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Wage Income Tax Reforms  
and Changes in Tax  
Burdens: 2000-2009

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## **FOREWORD**

This paper has been previously published as the Special Feature of the 2010 edition of the Taxing Wages Report. Changes in average and marginal tax rates and tax wedges for all OECD member countries can be found on the country-specific Taxing Wages websites ([www.oecd.org/ctp/taxingwages](http://www.oecd.org/ctp/taxingwages)). Michael Sharratt provided excellent statistical assistance. The paper also draws on input from Delegates to Working Party No. 2 on Tax Policy Analysis and Tax Statistics of the Committee on Fiscal Affairs of the OECD.

## WAGE INCOME TAX REFORMS AND CHANGES IN TAX BURDENS: 2000-2009

Bert Brys<sup>1</sup>

### 1. Introduction

The tax burden on labour and its evolution over time are issues that feature prominently in the political debate. Averaged across the OECD, personal income taxes, social security contributions and payroll taxes together account for more than 51% of total government revenues in 2008 (OECD, 2010). With tax burdens differentiated by earnings level and family situation, they serve a central role as redistribution policies. Importantly, by shaping both work incentives and the cost of labour, the level and structure of these taxes are major influences on the functioning of labour markets.

The Taxing Wages series summarizes tax policy features and the resulting tax burden on labour income in OECD member countries on an annual basis. This paper looks at tax burden changes since the year 2000. The analysis builds on detailed graphical representations of tax burden measures across a wide range of different wage levels.

This paper calculates the changes in the tax burden on wage income ranging from 50% to 250% of the average wage and calculates the respective contributions of changes in income taxes, employee social security contributions, employer social security contributions and cash benefits. The analysis will focus on changes in the average tax wedge as well as changes in the net personal average tax rate. Changes in marginal tax rates and wedges will not be discussed but more information is included on the country-specific Taxing Wages websites ([www.oecd.org/ctp/taxingwages](http://www.oecd.org/ctp/taxingwages)) where all country graphs underlying the results that are presented in this paper can be found.

The choice of 2000 as the base period is made for reasons of data availability as OECD Taxing Wages tax calculation models are maintained on a consistent basis from 2000 onwards. The choice of 2009 as the end period is made both for practical reasons – having to wait for the final 2010 tax models would have delayed the publication of the 2010 edition of the Taxing Wages Report (OECD, 2011) – and analytical reasons. In 2009, most countries did not yet implement tax reforms to reduce budgetary deficits caused by the effects of the financial and economic crisis or to better correspond to the changed situation on the labour market as a result of the crisis. For these reasons, it was decided to use the 2009 calculation models whose results were published in the 2009 edition of the Report. Any updates to these 2009 models that are considered in the main part of the 2010 edition of the Taxing Wages Report are not taken into account in this paper.

The analysis compares the tax burden in 2000 and 2009 for a given percentage of the average wage (AW) and this for all AW multiples within the 50% to 250% of the AW income range. The level of income at a particular AW multiple is typically not the same in 2000 and 2009; inflation as well as real earnings

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growth will typically have increased the average wage. This has an impact on the results presented in this paper as tax burden changes may be the result of the impact of inflation and real earnings growth and not necessarily of legislative tax policy changes that have occurred over the 2000-2009 period.

The impact of inflation and real earnings growth on the tax burden has been studied in the Special Feature of the 2007 edition of the Taxing Wages Report. With progressive tax systems in place, higher earnings usually translate into higher tax burdens. Unless tax systems are adjusted to compensate these effects, the evolution of earnings levels can have substantial effects on the tax burdens which employees face. The Special Feature in the 2007 edition of the Taxing Wages report concluded that without counterbalancing policy measures, the combination of inflation and real earnings growth would have led to significant tax wedge increases in almost all OECD countries. The fiscal drag effect is especially strong where tax systems are particularly progressive or where earnings growth has been above average.

Most countries do however employ some forms of adjustment, such as indexing tax band limits for inflation, in order to prevent large tax burden changes as a result of real earnings growth and especially inflation. These adjustments are often, however, incomplete or intermittent. Considered over a period of a decade, this can perhaps be regarded as a policy choice; countries could offset the impact of fiscal drag if they wanted.

In interpreting changes in the components of the tax wedge it should be noted that the denominator (and hence the ratios) changes when there is a change in the employer SSC. In order to evaluate the impact of tax reforms that countries have implemented the reader may find it useful not only to look at the change in the tax wedge and its different components but to evaluate also the change in the net personal average and marginal tax rate which does not suffer from this effect. Information on these rates can be found in the OECD Tax Database.

Note also that the analysis in this paper does not consider changes in the distribution of earnings across the 50-250% of the AW income range. Unfortunately, this type of information is not available though it is an extension of the analysis that might be worth considering in due course.

This paper provides information for all OECD member countries except for the new OECD member countries (Chile, Estonia, Israel and Slovenia) for which no fully-finalized tax models for the year 2000 were available when this paper was written.

The changes in the wage income tax burden over time are discussed in more detail in Section 2. The analysis will focus on 6 family types: single taxpayers without children (Section 2.1), single parents with 2 children (Section 2.2), one-earner married couples without and with 2 children (respectively Sections 2.3 and 2.4) and two-earner married couples without and with 2 children (Section 2.5). Section 3 concludes.

## **2. Changes in wage income tax burdens**

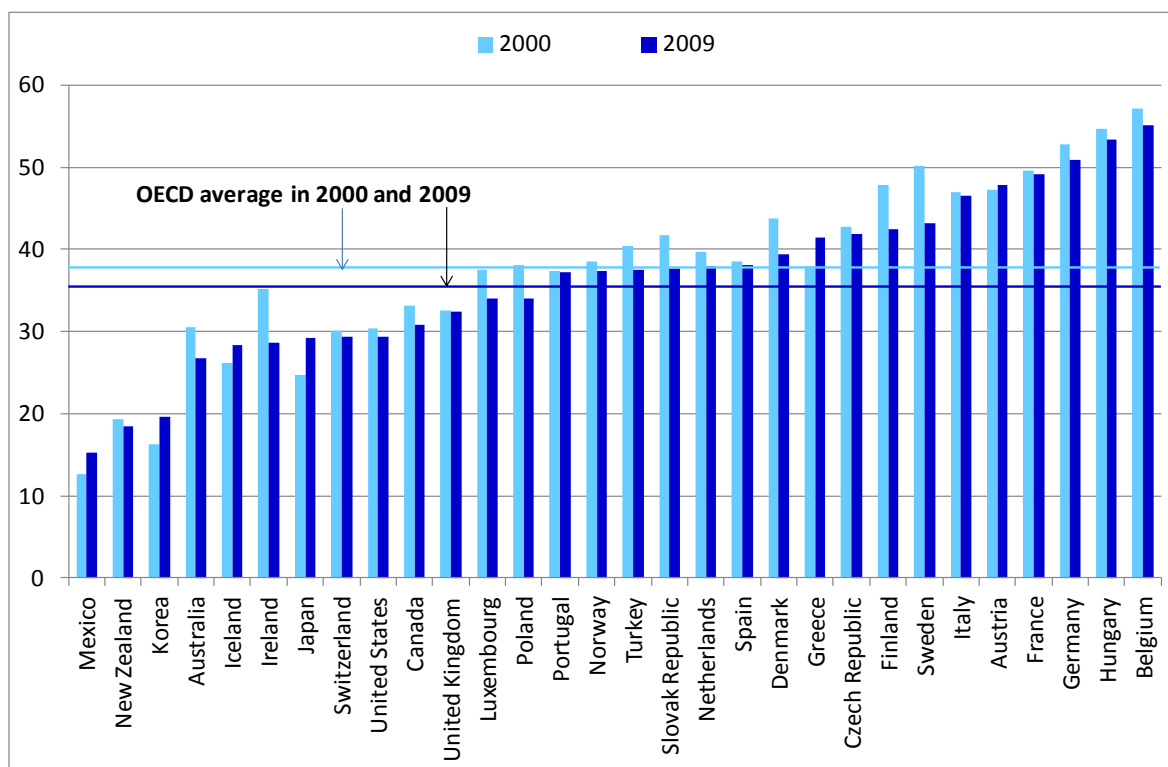
The headline tax burden indicator used in the Taxing Wages series, and also in this paper, is the tax wedge. It denotes the difference between labour cost to the employer and after-tax (or take-home) pay received by the employee. The tax wedge includes social security contributions (SSC) paid by employees, SSC and payroll taxes paid by employers, and income taxes minus any family cash benefits. It is therefore a comprehensive measure and may not reflect changes in one particular policy area (e.g. income tax) if they are compensated by offsetting changes in another (e.g. SSC). In order to explain the drivers of the observed changes in the tax wedge over time, the analysis focuses also on the changes in the different components of the tax wedge for different family types. The tax wedge is expressed in per cent of a

measure of labour cost to the employer (i.e. relative to gross earnings plus employer SSC plus payroll taxes).<sup>2</sup>

### 2.1 Single taxpayers without children

Average tax wedges for single taxpayers at average earnings changed slightly on average across OECD countries (a decrease with 1.4% from 37.8% in 2000 to 36.4% in 2009; see Figure 1) but the differences across countries have been considerable. These results are shown in more detail in Table 1, which summarizes how tax burdens have changed at different earnings levels. To summarize developments for low, average, high and very high-earning workers, Table 1 averages tax burden changes over four earnings intervals: 50% to 80%, 80% to 130%, 130% to 180% and 180% to 250% of the average wage. Table 1 also includes the average reduction in the average tax wedge over the 50% to 250% income range and the corresponding standard deviation in the change in the tax wedge across OECD member countries.

Figure 1. Average tax wedge for single taxpayers at average earnings without children in 2000 and 2009 <sup>(1)</sup>



1. Average tax wedges for 2010 can be found in Table I.1 of Taxing Wages 2009-2010 (OECD, 2011).

Compared to the decrease for average wage earners (see Figure 1) as well as the average decrease over the 50-250% AW income range (reduction of 1.4 percentage points on average across the OECD; see Table 1), higher tax reductions (reduction of 2.1 percentage points on average) are found for low wage earners (50-80% of the AW). Tax wedges also declined somewhat at above average wage levels. In fact, the decline has been slightly higher for very high-income earners (180-250% of the AW) than for high-income earners (130-180% AW), although this difference is not significant. The values of the standard

<sup>2</sup> Part III and IV of the Taxing Wages Report contain details on the methodology.

deviation show that the variation in the change in the average tax wedge on average across the OECD was the highest for low-income as well as for very high-income earners.

