | 246227 | 260262 | 260262 |
| Income threshold for benefit curtailment: |  |  |  |  |  |  |
| For couples | 1487463 | 1859329 | 2231195 | 2880000 | 3600000 | 3600000 |
| For a single parent | 743732 | 929665 | 1115598 | 1440000 | 1800000 | 1800000 |
| Curtailment of benefits: |  |  |  |  |  |  |
| For one child | 3\% | 3\% | 2\% | 2\% | 2\% | 2\% |
| For two children | 7\% | 7\% | 6\% | 5\% | 5\% | 5\% |
| For three children or more | 9\% | 9\% | 8\% | 7\% | 7\% | 7\% |

The data for 2009 is subject to change as the benefits are not payable until 2010.

### 4.5. A revision of the 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 as of the beginning of 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 2005-2007. 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 are assumed to stay in effect in 2009.

### 4.6. Transferability of the basic tax credit between spouses

The basic tax credit was made transferable between spouses in stages. See Section 1.1.2.1 above. In the income 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 earnings data as of 2005 refer to average workers in five categories, 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. Approximately 75 per cent of the labour force in economic activities $\mathrm{C}-\mathrm{K}$ are in D, F, G, I and J.

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 under Section 4.1 above.

2009 Parameter values

| AW-income | Ave_earn | 4209404 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Pension rate for tax allowance | pension_rate | 0.04 |  |
| Tax credit | Basic_crd | 506466 |  |
|  | Married_propn | 1 |  |
| Central income tax | central_rate | 0.241 |  |
| Special tax | special_rate | 0 |  |
| Threshold | special_thrsh |  |  |
| Local tax | local_rate | 0.131 |  |
| Church tax | church_tax | 0 |  |
| Social Security Contr. | SSC_fixed | 7534 |  |
|  | SSC_thrsh | 1361468 |  |
| Employer SSC | SSC_empr | 0.0617 |  |
| 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 | 0.02 |  |
| Reduction rate (two children) | SA_redn_2 | 0.05 |  |
| Reduction rate (tree or more children) | SA_redn_3 | 0.07 |  |

## 2009 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_inc* central_rate +(IF(tax_inc>8400000, (tax_inc$\left.8400000)^{*} 0.08 *(6 / 12), 0\right)$ ) |
| 6. Tax credits: | tax_cr | P | MIN(Basic_crd+Married_propn*(Basic_crd-tax_cr_spouse), CG_tax_excl_prin+local_tax_princ) |
|  |  | S | MIN(Basic_crd, CG_tax_excl_spouse+local_tax_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 | B | tax_inc*local_rate |
| 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 | Children*CA+(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 2009

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 |
| 1. | Gross wage earnings | 26515 | 39772 | 66287 | 26515 |
| 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) | 26515 | 39772 | 66287 | 26515 |
| 5. | Central government income tax liability (exclusive of tax credits) | 5303 | 8662 | 19533 | 5303 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 1830 | 1830 | 1830 | 1830 |
|  | Single, head of family | 0 | 0 | 0 | 1830 |
|  | Children |  |  |  |  |
|  | Other | 1830 | 1830 | 1830 | 1830 |
|  | Total | 3660 | 3660 | 3660 | 5490 |
| 7. | Central government income tax finally paid | 2083 | 5663 | 16974 | 440 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1679 | 2651 | 4595 | 1679 |
|  | Taxable income |  |  |  |  |
|  | Total | 1679 | 2651 | 4595 | 1679 |
| 10. | Total payments to general government (7+8+9) | 3762 | 8314 | 21568 | 2120 |
| 11. Cash transfers from general government |  |  |  |  |  |
|  | For head of family | 0 | 0 | 0 | 3771 |
|  | For two children | 0 | 0 | 0 | 3984 |
|  | Total | 0 | 0 | 0 | 7755 |
| 12. | Take-home pay (1-10+11) | 22752 | 31458 | 44718 | 32150 |
| 13. | Employer's compulsory social security contributions | 2850 | 4275 | 7126 | 2850 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 7.9\% | 14.2\% | 25.6\% | 1.7\% |
|  | Employees' social security contributions | 6.3\% | 6.7\% | 6.9\% | 6.3\% |
|  | Total payments less cash transfers | 14.2\% | 20.9\% | 32.5\% | -21.3\% |
|  | Total tax wedge including employer's social security contributions | 22.5\% | 28.6\% | 39.1\% | -9.5\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 29.0\% | 50.0\% | 50.0\% | 63.6\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 35.9\% | 54.8\% | 54.8\% | 67.1\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

Ireland 2009
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 |
| 1. | Gross wage earnings | 39772 | 53029 | 66287 | 53029 |
| 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) | 39772 | 53029 | 66287 | 53029 |
| 5. | Central government income tax liability (exclusive of tax credits) | 7954 | 10606 | 13257 | 10606 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 3660 | 3660 | 3660 | 3660 |
|  | Single, head of family | 0 | 0 | 0 | 0 |
|  | Children |  |  |  |  |
|  | Other | 2730 | 3660 | 3660 | 3660 |
|  | Total | 6390 | 7320 | 7320 | 7320 |
| 7. | Central government income tax finally paid (5-6) | 2225 | 3946 | 7038 | 3946 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 2651 | 2651 | 4330 | 2651 |
|  | Taxable income |  |  |  |  |
|  | Total | 2651 | 2651 | 4330 | 2651 |
| 10. | Total payments to general government (7+8+9) | 4876 | 6597 | 11368 | 6597 |
| 11. Cash transfers from general government |  |  |  |  |  |
|  | For head of family | 0 | 0 | 0 | 0 |
|  | For two children | 3984 | 3984 | 3984 | 0 |
|  | Total | 3984 | 3984 | 3984 | 0 |
| 12. | Take-home pay (1-10+11) | 38880 | 50416 | 58902 | 46432 |
| 13. | Employer's compulsory social security contributions | 4275 | 5402 | 7126 | 5402 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 5.6\% | 7.4\% | 10.6\% | 7.4\% |
|  | Employees' social security contributions | 6.7\% | 5.0\% | 6.5\% | 5.0\% |
|  | Total payments less cash transfers | 2.2\% | 4.9\% | 11.1\% | 12.4\% |
|  | Total tax wedge including employer's social security contributions | 11.7\% | 13.7\% | 19.8\% | 20.5\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 29.0\% | 29.0\% | 29.0\% | 29.0\% |
|  | Total payments less cash transfers: Spouse | 13.0\% | 20.0\% | 29.0\% | 20.0\% |
|  | Total tax wedge: Principal earner | 35.9\% | 35.9\% | 35.9\% | 35.9\% |
|  | Total tax wedge: Spouse | 19.8\% | 26.3\% | 35.9\% | 26.3\% |

The national currency is the euro (EUR). In 2009, EUR 0.72 was equal to USD 1. In that year, the average worker earned EUR 39772 (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 1830 per year.
- Standard marital status reliefs: The married person's credit is EUR 3660 per year (i.e. twice the basic credit of EUR 1 830).
- 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 1830.
- Single-Parent Family Relief: The single parent family credit is EUR 1830.


### 1.1.2.2. Main non-standard tax reliefs:

- 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 2009:

|  | First time mortgage holders | Other mortgage holders |
| :--- | :---: | :---: |
| Married couple | EUR 8000 | EUR 5079 |
| Widowed person | EUR 8000 | EUR 5079 |
| Single person | EUR 4000 | 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 900 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 5079 . A reduced measure of relief is granted for income between EUR 5080 and EUR 6 620: if the income exceeds EUR 5080 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 (one income) | Married couple (two incomes) | One-parent families |

### 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 |  |
| $\quad$ Under 65 | 10420 |
| 65 and over | 34000 |
| Children |  |
| One or two children (each) | 575 |
| Subsequent children | 830 |

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 then 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. Income levy

An income levy (on gross family income) was introduced on 1 January 2009. The rates, thresholds and exemption limit applicable for 2009 were then amended on 1 May 2009. The following schedule applies from 1 January to 30 April 2009, subject to an exemption of EUR 18 304:

| Income band (EUR) | Rate <br> $(\%)$ |
| :--- | :---: |
| Up to 100100 | 1 |
| 100100 to 250120 | 2 |
| Balance | 3 |

The following schedule applies from 1 May 2009 to 31 December 2009, subject to an exemption of EUR 15028 :

| Income band (EUR) | Rate <br> $(\%)$ |
| :--- | :---: |
| Up to 75036 | 2 |
| 75036 to 174980 | 4 |
| Balance | 6 |

### 1.3. 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. Individuals earning less than EUR 500 per week are exempt from the health levy, while individuals earning less than EUR 352 per week 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. This weekly exemption is non-cumulative in that the earner is no longer entitled to the weekly exemption when their cumulative annual earnings exceed the social insurance ceiling.

The rates, thresholds and ceilings applicable for 2009 were amended on 1 May 2009. The following is a breakdown of the rates of contribution together with thresholds and ceilings (where applicable) for 1 January 2009 to 30 April 2009:

| Description | Rate | Threshold (EUR) | Ceiling (EUR) |
| :--- | :---: | :---: | :---: |
| Health Levy | 2.00 | 26000 | 100100 |
| Pension and social insurance | 2.50 | 100100 |  |

The following is a breakdown of the rates of contribution together with thresholds and ceilings (where applicable) for 1 May 2009 to 31 December 2009:

| Description | Rate | Threshold (EUR) | Ceiling (EUR) |
| :--- | :---: | :---: | :---: |
| Health levy | 4.00 | 26000 | 75036 |
| Pension and social insurance | 5.00 | 75036 |  |

### 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 2008 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 <br> 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 2009 are as follows:

| Period | Monthly rate per child |  |
| :--- | :--- | :--- |
| April 2008 to March 2009 | First to second child: EUR 166.00 | Subsequent children: EUR 203.00 |
| April 2009 to December 2009 | First to second child :EUR 166.00 | Subsequent children: EUR 203.00 |

### 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 2009 is EUR 590 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 2009 is EUR 6490 plus EUR 1352 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 2008

### 4.1. Health levy

The Minister for Finance announced in the Supplementary Budget 2009 that the Health Levy rates will increase to $4 \%$ and $5 \%$ from 1 may 2009. The entry point to the higher rate will be EUR 75036.

### 4.2. Early Childcare Supplement

As a result of 2009 Budget Measures the Early Childcare Supplement will be paid monthly instead of quarterly and eligibility is being changed to reduce the period for which children qualify for the payment from 0-6 years to 0-5 years and 6months. Furthermore, as a result of the 2009 Supplementary Budget (April 2009) the Early Childcare Supplement monthly payment is to be halved to EUR 41.50 per child with effect from 1 May 2009 and abolished at end-2009. It will be replaced in January 2010 with a pre-school Early Childhood and Education Scheme (ECCE) for all children between the ages of 3 years 3 months and 4 years 6 months. A capitation grant will be payable to service providers who provide free pre-school services.

### 4.3. Income levy

A new income levy was introduced in Budget 2009 and came into effect 1 January 2009. In the Supplementary Budget 2009 the income levy rates, thresholds and exemption limit were amended with effect from 1 May 2009.

## 5. Memorandum items

### 5.1. Employer contributions to private social security arrangements

Information not available, although such schemes do exist.

2009 Parameter values

|  | Ave_earn | 39772 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Tax allowances |  |  |  |
| Tax credits | Basic_al_at_standardrate | 1830 |  |
|  | Married_al_at_standardrate | 1830 |  |
|  | Empl_al_at_standardrate | 1830 |  |
|  | Singleparent_at_standardrate | 1830 |  |
|  | Carers_allow | 900 |  |
|  | 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 | 36400 |
|  |  | 0.41 |  |
|  | Single_sch_child | 0.2 | 40400 |
|  |  | 0.41 |  |
|  | Married_sch_oneinc | 0.2 | 45400 |
|  |  | 0.41 |  |
|  | Married_sch_twoinc | 0.2 | 72800 |
|  |  | 0.41 |  |
| Income levy | Inc_levy_sch | 0.0166 | 75036 |
|  |  | 0.0300 | 100100 |
|  |  | 0.0333 | 174980 |
|  |  | 0.4660 | 250120 |
|  |  | 0.05 |  |
|  | inc_levy_trans_rate | 0.0133 |  |
|  | inc_levy_thresh_new | 15028 |  |
|  | inc_levy_thresh_old | 18304 |  |
| Maximum increase in first band | Band_increase_lim | 27400 |  |
| Social security contributions | SSC_thresh | 18304 |  |
| Employees | pension_rate | 0.04 |  |
|  | pension_ceil | 67357 |  |
|  | Emp_hlth_lower | 26000 |  |
|  | Non_cum_Allc | 6604 |  |
|  | health_levy_sch | 0.0333 | 75036 |
|  |  | 0.04 | 100100 |
|  |  | 0.0417 |  |
| Employers | Empr_rate | 0.1075 |  |
|  | Empr_lower_rate | 0.085 |  |
|  | Empr_thrsh | 18512 |  |
| Child benefit | Ch_ben | 1992 |  |
|  | Ch_ben_3 | 2436 |  |
| Family income supplement | FIS_pay_limit | 30680 |  |
|  | FIS_min | 1040 |  |
|  | FIS_rate | 0.6 |  |
| Medical card | single_med_card | 9568 |  |
|  | married_med_card | 13858 |  |
|  | child_add_med_card | 1976 |  |

## 2009 Tax equations

The equations for the Irish system in 2009 are 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 (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, Tax(earn_principal+Positive(earn_spouse-Band_increase_lim), Married_sch_oneinc)+Tax(MIN(earn_spouse, Band_increase_lim), 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) |
| 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 |
| Income levy | Inc_levy | B | IF(earn>inc_levy_thresh_new,IF(earn>inc_levy_thresh_old,Tax(earn ,inc_levy_sch),earn*inc_levy_trans_rate),0) |
| 7. Net tax | CG_tax | J | If(earn_total<=MRL, MIN(marg_rel_rate*positive(earn_totalexem_amt), positive(_tax_excl-tax_cr)), positive(_tax_excltax_cr))+inc_levy |
| 8. State and local taxes | local_tax | J | 0 |
| 9. Employees' soc. security: |  |  |  |
| weekly allowance | weekly_allce | B | IF(earn $=0,0, \operatorname{MINA}(\operatorname{IF}($ earn<pension_ceil, <br> 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>Emp_hlth_lower,Tax(earn,health_levy_sch)*med_crd_fac, 0) +IF(earn>SSC_thresh, pension_rate*Positive(MINA(earn, pension_ceil)-weekly_allce), 0) |
| 11. Cash transfers |  |  |  |
|  | Child_benefit | J | Children*Ch_ben+(Children>2)*(Children-2)* ${ }^{*}$ Ch_ben_3-Ch_ben) |


| Line in country table <br> and intermediate steps | Variable name | Range | Equation |
| :--- | :--- | :--- | :--- |
|  | FIS | J | (Children>0)^IF((earn-_tax-SSC)<=FIS_pay_limit, MAXA( <br> (FIS_pay_limit-(earn-_tax-SSC))*FIS_rate, FIS_min), 0) |
| Total cash transfers | Cash_trans |  | Child_benefit+FIS <br> IF(earn<=Empr_thrsh, Empr_lower_rate, Empr_rate)* MIN(earn, <br> Empr_ceil) |
| 13. Employer's soc security | SSC_empr | B |  |

## 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 2009

## The tax/benefit position of single persons

## 1. Gross wage earnings

| Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | none | none | none | 2 |
|  | 17454 | 26181 | 43634 | 17454 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
$\begin{array}{lll}\text { Deduction for social security contributions and income taxes } & 1656 & 248541674\end{array}$
Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income

| Total | 1656 | 2485 | 4157 | 1656 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 15797 | 23696 | 39478 | 15797 |
|  | 3665 | 5798 | 11322 | 3665 |
|  |  |  |  |  |
|  | 1311 | 1055 | 519 | 1311 |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 1375 |
|  |  |  |  |  |
| Total | 1311 | 1055 | 519 | 2686 |
|  | 2354 | 4743 | 10802 | 979 |
|  | 300 | 450 | 750 | 300 |
|  |  |  |  |  |
|  | 1656 | 2485 | 4157 | 1656 |
|  |  |  |  |  |
| Total | 1656 | 2485 | 4157 | 1656 |
|  | 4310 | 7678 | 15709 | 2935 |

11. Cash transfers from general governmen

For head of family
For two children
12. Take-home pay $(1-10+11)$

| Total | 0 | 0 | 0 | 2762 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 2762 |
|  | 13143 | 18503 | 27925 | 17280 |
|  | 5599 | 8399 | 13998 | 5599 |
|  |  |  |  |  |
|  | $15.2 \%$ | $19.8 \%$ | $26.5 \%$ | $7.3 \%$ |
|  | $9.5 \%$ | $9.5 \%$ | $9.5 \%$ | $9.5 \%$ |
|  | $24.7 \%$ | $29.3 \%$ | $36.0 \%$ | $1.0 \%$ |
|  | $43.0 \%$ | $46.5 \%$ | $51.5 \%$ | $25.0 \%$ |
|  |  |  |  |  |
|  | n.a. | n.a. | n.a. | n.a. |
|  | $53.6 \%$ | $53.6 \%$ | $61.5 \%$ | $54.1 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |

## Italy 2009

## The tax/benefit position of married couples

## 1. Gross wage earnings

| Wage level (per cent of average wage) | $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | 2 | 2 | 2 | none |
|  | 26181 | 34907 | 43634 | 34907 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
2485
3313
4141
3313
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

| Total | 2485 | 3313 | 4141 | 3313 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 23696 | 31595 | 39493 | 31595 |
|  | 5798 | 7615 | 9463 | 7615 |
|  |  |  |  |  |
|  | 1055 | 2872 | 2366 | 2872 |
|  | 690 | 0 | 0 | 0 |
|  | 1255 | 1255 | 1313 | 0 |
|  |  |  |  |  |
| Total | 3000 | 4127 | 3679 | 2872 |
|  | 2798 | 3488 | 5784 | 4743 |
|  | 450 | 450 | 750 | 450 |
|  |  |  |  |  |
|  | 2485 | 3313 | 4141 | 3313 |
|  |  |  |  |  |
|  |  | 3313 | 4141 | 3313 |
| Total | 2485 | 3251 | 10675 | 8506 |

11. Cash transfers from general government

For head of family

| For two children |  | 1787 | 944 | 877 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Total | 1787 | 944 | 877 | 0 |
| 12. Take-home pay (1-10+11) |  | 22235 | 28601 | 33836 | 26401 |
| 13. Employer's compulsory social security contributions | 8399 | 11198 | 13998 | 11198 |  |
| 14. Average rates |  |  |  |  |  |
| Income tax | $12.4 \%$ | $11.3 \%$ | $15.0 \%$ | $14.9 \%$ |  |
| Employees' social security contributions | $9.5 \%$ | $9.5 \%$ | $9.5 \%$ | $9.5 \%$ |  |
| Total payments less cash transfers | $15.1 \%$ | $18.1 \%$ | $22.5 \%$ | $24.4 \%$ |  |
| Total tax wedge including employer's social security contributions | $35.7 \%$ | $38.0 \%$ | $41.3 \%$ | $42.7 \%$ |  |
| 15. |  |  |  |  |  |
| Marginal rates | $40.0 \%$ | $40.0 \%$ | $39.4 \%$ | $38.7 \%$ |  |
| Total payments less cash transfers: Principal earner | $27.1 \%$ | $9.5 \%$ | $39.3 \%$ | $9.5 \%$ |  |
| Total payments less cash transfers: Spouse | $54.6 \%$ | $54.6 \%$ | $54.1 \%$ | $53.6 \%$ |  |
| Total tax wedge: Principal earner | $44.8 \%$ | $31.5 \%$ | $54.1 \%$ | $31.5 \%$ |  |
| Total tax wedge: Spouse |  |  |  |  |  |

The national currency is the Euro (EUR). In 2009, EUR 0.72 was equal to USD 1. In that year the average worker earned EUR 26181.

## 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 *(55 000-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 24 001 to 25000 | 1358 |
| From 25 001 to 26000 | 1368 |
| From 26 001 to 27000 | 1378 |
| From 27 001 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 credits (EUR) |  |
| :--- | :--- |
| Spouse | Amount (EUR) |
| Children 800 decreasing to 0 for net income over 80000 <br> Under three years of age <br> Over three years of age <br> Other dependent relatives 900 decreasing to 0 for net income over 95000 <br> * Tax credits are granted for family 800 decreasing to 0 for net income over 95000 <br> 750 decreasing to 0 for net income over 80000  |  |

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/15 000 |
| 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 |
| De 35201 to 40000 | 690 |
| From 40001 to 80000 | $690^{\star}(80000-$ taxable income)/40 000 |
| 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 60 000).

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).
- Expenses for the purchase of season tickets for public transport (up to EUR 250).
- Rents paid by out of town students (up to EUR 2633 ).
- 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.


### 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 the IRPEF.

### 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 per cent -1.4 per cent.

The figure given in the 2009 Parameter values table under the heading "Regional and local tax" includes the regional surcharge tax paid in the most representative city (Rome, Lazio - rate 1.4 per cent for 2009).

### 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 2009 Parameter values table under the heading "Regional and local tax" includes the local surcharge tax paid in the most representative city (Rome - rate 0.5 per cent for 2009).

## 2. Compulsory social security

### 2.1. Employee contributions

- Rate and ceiling
* The average rate is 9.49 per cent on earnings up to EUR 42069.
* The average rate is 10.49 per cent on earnings over EUR 42069 and up to EUR 91507.
* For earnings exceeding EUR 91 507, the employee pays a fixed amount given by (0.0949 $\times 42069)+0.1049 \times(91507-42069)$.
- Distinction by marital status or sex
* None.


### 2.2. Employer contributions

- Contributions equal 32.08 per cent on earnings up to EUR 91 507. For earnings exceeding EUR 91 507, the employer pays a fixed amount given by $0.3208 \times 91507$.


## 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 percent 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 t 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 <br> granted 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 refundable "bonus" for big families has been abolished.
- An "extraordinary bonus" for low income families has been introduced, only for the year 2009.

The amount of the bonus also depends on the number of family members.

| Number of family members | Family income (EUR) | Bonus amount (EUR) |
| :--- | :---: | :---: |
| 1 (only if retired) | Up to 15000 | 200 |
| 2 | Up to 17000 | 300 |
| 3 | Up to 17000 | 450 |
| 4 | Up to 20000 | 500 |
| 5 | Up to 20000 | 600 |
| More than 5 | Up to 22000 | 1000 |
| Families with disabled members | Up to 35000 | 1000 |

The bonus is granted only once, but taxpayers are allowed to identify the most favourable tax period between 2007 and 2008, with regards to both income earned and family composition on which basis the bonus is calculated. For the purposes of Taxing Wages, the extraordinary bonus which is calculated represents the amount which would be received by the family based on the situation for 2009.

## 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 3615.20 euros.

2009 Parameter values

| Average earnings/yr | Ave_earn |  | 26181 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |  | 0.019 |  |  |  |  |
| Social security contributions | SSC_sch |  | 0.0949 |  |  |  | 42069 |
|  |  |  | 0.1049 |  |  |  | 91507 |
|  |  |  | 0.00 |  |  |  | 999999999.99 |
| Employer contributions | Empr_sch |  | 0.3208 |  |  |  | 91507 |
|  |  |  | 0.00 |  |  |  | 999999999.99 |
| Cash transfers: |  |  |  |  |  |  |  |
| Family allowance schedule (t) |  |  |  |  |  |  |  |
| - Married couple | trans_sch |  | Table is too long to be included |  |  |  |  |
| - Single parent | Trans_sch_sp |  | Table is too long to be included |  |  |  |  |
|  |  | 0 | 300.0 | 450.00 | 500.00 | 600.00 | 1000.00 |
|  |  | 17000 | 0.00 | 0.00 | 500.00 | 600.00 | 1000.00 |
|  |  | 20000 | 0.00 | 0.00 | 0.00 | 0.00 | 1000.00 |
| Extraordinary bonus | Bonus | 22000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 2009 Tax equations

The equations for the Italian system in 2009 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, <br> IF(tax_inc_spouse<=8000,emp_cr_max_spouse, <br> IF(tax_inc_spouse<=15000,emp_cr_max_spouse+502* (15000- <br> tax_inc_spouse)/7000, <br> IF(tax_inc_spouse>55000,emp_cr_max_spouse,emp_cr_max_spouse*(5 <br> 5000-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 | IF(Children=0,0,IF(Married=1,(800*(95000-tax_inc)/95000+(Children- <br> 1)* $800 *(110000-$ tax_inc $) / 110000)^{*}(1$-child_crpct_spouse), <br> MAX (800* (95000-tax_inc)/95000, <br> IF(tax_inc>80000,0,IF(tax_inc<15000,800-110*tax_inc/15000, <br> IF(tax_inc>40000,690* (80000-tax_inc)/40000, <br> VLOOKUP(tax_inc,Spouse_cred,2)))))+(Children-1)*800*(110000tax_inc)/110000)) |
|  | child_crfull_spouse | S | IF(Children $=0,0$, (spouse_cr=0)*Married ${ }^{*}$ ( $800{ }^{*}$ ( 95000 -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) |


| Line in country table <br> and intermediate steps | Variable name | Range | Equation |
| :--- | :--- | :--- | :--- |
| 9. Employees' soc security | SSC | B | Tax(earn, SSC_sch) <br> IF(Children=0,0,12*VLOOKUP(earn_total, <br>  |
|  |  | J | IF(Married,trans_sch,trans_sch_sp),1+Children)) + <br> IF(1+Married+Children<2, 0,VLOOKUP(earn_total, bonus, <br> 11. Cash transfers |
|  |  | B Married+Children)) |  |
| 13. Employer's soc security | SSC_empr |  | 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 2009

## The tax/benefit position of single persons

1. Gross wage earnings
2. Standard tax allowances:

| Basic allowance | 380000 | 380000 | 380000 | 380000 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Married or head of family | 0 | 0 | 0 | 0 |  |
| Dependent children | 0 | 0 | 0 | 760000 |  |
| Deduction for social security contributions and income taxes | 395030 | 592546 | 936038 | 395030 |  |
| Work-related expenses | 1153381 | 1513381 | 2011151 | 1153381 |  |
| Other | Total | 1928411 | 2485927 | 3327189 | 2688411 |
|  | 0 | 0 | 0 | 0 |  |
| Tax credits or cash transfers included in taxable income | 1316192 | 2380978 | 4784319 | 556192 |  |
| Central government taxable income (1-2 + 3) | 65810 | 140598 | 529364 | 27810 |  |

6. Tax credits

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid
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 |
| :--- | ---: | ---: | ---: | ---: |
|  | 65810 | 140598 | 529364 | 27810 |
|  | 138119 | 244598 | 484932 | 67119 |
|  |  |  |  |  |
|  | 395030 | 592546 | 936038 | 395030 |
|  |  |  |  |  |
| Total | 395030 | 592546 | 936038 | 395030 |
|  | 598959 | 977741 | 1950334 | 489959 |

11. Cash transfers from general government

For head of family
For two children

| Total | 0 | 0 | 0 | 120000 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 120000 |
|  | 2645644 | 3889163 | 6161174 | 2874644 |
| 418716 | 628074 | 995252 | 418716 |  |
|  |  |  |  |  |
|  | $6.3 \%$ | $7.9 \%$ | $12.5 \%$ | $2.9 \%$ |
| $12.2 \%$ | $12.2 \%$ | $11.5 \%$ | $12.2 \%$ |  |
| $18.5 \%$ | $20.1 \%$ | $24.0 \%$ | $11.4 \%$ |  |
| $27.8 \%$ | $29.2 \%$ | $32.3 \%$ | $21.5 \%$ |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | $20.8 \%$ | $25.7 \%$ | $30.1 \%$ | $20.8 \%$ |
| n.a. | n.a. | n.a. | n.a. |  |
| $29.9 \%$ | $34.2 \%$ | $33.6 \%$ | $29.9 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |

## Japan 2009 <br> 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 $(7+8+9)$
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
-

| 380000 | 760000 | 760000 | 760000 |  |
| ---: | ---: | ---: | ---: | ---: |
| 380000 | 0 | 0 | 0 |  |
| 760000 | 760000 | 760000 | 0 |  |
| 592546 | 790061 | 987576 | 790061 |  |
| 1513381 | 2163381 | 2666762 | 2163381 |  |
|  |  |  |  |  |
| Total | 3625927 | 4473442 | 5174338 | 3713442 |
|  | 0 | 0 | 0 | 0 |
|  | 1240978 | 2015764 | 2937170 | 2775764 |
|  | 62049 | 100788 | 146858 | 160337 |


| Total | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  | 62049 | 100788 | 146858 | 160337 |
|  | 138098 | 219576 | 311717 | 290576 |
|  |  |  |  |  |
|  | 592546 | 790061 | 987576 | 790061 |
|  |  |  |  |  |
| Total | 592546 | 790061 | 987576 | 790061 |
|  | 792692 | 1110425 | 1446151 | 1240974 |

Total | 120000 | 120000 | 120000 | 0 |  |
| ---: | ---: | ---: | ---: | ---: |
|  | 120000 | 120000 | 120000 | 0 |
| 4194212 | 5498781 | 6785356 | 5248232 |  |
|  | 628074 | 837432 | 1046790 | 837432 |
|  |  |  |  |  |
|  | $4.1 \%$ | $4.9 \%$ | $5.7 \%$ | $6.9 \%$ |
| $12.2 \%$ | $12.2 \%$ | $12.2 \%$ | $12.2 \%$ |  |
| $13.8 \%$ | $15.3 \%$ | $16.3 \%$ | $19.1 \%$ |  |
| $23.7 \%$ | $24.9 \%$ | $25.9 \%$ | $28.4 \%$ |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | $22.3 \%$ | $22.3 \%$ | $22.3 \%$ | $25.7 \%$ |
| $19.6 \%$ | $25.3 \%$ | $20.8 \%$ | $25.3 \%$ |  |
| $31.2 \%$ | $31.2 \%$ | $31.2 \%$ | $34.2 \%$ |  |
| $28.8 \%$ | $33.9 \%$ | $29.9 \%$ | $33.9 \%$ |  |

The national currency is the Yen (JPY). In 2009 JPY 93.57 was equal to USD 1. In that year, the average worker is assumed to earn JPY 4866905 (Secretariat estimate).

## 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.
- Allowance for dependents: If a resident taxpayer has children and other relatives who meet the same requirements as for a spouse mentioned above, an allowance of JPY 380000 is given for each dependent.
- Special allowance for dependents: If a resident taxpayer has dependents who meet the requirement mentioned above and who are between 16 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 1800000 , but not JPY 3600000 , the deduction is JPY 180000 plus 30 per cent of salaries.
* If gross employment income exceeds JPY 3600000 , 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

- 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 owneroccupied 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 (RHLB). is JPY 40 million or less: <br> The RHLB $\times 1.0 \%$ (for first 8 years) <br> The RHLB $\times 0.5 \%$ <br> (for last 2 years) | If the RHLB is JPY 30 million or less: <br> The RHLB $\times 1.0 \%$ (for first 7 years) <br> The RHLB $\times 0.5 \%$ <br> (for last 3 years) | If the RHLB is JPY 25 million or less: <br> The RHLB $\times 1.0 \%$ [or 0.6\%] <br> (for first 6 years [or 10 years]) <br> The RHLB $\times 0.5 \%$ [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 |


| Residence starts: | From 1 January in 2008 to 31 December 2008 | From 1 January in 2009 to 31 December 2010 | From 1 January in 2011 to 31 December 2011 |
| :---: | :---: | :---: | :---: |
| Tax credit rate | If the RHLB is JPY 20 million or less: <br> The RHLB $\times 1.0 \%$ [or 0.6\%] (for first 6 years [or 10 years]) The RHLB $\times 0.5 \%$ [or 0.4\%] (for last 4 years [or 5 years]) | If the RHLB is JPY 50 million or less: <br> The RHLB $\times 1.0 \%$ | If the RHLB is JPY 40 million or less: <br> The RHLB x 1.0\% |
| Maximum tax credit amount (for each year) | JPY 200000 [or 120 000] JPY 100000 [or 80 000] (for last 4 years [or 5 years]) | JPY 500000 | JPY 400000 |
| Maximum tax credit amount (for the 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) |  | Deduction |
| :---: | ---: | :--- |
| Over | Not over |  |
| 25000 | 25000 | Total amount of premiums paid (1) |
| 50000 | 50000 | $(1) \times 1 / 2+$ JPY 12500 |
| 100000 | 100000 | $(1) \times 1 / 4+$ JPY 25000 |
|  | - | JPY 50000 |

The insurance premiums of this type of pension plan are not considered for the maximum deduction of life insurance premiums as described before.

- 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) $\left(^{*}\right)^{*}$ | Tax rate (\%) | Deductible amounts <br> for each bracket (JPY) |  |
| :---: | :---: | :---: | :---: |
| Over | Not over | (A) | (B) |
| 1950000 | 1950000 | 5 | - |
| 3300000 | 3300000 | 10 | 97500 |
| 6950000 | 6950000 | 20 | 427500 |
| 9000000 | 9000000 | 23 | 636000 |
| 18000000 | 18000000 | 33 | 1536000 |

* 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:
$7000000 \times 0.23(A)-636000(B)=J P Y 974000$.

### 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 inhabitants tax levied by prefectures and municipal inhabitants tax levied by cities, towns and villages. The prefectural inhabitants tax is collected together with the municipal inhabitants 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.

### 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 inhabitants tax: 4 per cent, Municipal inhabitants tax: 6 per cent).*

| Taxable income for local <br> income tax purposes | The tax credit |
| :--- | :--- |
| JPY 2 000 000 or less | 5 per cent of the lesser of: <br> total amount of differences in personal reliefs between those for <br> national income tax purposes and for local income tax purposes; or <br> - taxable income for local income tax purposes <br> ((total amount of differences in personal reliefs between those for <br> national income tax purposes and for local income tax purposes) - <br> (taxable income for local income tax purposes - JPY 2000 000) * $5 \%$. <br> The minimum credit is JPY 2500 |

### 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.

[^50]
## 2. Compulsory social security contribution to schemes operated within the government sector

### 2.1. Employees' contributions

### 2.1.1. Pension

7.675 per cent of total remuneration (standard remuneration and bonuses), up to the insurable ceiling of JPY 620000 (monthly).

### 2.1.2. Sickness

4.1 per cent of total remuneration (standard remuneration and bonuses) up to the insurable ceiling of JPY 1210000 (monthly).

Government-Managed Health Insurance was shifted to Japan Health Insurance Association-Managed Health Insurance in October 2008.

### 2.1.3. Unemployment

0.4 per cent of total remuneration (decreased from 0.6 per cent for FY 2009 only).

### 2.1.4. Work injury and family allowance

None.

### 2.2. Employers' contributions

### 2.2.1. Pensions

7.675 per cent of total remuneration, up to the insurable ceiling of JPY 620000 (monthly).

### 2.2.2. Sickness

4.1 per cent of total remuneration up to the insurable ceiling of JPY 1210000 (monthly).

Government-Managed Health Insurance was shifted to Japan Health Insurance Association-Managed Health Insurance in October 2008.

### 2.2.3. Unemployment

0.7 per cent of total remuneration (decreased from 0.9 per cent for FY 2009 only).

### 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 rates for fifty-four 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

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.

## 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 40 000).

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 dependant 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.

## 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, electricity, gas and water supply, construction, wholesale and retail trade, hotels and restaurants, financial intermediation 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.

2009 Parameter values

|  | Ave_earn | 4866905 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Allowances for central tax | basic_al | 380000 |  |
|  | spouse_al | 380000 |  |
|  | child_al | 380000 |  |
| 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_child_al | 330000 |  |
| Prefectural tax | pref_per_cap | 1000 |  |
| Municipal tax | mun_per_cap | 3000 |  |
|  | local_sch | 0.1 |  |
| Social security contributions | SSC_pens | 0.07675 |  |
|  | pens_ceil | 7440000 |  |
|  | SSC_sick | 0.041 |  |
|  | sick_ceil | 14520000 |  |
|  | SSC_unemp | 0.0040 |  |
| Employer contribution proportion | SSC_empr_unemp | 0.0070 |  |
|  | SSC_empr_oth | 0.0043 |  |
| Child transfer | Child_transfer | 60000 |  |
|  | Child_transfer_third | 120000 |  |
|  | Child_transfer_lim | 5320000 |  |
|  | Child_transfer_inclim | 380000 |  |
|  | Fixed_deduction | 80000 |  |

## 2009 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 + IF(Married,IF(earn_spouse-MAX(emp_inc_min, Tax(earn_spouse, emp_inc_sch))<spouse_al,spouse_al,0),0) + Children*child_al + MAX(emp_inc_min, Tax(earn, emp_inc_sch)) + SSC |
|  |  | S | basic_al + MAX(emp_inc_min, Tax(earn, emp_inc_sch)) + 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 | 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_princ | P | Positive(earn_princ-(s_basic_al+IF(Married,IF(earn_spouse-MAX(emp_inc_min, Tax(earn_spouse,emp_inc_sch))<spouse_al,s_spouse_al,0),0)+Children*s_child _al <br> +MAX(emp_inc_min, Tax(earn, emp_inc_sch)) + SSC)) |
|  | local_tax_inc_spou se | S | Positive(earn-(s_basic_al+MAX(emp_inc_min, Tax(earn, emp_inc_sch)) + SSC)) |
| Local tax | local_tax_princ | P | pref_per_cap+mun_per_cap+Positive(Tax(local_tax_inc_princ, local_sch)- <br> IF(local_tax_inc_princ>2000000, MAXA(2500,((local_tax_inc_princ- <br> tax_inc_princ)-(local_tax_inc_princ-2000000))*5\%),MINA((local_tax_inc_princtax_inc_princ),local_tax_inc_princ)*5\%)) |
|  | local_tax_spouse | S | (earn_spouse>0) ${ }^{*}$ (pref_per_cap+mun_per_cap+Positive(Tax(local_tax_inc_spouse, local_sch)-IF(local_tax_inc_spouse>2000000,MAXA(2500,((local_tax_inc_spouse-tax_inc_spouse)-(local_tax_inc_spouse2000000)) $\left.{ }^{*} 5 \%\right)$,MINA((local_tax_inc_spousetax_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,IF(earn_princ-Fixed_deduction-MAX(emp_inc_min, Tax(earn_princ,emp_inc_sch))<Child_transfer_lim+Children*Child_transfer_inclim +IF(Married,IF(earn_spouse-(earn_spouse>0)*MAX(emp_inc_min, Tax(earn_spouse,emp_inc_sch))<spouse_al,Child_transfer_inclim,0),0),Children* Child_transfer+IF(Children>2, (Children-2)* (Child_transfer_thirdChild_transfer),0),0),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 2009

## The tax/benefit position of single persons

1. Gross wage earnings

Wage level (per cent of average wage) 67
Number of children none
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
8. State and local taxes

| Total | 293668 | 500000 | 500000 | 160724 |
| :--- | ---: | ---: | ---: | ---: |
|  | 268558 | 1313769 | 4570885 | 131502 |
|  | 26856 | 131377 | 457088 | 13150 |
|  |  |  |  |  |
|  | 1760498 | 2640747 | 3743011 | 1760498 |
|  |  |  |  |  |
| Total | 1760498 | 2640747 | 3743011 | 1760498 |
|  | 2055911 | 4085892 | 8770984 | 1905149 |

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 $(1-10+11)$
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

| Total | 0 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
|  | 21075053 | 30610554 | 49056426 | 21225815 |
|  | 2269379 | 3404068 | 5015214 | 2269379 |
|  |  |  |  |  |
|  | $1.3 \%$ | $4.2 \%$ | $8.7 \%$ | $0.6 \%$ |
| $7.6 \%$ | $7.6 \%$ | $6.5 \%$ | $7.6 \%$ |  |
| $8.9 \%$ | $11.8 \%$ | $15.2 \%$ | $8.2 \%$ |  |
| $17.0 \%$ | $19.7 \%$ | $21.9 \%$ | $16.4 \%$ |  |
|  |  |  |  |  |
|  | $11.3 \%$ | $22.1 \%$ | $19.3 \%$ | $10.0 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
|  | $19.3 \%$ | $29.1 \%$ | $23.4 \%$ | $18.0 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |

## Korea 2009

The tax/benefit position of married couples

1. Gross wage earnings

Spouse adjustment when spouse income < allowance
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
Work-related expenses
Wage level
< allowance
number of children

Total
Adjustment spouse income < allowance

| Subtotal | 21860391 | 31163579 | 34620929 | 26663579 |
| ---: | ---: | ---: | ---: | ---: |
|  |  |  |  | -10803188 |
| Total | 21860391 | 31163579 | 34620929 | 15860391 |
|  | 0 | 0 | 0 | 0 |
|  | 12836055 | 15098349 | 23206481 | 19598349 |
|  | 853769 | 1139506 | 1625994 | 1859506 |

5. Central government income tax liability (exclusive of tax credits)
6. Tax credits

Basic credit
$381131478286 \quad 737798 \quad 525156$
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)
13. Employers' 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
3153
340

| $1.5 \%$ | $1.6 \%$ | $1.7 \%$ | $3.2 \%$ |
| ---: | ---: | ---: | ---: |
| $7.6 \%$ | $7.6 \%$ | $7.6 \%$ | $7.6 \%$ |
| $9.1 \%$ | $9.2 \%$ | $9.3 \%$ | $10.8 \%$ |
| $17.2 \%$ | $17.3 \%$ | $17.4 \%$ | $18.8 \%$ |
|  |  |  |  |
| $17.8 \%$ | $17.8 \%$ | $17.8 \%$ | $22.1 \%$ |
| $9.4 \%$ | $9.0 \%$ | $11.3 \%$ | $9.0 \%$ |
| $25.1 \%$ | $25.1 \%$ | $25.1 \%$ | $29.1 \%$ |
| $17.5 \%$ | $17.1 \%$ | $19.3 \%$ | $17.1 \%$ |

The national currency is the Won (KRW). In 2009 KRW 1274.95 was equal to USD 1 (average of daily exchange rates from January to June 2009). In this year, the average worker is expected to earn KRW 34696446 (Secretariat estimate).

## 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) a person aged 70 years or older $a$ );
b) a handicapped person b);
c) 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);
d) 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);
e) 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 500000 if there are (at least) 2 children plus an additional KRW 1000000 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 275000 plus $30 \%$ of the calculated tax over KRW 500000 (maximum credit: |

### 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 7000 000. 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 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.

[^51]*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 fifteen per cent of gross income.
- Credit card purchases f): Employees may deduct 20 per cent of their credit/debit card purchases that exceed 20 per cent of their total income to a maximum of the lesser of KRW 5000000 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 | 16 |
| 46000000 | 88000000 | 25 |
| 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 1944000.

### 2.1.2. Medical insurance

The medical insurance premium, which has a rate of 2.661 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 2008.

### 2.1.3. Unemployment insurance

0.45 per cent of gross income.

### 2.1.4. Work injury insurance

Employers only.

### 2.2. Employers' contribution

### 2.2.1. National pension

4.5 per cent of standardised average monthly wage income to a maximum of KRW 1944000.

### 2.2.2. Medical insurance

- The medical insurance premium, which has a rate of 2.661 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 2008.


### 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 0.7 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 1.95 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 12000000 ) 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.
Limit of deduction for interest on long-term mortgage loan for housing is expanded from KRW 6000000 to KRW 10000000.
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.
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 500000 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 88000000 ; New items have been added to the additional allowance with respect to lineal descendants who are born or adopted during the concerned taxable year; 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;
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 has been changed : from $8 \%, 17 \%, 26 \%, 35 \%$ to $6 \%, 16 \%, 25 \%, 35 \%$.
Employment income deduction has been changed : from $100 \%, 50 \%, 15 \%, 10 \% 5 \%$ to $80 \%, 50 \%, 15 \%, 10 \%$.

## 5. Memorandum item

### 5.1. Identification of the Average Worker (AW)

Sectors used: Industry Sectors C-K with reference to the International Standard Industrial Classification of All Economic Activities, Revision 3 (ISIC Rev. 3)

Geographical coverage: Whole country.
Type of workers: Wage workers (male and female).

### 5.2. Method to calculate earnings

The Report on Monthly Labour Survey covering data in 2007 by the Ministry of Labour is used to calculate the annual earnings of the AW. The statistics were obtained through a sample survey of 7200 firms with five or more regular employees throughout the whole country.

Basic method of calculation used: average monthly earnings 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).

2009 Parameter values

| AW earnings | Ave_earn | 34696446 |  |
| :---: | :---: | :---: | :---: |
| 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 | 500000 |  |
| Additional allowance 2 | add2_all | 1000000 |  |
| 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 |
|  |  | 0.16 | 46000000 |
|  |  | 0.25 | 88000000 |
|  |  | 0.35 |  |
| Local tax rate | local_rate | 0.1 |  |
| Social security contributions | SSC_pens | 0.045 |  |
|  | SSC_pens_max | 1944000 |  |
|  | SSC_sick | 0.02661 |  |
|  | SSC_unemp | 0.0045 |  |
| Employer contributions | emp_pens | 0.045 |  |
|  | emp_sick | 0.02661 |  |
|  | emp_unemp | 0.007 |  |
|  | emp_inj | 0.0195 |  |

## 2009 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+(Children2)*ext2_all,0))+(Children>0)*add2_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_u nemp),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) |

[^52]
## 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 2009

The tax/benefit position of single persons


## Luxembourg 2009

## The tax/benefit position of married couples



The national currency is the euro (EUR). In 2009, EUR 0.72 equalled USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 48445.

## 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 1500 ; 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

Tax brackets have been linearly increased by 9 \% as from 1 January 2009. Income tax is determined on the basis of the following schedule (amounts in euros):

| 0\% for the portion of income less than | 11265 |  |  |
| :--- | :--- | :--- | :--- |
| 8\% for the portion of income between | 11265 | and | 13173 |
| $10 \%$ for the portion of income between | 13173 | and | 15081 |
| $12 \%$ for the portion of income between | 15081 | and | 16989 |
| $14 \%$ for the portion of income between | 16989 | and | 18897 |
| $16 \%$ for the portion of income between | 18897 | and | 20805 |
| $18 \%$ for the portion of income between | 20805 | and | 22713 |
| $20 \%$ for the portion of income between | 22713 | and | 24621 |
| $22 \%$ for the portion of income between | 24621 | and | 26529 |
| $24 \%$ for the portion of income between | 26529 | and | 28437 |
| $26 \%$ for the portion of income between | 28437 | and | 30345 |
| $28 \%$ for the portion of income between | 30345 | and | 32253 |
| $30 \%$ for the portion of income between | 32253 | and | 34161 |
| $32 \%$ for the portion of income between | 34161 | and | 36069 |
| $34 \%$ for the portion of income between | 36069 | and | 37977 |
| $36 \%$ for the portion of income between | 37977 | and | 39885 |
| $38 \%$ for the portion of income exceeding | 39885 |  |  |

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 45 060, with the marginal tax rate capped at $38 \%$.

Income tax as determined by the applicable schedules is subject to a $2.5 \%$ "solidarity" surtax to finance the employment fund.

### 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 (\%) | Employee's share (\%) | Ceiling on contributions (in euros) |
| :---: | :---: | :---: | :---: |
| a) Pension and disability insurance | 8 | 8 | 100555.40 |
| b) Health insurance | 2.95 | 2.95 | 100555.40 |
| c) Dependency insurance |  | 1.4 | Monthly allowance: 418.98* |
| d) Health in the workplace | 0.11 |  |  |
| e) Accident insurance | Rate varies according to the probability of accidents (0.43-5.92) ${ }^{1}$ |  |  |

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 2009, 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 2004

### 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 selfemployment. 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 nonperiodic 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.

2009 Parameter values

| AW earnings | Ave_earn | 48445 | 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 |  |
| Child credit maximum | ch_cred | 0 |  |
| Social minimum salary | min_salary | 20111.08 |  |
| Multiplier for unemployment | unemp_rate | 1.025 |  |
| Social security contributions | SSC_rate | 0.1095 |  |
|  | SSC_ceil | 100555.40 |  |
|  | infirm | 0.014 |  |
|  | infirm_abatement | 0.25 |  |
| Employer contributions | workhealth | 0.0011 |  |
|  | SSC_empr | 0.1095 |  |
|  | SSC_acc | 0.0048 |  |
| 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 | 0.38 |  |

## 2009 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 <br> steps | Variable name | Range | Equation |
| :--- | :--- | :--- | :--- |
| 1. Earnings | earn |  |  |
| 2. Allowances: |  |  |  |
| Basic | basic | J. | IF(earn_spouse=0, 1, 2) |

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 2009

## The tax/benefit position of single persons

1. Gross wage earnings
Wage level (per cent of average wage) 67

Number of children none

| 100 | 167 | 67 |
| ---: | ---: | ---: |
| none | none | 2 |
| 83545 | 139242 | 55697 |
|  |  |  |
| 1939 | 2168 | 1825 |

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

| Total | 1825 | 1939 | 2168 | 1825 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 53872 | 81606 | 137074 | 53872 |
|  | 3331 | 6348 | 15778 | 3331 |
|  |  |  |  |  |
|  | 4251 | 3042 | 0 | 4251 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 0 |
|  |  | 0 | 0 | 4251 |
| Total | 4251 | 3042 | 0 | 0 |
|  | -920 | 3306 | 15778 | -920 |
|  | 0 | 0 |  | 0 |
|  |  |  |  |  |
|  | 696 | 1138 | 2057 | 696 |
|  |  |  |  |  |
|  | 696 | 1138 | 2057 | 696 |
|  |  |  |  |  |
| Total | -224 | 4444 | 17836 | -224 |

10. Total payments to general government $(7+8+9)$
-224
11. Cash transfers from general government

For head of family
For two children
12. Take-home pay $(1-10+11)$
13. Employers' 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 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 0 | 0 | 0 | 0 |
|  | 55921 | 79101 | 121407 | 55921 |
|  | 7725 | 9806 | 14063 | 7725 |
|  |  |  |  |  |
|  | $-1.7 \%$ | $4.0 \%$ | $11.3 \%$ | $-1.7 \%$ |
|  | $1.3 \%$ | $1.4 \%$ | $1.5 \%$ | $1.3 \%$ |
|  | $-0.4 \%$ | $5.3 \%$ | $12.8 \%$ | $-0.4 \%$ |
|  | $11.8 \%$ | $15.3 \%$ | $20.8 \%$ | $11.8 \%$ |
|  |  |  |  |  |
|  | $12.1 \%$ | $12.5 \%$ | $21.5 \%$ | $12.1 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
|  | $17.5 \%$ | $18.7 \%$ | $27.1 \%$ | $17.5 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |

Mexico 2009
The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage) 100-0
Number of children 2
2. Standard tax allowances

Basic allowance
1939
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)

|  | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
| Total | 3042 | 7924 | 7293 | 7924 |
|  | 3306 | -141 | 2386 | -141 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 1138 | 1487 | 1835 | 1487 |
|  |  |  |  |  |
| Total | 1138 | 1487 | 1835 | 1487 |
|  | 4444 | 1346 | 4221 | 1346 |

10. Total payments to general government (7+8+9)
Total
1939

| $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: |
| 2 | 2 | none |
| 111394 | 139242 | 111394 |
|  |  |  |
| 3198 | 3764 | 3198 |

198

The national currency is the peso (MXN). In 2009, MXN 13.50 was equal to USD 1. In 2009, the estimated earnings of the average worker are MXN 83545 (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 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). ${ }^{1}$ 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 97072 (five annual minimum wages).
- 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 6350 209. Real interest expenditure is considered the excess of interest expense over the inflation rate.