**Table 1. Average change in the average tax wedge by level of gross earnings as a % of the AW for single taxpayers, 0 or 2 children, between 2000 and 2009**

	50-250% AW		50-80% of AW		80-130% of AW		130-180% of AW		180-250% of AW	
	0 children	2 children	0 children	2 children	0 children	2 children	0 children	2 children	0 children	2 children
Australia	-5.4%	-8.2%	-4.7%	-14.4%	-4.4%	-10.2%	-5.8%	-7.4%	-6.0%	-4.8%
Austria	0.0%	0.6%	-0.4%	0.9%	0.3%	1.0%	-0.1%	0.3%	0.0%	0.3%
Belgium	-2.1%	-1.9%	-2.4%	-2.0%	-1.7%	-1.4%	-1.9%	-1.7%	-2.5%	-2.3%
Canada	-2.6%	-5.1%	-1.8%	-9.0%	-2.2%	-5.0%	-2.5%	-4.0%	-3.2%	-4.4%
Czech Republic	-1.1%	0.0%	-3.1%	1.8%	-0.8%	0.4%	-0.4%	-1.3%	-0.9%	0.0%
Denmark	-2.4%	-2.3%	-3.1%	-3.2%	-1.9%	-1.9%	-2.0%	-2.0%	-2.5%	-2.5%
Finland	-5.1%	-3.8%	-5.9%	-3.2%	-5.2%	-3.6%	-5.2%	-4.1%	-4.7%	-3.9%
France	0.4%	0.0%	-3.0%	-3.1%	0.0%	-0.4%	1.2%	0.6%	1.4%	1.4%
Germany	-3.1%	-1.5%	-1.4%	-0.3%	-2.3%	-1.1%	-3.2%	-1.7%	-4.4%	-2.2%
Greece	2.4%	2.1%	1.4%	1.4%	3.4%	3.1%	2.5%	2.4%	2.0%	1.5%
Hungary	-1.2%	-0.4%	-5.2%	-3.9%	-1.5%	-0.5%	-0.8%	0.0%	0.5%	1.1%
Iceland	-1.4%	0.8%	3.1%	10.0%	2.1%	5.3%	-2.1%	-0.9%	-5.2%	-5.2%
Ireland	-3.5%	-11.1%	-4.5%	-25.8%	-6.1%	-13.5%	-3.7%	-8.8%	-1.0%	-4.6%
Italy	0.1%	-1.8%	-0.7%	-5.2%	-0.5%	-2.6%	0.4%	-1.1%	0.6%	-0.2%
Japan	3.9%	2.3%	4.3%	0.3%	4.4%	2.0%	4.1%	2.7%	3.3%	3.1%
Korea	1.9%	1.1%	2.7%	1.8%	3.2%	2.1%	2.4%	1.8%	0.4%	-0.3%
Luxembourg	-4.0%	-7.3%	-4.0%	-5.9%	-3.7%	-1.2%	-4.0%	-6.2%	-4.3%	-13.1%
Mexico	2.0%	2.0%	4.7%	4.7%	3.8%	3.8%	2.0%	2.0%	-0.4%	-0.4%
Netherlands	-4.7%	-4.8%	-8.9%	-14.6%	-4.6%	-4.8%	-3.3%	-2.3%	-3.9%	-2.4%
New Zealand	-0.4%	-6.0%	-3.0%	-13.2%	-0.8%	-12.2%	0.4%	-4.3%	0.5%	0.4%
Norway	-1.7%	2.1%	-1.1%	4.5%	-1.3%	3.2%	-2.1%	1.6%	-2.0%	0.7%
Poland	-4.6%	-5.9%	-4.0%	-1.5%	-4.2%	-5.6%	-4.2%	-7.6%	-5.5%	-6.7%
Portugal	0.1%	-1.8%	-0.6%	-5.5%	-0.2%	-2.8%	0.5%	-0.6%	0.3%	-0.3%
Slovak Republic	-5.0%	-5.0%	-6.5%	-4.1%	-4.3%	-3.0%	-4.6%	-4.7%	-5.0%	-6.9%
Spain	0.3%	0.7%	-0.6%	-1.1%	-0.3%	0.0%	0.2%	0.8%	1.1%	2.0%
Sweden	-5.4%	-5.3%	-7.4%	-7.1%	-7.0%	-6.8%	-5.2%	-5.1%	-3.6%	-3.5%
Switzerland	-0.8%	-1.7%	-0.7%	-1.6%	-0.6%	-1.4%	-0.8%	-1.7%	-1.0%	-1.9%
Turkey	3.0%	2.3%	-4.1%	-5.3%	-1.8%	-2.6%	4.1%	3.6%	8.7%	8.3%
United Kingdom	0.8%	-0.4%	0.1%	-6.5%	0.1%	-1.0%	1.2%	1.0%	1.2%	1.5%
United States	-1.9%	-2.8%	-1.4%	-5.6%	-1.5%	-3.2%	-2.2%	-2.3%	-2.2%	-1.5%
OECD average	-1.4%	-2.1%	-2.1%	-3.9%	-1.3%	-2.1%	-1.2%	-1.7%	-1.3%	-1.6%
(Standard dev.)	2.6%	3.5%	3.3%	6.8%	2.9%	4.4%	2.7%	3.2%	3.2%	3.8%

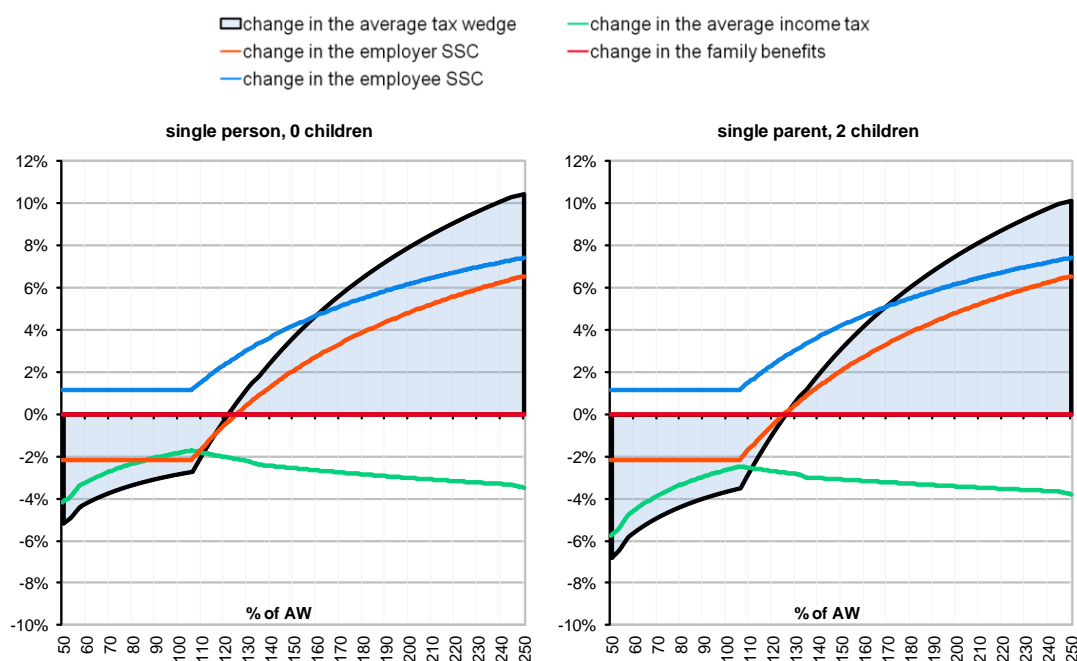
The change in the average tax wedge for single taxpayers without children has been the largest in Sweden, Australia, Finland, the Slovak Republic, the Netherlands, Poland and Luxembourg with an average decrease over the 50-250% AW income range of more than 4 percentage points (see Table 1). Income taxes decreased considerably in most of these countries but not in the Slovak Republic where employer SSC decreased with 6.7 percentage points thereby more than compensating for the increase in employee SSC of about 1.9 percentage points (see Figure 7), and in the Netherlands where income taxes increased with about 3 percentage points but employer and especially employee SSC decreased strongly (see Figure 3). In Ireland, Germany, Canada, Denmark and Belgium, the average decrease ranged from 3.5 to 2 percentage points. The average tax wedge increased slightly on average over the 50-250% AW income range in Portugal, Italy, Spain, France and the United Kingdom. Stronger increases have taken place in Korea, Mexico and Greece and especially in Turkey and Japan. As pointed out in the introduction, these changes are not necessarily (only) the result of structural tax policy changes but may (also) have been the result of inflation and/ or real earnings growth, as was the case in, for instance, Mexico.

Income taxes decreased on average over the 50-250% income range with more than 1.5 percentage points as a percentage of total labour costs in 11 OECD member countries (Australia, Ireland, Sweden, Canada, the United States, Luxembourg, Finland, Turkey, Iceland, Germany and Norway) and increased strongly only in the Netherlands, Mexico, Greece, Korea and Austria (see Figure A1). Employee SSC decreased strongly in Poland and the Netherlands while they increased with more than 2 percentage points in Hungary and Turkey. Strong reductions in employer SSC on average over the 50-250% income range are observed in Finland, the Slovak Republic, the Netherlands, Poland, Luxembourg, Denmark, Belgium and Hungary while they increased with about 1.7 percentage points in Turkey and Japan (see Figure A1).

The difference in the changes in the average tax wedge across different income levels, measured as the standard deviation of the change in the tax wedge for income in the 50-250% AW income range, is the highest in Turkey (see also Figure 2) where the tax wedge for low-income taxpayers decreased strongly while it increased even stronger for high-income taxpayers. Especially large differences across income levels can also be observed in Iceland, the Netherlands, Ireland, Mexico, Hungary, France, Sweden, New Zealand and Korea (for more information on the STD values, see the country-specific Taxing Wages webpages on [www.oecd.org/ctp/taxingwages](http://www.oecd.org/ctp/taxingwages)).

**Figure 2. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in Turkey**

For single persons with 0 and single parents with 2 children earning between 50-250% of the AW

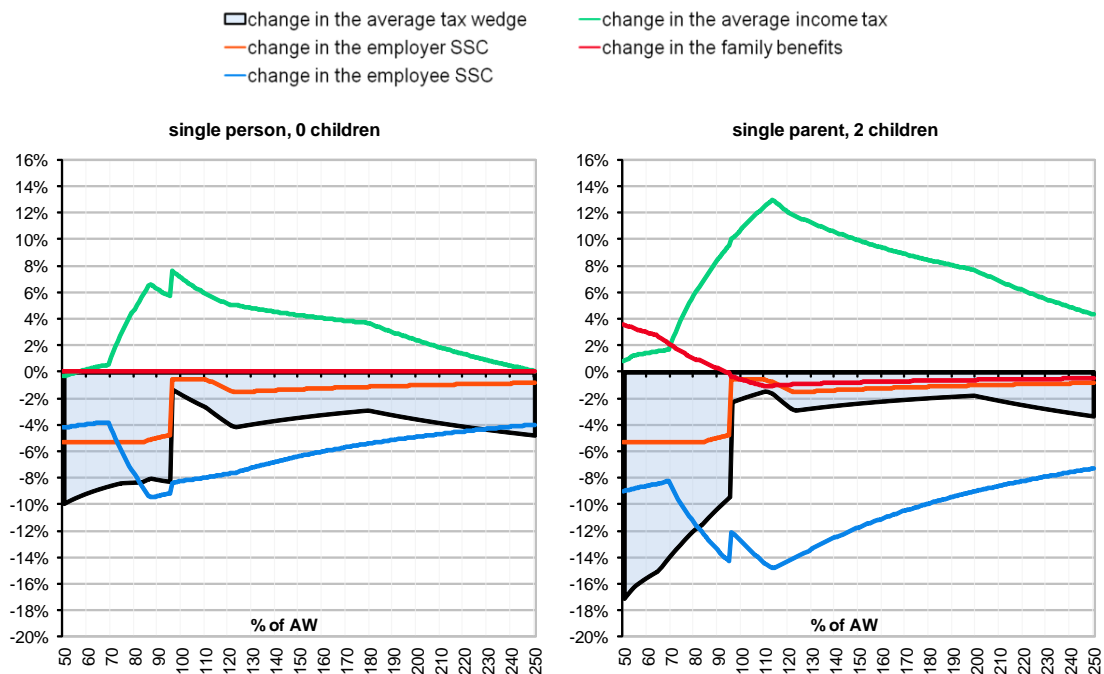


A number of countries implemented tax cuts targeted at low-income earners. Single employees without children with wages below 80% of the AW saw above average tax wedge reductions of more than 5 percentage points in the Netherlands (-8.9 percentage points), Sweden (-7.4 percentage points), the Slovak Republic (-6.5 percentage points), Finland (-5.9 percentage points) and Hungary (-5.2 percentage points). The tax wedge for low-income earners increased only in Mexico (+4.7 percentage points), Japan (+4.3 percentage points), Iceland (+3.1 percentage points), Korea (+2.7 percentage points), Greece (+1.4 percentage points) and the UK (+0.1 percentage points). In all of these countries except Greece, tax wedges were below the OECD average in 2000 and remained below the average after the tax increase.