### 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.

### 1.1.3. Tax schedule and other tables

### 1.1.3.1. Tax schedule ${ }^{2}$

| Taxable income (MXN) |  | Fixed quota (MXN) | Tax on the amount in excess of the lower limit (\%) |
| :---: | :---: | :---: | :---: |
| Lower limit | Upper limit |  |  |
| 0 | 5952.84 | 0 | 1.92 |
| 5952.85 | 50524.92 | 114.24 | 6.40 |
| 50524.93 | 88793.04 | 2966.76 | 10.88 |
| 88793.05 | 103218.00 | 7130.88 | 16.00 |
| 103218.01 | 123580.20 | 9438.60 | 17.92 |
| 123580.21 | 249243.48 | 13087.44 | 19.94 |
| 249243.49 | 392841.96 | 38139.60 | 21.95 |
| 392841.97 | And over | 69662.40 | 28.00 |

### 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 0ver | 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 payroll tax with an average rate of 1.92 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.

## 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 2009 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. ${ }^{3}$

In 2009 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 <br> 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.

## 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.

|  | Account | Per cent of workers' monthly wage |
| :--- | :--- | :---: |
| Employers' contributions | Retirement | 2.00 |
|  | Discharge and old age insurance | 3.15 |
|  | Housing Fund (INFONAVIT) | 5.00 |
| Employees' contributions | Discharge and old age insurance | 1.125 |

### 5.2. Main employers' contributions to private pension, health, etc., schemes

No information available.

2009 Parameter values

| Average earnings/yr | Ave_earn | 83545 | Secretariat estimate |  |
| :---: | :---: | :---: | :---: | :---: |
| (General min. wage per day) | min_wage | 53.19 |  |  |
| (General min. wage per day for the |  |  |  |  |
| Federal District of Mexico City) | min_wage_FD | 54.80 |  |  |
| 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 | 19.94 |
|  |  | 249243.49 | 38139.60 | 21.95 |
|  |  | 392841.97 | 69662.40 | 28.00 |
| 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 |  |  |

## 2009 Tax equations

The equations for the Mexican system in 2009 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 | $\operatorname{MIN}($ earn, $\operatorname{MIN}($ earn* $(6 / 365) * 0.25$, min_wage*15) $+\operatorname{MIN}($ earn* $(15 / 365)$, min_wage*30)) |
| 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 | VLOOKUP(tax_inc, Basic_crd, 2) |
| 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 | MIN(earn*SSC_rate, min_wage_FD*25*365*sSc_rate)+MIN(Positive(earn$\left(3^{*} 365^{*} \text { min_wage_FD) }\right)^{*}$ ssc_rate_sur, min_wage_FD* $(25-3)^{*} 365 *$ ssc_rate_sur) |
| 11. Cash transfers | cash_trans | B | 0 |
| 13. Employer's soc. security | SSC_empr | B | MIN(earn*ssc_empr, <br> min_wage_FD*25* $365^{*}$ sSc_empr)+365*min_wage_FD*SSC_empr_min <br> +MIN(Positive(earn-(3*365*min_wage_FD))*sSc_empr_sur, min_wage_FD*(25- <br> 3)* $365{ }^{*}$ ssc_empr_sur) |
| Memorandum item: <br> Non-wastable tax credit |  |  |  |
| Tax expenditure Component | taxexp | B | tax_cr-transfer |
| Cash transfer Component | transfer | B | 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).

## Notes

1. There are three minimum wage rates established in Mexico depending upon geographical location (in Zone A the minimum wage is equal to MXN 54.80 on a daily basis, in Zone B it is MXN 53.26 , and in Zone C it is MXN 51.95). 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 53.19). The latter is used in the evaluation of the holiday bonus and the end-of-year bonus.
2. The income tax schedule and the employment subsidy credit table are updated every time the accumulated inflation reaches 10 per cent.
3. 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.

## 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 2009

## The tax/benefit position of single persons

## 1. Gross wage earnings

Wage level (per cent of average wage) 67

| Number of children | none | none | none | 2 |
| :--- | ---: | ---: | ---: | ---: |
|  | 29741 | 44611 | 74351 | 29741 |

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)

| Total | 0 | 0 | 0 | 0 |
| :---: | ---: | ---: | ---: | ---: |
|  | 2009 | 2233 | 2233 | 2009 |
|  | 31118 | 45654 | 74276 | 31118 |
|  |  |  |  |  |
|  | 1857 | 7647 | 21619 | 1857 |

6. Tax credits :

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid
8. State and local taxes
9. Employees' compulsory social security contributions

Gross earnings
Taxable income (net of credits)
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 $(1-10+11)$
13. Employers' 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

| Total | 246 | 245 | 245 | 527 |
| :--- | ---: | ---: | ---: | ---: |
|  | 1610 | 7403 | 21374 | 1329 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 0 |
|  | 6428 | 6765 | 6765 | 2704 |
| Total | 6428 | 6765 | 6765 | 2704 |
|  | 8039 | 14168 | 28139 | 4034 |


| Total | 0 | 0 | 0 | 3138 |
| :---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 3138 |
|  | 21702 | 30443 | 46212 | 28844 |
|  | 2776 | 4476 | 4996 | 2776 |
|  |  |  |  |  |
|  | $5.4 \%$ | $16.6 \%$ | $28.7 \%$ | $4.5 \%$ |
| $21.6 \%$ | $15.2 \%$ | $9.1 \%$ | $9.1 \%$ |  |
| $27.0 \%$ | $31.8 \%$ | $37.8 \%$ | $3.0 \%$ |  |
| $33.3 \%$ | $38.0 \%$ | $41.8 \%$ | $11.3 \%$ |  |
|  |  |  |  |  |
|  | $43.2 \%$ | $40.4 \%$ | $50.0 \%$ | $45.5 \%$ |
| n.a. | n.a. | n.a. | n.a. |  |
| $49.0 \%$ | $46.5 \%$ | $50.0 \%$ | $51.1 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |

## Netherlands 2009

## The tax/benefit position of married couples

1. Gross wage earnings

| Wage level (per cent of average wage) | $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | 2 | 2 | 2 | none |
|  | 44611 | 59481 | 74351 | 59481 |

2. Standard tax allowances:

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes
0
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)

| Total | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  | 2233 | 3255 | 4242 | 3255 |
|  | 45654 | 61473 | 76772 | 61473 |
|  |  |  |  |  |
|  | 7647 | 8019 | 9504 | 8019 |

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

| Total | 376 | 541 | 615 | 457 |
| :--- | ---: | ---: | ---: | ---: |
|  | 7271 | 7479 | 8889 | 7563 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 0 |
|  | 5024 | 7770 | 11552 | 8882 |
| Total | 5024 | 7770 | 11552 | 8882 |
|  | 12295 | 15249 | 20442 | 16445 |

11. Cash transfers from general government

For head of family
For two child
12. Take-home pay $(1-10+11)$

|  | 2193 | 1894 | 1894 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 2193 | 1894 | 1894 | 0 |
|  | 34509 | 46126 | 55803 | 43036 |
|  | 4476 | 5620 | 7252 | 5620 |
|  |  |  |  |  |
|  | $16.3 \%$ | $12.6 \%$ | $12.0 \%$ | $12.7 \%$ |
|  | $11.3 \%$ | $13.1 \%$ | $15.5 \%$ | $14.9 \%$ |
| $22.6 \%$ | $22.5 \%$ | $24.9 \%$ | $27.6 \%$ |  |
|  | $29.7 \%$ | $29.1 \%$ | $31.6 \%$ | $33.9 \%$ |
|  |  |  |  |  |
|  | $46.7 \%$ | $40.4 \%$ | $40.4 \%$ | $40.4 \%$ |
| $21.9 \%$ | $17.8 \%$ | $43.2 \%$ | $21.7 \%$ |  |
| $52.1 \%$ | $46.5 \%$ | $46.5 \%$ | $46.5 \%$ |  |
| $27.5 \%$ | $23.5 \%$ | $49.0 \%$ | $27.1 \%$ |  |

The national currency is the euro (EUR). In 2009, EUR 0.72 was equal to USD 1 . In that year, the average worker earned EUR 44611 (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 netincome 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 with the exception of the health insurance contribution. The employers' health insurance contribution is subject to tax.


### 1.1.2.2. Non-standard allowances

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 deduction; the reimbursement is untaxed (also for employees who travel by car) if it is below certain specified amounts;
* The Dutch labour market is characterized 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.
- 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:

In 2009 the deduction of exceptional expenses due to chronic illness or disability has totally changed. Disabled persons or chronic ill persons will receive a specific benefit and the fiscal deduction of exceptional 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 7152 and is below EUR 38000 . If income is lower than or equal to EUR 7 152, the non-deductible limit is EUR 118. For a person with a partner: the joint income is used to determine the non-deductible amounts and the nondeductible limit is EUR 236.
- If income exceeds EUR 38000 , the specific expenses in excess of 1.65 per cent of EUR 38000 increased with 5.75 per cent of income above EUR 38000 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;
- Donations to 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) | Tax rate (\%) | Social securities contributions |  |
| :--- | :---: | :---: | :---: |
|  |  | $<65$ years | $>65$ years |
| $0-17878$ | 2.35 | 31.15 | 13.25 |
| $17878-32127$ | 10.85 | 31.15 | 13.25 |
| $32127-54776$ | 42 | - | - |
| 54776 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

### 1.1.4.1. Standard tax credits

The tax credits are applied to the combined amount of income tax levied and premiums paid for the general social security schemes (see Section 1.1.3). 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. Because this ratio is currently 7.0 per cent ( $=2.35 \% /(2.35 \%+31.15 \%)$, only 7.0 per cent of the (tax) credit is attributed to tax; the remaining 93.0 per cent being attributed to social security contributions. In the country tables, the social security contributions on taxable income are net of credits.

- General tax credit: This credit amounts to EUR 2 007; 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 2009-2024, 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 starts 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 1.738 per cent of taxable income from work with a maximum of EUR 154 and 12.38 per cent of taxable income from work with a franchise of EUR 8 859. The work credit is income dependent and is extended in 2009 for taxable income exceeding EUR 42 509. The work credit will be reduced by 1.25 per cent of taxable income above EUR 42 509; the reduction will be maximised when the credit equals EUR 24; the credit stops being reduced at a taxable income of EUR 44 429. The maximum work credit before it is reduced is EUR 1 504; the maximum reduced work credit is EUR 1480.
- Combination credit: The combination credit is abolished in 2009.
- Income dependant combination credit: The additional combination credit is replaced with the income dependant 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 4619 , is entitled to an income dependant combination credit of EUR 770 plus an extra combination credit of 3.8 per cent of taxable income above EUR 4 619. The maximum total combination credit is EUR 1765.
- Single parent credit: A single parent under certain conditions is entitled to the single parent credit of EUR 902.
- 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 1484.

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 16443 and EUR 47802 (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 insurance each adult pays a fixed amount of EUR 1064 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. Taxpayers might obtain compensation for this nominal contribution, depending on the taxpayer's personal situation and taxable income. This is called the care benefit. This benefit is included in the NTCP calculations as it compensates for the basic insurance premium of EUR 1064 . Also 6.9 per cent of gross earnings net of employees' unemployment social security contributions is paid until a maximum of net earnings of EUR 32 369. For the last 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.
- Taxpayers might obtain compensation for the nominal contribution of EUR 1064 for the basic health insurance, depending on the taxpayer's personal situation and taxable income. This is called the care benefit. The care benefit is calculated as follows:

Single parent households: $1209-2.7$ per cent * $19135-5$ per cent * (taxable income-19 135)

Married couples: number of adults * $1209-5.00$ per cent * 19 135-5 per cent * (taxable income principal and spouse - 19 135).

- 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: 4.15 per cent of gross earnings between EUR 16443 and EUR 47802 for the general unemployment fund and a contribution of 1.41 per cent of gross earnings below EUR 47802 for the industrial insurance associations redundancy payments fund;
- Invalidity: 6.32 per cent of gross earnings below EUR 47802.
- For medical care employers contribute 6.9 per cent of gross earnings net of employees' unemployment social security contributions until a maximum of gross earnings of EUR 32 369. 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 privately-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.

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. The extra child benefit has a maximum value of EUR 1011 per year for families with one child. The child credit increases to EUR 1322 a year for families with two children. The benefit is reduced at a rate of 6.5 per cent per euro when the family's yearly taxable income exceeds EUR 29914 and is completely withdrawn for families with two children when the taxable income is at least EUR 50253.

## 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 33 000. 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 (standard EUR 1064 a year in 2009) and, in addition for employees, a percentage of gross income ( 6.9 per cent) net of employees' 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 privately-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 EUR 1 064, depending on the taxpayer's personal situation and taxable income. This is called the care benefit (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 income-dependent 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 will be applicable at the beginning of May 2010. The AW for 2009 will be available in November 2010. Until then, the wage increase estimates presented in the OECD Economic Outlook will be used to estimate the AW for the years 2008 and 2009.

### 5.2. Main employers' contributions to private pension, health and related schemes

In addition to the obligatory contributions to social security schemes, most employers pay contributions to private pension schemes. More information is included in the Special Feature where the contributions to the privately-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.

2009 Parameter values

|  | Ave_earn | 44611 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Social security contributions | SSC_ceil | 47802 |  |
| Employees' schemes | Unemp_rate1 | 0.0 |  |
|  | Unemp_franchise1 | 16443 |  |
| Medical care | Med_rate | 0.069 |  |
|  | Med_limit | 999999 |  |
|  | Med_ceil | 32369 |  |
|  | Med_adult | 1064 |  |
|  | Med_child | 0 |  |
|  | Med_compensation1 | 0.027 |  |
|  | Med_compensation2 | 0.05 |  |
|  | Med_compensation3 | 0.05 |  |
|  | Med_compensation4 | 0.05 |  |
|  | Med_key | 19135 |  |
|  | Med_aldult for care benefit | 1209 |  |
| General schemes | Old_rate | 0.179 |  |
|  | Wid_rate | 0.0110 |  |
|  | Ex_med_rate | 0.1215 |  |
|  | Gen_Schemes_thrsh | 32127 |  |
|  | Unemp_empr1 | 0.0415 |  |
|  | Unemp_empr2 | 0.0141 |  |
|  | Unemp_unempr_franchise1 | 16443 |  |
|  | Unemp_unempr_franchise2 | 0 |  |
|  | Inv_empr_rate | 0.0632 |  |
|  | Inv_empr_franchise | 0 |  |
|  | Med_empr | 0.069 |  |
|  | Med_franchise | 0 |  |
| Tax schedule | Tax_sch | 0.0235 | 17878 |
|  | "tax_sch_lowest" | 0.1085 | 32127 |
|  | "tax_thrsh_1" | 0.42 | 54776 |
|  |  | 0.52 |  |
| Tax credits | Gen_credit | 2007 |  |
|  | Red_gen_credit | 1873 |  |
|  | Emp_credit1 | 154 |  |
|  | Emp_credit2 | 1350 |  |
|  | Emp_credit3 | 1326 |  |
|  | Emp_credit1_thr | 8859 |  |
|  | Emp_credit2_thr | 19763 |  |
|  | Emp_credit3_thr | 42509 |  |
|  | Emp_credit4_thr | 44429 |  |
|  | Comb_credit | Nvt |  |
|  | Comb_credit_franchise | 4619 |  |
|  | add_comb_credit | Nvt |  |
|  | Income_dependant_comb_comb_credit1 | 770 |  |
|  | Income_dependant_comb_credit_max | 1765 |  |
|  | Income_dependant_comb_par_credit_per | 0.038 |  |
|  | Sing_par_credit | 902 |  |
|  | Ex_sing_par_credit_per | 0.043 |  |
|  | Ex_sing_par_credit_max | 1484 |  |
| Family cash transfers | Ch1_trans | 947 |  |
|  | Ch2_trans | 1894 |  |
|  | Child_ben_1child | 1011 |  |
|  | Child_ben_2children | 1322 |  |
|  | Child_ben_redn | 0.065 |  |
|  | Child_ben_ceil | 29914 |  |

## 2009 Tax equations

The equations for the Netherlands system in 2009 are mostly 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 about tax equations. Due to the adjustment of the employment credit in 2009, the function Emp_credit(Value) is altered. 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 affixe "_spouse" indicates the value for the spouse. No affixe 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 / <br> 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+ad <br> d_comb_credit,Comb_credit),0) <br> +IF(AND(Children>0,Married=0),Sing_par_credit+MIN(Ex_sing_par_credit_max,E <br> x_sing_par_credit_per*tax_inc),0)) |
|  | tax_cr_spouse | S | IF(Married>0,MIN(CG_tax_excl_spouse+SSC_taxinc_spouse+ <br> CG_tax_excl+SSC_taxinc-tax_cr,Gen_credit <br> +Emp_credit(tax_inc_spouse)+IF(AND(Children>0,earn_spouse>Comb_credit_fra nchise),Comb_credit+add_comb_credit,0)),0) |
|  | tax_cr_inc | B | tax_sch_lowest/ <br> SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*(tax_cr+tax_cr_spouse) |
| 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 | J | SUM(Old_rate+Wid_rate+Ex_med_rate)/ <br> SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*(tax_cr+tax_cr_spouse) |
| Total | SSC | J | SSC_liable-tax_cr_SSC |
| 10. Total payments | total_payments | J | CG_tax+local_tax+SSC |
| 11. Cash transfers | cash_trans | J | IF(Children=1,Ch1_trans,IF(Children=2,Ch2_trans,0))+ <br> (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)))) |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
| 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

## (2009-2010 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 2009 <br> The tax/benefit position of single persons

1. Gross wage earnings

Wage level (per cent of average wage) 67
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)

| Total | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
|  | 0 | 0 | 0 | 0 |
|  | 31802 | 47703 | 79505 | 31802 |
|  | 5488 | 8828 | 19762 | 5488 |
|  | 520 | 39 | 0 | 0 |
| Total | 520 | 39 | 0 | 0 |
|  | 4968 | 8789 | 19762 | 5488 |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 |
|  | 4968 | 8789 | 19762 | 5488 |

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 $(1-10+11)$
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 | 0 | 0 | 10726 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 0 | 0 | 0 | 10726 |
|  | 26834 | 38914 | 59743 | 37040 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | $15.6 \%$ | $18.4 \%$ | $24.9 \%$ | $17.3 \%$ |
|  | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
|  | $15.6 \%$ | $18.4 \%$ | $24.9 \%$ | $-16.5 \%$ |
|  | $15.6 \%$ | $18.4 \%$ | $24.9 \%$ | $-16.5 \%$ |
|  |  |  |  |  |
|  | $21.0 \%$ | $34.0 \%$ | $38.0 \%$ | $21.0 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
| $21.0 \%$ | $34.0 \%$ | $38.0 \%$ | $21.0 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |

## New Zealand 2009

## The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage) 100-0
Number of children 2
2. Standard tax allowances:
ouc

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)
Total

6. Tax credits :

Basic credit
Married or head of family
Children
Other
7. Central government income tax finally paid (5-6)

| Total | 0 | 0 | 0 | 39 |
| ---: | ---: | ---: | ---: | ---: |
|  | 8828 | 10977 | 14316 | 10938 |
|  | 0 | 0 | 0 | 0 |

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 |
| ---: | ---: | ---: | ---: | ---: |
|  | 8828 | 10977 | 14316 | 10938 |

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

| $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: |
| 2 | 2 | none |
| 63604 | 79505 | 63604 |

The national currency is the New Zealand dollar (NZD). In 2009, NZD 1.60 was equal to USD 1. In that year the average worker earned NZD 47703 (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 fulltime 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

None.

### 1.1.3. Schedule

- Rates of income tax for individuals:
* On so much of the income as does not exceed NZD 14 000: 12.5 per cent.
* On so much of the income as exceeds NZD 14000 but does not exceed NZD 48000 : 21 per cent.
* On so much of the income as exceeds NZD 48000 but does not exceed NZD 70000 : 33 per cent.
* On so much of the income as exceeds NZD 70 000: 38 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 $1.3 \%$ 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 $0.89 \%$ ). 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 5198 per year, while the rate of NZD 4487 applies if the eldest child is younger than 16. For subsequent children the rate depends on the age of the child; NZD 4651 per year for $16-18$ year-olds, NZD 3557 per year for 13-15 year-olds and NZD 3119 per year for children under 13 years of age. The total credit is abated by 20 cents on each dollar earned over NZD 36 827. 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 395 per week plus the Family Tax Credit and In Work Tax Credit.

### 3.6. Independent Earner Tax Credit

The Independent Earner Tax Credit 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 2009/10

Changes to personal tax rates and thresholds take effect from 1 April 2009. The Independent Earner Tax Credit is also introduced from 1 April 2009. The Minimum Family Tax Credit was also increased from 1 April 2009 to NZD 395 per week (from NZD 355).

## 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 C-K 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.

2009 Parameter values

|  | Ave_earn | 47703 |  |
| :---: | :---: | :---: | :---: |
| Income tax schedule | Tax_sch | 0.125 | 14000 |
|  |  | 0.21 | 48000 |
|  |  | 0.33 | 70000 |
|  |  | 0.380 |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Income under NZ\$9880 rebate | reb_9880 | 728 |  |
|  | reb_9880_thrsh | 6240 |  |
|  | reb_9880_redn | 0.20 |  |
| Working for Families Tax Credits | Fam_sup_eld | 7607 |  |
|  | Fam_sup_oth | 3119 |  |
|  | Fam_sup_thrsh | 36827 |  |
|  | Fam_sup_rate | 0.20 |  |
| Minimum Family Tax Credit | Min_inc | 20540 |  |
| Independent Earner Tax Credit | IETC | 520 |  |
|  | IETC_thrsh1 | 23999 |  |
|  | IETC_thrsh2 | 44000 |  |
|  | IETC_rate | 0.13 |  |

## 2009 Tax equations

The equations for the New Zealand system in 2009 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 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 : |  |  |  |
| 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), |
| Independent Earner Tax Credit | IETC_rebate | B | ```CG_tax_excl-rebate_38000) =AND(Children=0,earn>IETC_thrsh1)*Taper(IETC,earn,IET C_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 2009

## The tax/benefit position of single persons

1. Gross wage earnings

| Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | none | none | none | 2 |
|  | 305215 | 457822 | 763037 | 305215 |

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 (ordinary) income (1-2 + 3)
5. Central government income tax liability (ordinary + personal)

| Total | 111150 | 111150 | 111150 | 151950 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 194065 | 346672 | 651887 | 153265 |
|  | 24355 | 45021 | 112188 | 19235 |

6. Tax credits (applicable against local tax)

Basic credit
Married or head of family
Children

|  | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Total | 0 | 0 | 0 | 0 |
|  | 24355 | 45021 | 112188 | 19235 |
|  | 29983 | 53561 | 100717 | 23679 |
|  |  |  |  |  |
|  | 23807 | 35710 | 59517 | 23807 |
|  |  |  |  |  |
| Total | 23807 | 35710 | 59517 | 23807 |
|  | 78145 | 134292 | 272422 | 66721 |

11. Cash transfers from general government

For head of family
For two children

| Total | 0 | 0 | 0 | 34920 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 34920 |
|  | 227070 | 323530 | 490615 | 273414 |
|  | 39068 | 58601 | 97669 | 39068 |
|  |  |  |  |  |
|  | $17.8 \%$ | $21.5 \%$ | $27.9 \%$ | $14.1 \%$ |
| $7.8 \%$ | $7.8 \%$ | $7.8 \%$ | $7.8 \%$ |  |
| $25.6 \%$ | $29.3 \%$ | $35.7 \%$ | $10.4 \%$ |  |
| $34.0 \%$ | $37.4 \%$ | $43.0 \%$ | $20.6 \%$ |  |
|  |  |  |  |  |
|  | $35.8 \%$ | $44.8 \%$ | $47.8 \%$ | $35.8 \%$ |
| n.a. | n.a. | n.a. | n.a. |  |
| $43.1 \%$ | $51.1 \%$ | $53.7 \%$ | $43.1 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |
|  |  |  |  |  |

## Norway 2009

## The tax/benefit position of married couples

1. Gross wage earnings

| Wage level (per cent of average wage) | $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | 2 | 2 | 2 | none |
|  | 457822 | 610430 | 763037 | 610430 |

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 (ordinary) income (1-2+3)
5. Central government income tax liability (ordinary + personal)

| Total | 151950 | 206889 | 222300 | 206889 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 305872 | 403541 | 540737 | 403541 |
|  | 39901 | 52158 | 69377 | 52158 |

6. Tax credits (applicable against local tax)

Basic credit
Married or head of family
Children

|  | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Total | 0 | 0 | 0 | 0 |
|  | 39901 | 52158 | 69377 | 52158 |
|  | 47257 | 62347 | 83544 | 62347 |
|  |  |  |  |  |
|  | 35710 | 47614 | 59517 | 47614 |
|  |  |  |  |  |
| Total | 35710 | 47614 | 59517 | 47614 |
|  | 122868 | 162119 | 212437 | 162119 |

11. Cash transfers from general government

For head of family
For two children

Total | 23280 | 23280 | 23280 | 0 |
| ---: | ---: | ---: | ---: |
|  | 23280 | 23280 | 23280 |

The national currency is the Kroner (NOK). In 2009, NOK 6.29 was equal to 1 USD. In that year the average worker earned NOK 457822 (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, 12.55 per cent is considered to be the central government income tax.

### 1.1.3. Rate schedule (surtax)

| Rate (\%) | NOK |
| :---: | :---: |
| 0 | $0-441000$ |
| 9.0 | $441000-716600$ |
| 12.0 | 716600 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 15.45 per cent points of the overall rate. Tax on ordinary income is levied after taking into account a standard allowance of NOK 40800 (Class 1) and NOK 81600 (Class 2) in 2009. 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 70350 . 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 13700.
- Labour union fees up to NOK 3600.
- 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 39600 . 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).

## 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 12.8 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

The base of the wealth tax has been gradually broadened. Most important changes in 2009 are 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) is 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 are reduced and the exempted amount is increased in 2009. The instalment scheme for family businesses is expanded through the abolition of the upper limit, and the payment period is increased from 7 to 12 years.

Other changes in the personal tax base in 2009:

- The fishermen's allowance is increased from NOK 115000 to NOK 150000.
- The reindeer husbandry allowance is increased to the same level as the agriculture allowance.
- The allowance for labour union fees is increased by NOK 450 to NOK 3600.
- The rate of the travel allowance is increased from NOK 1.40 per km to NOK 1.50 per km.
- The tax-free net income thresholds under the tax limitation rule are 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 69108 in 2008) 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 will be 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 (equivalent) employees in the C-K industry group (ISIC Rev. 3).

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 sectors.

### 5.2. Employers' contributions to private health and pension schemes

No information available.

2009 Parameter values

| AW-wage | Ave_earn | Secretariat estimate |  |
| :--- | :--- | :--- | :--- |
| Central rate (pers.) | Tax1_sch | 457822 | 441000 |
| Class 1 |  | 0 | 716600 |
|  |  | 0.09 | 441000 |
| Class 2 | Tax2_sch | 0.12 | 716600 |
|  |  | 0.09 |  |
| Central rate (ord.) | Cent_rate_ord | 0.12 |  |
| Local rate (ord.) | Local_rate | 0.1255 |  |
| Allowances | Class_al_1 | 0.1545 | 40800 |
|  | Class_al_2 | 81600 | 4000 |
| Basic relief | Basic_min | 70350 |  |
|  | Basic_max | 0.36 |  |
|  | Basic_rel_rate | 31800 |  |
| Soc security contribs | Basic_min_wage | 0.078 |  |
| Employer | SSC_rate | 0.128 |  |
| Trygd. low. lim. | SSC_empr | 39600 |  |
| Pct. rate | SSC_low_lim | 0.25 |  |
| Child cash transfer | SSC_low_rate | 11640 |  |

## 2009 Tax equations

The equations for the system for Norway in 2009 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 2009

## The tax/benefit position of single persons

1. Gross wage earnings

| Wage level (per cent of average wage) | 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | none | none | none | 2 |
|  | 23645 | 35468 | 59114 | 23645 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children

| Deduction for social security contributions and income taxes | 2379 | 3568 | 5947 |  |
| :--- | ---: | ---: | ---: | ---: |
| Work-related expenses | 1669 | 1669 | 1669 |  |
| Other | Total | 4047 | 5237 | 7615 |
|  |  | 0 | 0 | 0 |

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)
18735
6. Tax credits

Basic credit
Married or head of family
Children
28937

0
3372
-

## Poland 2009

The tax/benefit position of married couples

1. Gross wage earnings

| Wage level (per cent of average wage) | $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | 2 | 2 | 2 | none |
|  | 35468 | 47291 | 59114 | 47291 |

2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Deduction for social security contributions and income taxes 3568
Work-related expenses
1669

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)
7. Central government income tax finally paid (5-6)
8. State and local taxes
9. Employees' compulsory social security contributions

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: |
| Gross earnings | 3568 | 4757 | 5947 | 4757 |  |
| Taxable income | 2754 | 3673 | 4591 | 3673 |  |
|  | Total | 6323 | 8430 | 10538 | 8430 |
| 10. Total payments to general government $(\mathbf{7 + 8 + 9 )}$ |  | 6323 | 8676 | 11829 | 10900 |

11. Cash transfers from general government

For head of family

| For two children |  |  | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | 0 | 0 | 0 | 0 |
|  | Take-home pay (1-10+11) |  | 29146 | 38615 | 47285 | 36391 |
| 13. | Employers' compulsory social security contributions |  | 5242 | 6989 | 8737 | 6989 |
| 14. Average rates |  |  |  |  |  |  |
|  | Income tax |  | 0.0\% | 0.5\% | 2.2\% | 5.2\% |
|  | Employees' social security contributions |  | 17.8\% | 17.8\% | 17.8\% | 17.8\% |
|  | Total payments less cash transfers |  | 17.8\% | 18.3\% | 20.0\% | 23.0\% |
|  | Total tax wedge including employer's social security contributions |  | 28.4\% | 28.9\% | 30.3\% | 33.0\% |
| 15. Marginal rates |  |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner |  | 17.8\% | 26.7\% | 26.7\% | 26.7\% |
|  | Total payments less cash transfers: Spouse |  | 19.9\% | 26.7\% | 26.7\% | 26.7\% |
|  | Total tax wedge: Principal earner |  | 28.4\% | 36.1\% | 36.1\% | 36.1\% |
|  | Total tax wedge: Spouse |  | 30.2\% | 36.1\% | 36.1\% | 36.1\% |

The national currency is the zloty (PLN). In 2009, PLN 3.12 was equal to USD 1 . In that year, the average worker earned PLN 35468 (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 ${ }^{1}$ 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 dependant 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

### 1.1.1.1.1. 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. ${ }^{2}$
- 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.
- 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 <br> place of residence | 1335.00 | 2002.05 |
| Workplace in different town/city as <br> place of residence | $1668.72^{1}$ | 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 a workplace which is in a different city/town from his/her 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 243460.

Tax credits:

- Donations made to public benefit organizations - up to 1 per cent of due tax. ${ }^{3}$
- 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.


### 1.1.3. 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.

### 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.

In case of pension and disability insurance, contributions are not paid on the part of the wage that exceeds PLN 95790.

### 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; 15.88 percentage points of this contribution is assessed for social insurance (ZUS), 2.45 percentage points for the Labour Fund and 0.1 percentage points for the Guaranteed Employee Benefit Fund.

Social insurance contribution (ZUS) divides into three parts:

- 9.76 percentage points are aimed for old age insurance;
- 4.5 percentage points are aimed for disability insurance;
- 1.62 percentage points (on average) are aimed for accident insurance. The rate varies across industries and is subject to change. In the calculations contained in this Report, a rate of 1.62 per cent is used.

In case of pension and disability insurance, contributions are not paid on the part of the wage that exceeds PLN 95790.

## 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 are entitled to family allowances. From 1 September 2006 to the 31 October 2009 the family has been receiving PLN 48 monthly for a child until it reaches the age of 5 years, PLN 64 monthly for a child with an age from 5 up to 18 years old, PLN 68 monthly for a child with an age from 18 up to 24 years old. From 1 November 2009 the family allowances increase with $40 \%$. The family will receive PLN 68 monthly for a child until it reaches the age of 5 years, PLN 91 monthly for a child with an age from 5 up to 18 years old, PLN 98 monthly for a child with an age from 18 up to 24 years old. The average monthly income per household member that entitles families to the family allowances does not change (it remains PLN 504). 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 .

## 4. Main changes in tax/benefit systems since 2008

From 2009 onwards:

- Tax rates have been reduced for most taxpayers. The number of tax brackets has been limited, leaving only two brackets with rates of 18 per cent and 32 per cent. The tax threshold is set at the level PLN 85 528. The current income tax system is like a flat tax: about 99 per cent of all taxpayers earn income that is taxed in the first bracket at a tax rate of 18 per cent.
- Basic tax credit and tax credit for children were decreased from PLN 586.85 to PLN 556.02 and from PLN 1173.70 to PLN 1112.04 respectively.


## 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

No information provided.
2009 Parameter values

| AW earnings | Ave_earn | 35468 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Work expenses | work_exp | 1668.72 |  |
| 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 | 0.1426 |  |
| Other insurances | SSC_a | 0.0417 |  |
| Employees | SSC | 0.1371 |  |
| Old-age pension and disability pension insurance | SSC_old_e | 0.1126 |  |
| Sickness insurance | SSC_s | 0.0245 |  |
| Contribution ceiling | SSC_C | 95790 |  |
| Family benefit | fam_ben | 822 |  |
| 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 |  |

## 2009 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 |
| 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* (earn-SSC) |
| 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 | health_ins*(earn-SSC) |
|  | SSC | B | SSC_old_e*MIN(earn,SSC_C)+SSC_s*earn |
| 11. Cash transfers | cash_tran | J | ((earn_total/(1+Married+Children))<(Married*fam_ben_lim+(1- <br> Married) ${ }^{\star}$ fam_ben_lim_sp) $)^{\star}$ (Children*fam_ben+(1- <br> Married) ${ }^{\star}$ (Children>0)*MIN(fam_ben_Spsup*Children;fam_ben_Spsup_li m)) |
| 13. Employer's soc security | SSC_empr | B | SSC_old*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.

## Notes

1. However, a widowed spouse is entitled to apply the join income taxation.
2. 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.
3. This relief is distinct from an allowance for donations deducted from income.

## 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 2009

## 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
Wage level (per cent of average wage) 67
Number of children none

| 100 | 167 | 67 |
| ---: | ---: | ---: |
| none | none | 2 |
| 16657 | 27761 | 11104 |
|  |  |  |
| 3888 | 3888 | 3888 |

67
2
11104

3888

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
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 | 1221 | 1832 | 3054 | 1221 |
| :--- | :--- | :--- | :--- | :--- |
|  | 1796 | 3711 | 8176 | 1323 |

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

| Total | 0 | 0 | 0 | 1130 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 1130 |
|  | 9309 | 12945 | 19585 | 10912 |
|  | 2637 | 3956 | 6593 | 2637 |
|  |  |  |  |  |
|  | $5.2 \%$ | $11.3 \%$ | $18.5 \%$ | $0.9 \%$ |
| $11.0 \%$ | $11.0 \%$ | $11.0 \%$ | $11.0 \%$ |  |
| $16.2 \%$ | $22.3 \%$ | $29.5 \%$ | $1.7 \%$ |  |
| $32.3 \%$ | $37.2 \%$ | $43.0 \%$ | $20.6 \%$ |  |
|  |  |  |  |  |
|  | $34.5 \%$ | $34.5 \%$ | $45.0 \%$ | $34.5 \%$ |
| n.a. | n.a. | n.a. | n.a. |  |
| $47.1 \%$ | $47.1 \%$ | $55.6 \%$ | $47.1 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |
|  |  |  |  |  |

## Portugal 2009

The tax/benefit position of married couples


The national currency is the euro (EUR). In 2009, EUR 0.72 equalled USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 16657.

## 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 highest monthly minimum wage.* 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 3888.00 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 247.50 for each unmarried taxpayer or for each spouse;
- EUR 360.00 for a taxpayer in a single-parent family;
* The corresponding amount equals EUR 3888.00 ( 72 per cent $\times 12 \times$ EUR 450.00).
- EUR 180.00 for each dependent child; This tax credit is doubled for dependent children whose age does not exceed 3 years old.
- EUR 247.50 for each ascendant whose income does not exceed the minimum pension benefit. When there is only one ascendant, the tax credit is EUR 382.50.

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 64.00 EUR 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 highest minimum wage (EUR 720.00). For households having three or more dependants, the limit is raised by 30 per cent of the highest minimum wage (EUR 135.00) 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 382.50.
- 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 586.00. Rent paid by a tenant, for his permanent residence under an agreement typified by the law, up to EUR 586.00. 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 $\mathrm{A}+$ ). 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.
- Acquisition of new infrastructure for the use of renewable energies: 30 per cent of amounts spent, up to EUR 796. 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.
- Life and personal accident insurance premiums exclusively covering the risks of death, disability or retirement pensions: 25 per cent of premiums paid in the year in which the corresponding income was received, up to EUR 64 for unmarried taxpayers and EUR 128 for a married couple.
- Health insurance premiums: 25 per cent of premiums paid in the year in which the corresponding income was received, up to EUR 84 for unmarried taxpayers and EUR 168 for a married couple, plus EUR 41 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 .
- Acquisition of personal computers and software, as well as equipment for wide-band internet access: 50 per cent of amounts spent, up to EUR 250.
- 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.


### 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 2009 income)

| Taxable income (EUR) (R) | Marginal tax rate (\%) (T) | Amount to deduct (EUR) (K) |
| :--- | :---: | :---: |
| Up to 4755 | 10.5 | - |
| Over 4 755 up to 7 192 | 13.0 | 118.88 |
| Over 7 192 up to 17836 | 23.5 | 874.04 |
| Over 17 836 up to 41021 | 34.0 | 2746.82 |
| Over 41 021 up to 59 450 | 36.5 | 3772.34 |
| Over 59 450 up to 64 110 | 40.0 | 5853.09 |
| Over 64 110 | 42.0 | 7135.29 |

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 7560.00 in 2008), nor may it result in income tax of which the taxable base after application of the conjugal quotient is EUR 1896 or less.

For residents in the Autonomous Regions of the Azores and of Madeira, reduced tax rates are applicable. Tax calculation formula ( $\mathrm{I}=\mathrm{Income}$ tax due):

- Unmarried taxpayers: $\mathrm{I}=\mathrm{R} \times \mathrm{T}-\mathrm{K}-\mathrm{C}$

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)

### 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 highest monthly minimum wage (EUR 1800 ) 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 highest monthly minimum wage (EUR 675) 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 highest monthly minimum wage (EUR 1800 ) is granted for each taxpayer or spouse or dependent child.


### 1.1.8. Tax-exempt 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 and under 250 per cent of 14 times the reference value (i.e. over EUR 8803.62 and under EUR 14 672.70);
- Level 5: Families whose reference income is over 250 per cent and under 500 per cent of 14 times the reference value (i.e. over EUR 14672.70 and under EUR 29 345.40);
- Level 6: Families whose reference income is over 500 per cent of 14 times the reference value (i.e. over EUR 29 345.40).

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.

As of 1 July 2009, monthly social benefits per child were as follows:

|  | Child under 12 months | Child over <br> 12 months old | 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 | 174.72 | 43.68 | 43.68 | 87.36 |
| Level 2 | 144.91 | 36.23 | 36.23 | 72.46 |
| Level 3 | 92.29 | 26.54 | 26.54 | 53.08 |
| Level 4 | 56.45 | 22.59 | 22.59 | 45.18 |
| Level 5 | 33.88 | 11.29 | 11.29 | 22.58 |
| Level 6 | 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 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, singleparent 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 $\times 12$.


### 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.

2009 Parameter values

| Tax allowances | Ave_earn | 16657 | Secretariat estimate |  |
| :---: | :---: | :---: | :---: | :---: |
|  | perc | 1 |  |  |
|  | max_al | 3888 |  |  |
| Tax credits |  |  |  |  |
| Married (basic) | married_cred | 247.5 |  |  |
| Single (basic) | single_cred | 247.5 |  |  |
| Single parent | singlepar_cred | 360 |  |  |
| Each child credit | child_cred | 180 |  |  |
| Tax schedule | tax_sch | 0,105 | 4755 |  |
|  |  | 0,13 | 7192 |  |
|  |  | 0,235 | 17836 |  |
|  |  | 0,34 | 41021 |  |
|  |  | 0,365 | 59450 |  |
|  |  | 0,4 | 64110 |  |
|  |  | 0,42 |  |  |
|  | tax_floor | 1896 |  |  |
| Social security contributions | SSC_rate | 0,11 |  |  |
| Ceiling | SSC_empr | 0,2375 |  |  |
| Child benefit - Schedule | ch_ben_sch | 0 | 567.84 | 1st echelon |
|  |  | 2934.54 | 470.99 | 2nd echelon |
|  |  | 5869.08 | 345.02 | 3rd echelon |
|  |  | 8803.62 | 293.67 | 4th echelon |
|  |  | 14672.7 | 146.77 | 5th echelon |
|  |  | 29345.4 | 0 | 6th echelon |
| Extra child benefit for lone parents | ch_ben_lone | 0.2 |  |  |
| Minimum wage | MW | 6300 |  |  |
| Minimum disposable Income | MinDispY | 7560 |  |  |

## 2009 Tax equations

The equations for the Portuguese system in 2009 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 |
| 7. CG tax | CG_tax | J | If(earn-CG_tax_excl>MinDispY, Positive(CG_tax_excl-tax_cr), 0) |
| 8. State and local taxes | local_tax | $J$ | 0 |
| 9. Employees' soc. security | SSC | B | earn*SSC_rt |
| 11. Cash transfers | cash_trans | J | =IF(Married=0, VLOOKUP(earn/ <br> (Children+1),ch_ben_sch,2,1)*Children*(1+ch_ben_lone), <br> VLOOKUP(earn/(Children+1),ch_ben_sch,2,1)*Children) |
| 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 2009

## The tax/benefit position of single persons

1. Gross wage earnings

Wage level (per cent of average wage)
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children

| ent of average wage) | 67 |
| :---: | ---: |
| Number of children | none |
| 5965 |  |
|  | 4026 |
|  | 0 |
| 0 |  |
|  | 799 |

Work-related expenses
Other
3. Tax credits or cash transfers included in taxable income

| Total | 4825 | 5225 | 5990 | 4825 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 1140 | 3722 | 8921 | 1140 |
|  |  |  |  |  |
|  | 217 | 707 | 1695 | 217 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 472 |
|  | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 472 |
| Total | 0 | 707 | 1695 | -255 |
|  |  | 0 | 0 | 0 |
|  | 799 | 1199 | 1965 | 799 |
|  |  |  |  |  |
|  | 799 | 1199 | 1965 | 799 |
|  | 1016 | 1906 | 3660 | 544 |

10. Total payments to general government $(7+8+9)$
11. Cash transfers from general government

For head of family
For two children

| Total | 0 | 0 | 0 | 510 |
| :---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 510 |
|  | 4949 | 7041 | 11252 | 5931 |
|  | 1563 | 2344 | 3867 | 1563 |
|  |  |  |  |  |
|  | $3.6 \%$ | $7.9 \%$ | $11.4 \%$ | $-4.3 \%$ |
|  | $13.4 \%$ | $13.4 \%$ | $13.2 \%$ | $13.4 \%$ |
| $17.0 \%$ | $21.3 \%$ | $24.5 \%$ | $0.6 \%$ |  |
| $34.3 \%$ | $37.6 \%$ | $40.1 \%$ | $21.2 \%$ |  |
|  |  |  |  |  |
|  | $29.9 \%$ | $29.9 \%$ | $28.7 \%$ | $29.9 \%$ |
|  | n.a. | n.a. | n.a. | n.a. |
| $44.4 \%$ | $44.4 \%$ | $42.8 \%$ | $44.4 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |

## Slovak Republic 2009

## The tax/benefit position of married couples

1. Gross wage earnings

Wage level (per cent of average wage) 100-0

| Number of children | 2 |
| :--- | ---: |
| 8947 |  |

2. Standard tax allowances
Basic allowance
Married or head of family

4026

Maried or head of family
4026
Dependent children
0

Deduction for social security contributions and income taxes 1199
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 (ETC)
7. Central government income tax finally paid (5-6)
8. State and local taxes


Afrom 1.1.2009 Slovakia has joined the euro area; the national currency became the Euro (EUR). In 2009, EUR 0.72 was equal to USD 1 (average of six months daily exchange rates). In that year, the average worker earned EUR 8947 (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 $22.5^{*}$ times the minimum living standard (MLS) for a basic adult as of 1 January 2009 (EUR 4 025.7). In 2009, the basic personal allowance for taxpayers with gross earnings net of employee social security contributions in excess of the threshold of EUR 15387.12 per year ( $15387.12=86^{*} \mathrm{x}$ MLS, which is approximately equal to an employee's monthly gross wage of EUR 1473 ) is gradually withdrawn. If gross earnings net of employee social security contributions exceed EUR 15 387.12, the personal allowance is calculated as 44 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 31489.92 per year (employee's monthly gross wage of approximately EUR 2 941). 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 4 025.7. 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 2009 are lower or equal to EUR 31489.92 ( $=176$ times MLS) and the spouse's gross earnings net of employee social security contributions are lower than 4025.7 , the spouse allowance is calculated as the difference between $22.5^{*}$ 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 4025.7 , the spouse allowance is 0 . If the principal's gross earnings net of employee social security contributions exceed

[^53]EUR 31489.92 (= 176 times MLS), the spouse allowance is calculated as $66.5^{*}$ 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 of July when also the new amount of MLS comes into force. During the period from 1st January to 30 June 2009 monthly tax credit was EUR 19.32 per child, from 1 July 2009 the amount of tax credit will be EUR 20.00 (the annual amount will be EUR 235.92). 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 2009 is set at EUR 295.50 (the total annual earnings must therefore be at least EUR 1773 ). 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: As from 1 January 2005, premiums paid to the supplementary pension insurance, payments for specialpurpose savings paid to a bank* and life insurances paid to an insurance company* are tax-deductible up to the maximum limit of EUR 398.33 per year. It should be noted that contributions for supplementary pension insurance, special-purpose savings and life insurances made by employers on behalf of their employees are now treated as taxable benefits (these amounts would be added to the income of the employee) as from 2004.


### 1.1.2.3. Non-wastable tax credit: Employee tax credit (ETC/zamestnanecká prémia)

The employee tax credit is effective as from 1.1.2009 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 2009 is set at EUR 295.50 per month;

[^54]- 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 4025.7 ) and the tax base (gross earnings net of employee SSC), evaluated at the level of the minimum wage (EUR 3 072.96). 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 181.03 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 1 January 2008 adjusted formulae for calculation of MSSAB for retirement, disability and unemployment insurance. Average monthly MSSAB for retirement, disability and unemployment insurance are calculated as: $4 \times \mathrm{AW}(\mathrm{t}-2)+4 \times \mathrm{AW}(\mathrm{t}-1)$. Average monthly MSSAB for sickness insurance is calculated as: $1.5 \times \mathrm{AW}(\mathrm{t}-2)+1.5 \times \mathrm{AW}(\mathrm{t}-1)$. According to the law, MSSAB in the first six months of the year is $4 \times \mathrm{AW}(\mathrm{t}-2)$ (for sickness insurance $1.5 \times \mathrm{AW}(\mathrm{t}-2)$ ), in the second half of the year it is $4 \times \mathrm{AW}(\mathrm{t}-1)$ (for sickness insurance $1.5 \times \mathrm{AW}(\mathrm{t}-1)$ ). Average monthly MSSAB for health insurance is calculated as: $3 \times \mathrm{AW}(\mathrm{t}-2)$. Where $\mathrm{AW}(\mathrm{t}-2)$ is the average wage two years ago and $\mathrm{AW}(\mathrm{t}-1)$ is the average wage before the current tax year. The average wage ( AW ) is determined by the Statistical Office of the Slovak Republic - for 2007 it is EUR 668.72 per month and for 2008, EUR 723.03 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 2009; the rate will range from 0.3 to 2.1 per cent as from 2010 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).

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 | $3.0 \times$ AW (t-2) | 24073.92 |
| Social Insurance |  |  |
| of which: |  |  |
| Sickness | $(1.5 \times$ AW $(t-2)+1.5 \times$ AW $(\mathrm{t}-1)) / 2$ | 12525.84 |
| Retirement | $(4.0 \times$ AW (t-2) $+4.0 \times$ AW (t-1))/2 | 33402.00 |
| Disability | $(4.0 \times$ AW $(t-2)+4.0 \times$ AW(t-1))/2 | 33402.00 |
| Unemployment | $(4.0 \times$ AW (t-2) $+4.0 \times$ AW(t-1))/2 | 33402.00 |
| Accident |  | No limit |
| Guarantee fund | $(1.5 \times$ AW $(t-2)+1.5 \times$ AW(t-1))/2 | 12525.84 |
| Reserve fund | $(4.0 \times$ AW (t-2) $+4.0 \times$ AW(t-1))/2 | 3402.00 |

## 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 21.25 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 9.96. 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 2009, these amounts are:

|  | MLS monthly <br> $(1.1 .2009-30.6 .2009)$ | MLS monthly <br> $(1.7 .2009-31.12 .2009)$ |
| :--- | :---: | :---: |
| First adult | 178.92 | 185.19 |
| Second adult | 124.81 | 129.18 |
| Child | 81.66 | 84.52 |

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 of January 2009) are:

- EUR 58.43 per month for an individual;
- EUR 109.54 per month for an individual with between one and four children;
- EUR 101.58 per month for a couple without children;
- EUR 150.04 per month for a couple with between one and four children;
- EUR 159.34 per month for an individual with more than four children;
- EUR 201.16 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 12.95. 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 52.12 per month for individual in material need, EUR 83.32 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 2009

- Besides the euro adoption, the new employee tax credit (ETC) for low-income earners was introduced. The formulae for the calculation of the basic and marital status reliefs were changed (for the fiscal years 2009 as well as 2010) as a result of the adoption of anticrisis measures.


## 5. Memorandum items

### 5.1. Identification of AW and valuation of earnings

Earnings data are based on the new broader average wage definition including industries falling under Categories C to K inclusive, with reference to International Standard Industrial Classification of All Economic Activities, Revision 3. The data are from the Slovak Statistical Office, Labour Force survey data (LFS).