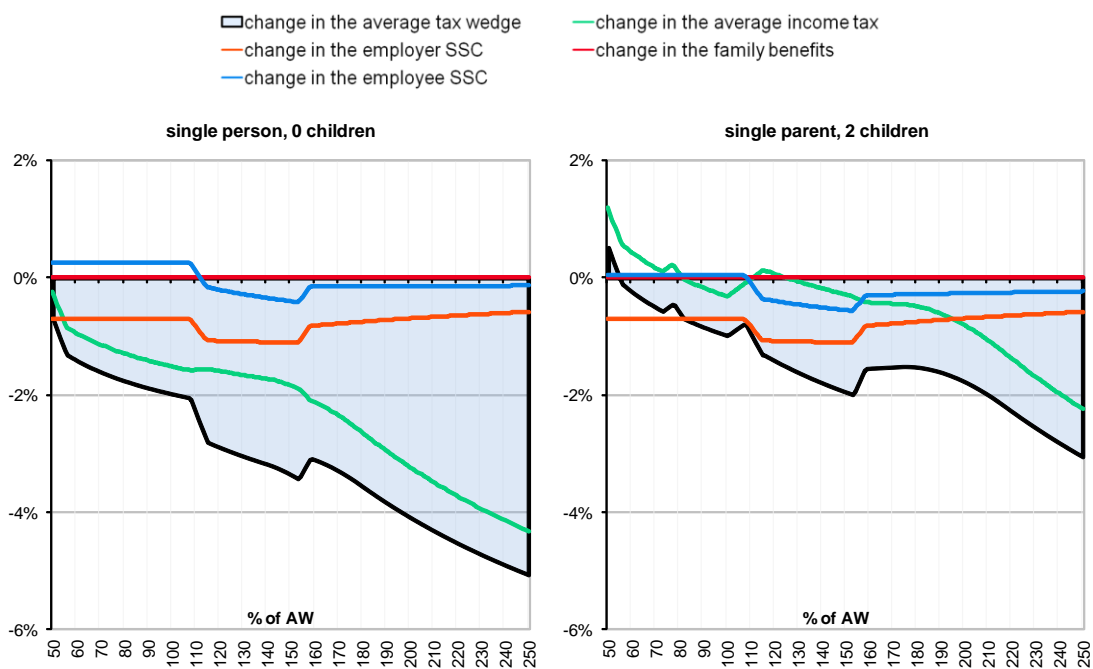
**Figure 3. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in the Netherlands**

For single persons with 0 and single parents with 2 children earning between 50-250% of the AW



**Figure 4. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in Germany**

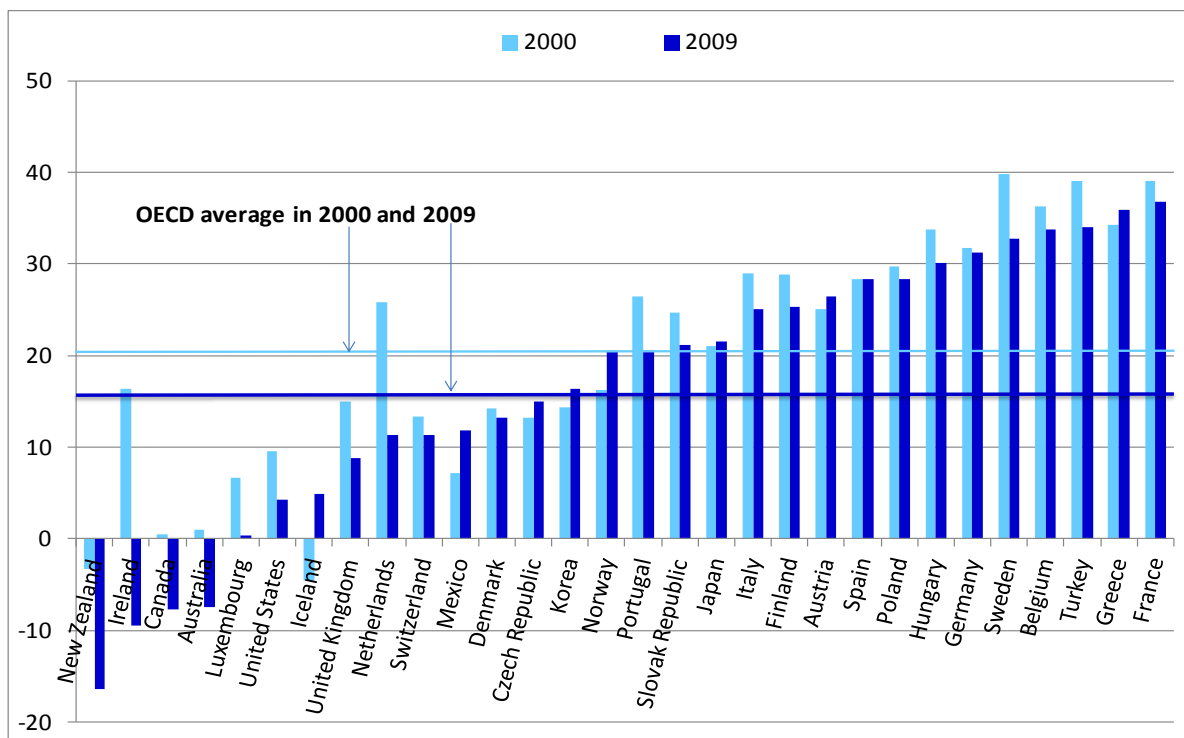
For single persons with 0 and single parents with 2 children earning between 50-250% of the AW



## 2.2 Single parents with 2 children

Average tax wedges for single parents with 2 children earning 67% of the AW decreased strongly on average across OECD countries; Figure 5 shows a decrease of 3.5% from 20.4% in 2000 to 16.9% in 2009. The differences across countries are shown in more detail in Table 1. The tax wedge decreased with 2.1 percentage points on average across the 50-250% income range in the OECD on average. Higher tax reductions of 3.9 percentage points on average are found for low-wage earners (50-80% of the AW); the impact of country tax reforms varied the most for this type of taxpayers (see Table 1, 2 and 3). Tax wedges also declined at above average wage levels but the higher was the income, the lower has been the average decrease.

Figure 5. Average tax wedge for single parents with 2 children at 67% of the AW in 2000 and 2009 <sup>(1)</sup>

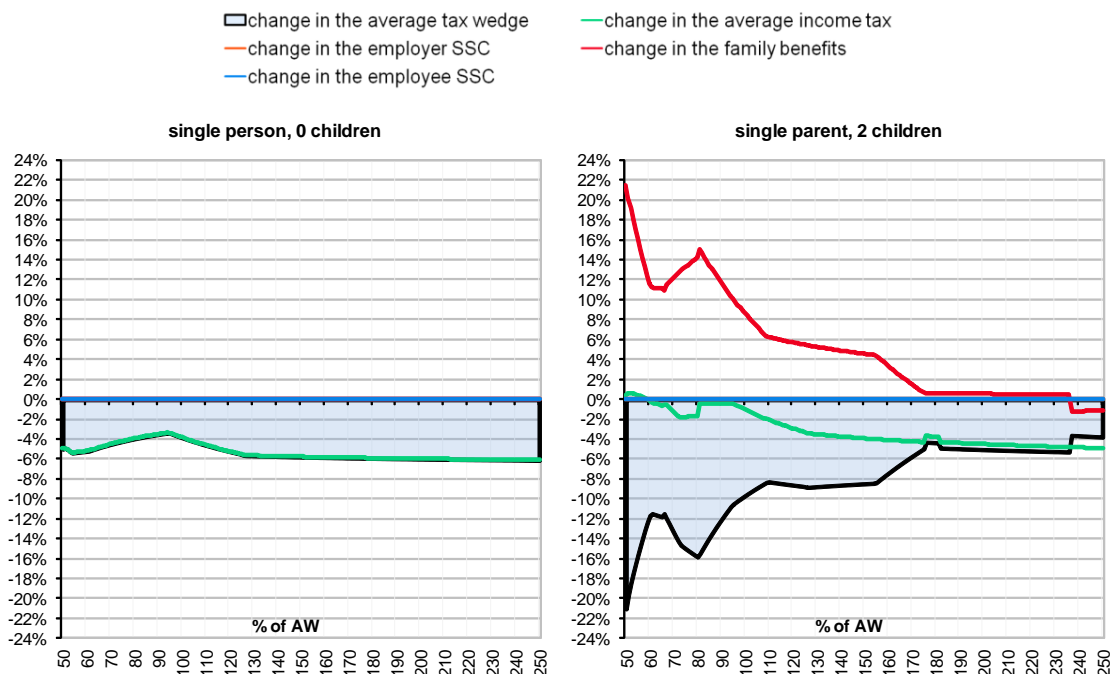


1. Average tax wedges for 2010 can be found in Table I.1 in Taxing Wages 2009-2010 (OECD, 2011).

The reduction of the average tax wedge for single parents with 2 children has been the largest in Ireland, Australia (see Figure 6) and Luxembourg with an average decrease over the 50-250% AW income range of more than 7 percentage points (see Table 1). In all three countries, the decrease in the tax wedge has been mainly the result of a strong reduction in income taxes and more generous cash benefits (see Figures A1). In New Zealand, Poland, Sweden, Canada, the Slovak Republic and the Netherlands, the average tax wedge decrease ranged from 6.0 to 4.8 percentage points. In New Zealand, the decrease in the average tax wedge is a result of more generous family benefits. Income taxes decreased strongly in the other countries except in the Netherlands where the average income tax burden increased with over 7 percentage points; this increase, however, has been offset by a larger reduction in employee SSC and in a reduction in employer SSC (see Figure A1). The average tax wedge increased on average over the 50-250% AW income range with more than 2 percentage points in Mexico, Norway, Greece, Japan and Turkey.