2009 Parameter values

|  | Ave_earn | 8947 | Country estimate |
| :---: | :---: | :---: | :---: |
| Minimum living standard (MLS) | basic_adult | 178.92 |  |
|  | basic_adult1 | 124.81 |  |
|  | basic_child | 81.66 |  |
| Basic allowance | basic_al_mult | 22.5 |  |
|  | basic_al | 4025.7 |  |
|  | basic_al_mult1 | 86 |  |
|  | basic_al_mult2 | 44 |  |
|  | basic_al_redn | 0.25 |  |
| Spouse allowance | spouse_al_limit | 4025.7 |  |
|  | spouse_al_mult1 | 176 |  |
|  | spouse_al_mult2 | 66.5 |  |
|  | spouse_al_redn | 0.25 |  |
| Income tax rate | tax_rate | 0.19 |  |
| Tax credits - non-wastable | tax_cr | 235.92 |  |
|  | min_wage | 295.50 |  |
|  | minwage_mult | 6 |  |
|  | etc_thresh | 3072.96 |  |
| 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 | 33402.00 |  |
|  | MSSAB_health | 24073.92 |  |
|  | MSSAB_sick | 12525.84 |  |
|  | MSSAB_gua | 12525.84 |  |
|  | MSSAB_fund | 33402.00 |  |
| Cash transfers | transf_1 | 255.00 |  |
|  | transf_indiv | 701.16 |  |
|  | transf_indiv_child | 1314.48 |  |
|  | transf_couple | 1218.96 |  |
|  | transf_couple_child | 1800.48 |  |
|  | transf_hous_indiv | 625.44 |  |
|  | transf_hous_couple | 999.84 |  |
|  | transf_activ | 756.84 |  |
|  | transf_health | 24.00 |  |

## 2009 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* (earnSSC),0)) |
| Spouse | spouse_allce | P | Married*Positive(IF(earn_princ- <br> SSC_princ<=spouse_al_mult1*basic_adult, IF(earn_spouse- <br> SSC_spouse<=spouse_al_limit, (basic_al_mult* ${ }^{\text {basic_adult)- }}$ <br> (earn_spouse-SSC_spouse),0),spouse_al_mult2*basic_adult- <br> 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_alMAX(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 | MINA(earn,MSSAB)*(SSC_rate)+ MINA(earn,MSSAB_sick)*SSC_sick+ MINA(earn,MSSAB_health)*SSC_health |
| 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)* (IF(Children>0;transf_indiv_child;transf_indiv))+ <br> Married*(IF(Children>0;transf_couple_child;transf_couple))+IF((Married +Children)>0;transf_hous_couple;transf_hous_indiv)+((1+Married+Chil dren)*transf_health)+IF(A7>0; transf_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.

## 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 2009

## 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 | 15962 | 23943 | 39905 | 15962 |
| 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 | 1014 | 1520 | 2413 | 1014 |
|  | Work-related expenses | 2652 | 2652 | 2652 | 2652 |
|  | Other |  |  |  |  |
|  | Total | 3666 | 4172 | 5065 | 5816 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central and state government taxable income (1-2+3) | 12297 | 19771 | 34841 | 10147 |
| 5. |  |  |  |  |  |
|  | Central and state government income tax liability (exclusive of tax credits) | 2951 | 4828 | 9212 | 2435 |
| 6. | Central and state government tax credits |  |  |  |  |
|  | Basic credit | 1636 | 1636 | 1636 | 2342 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 1636 | 1636 | 1636 | 2342 |
| 7. | Central government income tax finally paid | 719 | 1943 | 4804 | 0 |
| 8. | State income tax finally paid | 596 | 1248 | 2772 | 93 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1014 | 1520 | 2413 | 1014 |
|  | Taxable income |  |  |  |  |
|  | Total | 1014 | 1520 | 2413 | 1014 |
| 10. | Total payments to general government (7+8+9) | 2329 | 4712 | 9989 | 1107 |
| 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) | 13634 | 19232 | 29917 | 14855 |
| 13. | Employer's compulsory social security contributions | 4773 | 7159 | 11360 | 4773 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 8.2\% | 13.3\% | 19.0\% | 0.6\% |
|  | Employees' social security contributions | 6.35\% | 6.35\% | 6.05\% | 6.35\% |
|  | Total payments less cash transfers | 14.6\% | 19.7\% | 25.0\% | 6.9\% |
|  | Total tax wedge including employer's social security contributions | 34.2\% | 38.2\% | 41.6\% | 28.4\% |
| 15. | Marginal rates |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 28.8\% | 32.6\% | 37.0\% | 14.2\% |
|  | 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\% | 33.9\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a |

## Spain 2009

## 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 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
Married or head of family
Children
Other
7. Central government income tax finally paid

| Total | 2566 | 2916 | 4203 | 2451 |
| :--- | ---: | ---: | ---: | ---: |
|  | 750 | 1640 | 2055 | 1943 |
|  | 612 | 1086 | 1521 | 1248 |
|  |  |  |  |  |
|  | 1520 | 2027 | 2534 | 2027 |
|  |  |  |  |  |
| Total | 1520 | 2027 | 2534 | 2027 |
|  | 2883 | 4753 | 6110 | 5218 |

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

|  | 0 | 0 | 0 | 0 |
| :---: | ---: | ---: | ---: | ---: |
| Total | 0 | 0 | 0 | 0 |
|  | 21060 | 27171 | 33795 | 26706 |
|  | 7159 | 9545 | 11932 | 9545 |
|  |  |  |  |  |
|  | $5.7 \%$ | $8.5 \%$ | $9.0 \%$ | $10.0 \%$ |
|  | $6.35 \%$ | $6.35 \%$ | $6.35 \%$ | $6.35 \%$ |
|  | $12.0 \%$ | $14.9 \%$ | $15.3 \%$ | $16.3 \%$ |
|  | $32.3 \%$ | $34.5 \%$ | $34.8 \%$ | $35.6 \%$ |
|  |  |  |  |  |
|  | $28.8 \%$ | $32.6 \%$ | $32.6 \%$ | $32.6 \%$ |
| $23.4 \%$ | $6.4 \%$ | $28.8 \%$ | $6.3 \%$ |  |
|  | $45.2 \%$ | $48.1 \%$ | $48.1 \%$ | $48.1 \%$ |
| $41.1 \%$ | $27.9 \%$ | $45.2 \%$ | $27.9 \%$ |  |

The national currency is the Euro (EUR). In 2009, EUR 0.72 was equal to USD 1. In that year the average worker earned EUR 23943 (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.
- Birth or Children's Adoption tax credit: In addition to the previous tax credit, working females may also claim a deduction of EUR 2500 for each new born child (or adopted) during the fiscal year.
- Relief forsocial 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 can not become negative.

- Work related tax deduction: Working taxpayers may deduct EUR 400. 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

- 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, 15 per cent of the investment made during the year with a maximum limit of EUR 9015.
- Renting out property for own-housing: Taxpayers with a tax base below EUR 24020 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 9015 where taxpayer's the tax base is equal or below EUR 12000.
*EUR 9015 less the result of multiplying by 0.75 the difference between taxpayer's tax base and EUR 12000.
- 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 can not 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.

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 <br> excess of the lower limit (\%) |
| :--- | :---: | :---: |
| $0-17707.20$ | 0 | 15.66 |
| $17707.20-33007.20$ | 2772.95 | 18.27 |
| 33 007.20-53 407.20 | 5568.26 | 24.14 |
| Over 53 407.20 | 10492.82 | 27.13 |

### 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 <br> excess of the lower limit (\%) |
| :--- | :---: | :---: |
| $0-17707.20$ | 0 | 8.34 |
| $17707.20-33007.20$ | 1476.78 | 9.73 |
| $33007.20-53407.20$ | 2965.47 | 12.86 |
| Over 53 407.20 | 5588.91 | 15.87 |

## 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 2009, these ceilings are:

- Lower ceiling: EUR 8 737.2.
- Upper Ceiling: EUR 37 994.4.

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
4.7 per cent
- Unemployment 1.55 per cent
- Professional Training 0.1 per cent


### 2.2. Employers' contributions

- Old age pension/sickness and disability
23.6 per cent
- Unemployment/Work injuries
5.50 per cent
- Wages fund
0.2 per cent
- Professional Training
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 11530.76 . 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 2009

No changes were made in 2009.

## 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.

2009 Parameter values

| AW earnings | Ave_earn | 23943 | Secretariat estimate |  |
| :---: | :---: | :---: | :---: | :---: |
| Work related allowance | wr_rate | 0.35 |  |  |
|  | wr_lim_max | 13260 |  |  |
|  | wr_lim_min | 9180 |  |  |
|  | wr_lim_min_1 | 9180 |  |  |
|  | wr_allow_max | 4080 |  |  |
|  | wr_allow_min | 2652 |  |  |
| Personal and 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 |  |  |
| Tax schedule | tax_sch_sg | 0 | 0 | 15.66\% |
|  |  | 17707.2 | 2772.95 | 18.27\% |
|  |  | 33007.2 | 5568.26 | 24.14\% |
|  |  | 53407.2 | 10492.82 | 27.13\% |
|  | tax_sch_sa | 0 | 0 | 8.34\% |
|  |  | 17707.2 | 1476.78 | 9.73\% |
|  |  | 33007.2 | 2965.47 | 12.86\% |
|  |  | 53407.2 | 5588.91 | 15.87\% |
| 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 |  |  |
|  | top_lim | 37994.4 |  |  |
| 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 |

## 2009 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(earnSSC<=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_totalSSC_fam<=wr_lim_min, wr_allow_max, IF(earn_totalSSC_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), $0, \operatorname{IF}($ AND (Married=0,Children $>0$ ),joint_t ax_allow_fam2,joint_tax_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)* $($ dep_child+(children>1)*dep_child2+(children>2)*dep_c hild3+(children>3)* (children-3)*dep_child4), <br> (children>0)* $($ dep_child $+($ children>1)*dep_child2+(children>2)*dep_c hild3+(children>3)* (children-3)*dep_child4)/2) |
|  |  | S | IF(earn_sp=0, 0 , (children>0)* $($ dep_child+(children>1)*dep_child2+(children>2)*dep_c hild3+(children>3)* $(\text { children }-3)^{\star}$ dep_child4)/2) |
| Children exempt income, family | child_ex_inc_fam | J | (children>0)* $\left(\right.$ dep_child $+(\text { children }>1)^{\star}$ dep_child2 $2+(\text { children }>2)^{\star}$ dep_c hild3+(children>3)* ${ }^{\star}$ (children-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, Positive(earn(work_fam+joint_allow_fam+SSC_princ+SSC_sp))) |
| 5. CG tax before credits | CG_tax_ind_excl | B | MAXA(0, VLOOKUP(tax_inc_ind, tax_sch_sg, 2)+(tax_inc_indVLOOKUP(tax_inc_ind, tax_sch_sg, 1)) ${ }^{*} V L O O K U P\left(t a x \_i n c \_i n d, ~\right.$ tax_sch_sg, 3)) |
|  | CG_tax_fam_excl | J | MAXA(0, VLOOKUP(tax_inc_fam, tax_sch_sg, 2)+(tax_inc_famVLOOKUP(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)- <br> 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,MIN <br> A(TC_NUEVO,CG_tax_ind_excl),0)) |


| Line in country table and intermediate steps | Variable name | Range | Equation |
| :---: | :---: | :---: | :---: |
|  | 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)- <br> VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sg,1))* <br> VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sg,3)+IF(AND(marri ed=1,earn_sp>0),(MINA(2*TC_NUEVO,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_indVLOOKUP(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_famVLOOKUP(tax_inc_fam, tax_sch_sa, 1))*VLOOKUP(tax_inc_fam, tax_sch_sa, 3)) |
| 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)- <br> VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sa,1))* <br> 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)- <br> VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sa,1))* <br> 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 |  |  | 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 |  |  | ```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 2009

The tax/benefit position of single persons

1. Gross wage earnings
2. Standard tax allowances
Basic allowance

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
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
13. Employer's wage dependent contributions and taxes

Employer's compulsory social security contributions

|  | 30382 | 43179 | 46979 | 30382 |
| :--- | ---: | ---: | ---: | ---: |
| Total | 30382 | 43179 | 46979 | 30382 |
|  | -30382 | -43179 | -1334 | -30382 |
|  | 67862 | 108460 | 183414 | 67862 |
|  |  |  |  |  |
|  | 16600 | 25000 | 28800 | 16600 |
|  |  |  |  |  |
| Total | 16600 | 25000 | 28800 | 16600 |
|  | 54080 | 90281 | 210880 | 54080 |
|  |  |  |  |  |
|  | 0 | 0 | 0 | 26400 |
|  | 0 | 0 | 0 | 26400 |
|  |  |  |  |  |
| Total |  |  |  |  |
|  | 183737 | 266444 | 383662 | 210137 |
|  |  |  |  |  |
|  | 56910 | 85365 | 142274 | 56910 |
|  | 17812 | 26718 | 44531 | 17812 |
|  | 74722 | 112083 | 186805 | 74722 |

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
67
Number children
237817
100

167

237817
356725594542

22500
$-13782$

| Total | 8718 | -5579 | -5579 | 8718 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 215300 | 344100 | 581900 | 215300 |
|  | 0 | 0 | 45645 | 0 |

$-13782$
$-18179$
-18179

215300
0

For two children
12. Take-home pay (1-10+11)
payroll taxes
-
Gross earnings
Taxable income
10. Total payments to general government $(7+8+9)$
11. Cash transfers from general government

## Sweden 2009

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
Wage level (per cent of average wage)
Number of children

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 |  | 26400 | 26400 | 26400 | 0 |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Total | 26400 | 26400 | 26400 |
| 12. | Take-home pay (1-10+11) |  | 292844 | 392713 | 476581 |
| 13. | 366313 |  |  |  |  |
| Employer's wage dependent contributions and taxes |  |  |  |  |  |
| Employer's compulsory social security contributions |  | 85365 | 113820 | 142275 | 113820 |
| payroll taxes | Total | 112083 | 149444 | 186805 | 149444 |

14. Average rates

Income tax
Employees' social security contributions

| $18.3 \%$ | $16.0 \%$ | $17.3 \%$ | $16.0 \%$ |
| ---: | ---: | ---: | ---: |
| $7.0 \%$ | $7.0 \%$ | $7.0 \%$ | $7.0 \%$ |
| $17.9 \%$ | $17.4 \%$ | $19.8 \%$ | $23.0 \%$ |
| $37.5 \%$ | $37.2 \%$ | $39.0 \%$ | $41.4 \%$ |
|  |  |  |  |
| $31.5 \%$ | $31.5 \%$ | $31.5 \%$ | $31.5 \%$ |
| $16.0 \%$ | $29.5 \%$ | $29.5 \%$ | $29.5 \%$ |
| $47.9 \%$ | $47.9 \%$ | $47.9 \%$ | $47.9 \%$ |
| $36.1 \%$ | $46.3 \%$ | $46.3 \%$ | $46.3 \%$ |

The national currency is the Swedish Kroner (SEK). In 2009, SEK 7.65 was equal to USD 1. In that year, the average worker earned SEK 356725 (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 33 000, 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) | Percentage of BAat lower bracket | For exceeding income, \% of BA |
| :--- | :---: | :---: |
| $0-0.99$ | 0.423 |  |
| $0.99-2.72$ | 0.423 | +0.2 |
| $2.72-3.11$ | 0.77 | -0.1 |
| $3.11-7.88$ | 0.77 |  |
| $7.88-$ | 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

- 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 not 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;
* pension premiums.


### 1.1.3. Tax schedule

| Taxable Income (SEK) | Tax (SEK) at lower bracket | For exceeding income, \% |
| :--- | :---: | :---: |
| $0-367600$ | 0 |  |
| 367 600-526 200 | 0 |  |
| Over 526 200 | 31720 | 20 |

### 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 18179 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 the EITC for 2009 is simplified so that it is no longer connected to the local tax rate 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 2009 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 |
| $0.91 \mathrm{BA}-2.72 \mathrm{BA}$ | $0.91 \mathrm{BA}+0.25^{*}(\mathrm{EI}-0.91 \mathrm{BA})$ |
| $2.72 \mathrm{BA}-7.00 \mathrm{BA}$ | $1.363 \mathrm{BA}+0.065^{*}(\mathrm{EI}-2.72 \mathrm{BA})$ |
| $7.00 \mathrm{BA}-$ | 1.642 BA |
| $\mathrm{BA}=$ SEK 41000. |  |

For taxpayers older than 65, the EITC is calculated differently:

| Earned income (EI) | EITC |
| :--- | :--- |
| -100000 SEK | $0.2^{*}$ EI |
| $100000-300000$ SEK | 15000 SEK $+0.05^{*}$ EI |
| 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 348757 - 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 31.52 per cent in 2009, 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 28800 since the general pension contributions are not paid for income over SEK 410763 ( $=8.07$ * 50 900). 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 2009 are listed below.

| Program | Employer (\%) | Self-employed (\%) |
| :--- | :---: | :---: |
| Retirement pension | 10.21 | 10.21 |
| Survivor's pension | 1.70 | 1.70 |
| Parental insurance | 2.20 | 2.20 |
| Health insurance | 6.71 | 6.93 |
| Labour market | 2.43 | 0.50 |
| Occupational health | 0.68 | 0.68 |
| General wage tax | 7.49 | 7.49 |
| Total | 31.42 | 29.71 |

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 ( 15.07 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.

## 3. Universal cash transfers

### 3.1. Transfers related to marital status <br> 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 | 13800 |
| Third child | 16848 |
| Fourth child | 22920 |
| Fifth and subsequent child | 25200 |

## 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 since 2000. 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 July 1st 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 and further increased in 2009.

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 included 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.

## 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 C-K 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.

2009 Parameter values

| Average wage | Ave_earn | 356725 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Central income tax |  |  |  |
|  | tax_rate | 0.2 |  |
|  | tax_rate2 | 0.05 |  |
|  | tax_thrsh | 367600 |  |
|  | tax_thrsh2 | 526200 |  |
| 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 | 0.3152 |  |
|  | min_taxl | 0 |  |
| Soc. security amount |  |  |  |
|  | basic_amt | 42800 |  |
|  | basic_ant | 50900 |  |
| Soc. security contributions |  |  |  |
| Employee | SSC_rate | 0.07 |  |
| Employer | SSC_empr | 0.3142 |  |
| Ceiling | SSCC | 8.07 |  |
| Child benefit |  |  |  |
|  | Child 1 | 12600 |  |
|  | Child 2 | 13800 |  |
|  | CB | 13200 |  |
| 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 | 1.363 |  |
|  | ep_2 | 0.25 |  |
|  | ep_3 | 0.065 |  |
|  | ep_4 | 1.642 |  |
| Employer payroll tax | PRT | 0.0749 |  |

## 2009 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, <br> MINA(ROUNDUP(MAXA(gp_1*basic_amt, (gp_1+gp_2*(gr_2- <br> 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(truncearngr_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 |
|  |  |  | =TRUNC(MAX (()(TRUNC(IF(earned_income>er_2*basic_amt; IF(earned_income>er_3*basic_amt;ep_4*basic_amt;ep_1*basic_amt+e p_3* (earned_income- <br> er_2*basic_amt));MIN(earned_income;er_1*basic_amt+ep_2*(earned_ ncome-er_1*basic_amt)));0))-basic_allowance)*local_rate);0);0) |
|  | eitc | B |  |
|  | 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 2009

The tax/benefit position of single persons

## 1. Gross wage earnings

Wage level (per cent of average wage) 67
Number of children none
2. Standard tax allowances

Basic allowance

| Married or head of family | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
| Dependent children | 0 | 0 | 0 | 12200 |
| Deduction for social security contributions and income taxes | 5553 | 8329 | 13693 | 5553 |
| Work-related expenses | 2000 | 2011 | 3358 | 2000 |
| Other | Total | 9253 | 12040 | 18751 |
|  | 0 | 0 | 22853 |  |
| Tax credits or cash transfers included in taxable income | 40900 | 63300 | 106800 | 33300 |
| Central government taxable income (1-2 + 3) | 256 | 885 | 3739 | 6000 |

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

| Total | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  | 256 | 885 | 3739 | 66 |
|  | 3337 | 7008 | 15674 | 1178 |
|  |  |  |  |  |
|  | 5553 | 8329 | 13693 | 5553 |
|  |  |  |  |  |
| Total | 5553 | 8329 | 13693 | 5553 |
|  | 9146 | 16221 | 33106 | 6797 |

10. Total payments to general government $(7+8+9)$
11. Cash transfers from general government

For head of family
For two children

| Total | 0 | 0 | 0 | 6000 |
| ---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 6000 |
|  | 41104 | 59154 | 92520 | 49454 |
|  | 5553 | 8329 | 13693 | 5553 |
|  |  |  |  |  |
|  | $7.2 \%$ | $10.5 \%$ | $15.5 \%$ | $2.5 \%$ |
| $11.1 \%$ | $11.1 \%$ | $10.9 \%$ | $11.1 \%$ |  |
| $18.2 \%$ | $21.5 \%$ | $26.4 \%$ | $1.6 \%$ |  |
| $26.3 \%$ | $29.3 \%$ | $33.6 \%$ | $11.4 \%$ |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | $25.1 \%$ | $28.7 \%$ | $36.8 \%$ | $19.7 \%$ |
| n.a. | n.a. | n.a. | n.a. |  |
| $32.5 \%$ | $35.8 \%$ | $42.6 \%$ | $27.7 \%$ |  |
| n.a. | n.a. | n.a. | n.a. |  |

## Switzerland 2009

## The tax/benefit position of married couples

1. Gross wage earnings

| Wage level (per cent of average wage) | $100-0$ | $100-33$ | $100-67$ | $100-33$ |
| ---: | ---: | ---: | ---: | ---: |
| Number of children | 2 | 2 | 2 | none |
|  | 75376 | 100501 | 125626 | 100501 |

2. Standard tax allowances

Basic allowance

6. Tax credits

Basic credit
Married or head of family
Children
Other

|  |  | Total | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. | Central government income tax finally paid (5-6) |  | 286 | 487 | 1268 | 715 |
| 8. | State and local taxes |  | 3456 | 5602 | 9093 | 7135 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |  |
|  | Gross earnings |  | 8329 | 11105 | 13882 | 11105 |
|  | Taxable income |  |  |  |  |  |
|  |  | Total | 8329 | 11105 | 13882 | 11105 |
| 10. | Total payments to general government (7+8+9) |  | 12071 | 17194 | 24242 | 18955 |
| 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) |  | 69305 | 89307 | 107384 | 81546 |
| 13. | Employer's compulsory social security contributions |  | 8329 | 11105 | 13882 | 11105 |
| 14. Average rates |  |  |  |  |  |  |
|  | Income tax |  | 5.0\% | 6.1\% | 8.2\% | 7.8\% |
|  | Employees' social security contributions |  | 11.1\% | 11.1\% | 11.1\% | 11.1\% |
|  | Total payments less cash transfers |  | 8.1\% | 11.1\% | 14.5\% | 18.9\% |
|  | Total tax wedge including employer's social security contributions |  | 17.2\% | 20.0\% | 23.0\% | 26.9\% |
| 15. | Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner |  | 24.1\% | 26.9\% | 29.6\% | 26.9\% |
|  | Total payments less cash transfers: Spouse |  | 20.4\% | 27.4\% | 30.2\% | 27.4\% |
|  | Total tax wedge: Principal earner |  | 31.7\% | 34.1\% | 36.6\% | 34.1\% |
|  | Total tax wedge: Spouse |  | 28.3\% | 34.6\% | 37.1\% | 34.6\% |

T
he national currency is the Swiss franc (CHF). In 2009, CHF 1.09 equalled USD 1 (for the first 6 months of the year). The Secretariat has estimated that in that same year the average worker earned CHF 75376.

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 "postnumerando" 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 2500 for married couples for direct federal tax

- Deduction for children

A CHF 6100 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.

- 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 ( $1 \%$ for income up to CHF 106 800, the contribution being waived for the portion of pay in excess of that amount) are deductible in full. Compulsory contributions to the pension fund are also fully deductible. Health and life insurance premiums are deductible up to CHF 3300 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 7600 and no more than CHF 12500.

### 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 striking the taxpayer, or a dependant 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 (CHF) | Married taxpayer, 2 children (CHF) |
| :--- | :---: | :---: |
| Work-related expenses ${ }^{1}$ | $2000-4000$ | $2000-4000$ |
| Personal deduction | - | 2500 |
| Deduction for 2 dependent children | - | $12200\left(6100^{* 2)}\right.$ |
| Social contributions | $5.05 \%$ | $5.05 \%$ |
| Old age insurance | $1 \%^{2}$ | $1 \%{ }^{2}$ |
| Unemployment insurance | $5 \%$ | $5 \%$ |
| $\quad$ Pension fund | 1700 plus 700 per child | 3300 plus 700 per child |
| Maximum deductions for health insurance premiums and |  |  |
| loan interest ${ }^{3}$ |  | $7600-12500$ |
| Deduction for two-income couples ${ }^{4}$ |  |  |

1. $3 \%$ of net income, minimum CHF 2000 , maximum CHF 4000.
2. $1 \%$ of income up to CHF 106800 ; contribution waived on the portion exceeding that amount.
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.

### 1.1.4. Tax schedules

### 1.1.4.1. Rates for persons living alone

| Taxable income (CHF) | Base amount (CHF) | Plus \% of excess (CHF) |  |
| :--- | :---: | :---: | :---: |
| Up to 13600 | - | - | - |
| 13600 to 29800 |  | 0.77 | 13600 |
| 29800 to 39000 | 124.70 | 0.88 | 29800 |
| 39000 to 52000 | 205.65 | 2.64 | 39000 |
| 52000 to 68300 | 548.85 | 2.97 | 52000 |
| 68300 to 73600 | 1032.95 | 5.94 | 68300 |
| 73600 to 97700 | 1347.75 | 6.60 | 73600 |
| 97700 to 127100 | 2938.35 | 8.80 | 97700 |
| 127100 to 166200 | 5525.55 | 11.00 | 127100 |
| 166200 to 712500 | 9826.55 | 13.20 | 166200 |
| Over $712500^{2}$ | - | 11.5 of total income |  |

1. Fractions of less than CHF 100 are disregarded.
2. The calculation model disregards this part of the schedule.
1.1.4.2. Rates for spouses living together and for widowed, separated, divorced taxpayers or unmarried taxpayers living with their own children

| Taxable income (CHF) | Base amount (CHF) | Plus \% of the excess (CHF) |
| :--- | :---: | :---: |
| Up to 26700 | - | - |
| 26700 to 47900 |  | 1 |
| 47900 to 54900 | 212 | 2 |
| 54900 to 70900 | 352 | 3 |
| 70900 to 85100 | 832 | 4 |
| 85100 to 97400 | 1400 | 5 |
| 97400 to 108100 | 2015 | 6 |
| 108100 to 117000 | 2657 | 7 |
| 117000 to 124000 | 3280 | 8 |
| 124000 to 129300 | 3840 | 9 |
| 129300 to 132900 | 4317 | 10 |
| 132900 to 134700 | 4677 | 11 |
| 134700 to 136500 | 4875 | 12 |
| 136500 to 843600 | 5091 | 13 |
| Over $843600^{2}$ | - | 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 2009, 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 (CHF) | Married taxpayer, 2 children (CHF) |
| :---: | :---: | :---: |
| Work-related expenses ${ }^{1}$ | 2 000-4 000 | 2000-4000 |
| Personal deduction | - | - |
| Deduction for 2 dependent children | - | 13600 (6800*2) |
| Social contributions |  |  |
| Old age insurance | 5.05\% | 5.05\% |
| Unemployment insurance | $1 \%^{2}$ | $1 \%^{2}$ |
| Pension fund | 5\% | 5\% |
| Maximum deductions for health insurance premiums and loan interest ${ }^{3}$ | 2400 plus 1200 per child | 4800 plus 1200 per child |
| Deduction for two-income couples |  | 5400 |

1. $3 \%$ of net income, minimum CHF 2000 CHF, maximum CHF 4000.
2. $1 \%$ of income up to CHF 106800 ; contribution waived on the portion exceeding that amount.
3. For the purposes of this publication, taxpayers are assumed to always receive the relevant maximum deduction.

### 1.2.3. Postnumerando tax rates <br> 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 | 156000 |  |
| 207100 to 262500 | 15145 | 207100 |  |
| 262500 to 326400 | 21238 | 11 | 262500 |
| Over 326400 | 28905 | 12 | 326400 |

b) Basic income tax rates for other taxpayers (single without children).

| Taxable income (CHF) ${ }^{1}$ | Base amount (CHF) | Plus \% of the excess (CHF) |
| :--- | :---: | :---: |
| Up to 6200 | - | 0 |
| 6200 to 10500 | - | 2 |
| 10500 to 14800 | 85 | 3 |
| 14800 to 21800 | 214 | 4 |
| 21800 to 30400 | 494 | 5 |
| 30400 to 40300 | 924 | 6 |
| 40300 to 51700 | 1518 | 7 |
| 51700 to 67300 | 2316 | 8 |
| 67300 to 97200 | 3564 | 9 |
| 97200 to 126900 | 6255 | 10 |
| 126900 to 173900 | 9225 | 11 |
| 173900 to 234900 | 14395 | 12 |
| Over 234900 | 21714 | 13 |

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.
- $5 \%$ of gross income for the pension fund.


### 2.1.2. Health insurance

### 2.1.3. Unemployment

$1 \%$ on the portion of income up to CHF 106800 ; contribution is waived on any income in excess of that amount.

### 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.
- $5 \%$ of gross income for the pension fund.


### 2.2.2. Health insurance

### 2.2.3. Unemployment

$1 \%$ on the portion of income up to CHF 106 800; contribution is waived on any income in excess of that amount.

### 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.

### 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 prae-numerando taxation to annual post-numerando taxation on individual income. As a result, 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.

## 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.

2009 Parameter values

| AW earnings | Ave_earn | 75376 | Secretariat estimate |
| :---: | :---: | :---: | :---: |
| Tax allowances | Child_al | 6100 |  |
| Partner Allowance | partner_rate partner_min partner_max | $\begin{aligned} & 0.5 \\ & 7600 \\ & 12500 \end{aligned}$ |  |
| Basic deduction for married couples | Married_ded | 2500 |  |
| 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 | 13600 |
|  |  | 0.0077 | 29800 |
|  |  | 0.0088 | 39000 |
|  |  | 0.0264 | 52000 |
|  |  | 0.0297 | 68300 |
|  |  | 0.0594 | 73600 |
|  |  | 0.066 | 97700 |
|  |  | 0.088 | 127100 |
|  |  | 0.11 | 166200 |
|  |  | 0.132 | 712500 |
|  |  | 0.132 |  |
| Married | IFD_min_m | - |  |
|  | IFD_sch_m | 0 | 26700 |
|  |  | 0.01 | 47900 |
|  |  | 0.02 | 54900 |
|  |  | 0.03 | 70900 |
|  |  | 0.04 | 85100 |
|  |  | 0.05 | 97400 |
|  |  | 0.06 | 108100 |
|  |  | 0.07 | 117000 |
|  |  | 0.08 | 124000 |
|  |  | 0.09 | 129300 |
|  |  | 0.1 | 132900 |
|  |  | 0.11 | 134700 |
|  |  | 0.12 | 136500 |
|  |  | 0.13 | 843600 |
|  |  | 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 |  |

## 2009 Parameter values (cont.)

| 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 Multiple | statetax_mult | 2.19 |  |
| Social security contributions | old_age | 0.05 |  |
| Pension | pension_rate | 0.0505 |  |
| Unemployment | unemp_rate | 0.01 |  |
|  | unemp_rate2 | 0 |  |
| income ceiling | unemp_ciel | 106800 |  |
|  | unemp_ciel2 | 0 |  |
| 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 | 3300 |  |
| Child | max_dedn_c | 700 |  |
| Child cash transfer | child_ben | 3000 |  |

## 2009 Tax equations

The equations for the Swiss system in 2009 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,par tner_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 |
| Work related | work_al | B | MAX(work_exp_min, MIN(work_exp_max, work_exp* (earnSSC_al))) |
| Other | oth_al | J | IF(Married,IF(Children>0, max_dedn_m+Children*fed_dedn_c,max_d edn_m),IF(Children>0,max_dedn_s+Children*fed_dedn_c,max_ded n_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 : | tax_cr | J | 0 |
| 7. CG tax | CG_tax | J | CG_tax_excl |
| 8. State and local taxes | local_tax_inc | J | MAX(earn_total+taxbl_cr-local_basic*(1+Married)- <br> Children*local_child-work_al-SSC- <br> (local_dedn*(1+Married)+Children*local_dedn_c)- <br> (earn_spouse>0)*partner_local,0) |
|  | local_tax |  | IF((Married+Children) $>0$, Tax(local_tax_inc, <br> Zurich_sch_m)*statetax_mult+(1+Married)*Zurich_min*(Tax(local_t <br> ax_inc, Zurich_sch_m)>0), Tax(local_tax_inc, <br> Zurich_sch_s)*statetax_mult+(Tax(local_tax_inc, <br> Zurich_sch_s)>0)*Zurich_min) |
| 9. Employees' soc security | SSC | B | (pension_rate+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 2009

## The tax/benefit position of single persons

|  | Wage level (per cent of average production wage) | 67 | 100 | 167 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | none | none | none | 2 |
|  | Gross wage earnings | 12806 | 19209 | 32015 | 12806 |
| 2. Standard tax allowances |  |  |  |  |  |
|  | Basic allowance | 0 | 0 | 0 | 0 |
| Married or head of family |  |  |  |  |  |
| Dependent children |  |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 1921 | 2881 | 4802 | 1921 |
| Work-related expenses |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 1921 | 2881 | 4802 | 1921 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2 + 3) | 10885 | 16328 | 27213 | 10885 |
| 5. | Central government income tax liability (exclusive of tax credits) | 1742 | 2831 | 5372 | 1742 |
|  | Stamp tax | 77 | 115 | 192 | 77 |
|  | Total | 1819 | 2946 | 5565 | 1819 |
| 6. Tax credits |  |  |  |  |  |
|  | Basic credit | 599 | 599 | 599 | 779 |
| Married or head of family |  |  |  |  |  |
| Children |  |  |  |  |  |
| Other |  |  |  |  |  |
|  | Total | 599 | 599 | 599 | 779 |
| 7. | Central government income tax finally paid | 1219 | 2346 | 4965 | 1040 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 1921 | 2881 | 4802 | 1921 |
|  | Taxable income |  |  |  |  |
|  | Total | 1921 | 2881 | 4802 | 1921 |
| 10. | Total payments to general government (7+8+9) | 3140 | 5228 | 9767 | 2961 |
| 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) | 9666 | 13981 | 22248 | 9845 |
| 13. | Employer's compulsory social security contributions | 2113 | 3169 | 5282 | 2113 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 9.5\% | 12.2\% | 15.5\% | 8.1\% |
|  | Employees' social security contributions | 15.0\% | 15.0\% | 15.0\% | 15.0\% |
|  | Total payments less cash transfers | 24.5\% | 27.2\% | 30.5\% | 23.1\% |
|  | Total tax wedge including employer's social security contributions | 35.2\% | 37.5\% | 40.4\% | 34.0\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 32.6\% | 32.6\% | 38.6\% | 32.6\% |
|  | Total payments less cash transfers: Spouse | n.a. | n.a. | n.a. | n.a. |
|  | Total tax wedge: Principal earner | 42.1\% | 42.1\% | 47.3\% | 42.1\% |
|  | Total tax wedge: Spouse | n.a. | n.a. | n.a. | n.a. |

## Turkey 2009

## The tax/benefit position of married couples

|  | Wage level (per cent of average production wage) | 100-0 | 100-33 | 100-67 | 100-33 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of children | 2 | 2 | 2 | none |
|  | Gross wage earnings | 19209 | 25612 | 32015 | 25612 |
| 2. | Standard tax allowances |  |  |  |  |
|  | Basic allowance | 0 | 0 | 0 | 0 |
|  | Married or head of family |  |  |  |  |
|  | Dependent children |  |  |  |  |
|  | Deduction for social security contributions and income taxes | 2881 | 3842 | 4802 | 3842 |
|  | Work-related expenses |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 2881 | 3842 | 4802 | 3842 |
| 3. | Tax credits or cash transfers included in taxable income | 0 | 0 | 0 | 0 |
| 4. | Central government taxable income (1-2+3) | 16328 | 21770 | 27213 | 21770 |
| 5. | Central government income tax liability (exclusive of tax credits) | 2831 | 3647 | 4573 | 3647 |
|  | Stamp tax | 115 | 115 | 115 | 115 |
|  | Total | 2946 | 3762 | 4688 | 3762 |
| 6. | Tax credits |  |  |  |  |
|  | Basic credit | 899 | 779 | 779 | 599 |
|  | Married or head of family |  |  |  |  |
|  | Children |  |  |  |  |
|  | Other |  |  |  |  |
|  | Total | 899 | 779 | 779 | 599 |
| 7. | Central government income tax finally paid (5-6) | 2047 | 3021 | 3985 | 3201 |
| 8. | State and local taxes | 0 | 0 | 0 | 0 |
| 9. | Employees' compulsory social security contributions |  |  |  |  |
|  | Gross earnings | 2881 | 3842 | 4802 | 3842 |
|  | Taxable income |  |  |  |  |
|  | Total | 2881 | 3842 | 4802 | 3842 |
| 10. | Total payments to general government (7+8+9) | 4928 | 6863 | 8788 | 7043 |
| 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) | 14281 | 18749 | 23227 | 18569 |
| 13. | Employer's compulsory social security contributions | 3169 | 4226 | 5282 | 4226 |
| 14. Average rates |  |  |  |  |  |
|  | Income tax | 10.7\% | 11.8\% | 12.4\% | 12.5\% |
|  | Employees' social security contributions | 15.0\% | 15.0\% | 15.0\% | 15.0\% |
|  | Total payments less cash transfers | 25.7\% | 26.8\% | 27.4\% | 27.5\% |
|  | Total tax wedge including employer's social security contributions | 36.2\% | 37.2\% | 37.7\% | 37.8\% |
| 15. Marginal rates |  |  |  |  |  |
|  | Total payments less cash transfers: Principal earner | 32.6\% | 32.6\% | 32.6\% | 32.6\% |
|  | Total payments less cash transfers: Spouse | 28.4\% | 28.3\% | 32.6\% | 28.3\% |
|  | Total tax wedge: Principal earner | 42.1\% | 42.1\% | 42.1\% | 42.1\% |
|  | Total tax wedge: Spouse | 38.5\% | 38.5\% | 42.1\% | 38.5\% |

The national currency is the Türk Liras (TL). Turkey has changed its national currency unit in 2009 (after 1 January 2009, 1YTL = 1 million TRL, after 1 January 2009, 1TL = 1 YTL). In 2009, TL 1.55 was equal to USD 1. For 2009, the average production worker earned TL 19209 (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 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 2 nd respectively 3 rd degree if they lost their working capacity with at least 60 respectively 40 per cent. In these cases, the following amounts are deductible from monthly wages:
* Disabled in the 1st degree: 670 TL.
* Disabled in the 2nd degree: 330 TL.
* Disabled in the 3rd degree: 160 TL.
- 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 tax Allowance for Wage-Earners which was arranged by Repeated Article 121 was abolished by Article 31 of the Law No: 5615. Instead, Minimum Living Relief which was enacted by Rearranged Article 32 of Personal income tax shall be amended and applied to income that will be obtained as of 01/01/2008 by Article 2 of the Law No: 5615.

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 rates below:

* 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.

### 1.1.2.2. Main non-standard tax reliefs

- 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 2008 is as follows:

| Taxable income (TL) | Tax on lower threshold (TL) | Tax on excess amount above <br> lower threshold (\%) |
| :--- | :---: | :---: |
| Up to 8700 |  | 15 |
| 8700 up to 22000 | 1305 | 20 |
| 22000 up to 50000 | 3965 | 27 |
| 50000 and over | 11525 | 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 0.6 per cent in 2009.

## 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

2.2.4. Work injury: The industry-dependent rate varies between 1.5 per cent and 7.0 per cent. The rate includes occupational disease insurance. In this Report, the lowest rate is used (1.5 per cent).

### 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 2009, the ceiling amount is TL 53001 and the base amount is TL 8 154. Under the Social Security Law amended by Law 5198, the base wage for social security contributions is equal to the minimum wage since 1 July 2004. 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 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

Following Article 128 of the Social Insurance Act No. 506, 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.

### 5.3. Saving premium and employer Contribution

Abolished by Act No. 4447 (abolished since 1 June 2000).

## 2009 Parameter values

| Average earnings/yr | Ave_earn | 19209 | Country estimate |
| :---: | :---: | :---: | :---: |
| Income tax | Tax_sch | 0.15 | 8700 |
|  |  | 0.20 | 22000 |
|  |  | 0.27 | 50000 |
|  |  | 0.35 |  |
| Stamp tax | Stamp_rate | 0.006 |  |
| Employees SSC | SSC_rate | 0.15 |  |
|  | SSC_ceil | 53001 |  |
|  | SSC_empr credit_rate basic_allow spouse_allow child_allow add_child_allow min_wage | $\begin{aligned} & 0.165 \\ & 0.15 \\ & 0.5 \\ & 0.1 \\ & 0.075 \\ & 0.05 \\ & 7992 \end{aligned}$ |  |

## 2009 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) + stamp_tax |
| 6. Tax credits : | tax_cr | B | credit_rate*min_wage*(basic_allow+spouse_allow* (IF(Wife=0,Married,0))+IF(OR(Children=1,Children= <br> 2),Children*child_allow,0)+IF(Children>2,2*child_allow +(Children-2)*add_child_allow,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 | 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)*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

## (2009-2010 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 2009 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
Wage level (per cent of average wage)
Number of children

| 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: |
| none | none | none | 2 |
| 22497 | 33745 | 56241 | 22497 |
|  |  |  |  |
| 6475 | 6475 | 6475 | 6475 |

Other
7. Central government income tax finally paid
8. State and local taxes
9. Employees' compulsory social security contributions

| Gross earnings |  | 1845 | 3083 | 4322 | 1845 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable income |  |  |  |  |  |
|  | Total | 1845 | 3083 | 4322 | 1845 |
| 10. Total payments to general government ( $7+8+9$ ) |  | 5050 | 8537 | 16749 | 1768 |
| 11. Cash transfers from general government |  |  |  |  |  |
| For head of family |  |  |  |  |  |
| For two children |  | 0 | 0 | 0 | 1731 |
|  | Total | 0 | 0 | 0 | 1731 |
| 12. Take-home pay (1-10+11) |  | 17447 | 25208 | 39493 | 22460 |
| 13. Employer's compulsory social security contributions |  | 2147 | 3587 | 6467 | 2147 |
| 14. Average rates |  |  |  |  |  |
| Income tax |  | 14.2\% | 16.2\% | 22.1\% | -0.3\% |
| Employees' social security contributions |  | 8.2\% | 9.1\% | 7.7\% | 8.2\% |
| Total payments less cash transfers |  | 22.4\% | 25.3\% | 29.8\% | 0.2\% |
| Total tax wedge including employer's social security contributions |  | 29.2\% | 32.5\% | 37.0\% | 8.9\% |
| 15. Marginal rates |  |  |  |  |  |
| Total payments less cash transfers: Principal earner |  | 31.0\% | 31.0\% | 41.0\% | 70.0\% |
| Total payments less cash transfers: Spouse |  | n.a. | n.a. | n.a. | n.a. |
| Total tax wedge: Principal earner |  | 38.8\% | 38.8\% | 47.7\% | 73.4\% |
| Total tax wedge: Spouse |  | n.a | n. | n.a | n.a. |

## United Kingdom 2009

 The tax/benefit position of married couples1. Gross wage earnings

Wage level (per cent of average wage) 100-0
100-33

100-6
100-33
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

|  | 548 | 548 | 131 | 0 |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Total | 548 | 548 | 131 | 0 |
|  | 4906 | 5861 | 8527 | 6409 |
|  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 3083 | 3691 | 4928 | 3691 |
|  |  |  |  |  |
| Total | 3083 | 3691 | 4928 | 3691 |
|  | 7989 | 9552 | 13455 | 10099 |

11. Cash transfers from general government

For head of family
For two children

|  | 1731 | 1731 | 1731 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 1731 | 1731 | 1731 | 0 |
|  | 27487 | 37172 | 44518 | 34894 |
|  | 3587 | 4295 | 5735 | 4295 |
|  |  |  |  |  |
|  | $14.5 \%$ | $13.0 \%$ | $15.2 \%$ | $14.2 \%$ |
|  | $9.1 \%$ | $8.2 \%$ | $8.8 \%$ | $8.2 \%$ |
|  | $18.5 \%$ | $17.4 \%$ | $20.8 \%$ | $22.4 \%$ |
|  | $26.4 \%$ | $24.6 \%$ | $28.2 \%$ | $29.2 \%$ |
|  |  |  |  |  |
|  | $31.0 \%$ | $31.0 \%$ | $37.7 \%$ | $31.0 \%$ |
|  | $13.9 \%$ | $31.0 \%$ | $37.7 \%$ | $31.0 \%$ |
|  | $38.8 \%$ | $38.8 \%$ | $44.7 \%$ | $38.8 \%$ |
|  | $19.0 \%$ | $38.8 \%$ | $44.7 \%$ | $38.8 \%$ |

The national currency is the Pound Sterling (GBP). In 2009, GBP 0.64 was equal to USD 1. In 2009-2010, the Average Worker is estimated to earn GBP 33745 (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 6475 is granted to each individual.
- 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 4525 per year before taking into account eligible childcare costs.* This credit is reduced by 39 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 1 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 GBP 5015 per year, which is reduced by 39 pence for each GBP 1 of gross income above a threshold of GBP 16040 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.
* 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.

There is a minimum value to the award of GBP 545 for all families with children and gross income up to GBP 50000 . A second taper of 6.67 per cent is applied for incomes exceeding GBP 50 000. 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

- 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

From April 2008 the 10 per cent starting rate band for earnings was removed and the basic rate of income tax was lowered from 22 per cent to 20 per cent. There is a 10 per cent starting rate for savings income only. The starting rate limit for savings is GBP 2440 for 2009-10, but if an individual's non-savings income exceeds the starting rate limit, then the 10 per cent starting rate for savings is not available.

| Taxable income (GBP) | Rate \% |
| :--- | :---: |
| $0-37400$ | 20 |
| Over 37 400 | 40 |

### 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 110 in any week. These are 11 per cent of earnings between GBP 110 and GBP 844 and 1 per cent of earnings above GBP 844 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 percent on earnings between GBP 95 and GBP 770. Depending on eligibility criteria members of the National Insurance scheme qualify for pensions, sickness, industrial injury, unemployment benefits, etc. All employees earning under GBP 110 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 95 and GBP 110 to protect benefit entitlement.

### 2.2. Employers' contributions

Employer's contributions are not payable for employees earning less than GBP 110 per week. The rate of employers' contributions for employees not contracted out of the
additional (earnings related) scheme is 12.8 per cent of earnings above GBP 110 per week. For employees who are contracted out, there is a rebate of 3.7 per cent on earnings between GBP 95 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 per week is paid in respect of the first child in the family up to age 16 with GBP 13.20 per week paid for each subsequent child. Single Parent Child Benefit was abolished in 1998, with only those existing claimants still receiving the benefit. The rate was frozen at 1998 levels, whilst Child Benefit has risen in line with prices. Forecasts showed that the rate of Child Benefit would exceed the rate of Single Parent Child Benefit in 2007-08 and therefore ceased to exist from that year onwards. None of these payments is subject to tax.

## 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

About half of all wage earners are covered by private occupational pension schemes. A limited number are covered by private health schemes financed in whole or in part by employers.