**Figure 6. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in Australia**

For single persons with 0 and single parents with 2 children earning between 50-250% of the AW



Income taxes decreased on average over the 50-250% income range for single parents with 2 children with more than 2 percentage points as a percentage of total labour costs in 11 OECD member countries (Ireland, Australia, Luxembourg, Poland, Sweden, Canada, Finland, the United States, the United Kingdom, Iceland and Turkey) and increased strongly only in Hungary, Greece, the Netherlands and Mexico. Employee SSC decreased strongly in Poland and the Netherlands while they increased with more than 2 percentage points in Hungary and Turkey. Strong reductions in employer SSC (on average over the 50-250% income range) are observed in the Slovak Republic, Belgium, the Netherlands and Hungary. Benefits increased strongly in Ireland, Australia, Luxembourg and New Zealand while they decreased with more than 2 percentage points in the Czech Republic and Iceland (see Figures A1).

The standard deviation of the change in the tax wedge for income in the 50-250% AW income range is considerably higher for single parents than for single taxpayers without children. Especially strong differences across different income levels can be observed in Ireland, Iceland, New Zealand, Turkey, Luxembourg, the Netherlands and Australia.

Many countries implemented tax cuts targeted at low-income earners. Single parents with wages below 80% of the AW saw above average tax wedge reductions of more than 5 percentage points in Ireland (-25.8 percentage points), the Netherlands (-14.6 percentage points), Australia (-14.4 percentage points), New Zealand (-13.2 percentage points), Canada (-9.0 percentage points), Sweden (-7.1 percentage points), the United Kingdom (-6.5 percentage points), Luxembourg (-5.9 percentage points), the United States (-5.6 percentage points), Portugal (-5.5 percentage points), Turkey (-5.3 percentage points) and Italy (-5.2 percentage points). Amongst these countries, only Luxembourg decreased the tax wedge for very high-income single parents even more than for low-income single parents (as a result of a stronger reduction in income taxes). In Hungary, Turkey and the United Kingdom, the strong reduction in the tax

wedge for low-income single parents has been accompanied by an increase in the tax wedge for very high-income single parents.

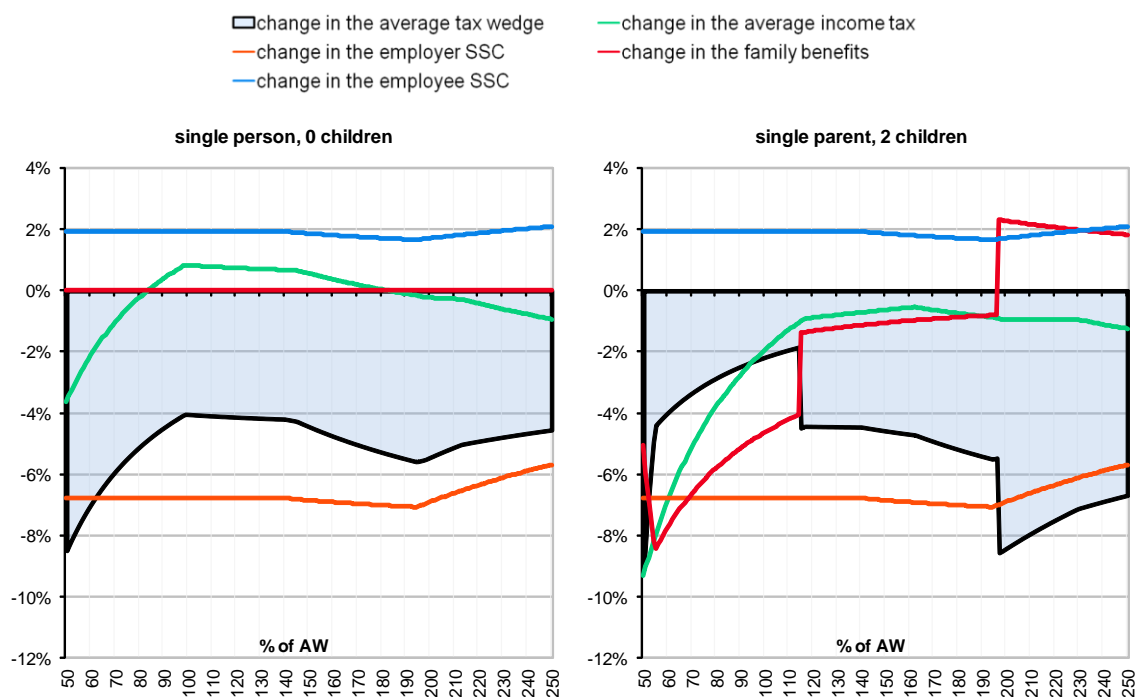
Countries that decreased the tax burden for low-income single parents the most have achieved this by strongly increasing the benefits that these families have received (Ireland, Australia, New Zealand, Canada, Luxembourg and Portugal) and/or by strongly reducing the income taxes that have to be paid (Canada, Sweden, the United Kingdom, the United States, Turkey and Ireland). In the Netherlands, however, the reductions in employee and employer SSC have resulted in a strong tax wedge decrease for low-income single parents with 2 children (see Table A1 and Figure 3).

The average tax wedge for low-income single parents increased with over 4 percentage points in Norway (+4.5 percentage points), Mexico (+4.7 percentage points) and Iceland (+10 percentage points). In these countries as well as in Poland (and to a lesser extent in the Slovak Republic, Germany, Finland, the Czech Republic and Luxembourg) tax reforms tended to reduce the progressivity of the tax structure, if standard cash benefits are also taken into account, with high and very high-earning single parents benefiting from significantly higher tax reductions or lower tax increases than those in the middle and bottom parts of the earnings range.

Benefits have become particularly less generous in the Czech Republic and the Slovak Republic as part of their flat tax reform as well as in Iceland, Poland and Norway. In the Slovak Republic (see Figure 7), the reduction in benefits has largely offset the impact of the reduction in employer SSC on the average tax wedge for single parents with 2 children at earnings below 115% of the AW. Overall, the tax wedge decreased for low-income single parents because also the income taxes decreased.

**Figure 7. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in the Slovak Republic**

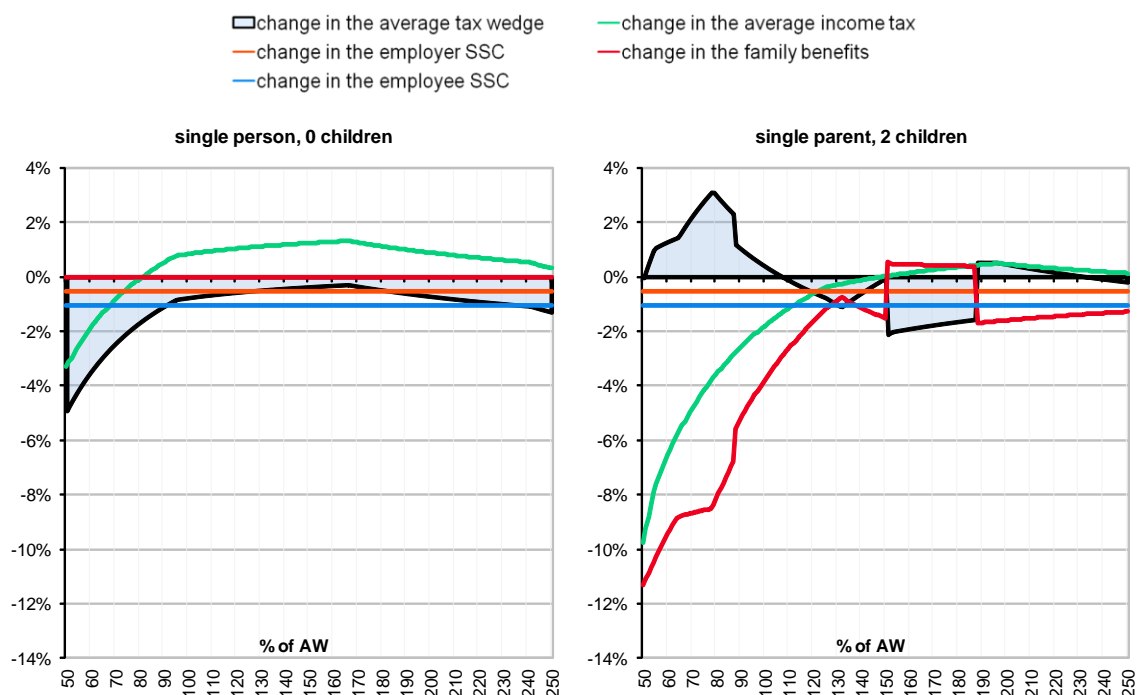
For single persons with 0 and single parents with 2 children earning between 50-250% of the AW



Family benefits have become less generous also in the Czech Republic (see Figure S.8). Especially single parents and one-earner married couples with 2 children with earnings below 130% of the AW now receive strongly reduced family benefits. In general, however, the decrease in income taxes has more than offset the reduction in family benefits. These changes together with the reduction in employee and employer SSC imply that the net personal average tax rate and tax wedge has decreased for most families with children in the Czech Republic. However, this is not the case for single parents with below average earnings; their family benefits decreased more than the reduction in income taxes.

**Figure 8. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in the Czech Republic**

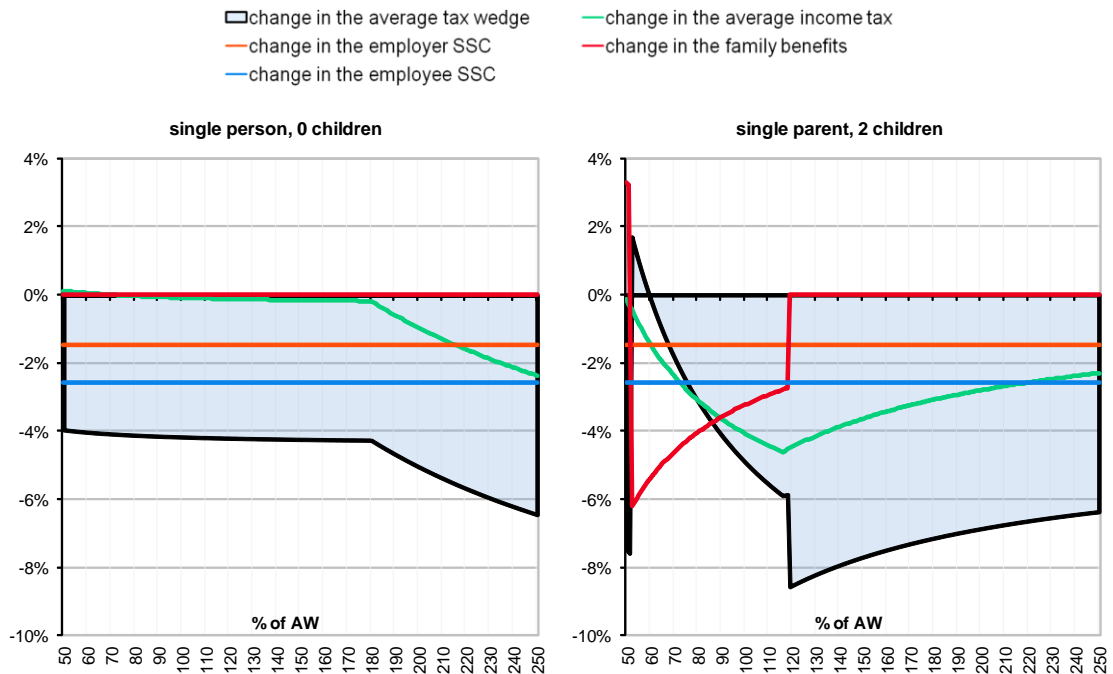
For single persons with 0 and single parents with 2 children earning between 50-250% of the AW



In Poland (see Figure 9), the tax wedge decreased with about 4 percentage points for single taxpayers as a result of reductions in SSC. Single parents have benefitted also from a reduction in income taxes; the reduction in family benefits, however, has partly offset the tax reduction especially for very low-income earners.

**Figure 9. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in Poland**

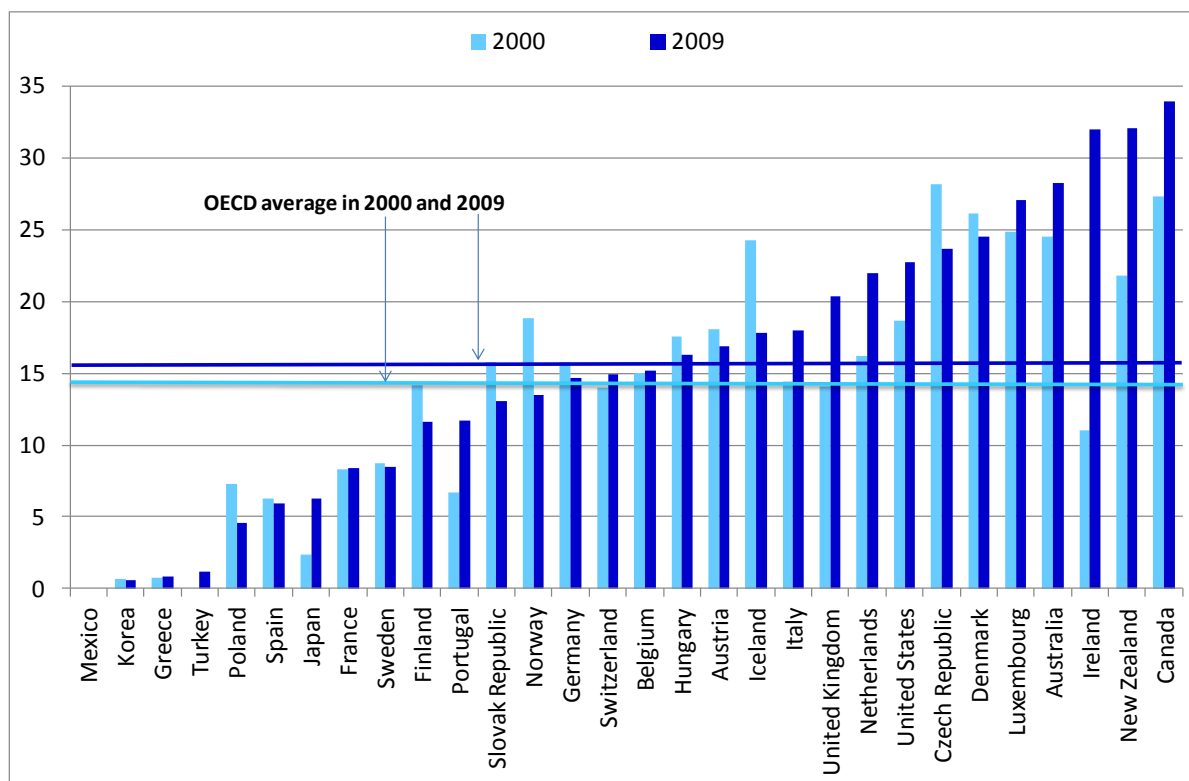
For single persons with 0 and single parents with 2 children earning between 50-250% of the AW



*Tax reforms targeted at children in single taxpayer families*

All OECD countries except Mexico tax single parents with 2 children earning 67% of the AW at lower rates than single taxpayers without children at the same earnings level (see Figure 10). The difference in tax wedge on average across the OECD was 15.5 percentage points in 2009 while it was 14.1 percentage points in 2000.

**Figure 10. Tax wedge difference without/with children: single taxpayers and single parents earning 67% of the AW in 2000 and 2009 <sup>(1,2)</sup>**



- (1) The tax advantage is shown in per cent of total labour costs and is calculated as the difference between the tax wedge faced by a single taxpayer without children and a single parent with 2 children.
- (2) Information on average tax wedges for 2010 can be found in Table I.1 in this Report.

Seventeen OECD countries have implemented tax reforms that have been more beneficial to single parents with 2 children than to similar taxpayers that do not have children (on average across the 50-250% AW income range); this can be observed by comparing the change in the tax wedge in columns 1 and 2 of Table 1. This has been especially the case in Ireland, New Zealand, Luxembourg, Australia, Canada, Italy, Portugal, Japan, the United Kingdom and Poland (although not for single taxpayers at low-income earnings in Poland). This is the result of more generous child benefits but not in the United Kingdom and Poland. In these 2 countries as well as in Canada, the income taxes have been reduced the most. In Australia, single parents benefited from a smaller reduction in income taxes than single taxpayers, but this has been more than compensated by the strong increase in benefits (see Figure A1: 50-250% in the Annex).

In Hungary, the Czech Republic, Finland, Germany, Iceland and especially Norway, tax reforms have been more beneficial to single taxpayers without children as a result of a decrease in child benefits. This is not the case in Hungary where benefits have considerably increased but income taxes increased for single parents on average across the 50-250% income range while they decreased for single taxpayers without children. Income tax reforms have been more beneficial to single taxpayers without children also in Norway and in Germany where benefits did not change.

The differences in the change in the tax wedge are larger when looking only at income in the 50-80% AW range. Tax reforms have been more beneficial to low-income single taxpayers who have 2 children especially in Ireland, New Zealand, Australia, Canada, the United Kingdom, the Netherlands, Portugal, Italy, the United States and Japan (differences in the change in the tax wedge of over 4 percentage points

are noted; see columns 3 and 4 in Table 1). Tax reforms have been more beneficial to low-income single taxpayers without children in the Slovak Republic, Poland, Finland, the Czech Republic, Norway and especially Iceland (differences in the change in the tax wedge of over 2 percentage points are noted). In most countries, these changes are the result of changes in the family benefits. However, this is not the case in the United Kingdom and the United States where only the income tax system – for instance through tax credits targeted at children – has been used to implement a more child-friendly tax system (see also Figure A1: 50-80% in the Annex). In Canada, the increase in benefits for children is accompanied by income tax reductions for single parents. In Ireland, New Zealand and Australia, the very strong increase in benefits is partly offset by income taxes which have decreased less for single parents than for single taxpayers without children. In the Slovak Republic, Poland and the Czech Republic, the strong decrease in benefits are partly offset by larger reductions in income taxes for single parents than for single taxpayers.

There are no OECD countries that implement a child policy through the employer SSC that are levied. This is also true for employee SSC but not in the Netherlands where employee SSC have decreased more for single parents than for single taxpayers at all income levels (see Figure A1 in the Annex).

### ***2.3 One-earner married couples without children***

The average tax wedge for one-earner married couples without children decreased with 1.4 percentage points since 2000 on average across the OECD over the 50-250% AW income range. Higher tax reductions of 2.6 percentage points are observed for one-earner married couples at low wages. The tax wedge decreased less for high-income one-earner married couples.



**Table 2. Average change in the average tax wedge by level of gross earnings as a % of the AW for one-earner married couples, 0 or 2 children, between 2000 and 2009**