2009 Parameter values

| Average earnings/yr | Ave_earn | 33745 | Secretariat Estimate |
| :---: | :---: | :---: | :---: |
| Allowances | Basic_al | 6475 |  |
|  | Married_al | 0 |  |
|  | Married_rate | 0 |  |
| Income tax | Tax_sch | 0.2 | 37400 |
|  |  | 0.4 |  |
| Employees SSC |  |  |  |
| Primary threshold | SSC_sch | 0 | 5733 PT |
| Upper earnings limit |  | 0.11 | 43875 UEL |
|  |  | 0.01 |  |
| Employers SSC | SSC_rate2 | 0.128 |  |
|  | ST | 5733 |  |
| Child benefit (first) | CB_first | 20.0 |  |
| Child benefit (others) | CB_others | 13.2 |  |
| NEW TAX CREDITS |  |  |  |
| WTC |  |  |  |
| Basic element | WTC_Basic | 1890 |  |
| Couple/Lone parent | WTC_couple_or_lone | 1860 |  |
| 30 Hour element | WTC_30hr | 775 |  |
| CTC |  |  |  |
| Family element | CTC_family | 545 |  |
| Child element | CTC_child | 2235 |  |
| Baby element | CTC_baby | 545 |  |
| Threshold | NTC_1 ${ }^{\text {st }}$ _thres | 6420 |  |
|  | NTC_1 ${ }^{\text {st }}$ _taper | 0.39 |  |
|  | NTC_2 ${ }^{\text {nd }}$ _thres | 50000 |  |
|  | NTC_2 ${ }^{\text {nd }}$ _taper | 0.0667 |  |
| Days in tax year | Numdays | 365 |  |

## 2009 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 | 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 (non-wastable) | tax_cr | J | IF(Children>0, IF((earn_total)>NTC_2nd_thres, <br> 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, <br> 2)*numdays+ROUNDUP(WTC_30hr/numdays, <br> 2)*numdays+ROUNDUP(WTC_couple_or_lone/numdays, <br> 2)*numdays, earn_total, NTC_1st_thres, NTC_1st_taper), <br> ROUNDUP(CTC_family/numdays, 2)*numdays)), <br> Taper(ROUNDUP(WTC_Basic/numdays, <br> 2)*numdays+ROUNDUP(WTC_30hr/numdays, <br> 2)*numdays+IF(Married=1, 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 $/ 7^{*}\left(\left(\right.\right.$ CB_first ${ }^{*}$ (Children>0) + CB_others*Positive (Children-1))+ $(\text { Married }=0)^{*}(\text { Children }>0)^{*}$ CB_onepar)) |
| 13. Employer's soc. security | SSC_empr | B | (earn>ST)* ${ }^{*}$ earn-ST)* ${ }^{\text {SSC_rate2 }}$ |
| 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 2009

## The tax/benefit position of single persons

1. Gross wage earnings

Wage level (per cent of average wage) 67
Number of children

1. Gross wage earnings
2. Standard tax allowances
Basic allowance
Married or head of family

Dependent children

| 67 | 100 | 167 | 67 |
| ---: | ---: | ---: | ---: |
| none | none | none | 2 |
| 26615 | 39923 | 66538 | 26615 |
|  |  |  |  |
| 9350 | 9350 | 9350 | 12000 |
|  |  |  |  |
| 0 | 0 | 0 | 7300 |

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)

| Total | 9350 | 9350 | 9350 | 19300 |
| :--- | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 17265 | 30573 | 57188 | 7315 |
|  | 2172 | 4168 | 10484 | 732 |
|  |  |  |  |  |
|  |  | 0 | 0 | 2881 |
|  | 778 | 778 | 778 | 2778 |
|  |  |  |  |  |
|  | 778 | 778 | 778 | 5659 |
| Total | 1394 | 3390 | 9706 | -4927 |
|  | 1606 | 2501 | 4291 | 1221 |
|  |  |  |  |  |
|  | 2036 | 3054 | 5090 | 2036 |
|  |  |  |  |  |
|  |  | 3054 | 5090 | 2036 |

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 $(1-10+11)$
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

| $29.4 \%$ | $29.4 \%$ | $39.4 \%$ | $45.4 \%$ |
| ---: | ---: | ---: | ---: |
| n.a. | n.a. | n.a. | n.a. |
| $34.4 \%$ | $34.4 \%$ | $43.7 \%$ | $49.3 \%$ |
| n.a. | n.a. | n.a. | n.a. |

## United States 2009

 The tax/benefit position of married couples1. Gross wage earnings
2. Standard tax allowances

Basic allowance
Married or head of family
Dependent children
Wage level (per cent of average wage) 100-0
Number of 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)

| Total | 26000 | 26000 | 26000 | 18700 |
| :---: | ---: | ---: | ---: | ---: |
|  | 0 | 0 | 0 | 0 |
|  | 13923 | 27230 | 40538 | 34530 |
|  | 1392 | 3250 | 5246 | 4345 |
|  | 1131 | 0 | 0 | 0 |
|  |  |  |  |  |
|  | 3178 | 3178 | 3178 | 1178 |
|  |  |  |  |  |
|  | 4309 | 3178 | 3178 | 1178 |
| Total | -2917 | 72 | 2068 | 3167 |
|  | 1949 | 2844 | 3739 | 3229 |
|  |  |  |  |  |
|  | 3054 | 4072 | 5090 | 4072 |
|  |  |  |  |  |
|  | 3054 | 4072 | 5090 | 4072 |

10. Total payments to general government $(\mathbf{7 + 8 + 9})$
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

|  | 0 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| Total | 0 | 0 | 0 | 0 |
|  | 37837 | 46243 | 55641 | 42762 |
|  | 3929 | 5822 | 6840 | 5822 |
|  |  |  |  |  |
|  | $-2.4 \%$ | $5.5 \%$ | $8.7 \%$ | $12.0 \%$ |
|  | $7.7 \%$ | $7.7 \%$ | $7.7 \%$ | $7.7 \%$ |
|  | $5.2 \%$ | $13.1 \%$ | $16.4 \%$ | $19.7 \%$ |
|  | $13.7 \%$ | $21.7 \%$ | $24.2 \%$ | $27.6 \%$ |
|  |  |  |  |  |
|  | $45.4 \%$ | $29.4 \%$ | $29.4 \%$ | $29.4 \%$ |
|  | $36.8 \%$ | $29.4 \%$ | $29.4 \%$ | $29.4 \%$ |
| $49.3 \%$ | $34.4 \%$ | $34.4 \%$ | $34.4 \%$ |  |
|  | $44.7 \%$ | $34.4 \%$ | $34.4 \%$ | $34.4 \%$ |

The national currency is the dollar (USD). In 2009, the average worker earned USD 39923 (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 2009 a married couple filing a joint tax return is entitled to a standard deduction of USD 11 400. The standard deduction is USD 8350 for heads of households and USD 5700 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 2009 a USD 3650 personal exemption is given every taxpayer (including both husband and wife filing a joint return). The personal exemption is indexed annually for inflation. The deduction for personal exemptions is reduced by 0.67 percent for each USD 2500 or fraction thereof by which the taxpayer's income exceeds USD 250200 for married couples, USD 166800 for single taxpayers, and USD 208500 for heads of households. All of a taxpayer's exemptions are phased out simultaneously.
- 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.
- Relieffor 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 3650 in 2009. 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 8950 of earned income in 2009. The credit phases down when income exceeds USD 16420 (21 420 for married taxpayers) and phases out when it reaches USD 35463 (40 463 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 12570 of earned income in 2009. The credit phases down when income exceeds

USD 16420 ( 21420 for married taxpayers) and phases out when it reaches USD 40295 (45 295 for married taxpayers). For 2009 and 2010, 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 12570 of earned income. The credit phases down when income exceeds USD 16420 (21 420 for married taxpayers) and phases out when it reaches USD 43279 (48 279 for married taxpayers).

- Since 1998, taxpayers are permitted a tax credit for each qualifying child under the age of 17. In 2009 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-wastable) 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-wastable) 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 2009 low income workers without children are permitted a non-wastable earned income credit of 7.65 per cent of up to USD 5970 of earned income. The credit phases down when income exceeds USD 7470 (12 470 for married taxpayers) and phases out when income reaches USD 13440 (18 440 for married taxpayers). This credit is available for taxpayers at least 25 years old and under 65 years old.
- Relief for workers. The making work pay credit is a non-wastable tax credit based on earned income. The credit is 6.2 per cent of earned income, up to a maximum credit of USD 400 ( 800 for married taxpayers). The credit is reduced by 2 per cent of gross income in excess of USD 75000 ( 150000 for married taxpayers). This credit is available in 2009 and 2010.
- Relief for social security and other taxes. There is no special relief for social security taxes although the non-wastable making work pay tax credit and 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

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. In 2009 taxpayers can deduct state and local sales taxes in lieu of state and local income 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.

Otherwise allowable itemised deductions are reduced by one per cent of the amount by which income exceeds USD 166 800. However, the reduction is limited to 26.67 per cent of the total of otherwise allowable itemised deductions other than the allowable itemised deductions for medical expenses, investment interest, theft and casualty losses, and gambling losses.

In 2006, the most recent year for which such statistics are available, the 43 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 1 629; taxes paid, USD 3 918; charitable contributions, USD 1 748; interest expense, USD 6768.

Taxpayers claiming the standard deduction are able to claim an additional deduction for real estate taxes, up to a maximum of USD 500 ( 1000 for married taxpayers).

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

Federal income tax rates

|  | Taxable income bracket (USD) |  |  |
| :--- | :--- | :--- | :--- |
| Single individual | Joint return of married couple | Head of household | Marginal tax rate (\%) |
| 0 to 8350 | 0 to 16700 | 0 to 11950 |  |
| 8350 to 33950 | 16700 to 67900 | 11950 to 45500 | 15 |
| 33950 to 82250 | 67900 to 137050 | 45500 to 117450 | 25 |
| 82250 to 171550 | 137050 to 208850 | 117450 to 190200 | 28 |
| 171550 to 372950 | 208850 to 372950 | 190200 to 372950 | 33 |
| 372950 and over | 372950 and over | 372950 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 3500 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. 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

The rate for employee contributions is 7.65 per cent ( 6.2 per cent for old age, survivors, and disability insurance, and 1.45 per cent for old age hospital insurance). The 6.2 per cent rate applies to earnings up to USD 106 800. 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

Employers match the employees' tax of 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 7 000. 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 percent 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 2008

A new making work pay tax credit is provided. The income at which the earned income tax credit begins to phase out increased for married taxpayers and an enhanced credit is provided for taxpayers with three or more children. The minimum earned income for the additional child credit was reduced so that more families are eligible.

## 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 fulltime equivalent worker. The AW wage is estimated to be USD 40256 for 2008.


### 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 2008 for employees in private industry:

|  | Pension | Health | Life |
| :--- | :---: | :---: | :---: |
| Per cent of workers covered | 56 | 56 | 60 |
| USD per covered employee | n.a. | 8712 (family) | n.a. |
|  |  | 3923 (single) |  |

2009 Parameter values

| APW earnings | Ave_earn | 39923 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Standard deductions | Married_al | 11400 |  |  |  |  |
|  | hh_al | 8350 |  |  |  |  |
|  | single_al | 5700 |  |  |  |  |
| Personal exemption | pers_ex | 3650 |  |  |  |  |
| Dependency exemption | dep_ex | 3650 |  |  |  |  |
| Personal exemption reduction | ex_dedn_rate | 0.0067 |  |  |  |  |
| Unit of earnings | ex_dedn_unit | 2500 |  |  |  |  |
| Threshold single (no children) | ex_thrsh_s | 166800 |  |  |  |  |
| Threshold single (with children) | ex_thrsh_hh | 208500 |  |  |  |  |
| Threshold joint | ex_thrsh_m | 250200 |  |  |  |  |
| Federal tax schedules | Fed_sch_s | 0.1 | 8350 |  |  |  |
|  |  | 0.15 | 33950 |  |  |  |
| Single individuals |  | 0.25 | 82250 |  |  |  |
|  |  | 0.28 | 171550 |  |  |  |
|  |  | 0.33 | 372950 |  |  |  |
|  |  | 0.35 |  |  |  |  |
| Married filing jointly | Fed_sch_m | 0.1 | 16700 |  |  |  |
|  |  | 0.15 | 67900 |  |  |  |
|  |  | 0.25 | 137050 |  |  |  |
|  |  | 0.28 | 208850 |  |  |  |
|  |  | 0.33 | 372950 |  |  |  |
|  |  | 0.35 |  |  |  |  |
| Head of household | Fed_sch_h | 0.1 | 11950 |  |  |  |
|  |  | 0.15 | 45500 |  |  |  |
|  |  | 0.25 | 117450 |  |  |  |
|  |  | 0.28 | 190200 |  |  |  |
|  |  | 0.33 | 372950 |  |  |  |
|  |  | 0.35 |  |  |  |  |
| Earned income credit | EIC_sch | rate | income limit | threshold | thresh-married | phase-out |
|  | no children | 0.0765 | 5720 | 7470 | 12470 | 0.0765 |
|  | 1 child | 0.34 | 8950 | 16420 | 21420 | 0.1598 |
|  | 2 children | 0.4 | 12570 | 16420 | 21420 | 0.2106 |
|  | 3 or more children | 0.45 | 12570 | 16420 | 21420 | 0.2106 |
| Child credit | cherd_max | 1000 |  |  |  |  |
|  | cherd_rdn | 50 |  |  |  |  |
|  | cherd_thrsh_m | 110000 |  |  |  |  |
|  | chard_thrsh_oth | 75000 |  |  |  |  |
|  | cherd_ref_perct | 0.15 |  |  |  |  |
|  | chcrd_ref_thresh | 3000 |  |  |  |  |
| Making work pay credit | MWP_rate | 0.062 |  |  |  |  |
|  | MWP_max | 400 |  |  |  | 0.02 |
|  | MWP_thresh | 75000 |  |  |  |  |
|  | MWP_taper_rate | 0.02 |  |  |  |  |
| Detroit | Detroit_ex | 600 |  |  |  |  |
|  | Detroit_rate | 0.025 |  |  |  |  |
| Michigan | Mich_ex | 3500 |  |  |  |  |
|  | Mich_ex_child | 600 |  |  |  |  |
|  | Mich_rate | 0.0435 |  |  |  |  |
| 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 | 0.062 |  |  |  |  |
|  | hosp_rate | 0.0145 |  |  |  |  |
| Ceiling for employers | pens_ceil | 106800 |  |  |  |  |

2009 Parameter values (cont.)

| 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 |

## 2009 Tax equations

The equations for the US system in 2009 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))+ Taper((1+Married)*pers_ex+ Children*dep_ex, earn_total, IF(Married, ex_thrsh_m, IF(Children=0, ex_thrsh_s, ex_thrsh_hh)), ex_dedn_rate/ ex_dedn_unit) |
| 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) |
|  | MWP | J | Taper(MIN((1+Married)*MWP_max,(MWP_rate*earn)),earn,(1+Marrie <br> d) <br> *MWP_thresh,MWP_taper_rate) |
|  | 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+MWP+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))``` |
| 9. Employees' soc security | SSC | B | pens_rate*MIN(earn, pens_ceil)+hosp_rate*earn |
| 11. Cash transfers | Cash_tran | J |  |
| 13. Employer's soc security | SSC_empr | B | pens_rate* $\mathrm{MIN}^{\left(e a r n, ~ p e n s \_c e i l\right) ~}$ <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) |

[^55]
## 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, fulltime 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 this part of the Report have been used by all OECD countries to calculate the figures shown in Parts 0, I, II and III. Where a country 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 "average workers" for which the average earnings figure is 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 B. Earnings levels for the edition year 2009 had to be estimated, 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, average wages reported by a few countries depart from the common "average worker" definition. The relevant differences are set out below and should be kept in mind when comparing Taxing Wages results across countries. At the same time, potential comparability problems are reduced from the fact that Taxing Wages compares tax rates and tax wedges, and not earnings levels as such.

## Industry sectors covered

Starting with the 2005 edition of Taxing Wages, average wages are 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 definition are provided in the Special Feature of Taxing Wages 2003-2004.

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 these countries therefore still refer to manual workers in manufacturing (industry Sector D). These differences may affect the comparability of the data, and all countries will therefore move to the broadened definition as soon as practically possible.

Table IV.1. Terminology

|  | General terms |
| :---: | :---: |
| Average worker (AW) | An adult full-time worker in the covered industry sectors whose wage earnings are equal to the average wage earnings of such workers |
| Single persons | Unmarried men and women |
| Couple with two children | Husband and wife with two dependent children between but not including five and twelve years of age |
| Labour costs | Gross wage earnings plus employers' social security contributions and payroll taxes |
| Net take-home pay | Gross wage earnings less personal income tax and employee social security contributions, plus cash transfers received from general government |
| Personal average tax rate | Personal income tax plus employee social security contributions expressed as a percentage of gross wage earnings |
| Tax burden | see Personal average tax rate |
| Tax wedge | Sum of personal income tax and employee plus employer social security contributions together with any payroll tax less cash transfers, expressed as a percentage of labour costs. |
| Elasticity of income after tax | Shows percentage change in after-tax income following a 1 per cent change of income before tax (defined more precisely as one minus a marginal tax rate divided by one minus a corresponding average tax rate) |
|  | Terms used under the income tax |
| Tax reliefs | A generic term to cover all the means of giving favourable income tax treatment to employees, married couples and parents |
| Tax allowances | Amounts deducted from gross earnings to arrive at taxable income |
| Tax credits | Amounts which a taxpayer may subtract from his tax liability. They are described as payable if they can exceed tax liability (sometimes the terms "refundable" and "non-wastable" are used) |
| Standard tax reliefs | Reliefs unrelated to the actual expenses incurred by taxpayers and automatically available to all taxpayers who satisfy the eligibility rules specified in the legislation are counted as standard reliefs, including also deductions for compulsory social security contributions |
| Basic relief | Any standard tax relief which is available irrespective of marital or family status |
| Marriage allowance | Additional tax relief given to married couples. (In some countries, this is not distinguished from the basic relief which may be doubled on marriage) |
| Non-standard tax reliefs | Reliefs wholly determined by reference to actual expenses incurred |
| Average rate of income tax | Amount of income tax payable after accounting for any reliefs calculated on the basis of the tax provisions covered in this Report, divided by gross wage earnings |
| Schedule rate | The rate which appears in the schedule of the income tax and in the schedule of social security contributions |
|  | Terms used under cash transfers |
| Cash transfers | Cash payments made by general government (agencies) paid to families usually in respect of dependent children. |

# 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 |
| I | 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 |
| O | Other community, social and personal service activities |
| P | Activities of private households as employers and undifferentiated production activities of private households |
| Q | Extraterritorial organizations and bodies |

## Geographical coverage

The data relate to average earnings in the covered industry sectors for the country as a whole.

## Type of worker

The type of worker referred to is an adult worker, including both manual and nonmanual workers. Some countries are not able to provide averages that include supervisory and/or management employees (see Table V.3). Where supervisory or management employees are excluded, the reported averages will be lower than would otherwise be the case (for instance, 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 $18 \%$ ). For 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 V.3). Most of them report full-time equivalent wages in these cases. In three countries (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. As shown in the Special Feature in Part I of the 2005 edition, such individuals are most likely to be working part-time and not full-time. However, it is also shown that the assumption that all employees are working full-time do 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. The reason is that special provisions for part-time workers are either of minor importance or not applicable for the household types currently presented in Taxing Wages.

## Determination of earnings

The ways in which earnings data are calculated in each country are set out in Table IV.3. All remuneration in cash paid to workers with characteristics similar to those defined above are included in the earnings calculation, which in addition to ordinary wages should include 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 in part because these types of benefits would be difficult to evaluate in a consistent way (they may be valued at the actual cost to the employer, their taxable value to the employee or their fair market value) and in most countries are of slight importance for workers at the average wage level. In addition, if fringe benefits were to be included in the earnings definition one would also need to incorporate the tax treatment of fringe benefits in the tax calculations. This would complicate the tax calculations significantly.

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. While these contributions are excluded from the earnings base (and therefore do not affect the tax calculation), in a number of cases country chapters in Part III provide an indication of the schemes which may be relevant for an average worker. These schemes are excluded from the present Report, because if they act as substitutes for compulsory state social security schemes their inclusion would require employers' contributions to these schemes to be also taken into account for reasons of consistency. Furthermore, the tax treatment of both contributions and benefits paid out would have to be included, which is beyond the scope of this Report.

## Calculation method used

Table IV. 3 notes 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 parttime employees should if possible be converted into their full-time equivalents (see section "full-time worker" above).

## 3. Estimating gross wage earnings in 2009

Statistical data on average gross wage earnings in 2009 are not presently available (except for Australia). 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 current edition year. Estimates of gross wage earnings of average workers in 2009 were derived by the Secretariat on the basis of a uniform approach: all year 2008 earnings levels are multiplied by the country-specific annual percentage change of wages reported in the most recently published edition of the OECD Economic Outlook. ${ }^{2}$ This transparent procedure is intended to avoid any bias in the results. Only in the cases of the Slovak Republic 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 2009 gross wage earnings were used.

There are gaps between wage levels reported in this publication and those contained in the OECD Analytical Data Base (ADB) corresponding to what is shown in the OECD 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 sector, 2) cash wages, 3) generally, no fringe benefits and no profit sharing schemes and 4) generally, no

Table IV. 3 Method used to calculate average earnings

| Table IV. 3 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Items included and exluded from the earnings base |  |  |  |  | Types of worker included and excluded inthe 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 x 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 x 12 (plus recurring bonuses) | 31st December | Calendar year |
| Canada | Exc | Inc | Inc | Inc | Exc | Inc | Inc | $1 \mathrm{lnc}^{6}$ | Average weekly hours x average hourly earnings $\times 52$ | 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 | $1 \mathrm{Inc}^{6}$ | Hourly earnings x hours worked | 31st December | Calendar year |
| Finland | Exc | Inc | Inc | Inc | Exc | Inc | $\mathrm{Inc}^{5}$ | 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 | $1 \mathrm{nc}{ }^{2}$ | Inc | Inc | Inc | Exc | Hourly earnings x hours worked | 31st December | Calendar year |
| Hungary | Exc | Inc | Inc | Inc | Exc | Inc | $\mathrm{Inc}^{5}$ | 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 |
| Italy | Exc ${ }^{3}$ | Inc | Inc | Inc | Exc ${ }^{4}$ | Inc | Exc | 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 fulltime 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 x 13 | 31st March | Tax year |
| Norway | Exc | Exc | Inc | Inc | Exc | Inc | Inc | Inc ${ }^{6}$ | Annual wages + estimated overtime | 31st December | Calendar year |
| Poland | Inc | Inc | Inc | Inc | Exc | Inc | Inc | 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 |
| 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 | Inc ${ }^{6}$ | 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 | Inc ${ }^{6}$ | 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 | $1 \mathrm{mc}{ }^{2}$ | Exc | Inc | Inc | Inc ${ }^{6}$ | Average weekly earnings $\times 52$ | 31st December | Calendar year |

[^56]2. In 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).
5. Except for top management (Finland); except fincome from profits exceeds $50 \%$ of totar income (Hure
6. Part-time wages are converted to full-time equivalents before calculating the average wage measure.
allowances to cover costs. In addition, for a number of countries the methodology for determining the average wage level is different.

Eleven of the OECD member countries have opted to provide national estimates of the level of gross wage earnings of average production workers in 2009. These estimates were not used as they may not be consistent with the Secretariat estimates derived for other countries, but they are included in Table IV. 4 to allow a comparison to be made of estimates by applying the Secretariat formula and those from national sources. In all cases, Secretariat estimates of wage levels in 2009 and wage levels provided by national respondents are fairly close.

Table IV.4. Estimated gross wage earnings, 2008-2009 (in national currency)

|  | Average wage 2008 | Average wage 2009 <br> (Secret. estimates) | Average wage 2009 (country estimates) | EO86 forecasted rates for $2009{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Australia | 60387 | 63408 | 63408 | 2.1 |
| Austria | 38843 | 39856 |  | 2.6 |
| Belgium | 39727 | 39723 |  | 0.0 |
| Canada | 42950 | 43568 | 44110 | 1.4 |
| Czech Republic | 274476 | 278717 | 285455 | 1.5 |
| Denmark | 359300 | 375153 | 371500 | 4.4 |
| Finland | 37273 | 38219 |  | 2.5 |
| France | 32663 | 33065 |  | 1.2 |
| Germany | 41400 | 40929 |  | -1.1 |
| Greece | 23934 | 25145 | 24979 | 5.1 |
| Hungary | 2338752 | 2476768 |  | 5.9 |
| Iceland | 4068000 | 4209404 |  | 3.5 |
| Ireland | 40862 | 39772 |  | -2.7 |
| Italy | 26304 | 26181 |  | -0.5 |
| Japan | 5000499 | 4866905 |  | -2.7 |
| Korea | 33467499 | 34696446 | 33467499 | 3.7 |
| Luxembourg | 48372 | 48445 |  | 0.2 |
| Mexico | 81133 | 83545 |  | 3.0 |
| Netherlands | 43514 | 44611 |  | 2.5 |
| New Zealand ${ }^{4}$ | 46676 | 47703 | 47703 | n.a |
| Norway | 439991 | 457822 | 430547 | 4.1 |
| Poland | 33711 | 35468 | 36954 | 5.2 |
| Portugal | 16093 | 16657 |  | 3.5 |
| Slovak Republic ${ }^{2,4}$ | 264739 | 8947 | 8947 | 3.4 |
| Spain | 23218 | 23943 |  | 3.1 |
| Sweden | 352470 | 356725 |  | 1.2 |
| Switzerland | 74495 | 75376 |  | 1.2 |
| Turkey ${ }^{3,4}$ | 18833 | 19209 | 19209 | n.a. |
| United Kingdom | 33592 | 33745 |  | 0.5 |
| United States | 40256 | 39923 |  | -0.8 |

1. Increase of compensation per employee in the business sector (EO86).
2. The Slovak Republic has introduced the Euro in 2009.
3. Turkey wage figures under the old definition of average worker (ISIC D, rev3.)
4. The country AW estimate is used instead of the OECD Secretariat's

AW estimate in the Taxing Wages calculations.

## 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 takehome 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:

- a single individual with no children earning 67 (two-thirds), 100 and 167 (five-thirds) per cent of the average earnings level, respectively;
- a lone parent with two children earning 67 (two-thirds) per cent of the average earnings level;
- a married couple with two children with a single earner at the average earnings level; and
- three cases of two-earner married couples, with earnings split between the two partners at 100-33 (one-third) per cent of the average earnings level, both with and without children, and finally a couple with children with the earnings split 100-67 (two-thirds) per cent of the average earnings level.

In cases of families with children, the children are assumed to be aged between but not including five and twelve.

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 |

## 6. Calculation of personal income taxes

The method by which income tax payments are calculated can be seen from 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 that arises in the calculation of personal income tax due 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. Standard reliefs are taken into account in calculating the tax position of employees and 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 but not including the ages of five and twelve;
* 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 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 country tables. A brief description of the main non-standard reliefs is provided in most country chapters. A comparison of the effect of these reliefs claimed by an average production worker on effective income tax rates is provided in Table IV.6.

There are several steps required in calculating the value of non-standard reliefs in Table IV.6. First, the reliefs which could be claimed by a taxpayer with the family-type characteristics and income level of an average worker, or for a wider group of taxpayers which would include the average worker are identified. It follows that allowances that are not consistent with the assumption of an average worker (e.g. allowances for the selfemployed) are not taken into account. Then, for each identified relief measure, the average expense-related relief is determined, taking into account also those who do not have that specific income component (and the related tax relief) to give an average value of that relief for all average worker-type taxpayers (in the wider group.) The impact of these different reliefs on the average rate of income tax is then calculated. Consider as an example the case where it is determined that 20 per cent of all taxpayers in the income class that

Table IV.6. Main non-standard income tax reliefs received by an average worker


Table IV.6. Main non-standard income tax reliefs received by an average worker (cont.)

## IRELAND (1999)

Work-related expenses (TA)
Medical insurance relief (TC)
Interest paid in full (TC)
ITALY (2001)
Medical expenses (TC)
Expenses for disabled persons (TC)
Mortgage interest (TC)
Payments to insurance funds (TC)
Payments to foundations (TC)
Expenses to attend school and university (TC)
Funeral charges
Other (TC)
Compulsory contributions (TA)
Contributions/premiums paid to private pension
saving plans (TA)
Charitable donations (TA)
Medical and assistance expenses incurred by handicapped persons (TA)
Periodical benefits allowed to the spouse fixed by judicial authority (TA)
Other deductions (TA)
LUXEMBOURG (2001)
Work expenses ( $5 \%$ ) (TA)
Special allowances $(3.5 \%)$ (TA)
Exceptional oxpenses (1.1\%)(TA)
Interest on personal dwelling (TA)
NORWAY (2003)
Travel expenses related to work exceeding
NOK 9200 (TA)
Labour union fees (TA)
Premiums and contributions to occupational
pension schemes in the private and public sector
Premiums and contributions to individual pension
Unlimited allowance for interest payments (TA)

## SPAIN (1995)

Mortgage interest (TA)

| Average am <br> relief typically rec <br> (national <br> Single <br> versons |
| :---: |

unt of each
eived by average
wage

Couples

80
75

### 63.29

1.03
43.49
70.80
1.38
8.41
4.14
0.31
309.41
7.97
1.23
4.53
10.63
4.50

| 75000 | 75000 |
| :--- | ---: |
| 45000 | 70000 |
| 27000 | 80000 |
| 45000 | 180000 |

10.8

000 80000
19.3

All income earners

All income earners around th average wage's income level

Calculations refer to following taxpayers ${ }^{2}$

All income earners in the range of IR£ $15000-17500$ of total income in
manufacturing sector

All income earners around average wage's income level

17 per cent of all taxpayers around the average wage's income level

tions（TA）
Note：TA＝Tax Allowance；TC＝Tax Credit
1．Relates to the non－standard tax reliefs typically claimed by taxpayers around the average wage＇s income level．The value of each relief is calculated by dividing the total amount received by average worker－type taxpayers by the total number of such taxpayers，including those who do not claim the relief．Calculated this way the amounts of all the separate reliefs are then added up to arrive at the total relief by the average worker．
2．Within average wage＇s income range can be taken to mean in most countries within $+/-5$ per cent of average wage＇s income．
includes the average worker owns their own house and on average deduct 10000 currency units in mortgage interest. In this case, taxpayers in the income class that includes the average worker would be assumed on average to deduct 2000 units in mortgage interest (because one in five actually deducts 10000 units.) At a typical marginal tax rate of 30 per cent, the resulting tax relief is 600 units, and the average tax rate of the average worker would be re-calculated accordingly.

Non-standard reliefs which are not related to specific sources of income are wholly offset against the tax liability. In contrast, for reliefs which are related to specific sources of income (e.g. mortgage interest reliefs which in some countries must be offset against imputed rent from home ownership), only the excess over the associated income is taken into account in the calculations shown in Table IV.6.

## 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 Quebec), 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 (see Table IV.7). 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. Table IV. 7 summarises the ways in which these taxes are calculated and the method used to determine the amount of state and local income taxes paid by an average worker.

## 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.

Table IV.7. State and local personal income taxes, 2005


1. Quebec operates a separate personal income tax system. Provincial tax is calculated as a percentage of taxable income.
2. Income subject to tax is usually the same as under the central government income tax, but tax reliefs are not the same.

Contributions to social security schemes outside the general government sector are not included in the calculations.

## 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 lowskilled 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 (but not including) five and twelve years of age who are attending school are included in the scope of the study. It follows that only children of age 6, 7, 8, 9, 10 and 11 are relevant in determining the tax relief for children and/or the amount of child benefit. If tax reliefs or cash transfers vary within this age range, the most generous provisions are taken. 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)' 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.

## 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 (see Annex I) 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 $33 \%$ 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 $33 \%$ 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 (see Table IV.6). On the other hand, actual rates may be higher than calculated rates because the latter do not take into account tax on nonwage 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 (Table IV.6); 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.
Table IV. 6 shows that for most of the countries which can provide information on these reliefs their inclusion would have significantly reduced the income tax rates, notably in Luxembourg and Spain.

When comparisons are made of income tax rates, some readers may prefer to use the sort of rates shown in columns five and six of Table IV. 6 for countries like Luxembourg and Spain where an average worker would typically be able to claim large amounts of nonstandard reliefs. Nevertheless, tax rates have been calculated for all countries using the standard methodology and these are the figures used in the main comparative tables and graphs.

## 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). ${ }^{8}$ The implications of adopting this new definition for timeseries comparisons are discussed in the 2005 edition of Taxing Wages.

Despite the focus on the years since 2000 in the main body of the Report, Annex D 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 D).

- 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 (see Table IV.7). 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 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 that describes the of equations in a standard format which show 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, $\operatorname{MAX}(\mathrm{X}, \mathrm{Y})$ and $\operatorname{MIN}(\mathrm{X}, \mathrm{Y})$ find the maximum and minimum of the two values, respectively. IF (condition $X, Y$ ) 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 $=2, C_{B} 2,0$ ).

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.

## Notes

1. Not all national statistical agencies use ISIC Rev. 3.1 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.
2. Wage estimates reported in the OECD Economic Outlook are consistent with information in the Analytical Data Base (ADB) of the Economics Department (ECO) of the OECD. These estimates are prepared by the ECO country desks. Data in the ADB/EO86 are consistent with the December 2009 issue of the OECD 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.
8. International Standard Industrial Classification of all economic activities, Revision 3.1 (ISIC Rev. 3.1).

## Annexes

Annex A. Overall Tax Levels and Tax Structures in OECD member Countries, 1990-2005 ..... 506
Annex B. Source of Earnings Data ..... 508
Annex C. Exchange Rates and Purchasing Power Parities of National Currencies, 2008 ..... 509
Annex D. Historical Series under the Old Definition of Average Worker ..... 510

Table A.1. Tax revenues expressed as a percentage of GDP at market prices, 1990-2007

|  | Total tax revenue |  |  | Personal income taxes |  |  | Social security contributions |  |  |  |  |  | All other taxes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Employees | Employers |  |  |  |  |  |
|  | 1990 | 1995 | 2007 |  |  |  | 1990 | 1995 | 2007 | 1990 | 1995 | 2007 | 1990 | 1995 | 2007 | 1990 | 1995 | 2007 |
| Australia | 29 | 29 | 31 | 12 | 12 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 17 | 20 |
| Austria | 40 | 41 | 42 | 8 | 9 | 10 | 6 | 6 | 6 | 6 | 7 | 7 | 19 | 19 | 20 |
| Belgium | 42 | 44 | 44 | 13 | 14 | 13 | 4 | 4 | 4 | 9 | 9 | 8 | 16 | 16 | 19 |
| Canada | 36 | 36 | 33 | 15 | 13 | 12 | 2 | 2 | 2 | 3 | 3 | 3 | 17 | 17 | 16 |
| Czech Republic |  | 38 | 37 |  | 5 | 4 |  | 4 | 4 |  | 10 | 10 |  | 19 | 19 |
| Denmark | 47 | 49 | 49 | 25 | 26 | 25 | 1 | 1 | 1 | 0 | 0 | 0 | 21 | 21 | 23 |
| Finland | 44 | 46 | 43 | 15 | 14 | 13 | 1 | 3 | 2 | 9 | 10 | 9 | 18 | 19 | 19 |
| France | 42 | 43 | 43 | 4 | 5 | 7 | 6 | 6 | 4 | 11 | 11 | 11 | 21 | 21 | 21 |
| Germany | 35 | 37 | 36 | 10 | 10 | 9 | 6 | 6 | 6 | 7 | 7 | 6 | 13 | 13 | 15 |
| Greece | 26 | 29 | 32 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 15 | 17 | 17 |
| Hungary |  | 41 | 40 |  | 7 | 7 |  | 2 | 3 |  | 12 | 9 |  | 20 | 20 |
| Iceland | 31 | 31 | 41 | 8 | 10 | 14 | 0 | 0 |  | 1 | 2 |  | 22 | 19 | 27 |
| Ireland | 33 | 32 | 31 | 11 | 10 | 9 | 2 | 2 | 1 | 3 | 3 | 3 | 18 | 18 | 18 |
| Italy | 38 | 40 | 43 | 10 | 10 | 11 | 2 | 3 | 2 | 9 | 8 | 9 | 17 | 19 | 21 |
| Japan | 29 | 27 | 28 | 8 | 6 | 6 | 3 | 4 | 5 | 4 | 4 | 5 | 14 | 13 | 14 |
| Korea | 18 | 19 | 27 | 4 | 4 | 4 | 0 | 0 | 3 | 1 | 1 | 2 | 13 | 14 | 17 |
| Luxembourg | 36 | 37 | 37 | 8 | 8 | 7 | 4 | 4 | 4 | 5 | 5 | 4 | 19 | 21 | 20 |
| Mexico | 16 | 15 | 18 |  |  |  |  |  |  |  |  |  | 16 | 15 | 18 |
| Netherlands ${ }^{1}$ | 43 | 42 | 38 | 11 | 8 | 8 | 10 | 11 | 6 | 3 | 3 | 5 | 19 | 20 | 19 |
| New Zealand | 37 | 37 | 36 | 18 | 17 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 20 | 21 |
| Norway | 41 | 41 | 44 | 11 | 11 | 10 | 3 | 3 | 3 | 7 | 6 | 6 | 20 | 21 | 25 |
| Poland ${ }^{2}$ |  | 36 | 35 |  | 8 | 5 |  | 11 | 5 |  |  | 5 |  | 17 | 20 |
| Portugal | 28 | 32 | 36 | 4 | 6 | 6 | 3 | 3 | 3 | 5 | 6 | 8 | 16 | 17 | 20 |
| Slovak Republic |  |  | 29 |  |  | 3 |  |  | 3 |  |  | 6 |  |  | 18 |
| Spain | 32 | 32 | 37 | 7 | 8 | 7 | 2 | 2 | 2 | 8 | 8 | 9 | 15 | 15 | 19 |
| Sweden | 52 | 47 | 48 | 20 | 16 | 15 | 0 | 2 | 3 | 14 | 11 | 10 | 18 | 19 | 21 |
| Switzerland | 26 | 28 | 29 | 10 | 10 | 10 | 3 | 3 | 3 | 3 | 3 | 3 | 10 | 11 | 12 |
| Turkey | 15 | 17 | 24 | 4 | 4 | 4 | 1 | 1 | 2 | 2 | 1 | 2 | 8 | 11 | 15 |
| United Kingdom | 36 | 34 | 36 | 10 | 10 | 11 | 2 | 3 | 3 | 4 | 3 | 4 | 19 | 18 | 19 |
| United States | 27 | 28 | 28 | 10 | 10 | 11 | 3 | 3 | 3 | 4 | 4 | 3 | 11 | 11 | 11 |
| 1. The year 2007 understates some local tax. <br> 2. Total social security contributions in 1995. <br> Source: OECD, Revenue Statistics 1965-2008, 2009 Edition. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table A．2．Tax revenues from personal income taxes as a percentage of GDP and total taxation，1990－2007
（Countries with non－central government income taxes）


1．Income－tax sharing arrangements exist in Austria，Germany，Greece，Luxembourg，Portugal and Spain．
2．Spain has introduced an income tax of the Autonomous Regions as of 1997.
Source：OECD，Revenue Statistics 1965－2008， 2009 Edition．

## Source of Earnings Data

| 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). <br> Same source as for Eurostat "Annual gross earnings" data. |
| Canada | Monthly survey of all firms | Statistics Canada, "Survey of Employment Payrolls and Hours" |
| Czech Republic | Employer survey data | National Statistical Office |
| Denmark | Danish Employers Confederation survey of earnings | Annual Report Danish Employers Confederation (Dansk Arbejds Giverforening) |
| Finland | 1) Finnish Employers Federation survey of hourly and monthly earnings; 2) Survey for unorganized 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 | 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 |
| 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 |
| 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, http://www.bfs.admin.ch/bfs/portal/fr/index/ themen/03/04.htmI |
| 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 |

Exchange Rates and Purchasing Power Parities of National Currencies, 2009

|  |  |  | 009 |
| :---: | :---: | :---: | :---: |
|  | Monetary unit | Exchange rates* | Purchasing power parities |
| Australia | AUD | 1.28 | 1.46 |
| Austria | EUR | 0.72 | 0.89 |
| Belgium | EUR | 0.72 | 0.91 |
| Canada | CAD | 1.14 | 1.19 |
| Czech Rep. | CZK | 19.05 | 14.62 |
| Denmark | DKK | 5.36 | 8.44 |
| Finland | EUR | 0.72 | 0.97 |
| France | EUR | 0.72 | 0.92 |
| Germany | EUR | 0.72 | 0.85 |
| Greece | EUR | 0.72 | 0.74 |
| Hungary | HUF | 202.06 | 135.45 |
| Iceland | ISK | 123.66 | 133.94 |
| Ireland | EUR | 0.72 | 0.94 |
| Italy | EUR | 0.72 | 0.85 |
| Japan | JPY | 93.57 | 114.98 |
| Korea | KRW | 1274.95 | 773.43 |
| Luxembourg | EUR | 0.72 | 0.93 |
| Mexico | MXN | 13.50 | 8.22 |
| Netherlands | EUR | 0.72 | 0.87 |
| New Zealand | NZD | 1.60 | 1.58 |
| Norway | NOK | 6.29 | 8.69 |
| Poland | PLN | 3.12 | 1.97 |
| Portugal | EUR | 0.72 | 0.67 |
| Slovak republic | SKK | 0.72 | 0.55 |
| Spain | EUR | 0.72 | 0.75 |
| Sweden | SEK | 7.65 | 9.35 |
| Switzerland | CHF | 1.09 | 1.63 |
| Turkey | TRL | 1.55 | 1.01 |
| United Kingdom | GBP | 0.64 | 0.66 |
| United States | USD | 1.00 | 1.00 |

[^57]
## 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 2000-2008. 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.

Table D.1. Income tax plus employee and employer contributions (as \% of labour costs), 1979-2004
single persons without children

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | - | - | - | - | - | - | - | - | - | 29.6 | 30.4 | 27.4 | 27.8 | 28.3 | 28.3 | 28.6 |
| Austria | 36.5 | 38.6 | 38.1 | 40.3 | 39.6 | 38.1 | 39.1 | 40.0 | 41.2 | 45.6 | 45.9 | 44.9 | 44.5 | 44.7 | 45.0 | 44.9 |
| Belgium | 47.4 | 49.8 | 49.2 | 51.0 | 53.5 | 53.2 | 53.7 | 54.6 | 56.3 | 56.6 | 56.9 | 56.2 | 55.6 | 55.1 | 54.6 | 54.2 |
| Canada | 23.2 | 24.7 | 25.6 | 26.9 | 29.0 | 27.2 | 29.0 | 30.8 | 31.5 | 32.3 | 31.1 | 31.8 | 30.4 | 32.2 | 32.4 | 32.3 |
| Czech Republic | - | - | - | - | - | - | - | 42.6 | 43.2 | 42.9 | 42.7 | 42.7 | 42.6 | 42.9 | 43.2 | 43.6 |
| Denmark | 40.6 | 42.7 | 46.5 | 47.8 | 47.6 | 46.6 | 46.7 | 47.0 | 45.2 | 45.1 | 44.5 | 44.4 | 43.6 | 42.7 | 42.7 | 41.5 |
| Finland | 41.6 | 42.4 | 43.2 | 45.2 | 45.5 | 46.2 | 44.5 | 49.3 | 51.2 | 48.9 | 47.4 | 47.3 | 45.9 | 45.2 | 44.4 | 43.8 |
| France ${ }^{1}$ | - | - | - | - | - | - | - | - | 49.1 | 48.7 | 48.1 | 48.2 | 48.3 | 48.2 | 48.3 | 47.4 |
| Germany | 40.8 | 41.9 | 43.4 | 44.5 | 45.1 | 45.5 | 46.4 | 46.4 | 50.2 | 52.3 | 51.9 | 51.8 | 50.8 | 51.1 | 51.9 | 50.7 |
| Greece | 25.6 | 25.5 | 31.2 | 31.4 | 31.6 | 33.8 | 33.0 | 35.3 | 35.6 | 35.8 | 35.7 | 36.0 | 35.7 | 34.6 | 34.4 | 34.9 |
| Hungary | - | - | - | - | - | - | - | - | 51.4 | 52.0 | 50.7 | 49.6 | 49.0 | 49.0 | 45.6 | 45.8 |
| Iceland | - | 18.4 | 18.8 | 16.5 | 13.9 | 19.5 | 20.1 | 22.0 | 23.1 | 24.4 | 26.0 | 26.7 | 27.5 | 28.8 | 29.4 | 29.7 |
| Ireland | 33.9 | 34.7 | 40.1 | 42.4 | 42.8 | 40.6 | 39.8 | 40.0 | 36.9 | 33.9 | 32.4 | 28.9 | 25.8 | 24.5 | 24.2 | 23.8 |
| Italy ${ }^{2}$ | 45.3 | 47.3 | 50.5 | 50.0 | 49.4 | 51.2 | 48.8 | 49.2 | 50.3 | 51.5 | 47.2 | 46.7 | 46.1 | 46.1 | 45.4 | 45.7 |
| Japan | 16.7 | 17.3 | 17.7 | 21.6 | 21.4 | 20.4 | 21.5 | 21.2 | 19.5 | 20.7 | 24.0 | 24.1 | 24.2 | 29.8 | 26.7 | 26.6 |
| Korea | - | - | - | - | - | - | - | - | 6.9 | 12.4 | 16.1 | 16.5 | 16.6 | 16.1 | 16.3 | 16.6 |
| Luxembourg | 38.5 | 38.2 | 38.6 | 38.4 | 35.7 | 35.5 | 33.9 | 34.9 | 34.3 | 35.2 | 34.6 | 35.5 | 33.9 | 31.3 | 31.5 | 31.9 |
| Mexico | - | - | - | - | - | 23.5 | 24.4 | 26.6 | 27.2 | 20.8 | 14.1 | 15.4 | 14.4 | 16.1 | 17.2 | 15.4 |
| Netherlands | 48.0 | 48.3 | 52.0 | 49.9 | 49.5 | 47.0 | 46.5 | 45.7 | 44.8 | 43.6 | 44.3 | 45.1 | 42.3 | 35.5 | 35.2 | 43.6 |
| 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 | 43.5 | 43.1 | 42.3 | 41.8 | 42.6 | 42.7 | 41.2 | 36.8 | 37.5 | 37.4 | 37.3 | 37.2 | 36.9 | 36.9 | 36.8 | 36.9 |
| Poland ${ }^{3}$ | - | - | - | - | - | - | - | 44.1 | 44.7 | 43.9 | 43.0 | 43.0 | 42.7 | 42.8 | 42.9 | 43.1 |
| Portugal | 28.1 | 29.9 | 32.3 | 34.9 | 34.5 | 33.9 | 33.2 | 33.3 | 33.7 | 33.9 | 33.4 | 33.5 | 32.5 | 32.6 | 32.6 | 32.6 |
| Slovak Republic | - | - | - | - | - | - | - | - | - | - | - | 41.2 | 41.7 | 41.1 | 41.4 | 42.0 |
| Spain | 36.4 | 37.4 | 38.0 | 36.6 | 37.9 | 35.9 | 36.5 | 38.0 | 38.5 | 39.0 | 37.5 | 37.6 | 37.9 | 38.2 | 37.7 | 38.0 |
| Sweden | 50.7 | 50.8 | 50.6 | 50.9 | 51.7 | 52.7 | 46.0 | 45.6 | 49.3 | 50.7 | 50.5 | 49.5 | 48.5 | 47.6 | 47.9 | 48.0 |
| Switzerland | 28.2 | 29.1 | 28.8 | 28.8 | 28.5 | 28.6 | 27.3 | 28.7 | 30.6 | 30.0 | 29.8 | 29.5 | 29.5 | 29.6 | 29.0 | 28.8 |
| 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 | 36.1 | 37.6 | 38.2 | 37.8 | 36.0 | 34.2 | 33.2 | 32.6 | 33.4 | 32.0 | 30.8 | 30.1 | 29.5 | 29.5 | 31.0 | 31.2 |
| United States | 31.9 | 35.3 | 34.9 | 33.6 | 30.6 | 31.1 | 31.3 | 31.2 | 31.0 | 31.1 | 31.1 | 30.8 | 29.8 | 29.7 | 29.5 | 29.6 |

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 | - | - | - | - | - | - | - | - | - | 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 |
| Poland ${ }^{2}$ | - | - | - | - | - | - | - | 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.

|  | 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.

|  | 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 | 17.7 |
| 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.

Table D.5. Income tax (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 | - | - | - | - | - | - | - | - | - | 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.

|  | 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 | 12.8 |
| 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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2008-2009

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## 2009


[^0]:    Corrigenda to OECD publications may be found on line at: www.oecd.org/publishing/corrigenda.

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[^2]:    * Previous editions were published under the title The Tax/Benefit Position of Employees (1996-1998 editions) and The Tax/Benefit Position of Production Workers (editions published before 1996).
    ${ }^{* *}$ Annex D presents historical series using the old definition of the average production worker (1979-2004).

[^3]:    * Not all national statistical agencies use ISIC Rev. 3 to classify industries. However, the Statistical Classification of Economic Activities in the European Community (NACE Rev. 1), the North American Industry Classification System (US NAICS 2002) and the Australian and New Zealand Standard Industrial Classification (ANZSIC 1993) include a classification which broadly conforms with industries C-K in ISIC Rev. 3.

[^4]:    * 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.

[^5]:    Note : ch = children.

    1. Two-earner family.
    2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children
    which are not available to all families.
    3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).
[^6]:    Note : ch = children.

[^7]:    Note : ch = children.

    1. Two-earner family.
    2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
    3. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^8]:    Note : ch = children.

[^9]:    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 elasticity would equal 1. The more progressive the system at these income levels, the lower is the elasticity.
    2. Two-earner family. Assumes a rise in gross earnings of the principal earner in the household.
    3. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
    4. Wage figures are based on the old definition of average worker (ISIC D, rev3.).
[^10]:    Note : ch = children.

    1. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
    2. Wage figures are based on the old definition of average worker (ISIC D, rev3.).
[^11]:    Note : ch = children.

    1. Two-earner family.
    2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children
    which are not available to all families.
    3. Wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^12]:    Note : ch = children.

    1. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
    2. Wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^13]:    Note : ch = children.

    1. Two-earner family.
    2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
    3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).
[^14]:    StatLink .inlst http://dx.doi.org/10.1787/830147020443

[^15]:    StatLink .inlst http://dx.doi.org/10.1787/830346857213

[^16]:    StatLink ..insta http://dx.doi.org/10.1787/830367403474

[^17]:    StatLink ..ilist http://dx.doi.org/10.1787/830687478108

[^18]:    StatLink ..insta http://dx.doi.org/10.1787/830735421111

[^19]:    StatLink .inlst http://dx.doi.org/10.1787/831116046730

[^20]:    StatLink ..insta http://dx.doi.org/10.1787/831135653660

[^21]:    StatLink .inlsta http://dx.doi.org/10.1787/831187105784

[^22]:    Note : ch = children.

[^23]:    Note : ch = children.

    1. Two-earner family.
    2. The AW for Greece overestimates the actual gross earnings because it includes benefits
    linked to marriage and children which are not available to all families.
    3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).
[^24]:    Note : ch = children.

[^25]:    Note : ch = children.

[^26]:    Note : ch = children.

    1. Two-earner family.
    2. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
    3. Wage figures are based on the old definition of average worker (ISIC D, rev3.).
[^27]:    Note : ch = children.

    1. The AW for Greece overestimates the actual gross earnings because it includes benefits linked to marriage and children which are not available to all families.
    2. Wage figures are based on the old definition of average worker (ISIC D, rev3.).
[^28]:    1. The AW for Greece overestimates the actual gross earnings because it includes
    earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^29]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^30]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^31]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^32]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^33]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings
    linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^34]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^35]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^36]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings
    linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^37]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings
    linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^38]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^39]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^40]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings
    linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^41]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings
    linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^42]:    1. The AW for Greece overestimates the actual gross earnings because it includes earnings
    linked to marriage and children which are not available to all families.
    2. Turkey wage figures are based on the old definition of average worker (ISIC D, rev3.)
[^43]:    * The payments that relate to the 2009 tax year are payable between July 2010 and June 2011. The amounts shown in this Report assume indexation of 0.5\% for the 2010 tax year (and 2010-11 benefit year); this indexation parameter will be announced in December 2009.

[^44]:    * 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.

[^45]:    * Income tax calculations in this report for 2009 are based on rules for the taxation of 2008 income and projected gross earnings for 2009. 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 2008 (withholding tax) but taxes the 2008 income reported by French taxpayers in March 2009 (reporting system). Insofar as tax legislation covering 2009 income is not known until a year later (early 2010), this report cannot apply to 2009 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.

[^46]:    * This is the 2007 tax schedule which is assumed to apply to 2008 estimated income in the calculations of this report.

[^47]:    * The AW overestimates the actual gross earnings because the AW is calculated on the basis of earnings figures gross of the benefits linked to marriage and children. Married taxpayers may earn up to $10 \%$ of additional income; parents may earn up to $5 \%$ of additional income for each child. These benefits cannot be separated from other gross earnings in Greece and are therefore taken into account when calculating the AW. This implies that all tax burdens for all family types might be overestimated. Note that Taxing Wages models the taxable wage increases linked to marriage and children separately, even though these increases are already considered in calculating the AW value, in order to guarantee the comparability of tax burdens across family types in Greece.

[^48]:    * 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 1 200,

[^49]:    * The definition of average worker in Iceland includes workers in five categories. See Section 5.1.

[^50]:    * The local tax rate and the central government income tax rate were changed in the FY2006 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.

[^51]:    * The calculations for Korea assume that the husband is the principal and that the wife is the spouse.

[^52]:    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.

[^53]:    * (The formulae for the calculation of the basic and marital status relief were changed temporarily in 2009 and 2010 as a result of the adoption of anti-crisis measures.)

[^54]:    * Payments for special-purpose savings paid to a bank or life insurances paid to an insurance company are tax-deductible if the following conditions are met:
    Taxpayers must contribute to these special-purpose savings for at least 10 years,
    Taxpayers can receive the benefits arising from these special-purpose savings not before the age of 55 .

[^55]:    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.

[^56]:    Note: Exc $=$ Excluded $\quad \mathrm{Inc}=$ Included $\quad-\quad-=$ information not available
    . Usually includes compensation paid by employer whether paid on behalf of the government or as part of a private sickness scheme.

[^57]:    * Estimates.