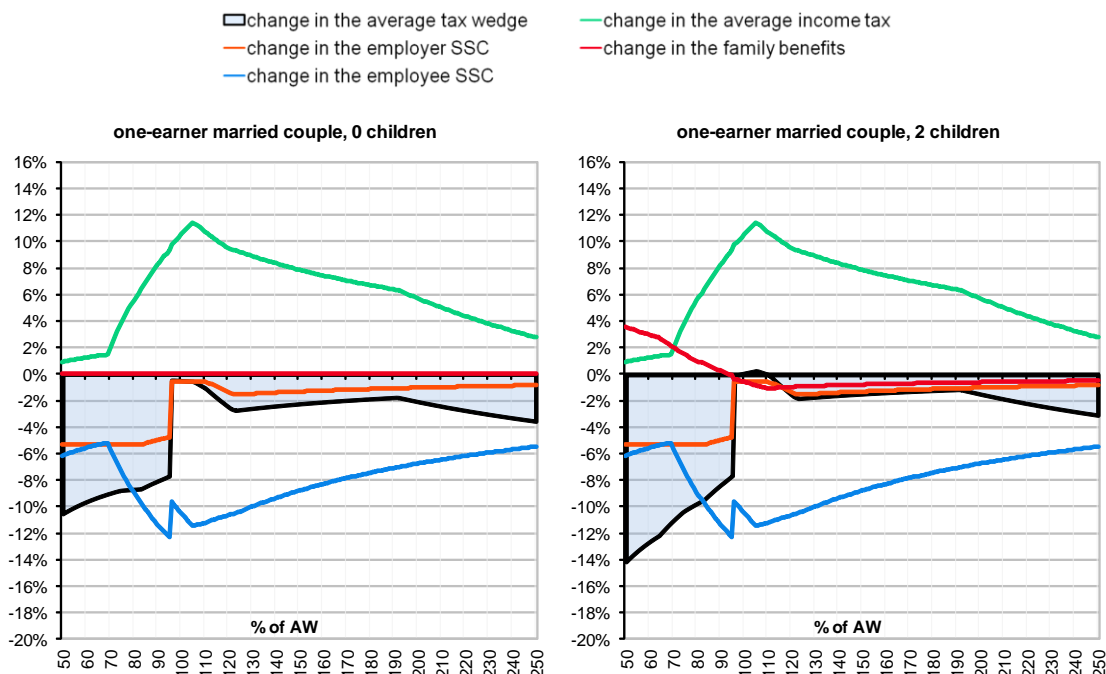
	50-250% AW		50-80% of AW		80-130% of AW		130-180% of AW		180-250% of AW	
	0 children	2 children	0 children	2 children	0 children	2 children	0 children	2 children	0 children	2 children
Australia	-5.4%	-7.2%	-5.7%	-11.9%	-4.4%	-9.1%	-5.8%	-6.6%	-5.8%	-4.3%
Austria	0.2%	0.6%	0.1%	0.9%	0.6%	1.0%	0.1%	0.3%	0.1%	0.3%
Belgium	-3.1%	-3.1%	-4.5%	-4.7%	-3.1%	-3.1%	-2.6%	-2.6%	-2.8%	-2.8%
Canada	-3.2%	-5.5%	-3.8%	-10.7%	-2.8%	-5.4%	-2.9%	-4.0%	-3.4%	-4.4%
Czech Republic	-4.1%	-3.1%	-5.5%	-2.0%	-5.6%	-2.9%	-3.5%	-3.5%	-2.9%	-3.3%
Denmark	-3.4%	-3.7%	-5.2%	-5.9%	-3.4%	-3.6%	-2.9%	-3.1%	-3.0%	-3.1%
Finland	-5.1%	-3.8%	-5.9%	-3.2%	-5.2%	-3.6%	-5.2%	-4.1%	-4.7%	-3.9%
France	0.4%	0.8%	-3.1%	-3.2%	0.5%	0.7%	1.3%	1.6%	1.2%	2.2%
Germany	-1.8%	-2.2%	-0.3%	-1.3%	-1.3%	-2.0%	-2.6%	-3.0%	-2.3%	-2.3%
Greece	2.4%	2.1%	2.1%	2.1%	3.5%	3.1%	2.7%	2.5%	1.7%	1.2%
Hungary	-1.2%	-0.3%	-5.2%	-3.9%	-1.5%	-0.5%	-0.8%	-0.1%	0.5%	1.1%
Iceland	1.5%	2.7%	1.6%	7.3%	1.8%	3.7%	1.4%	1.7%	1.3%	0.7%
Ireland	-0.6%	-6.7%	-2.4%	-22.4%	-2.9%	-8.4%	-0.4%	-3.7%	1.6%	-0.8%
Italy	-0.1%	-1.9%	-1.6%	-4.4%	-0.7%	-2.6%	0.2%	-1.6%	0.7%	-0.3%
Japan	4.8%	2.9%	5.3%	0.9%	5.2%	2.7%	4.9%	3.2%	4.0%	3.8%
Korea	1.4%	0.9%	1.7%	1.7%	2.6%	1.8%	1.9%	1.7%	-0.1%	-0.5%
Luxembourg	-3.6%	-3.5%	-2.6%	-6.0%	-3.9%	-2.9%	-4.0%	-3.2%	-3.5%	-2.9%
Mexico	2.0%	2.0%	4.7%	4.7%	3.8%	3.8%	2.0%	2.0%	-0.4%	-0.4%
Netherlands	-3.8%	-3.6%	-9.4%	-11.8%	-3.7%	-3.2%	-2.2%	-1.4%	-2.6%	-2.0%
New Zealand	-0.4%	-6.0%	-3.0%	-13.2%	-0.8%	-12.2%	0.4%	-4.3%	0.5%	0.4%
Norway	-0.7%	1.3%	-1.0%	2.9%	-0.2%	2.2%	-0.7%	0.9%	-1.0%	0.2%
Poland	-4.0%	-6.0%	-3.6%	-5.1%	-3.9%	-5.0%	-4.1%	-6.4%	-4.1%	-6.7%
Portugal	-1.2%	-2.0%	-2.0%	-4.2%	-1.7%	-3.1%	-0.7%	-1.0%	-0.9%	-1.0%
Slovak Republic	-8.1%	-8.6%	-8.0%	-7.9%	-9.1%	-8.0%	-8.2%	-8.3%	-7.5%	-9.5%
Spain	0.9%	0.9%	0.1%	-1.0%	0.4%	0.2%	0.8%	1.0%	1.7%	2.1%
Sweden	-5.4%	-5.3%	-7.4%	-7.1%	-7.0%	-6.8%	-5.2%	-5.1%	-3.6%	-3.5%
Switzerland	-0.9%	-1.3%	-1.0%	-1.8%	-0.8%	-1.3%	-0.9%	-1.2%	-1.0%	-1.3%
Turkey	2.6%	1.9%	-4.9%	-6.2%	-2.4%	-3.1%	3.7%	3.2%	8.5%	8.1%
United Kingdom	0.8%	-0.8%	0.0%	-7.2%	0.1%	-1.5%	1.2%	0.7%	1.2%	1.3%
United States	-2.8%	-5.3%	-3.2%	-11.0%	-2.7%	-6.1%	-2.0%	-3.2%	-3.4%	-3.6%
OECD average	-1.4%	-2.1%	-2.5%	-4.5%	-1.6%	-2.5%	-1.1%	-1.6%	-1.0%	-1.2%
(Standard dev.)	2.9%	3.3%	3.5%	6.1%	3.2%	4.0%	3.0%	3.1%	3.2%	3.3%

The change in the average tax wedge for one-earner married couples without children has been the largest in the Slovak Republic, Australia, Sweden, Finland and the Czech Republic with an average decrease over the 50-250% AW income range of more than 4 percentage points (see Table 2). Income taxes decreased considerably in all of these countries; also employer SSC decreased strongly in the Slovak Republic and Finland (see Figures A2). The average tax wedge decreased with more than 2.8 percentage points also in the United States, Canada, Belgium, Denmark, Luxembourg, the Netherlands and Poland. The tax wedge increased with more than 2 percentage points on average over the 50-250% AW income range in Mexico, Greece, Turkey and especially in Japan where the tax wedge increased with 4.8 percentage points.

Income taxes decreased on average over the 50-250% income range with more than 2 percentage points as a percentage of total labour costs in 10 OECD member countries and increased strongly only in the Netherlands, Mexico, Greece and Japan. Employee SSC decreased strongly in Poland and the Netherlands, while they increased with about 2 percentage points or more in the Slovak Republic, Hungary and Turkey. Strong reductions in employer SSC on average over the 50-250% income range are observed in the Netherlands (see Figure S.11), Luxembourg, Denmark, Finland, Belgium, Hungary and the Slovak Republic, while they increased with about 2 percentage points in Turkey and Japan (see Figure S.A2).

**Figure 11. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in the Netherlands**

For one-earner married couples with 0 and 2 children earning between 50-250% of the AW

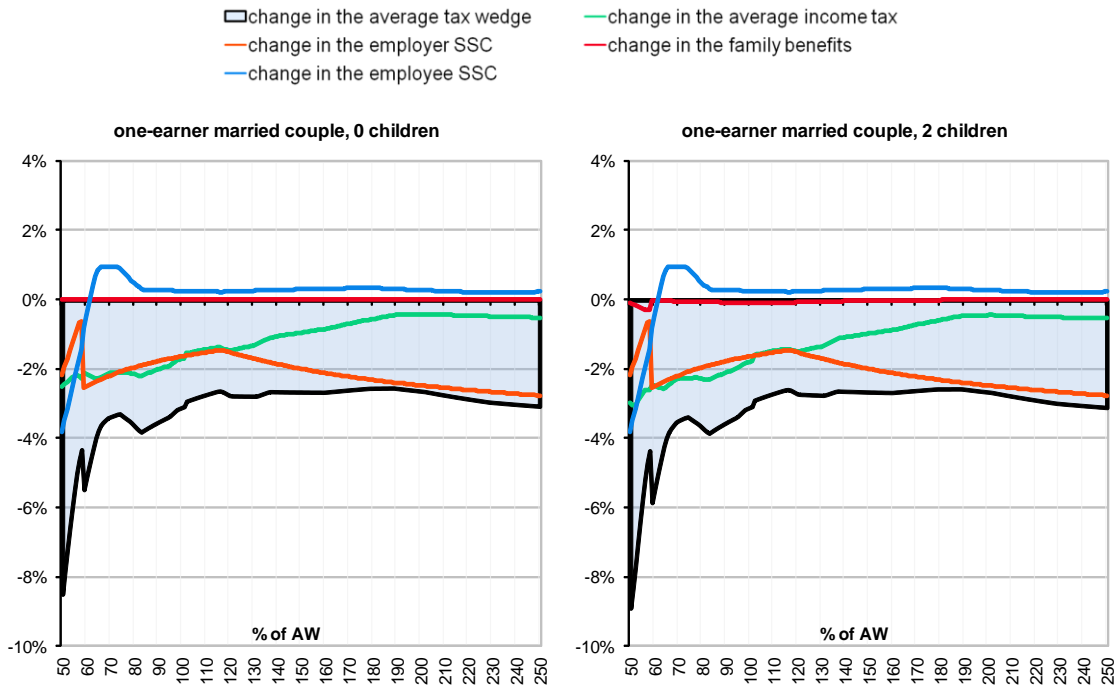


In Belgium (see Figure 12), the tax wedge for one-earner married couples without children decreased with about 3.4 percentage points on average. Very low-income earners gained more than taxpayers at other income levels. These changes are mainly the result of (i) a decrease in the central government income tax, (ii) a decrease in employee SSC on earnings below 62% of the AW as a result of the “employment bonus” which has become more generous over time; the increased employee SSC on earnings between 63% and 82% of the AW are a result of changes in the tax base of the “special social security contribution”, and (iii) the reduction in employer SSC. Families with children faced the same tax changes mainly because child benefits did not change (except very slightly for low-income families with children).

The tax mix in Hungary (see Figure 13) shifted away from employer SSC and income taxes towards more employee SSC. The tax wedge decreased especially for low-income one-earner married couples without children as a result of the stronger reduction in income taxes; the tax wedge slightly increased for the highest incomes. Families with children, however, faced an increase in income taxes but this effect has been offset by an increase in family benefits. Overall, tax reforms in Hungary during the period 2000-2009 have been slightly more beneficial to one-earner married couples without children.

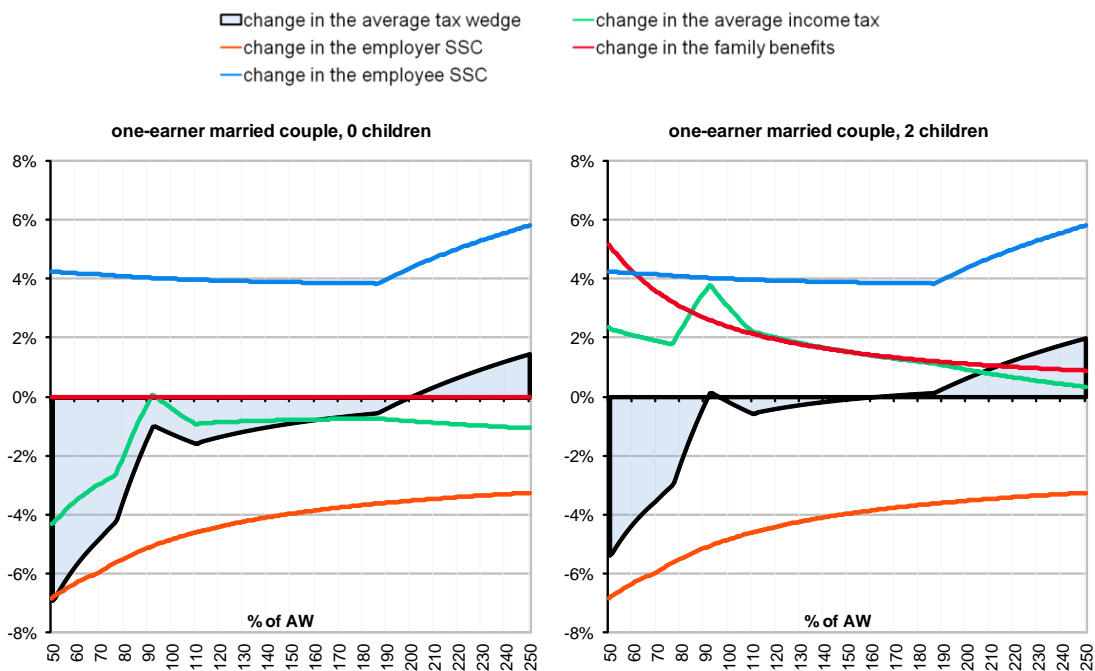
**Figure 12. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in Belgium**

For one-earner married couples with 0 and 2 children earning between 50-250% of the AW



**Figure 13. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in Hungary**

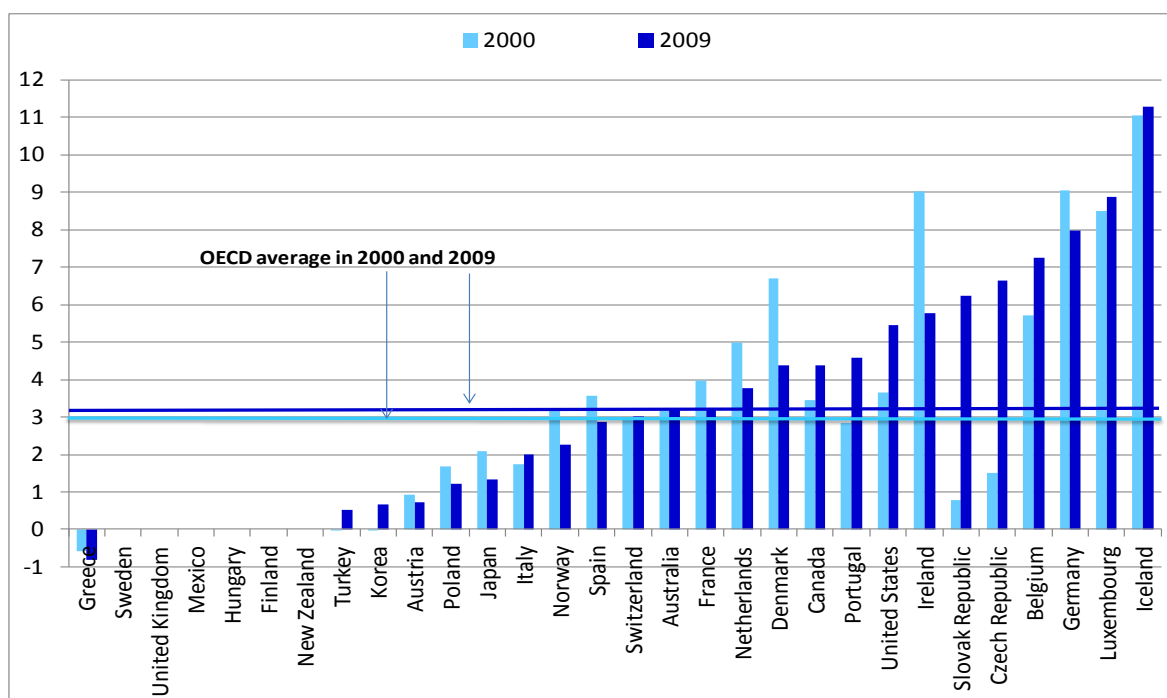
For one-earner married couples with 0 and 2 children earning between 50-250% of the AW



*Tax reforms targeted at the spouse without wage income in families without children*

In most OECD countries, taxpayers that are married to a partner who has no wage income benefit from a decrease in the tax wedge, except in Sweden, the United Kingdom, Mexico, Hungary, Finland and New Zealand (see Figure 14). The difference in the tax wedge for single taxpayers and one-earner married couples at average earnings without children across the OECD was 3.2 percentage points in 2009 while it was 3.0 percentage points in 2000.

**Figure 14. Tax wedge reduction when being married to a partner without wage income: single taxpayers versus one-earner married couples at average wage earnings without children in 2000 and 2009, in percentage points <sup>(1,2,3)</sup>**



- (1) The tax advantage is shown in per cent of total labour costs and is calculated as the difference between the tax wedge faced by a single taxpayer and a one-earner married couple at average earnings without children.
- (2) Information on average tax wedges for 2010 can be found in Table I.1 in *Taxing Wages 2009-2010* (OECD, 2011).
- (3) In Greece, married taxpayers working in the private sector may earn up to 10% of additional income compared to single taxpayers. This additional income, however, could not be separated from other gross earnings and has therefore been taken into account when calculating the taxes that have to be paid by married couples. This biases the analysis in this chart for Greece. For more information, see the 2009 edition of *Taxing Wages*.

The level of this “non-earning spouse”-bonus has changed over time in some countries. The tax wedge for one-earner married couples without children decreased considerably stronger (on average across the 50-250% AW income range) than the tax wedge for single taxpayers without children in Belgium and the United States (-1.0 percentage point), Denmark (-1.1 percentage points), Portugal (-1.3 percentage points) and especially the Czech Republic and the Slovak Republic (-3.1 percentage points) as a result of stronger reductions in income taxes. The opposite can be observed in Norway (+1 percentage point), Germany (+1.3 percentage points) and especially Ireland and Iceland (+2.9 percentage points) where the tax reforms over the period 2000-2009 were more beneficial to single taxpayers without children than to one-earner married couples without children. This is partly also true for the Netherlands (+0.9 percentage point)

where one-earner married couples faced a considerably larger increase in income taxes but this effect is almost entirely offset by a larger reduction in employee SSC (compare Figure 3 and 11). On average across the OECD, tax reforms have been equally beneficial to one-earner married couples without children than to single taxpayers without children (-0.02 percentage point difference in the change over time).

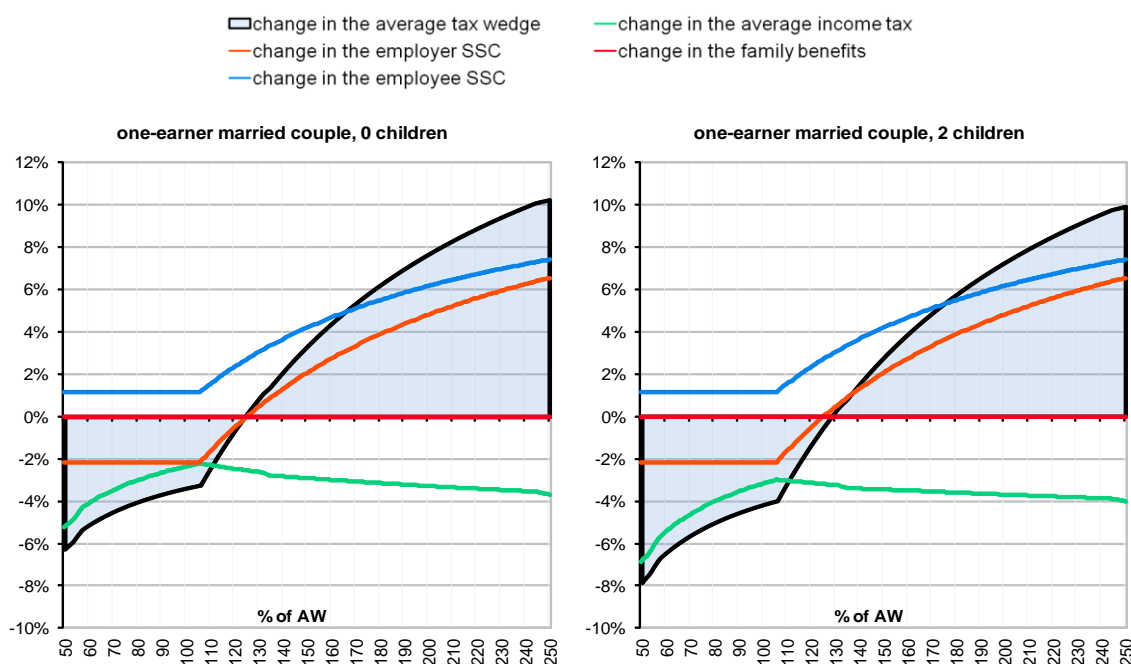
The “non-earning spouse”-bonus has increased more for low-income families. Compared to the difference over the 50-250% income range on average across the OECD, tax reforms have been especially more beneficial to low-income (50-80% of AW) one-earner married couples without children than to low-income single taxpayers without children (-0.38 percentage point). The tax wedge for one-earner married couples without children at low earnings decreased considerably stronger (on average across the 50-80% AW income range) than the tax wedge for low-income single taxpayers without children in Portugal, Iceland and the Slovak Republic (-1.4 percentage points), the United States (-1.8 percentage points), Canada (-1.9 percentage points), Belgium and Denmark (-2.1 percentage points) and especially the Czech Republic (-2.5 percentage points) as a result of stronger reductions in income taxes. The opposite can be observed in Germany (+1 percentage point), Luxembourg (+1.4 percentage points) and especially Ireland (+2.1 percentage points) where the tax reforms over the period 2000-2009 were more beneficial to low-income single taxpayers without children than to low-income one-earner married couples without children.

#### 2.4 One-earner married couples with 2 children

The average tax wedge for one-earner married couples with 2 children decreased on average across the OECD over the 50-250% AW income range with 2.1 percentage points since 2000. Higher tax reductions of 4.5 percentage points are observed for one-earner married couples at low wages. Tax wedges decreased less for higher income one-earner married couples with 2 children (see Table 2).

**Figure 15. Decomposition of the change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW in Turkey**

For one-earner married couples with 0 and 2 children earning between 50-250% of the AW



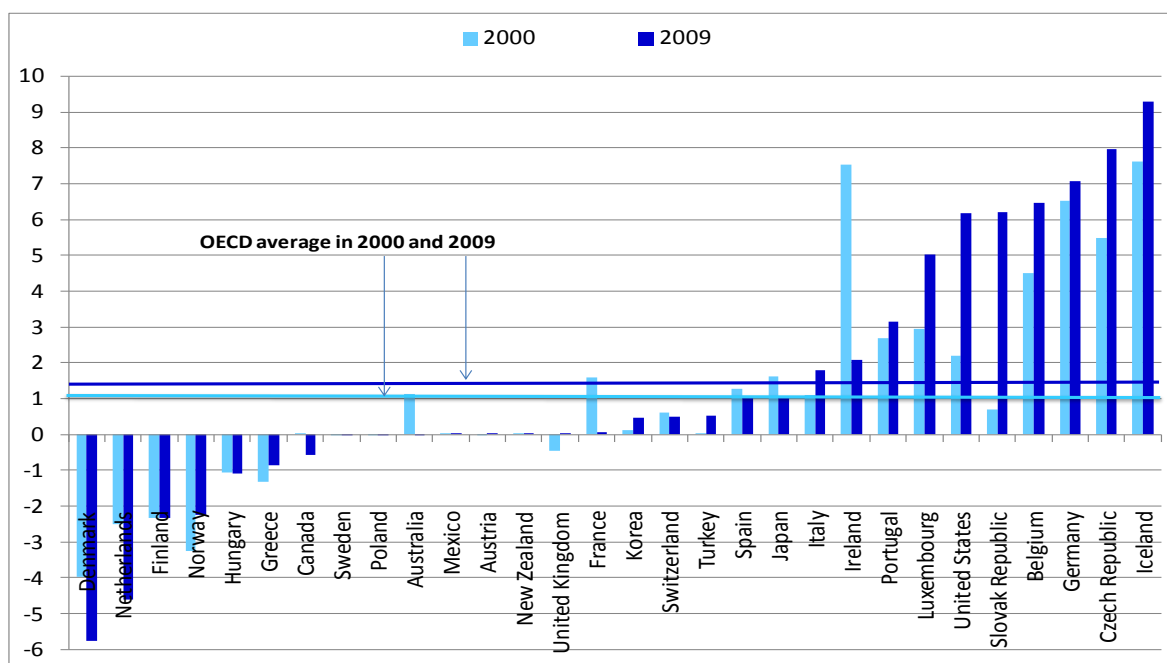
The change in the average tax wedge for one-earner married couples with 2 children has been the largest in the Slovak Republic, Australia, Ireland, New Zealand, Poland, Canada, Sweden and the United

States with an average decrease over the 50-250% AW income range of more than 5 percentage points (see Table 2). Income taxes decreased considerably in all of these countries except in New Zealand and to some degree also in Ireland; in these 2 countries the tax wedge has decreased mainly as a result of the strong increase in benefits (see Figures A2). The average tax wedge decreased with more than 3 percentage points also in the Czech Republic, Luxembourg, the Netherlands, Denmark, Belgium and Finland. The tax wedge increased with more than 2 percentage points on average over the 50-250% AW income range in Mexico, Greece, Iceland and Japan.

In Turkey (see Figure 15), one-earner married couples with 2 children faced a larger decrease or a smaller increase in the tax wedge as a result of a larger decrease in income taxes than one-earner married couples without children. The decrease in employer SSC and income taxes has more than offset the increase in employee SSC for taxpayers with earnings below 130% of the AW. The increase in employee and employer SSC on higher earnings has resulted in an increase in the average tax wedge for one-earner married couples.

*Tax reforms targeted at the spouse without wage income in families with children*

**Figure 16. Tax wedge reduction when being married to a partner without wage income: Single parents versus one-earner married couples at average wage earnings with 2 children in 2000 and 2009, in percentage points <sup>(1,2,3)</sup>**



(1) The tax advantage is shown in per cent of total labour costs and is calculated as the difference between the tax wedge faced by a single parent at average wage earnings with 2 children and a one-earner married couple at average earnings with 2 children.

(2) Information on average tax wedges for 2010 can be found in Table I.1 in Taxing Wages 2009-2010 (OECD, 2011).

(3) In Greece, married taxpayers working in the private sector may earn up to 10% of additional income compared to single taxpayers and parents may earn up to 5% of additional income for each child. This additional income, however, could not be separated from other gross earnings and has therefore been taken into account when calculating the taxes that have to be paid by married couples. This biases the analysis in this chart for Greece. For more information, see the 2009 edition of the Taxing Wages Report.

The “non-earning spouse”-bonus is considerably lower in many OECD countries for families with children (compare Figure 14 and Figure 16). In Denmark, the Netherlands, Finland, Norway, Hungary, Greece and Canada, single parents at average earnings with 2 children pay less tax than one-earner married couples at average earnings with 2 children (“non-earning spouse”-penalty). The difference in the tax wedge for single parents and one-earner married couples at average earnings with 2 children across the OECD was 1.4 percentage points in 2009 while it was 1.1 percentage points in 2000.

The “non-earning spouse”-bonus (or penalty) increased considerably in some but decreased in other countries. The tax wedge for one-earner married couples with 2 children decreased considerably stronger (on average across the 50-250% AW income range) than the tax wedge for single parents with 2 children in the Slovak Republic (-3.7 percentage points), the Czech Republic (-3.1 percentage points), the United States (-2.5 percentage points), Denmark (-1.3 percentage points) and Belgium (-1.2 percentage points) as a result of stronger reductions in income taxes. The opposite can be observed in Australia (+1 percentage point), the Netherlands (+1.2 percentage points), Iceland (+1.9 percentage points) and especially in Luxembourg (+3.9 percentage points) and Ireland (+4.4 percentage points) where the tax reforms over the period 2000-2009 were more beneficial to single parents than to one-earner married couples with 2 children. On average across the OECD, tax reforms have been equally beneficial to one-earner married couples with 2 children than to single parents with 2 children (-0.03 percentage point difference in the change over time).

In contrast to the difference over the 50-250% income range on average across the OECD, tax reforms have been considerably more beneficial to low-income (50-80% of AW) one-earner married couples with 2 children than to low-income single parents with 2 children (-0.63 percentage point). The tax wedge for one-earner married couples with 2 children at low earnings decreased considerably stronger (on average across the 50-80% AW income range) than the tax wedge for low-income single parents with 2 children in Germany (-1 percentage point), Norway and Canada (-1.6 percentage points), Belgium (-2.6 percentage points), Iceland and Denmark (-2.7 percentage points), Poland, (-3.6 percentage points), the Czech Republic and the Slovak Republic (-3.8 percentage points) and the United States (-5.5 percentage points) as a result of stronger reductions in income taxes and/ or increases in benefits. The opposite can be observed in Portugal (+1.3 percentage points), Australia (+2.5 percentage points), the Netherlands (+2.8 percentage points) and especially Ireland (+3.4 percentage points) where the tax reforms over the period 2000-2009 were more beneficial to low-income single parents with 2 children than to low-income one-earner married couples with 2 children.

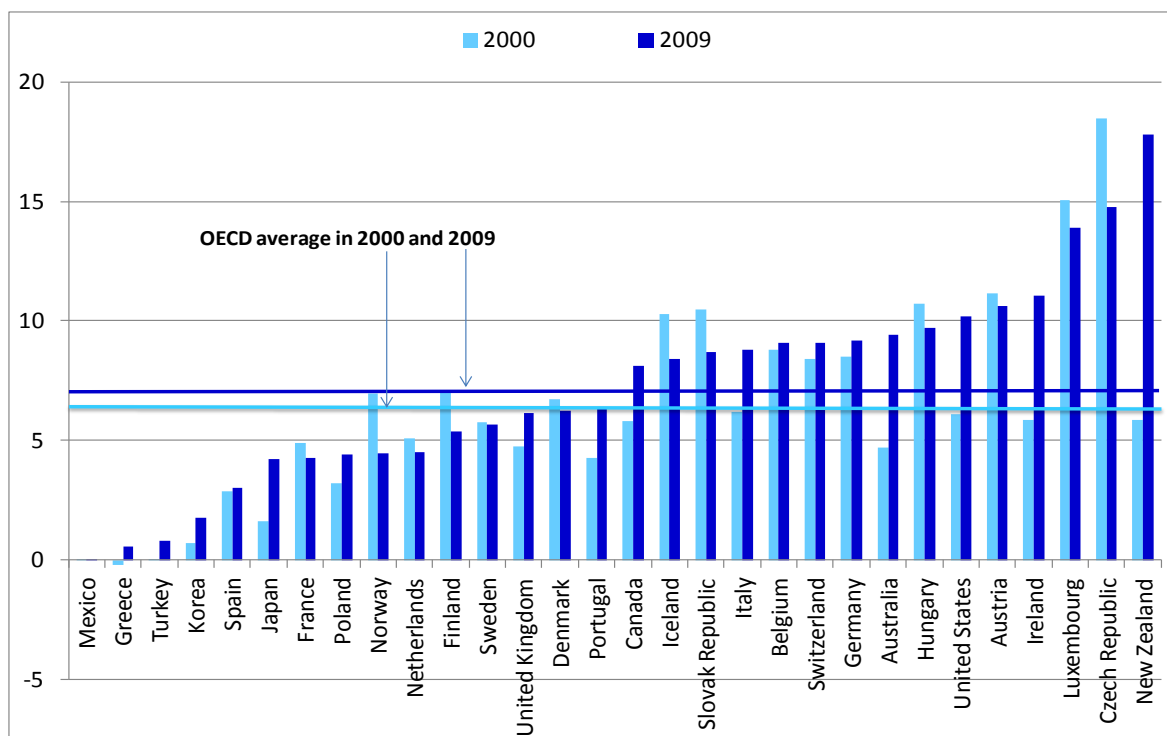
#### *Tax reforms targeted at children in one-earner married couples*

In 2009, all OECD countries except Mexico taxed one-earner married couples at average earnings with 2 children at lower rates than one-earner married couples at average earnings without children (see Figure 17). The difference in tax wedge on average across the OECD was 7.2 percentage points in 2009 while it was 6.3 percentage points in 2000. The difference, however, is considerably smaller than in case of single taxpayers/ single parents at 67% of the AW (see Figure 10).

Nineteen OECD countries have implemented tax reforms that have been more beneficial to one-earner married couples with 2 children than to similar families that do not have children (on average across the 50-250% AW income range); this can be observed by comparing the change in the tax wedge in columns 1 and 2 in Table 2. The most child-friendly tax reforms for this family type have been implemented in Ireland, New Zealand, the United States, Canada, Poland, Japan, Australia, Italy and the United Kingdom. This is the result of more generous child benefits in Ireland, New Zealand, Japan and Australia and of stronger reductions in income taxes in the United States and the United Kingdom. In Poland, one-earner married couples with children received lower benefits but this decrease has been more than compensated by a larger reduction in income taxes (see Figure A2: 50-250% in the Annex).

In Hungary, the Czech Republic, Iceland, Finland and especially Norway, tax reforms have been more beneficial to one-earner married couples without children as a result of a decrease in the (real) value of the child benefits. In Norway, the child benefits have stayed constant in nominal terms but they decreased in real terms. This is not the case in Hungary and also in Luxembourg where benefits have considerably increased but income taxes increased for one-earner married couples with children on average across the 50-250% income range while they decreased for these families without children.

**Figure 17. Tax wedge difference without/with children:  
One-earner married couples at average wage earnings in 2000 and 2009 (1,2)**



- (1) The tax advantage is shown in per cent of total labour costs and is calculated as the difference between the tax wedge faced by a one-earner married couple without children and a one-earner married couple with 2 children.
- (2) Information on average tax wedges for 2010 can be found in Table I.1 in Taxing Wages 2009-2010 (OECD, 2011).

The differences between the changes in the tax wedge are larger when looking only at income in the 50-80% AW range. For more information, see columns 3 and 4 in Table 2 and Figure A2 in the Annex. There are no OECD countries that implement a child policy through the employer SSC that are levied. This is also true for employee SSC (see Figure A2 in the Annex).

### 2.5 Two-earner married couples without and with 2 children

The average tax wedge for two-earner married couples without children decreased on average across the OECD over the 150-350% AW income range with 1.6 percentage points since 2000. The average tax wedge decreased slightly more for families with 2 children (-2.0 percentage points). Two-earner families at lower earnings benefited from a slightly higher tax reduction (see Table 3).



The change in the average tax wedge for two-earner married couples without children has been the largest in Sweden, Finland, Australia, Ireland, the Slovak Republic, Poland, the Netherlands, Luxembourg and Denmark with an average decrease over the 150-350% AW income range of more than 3 percentage points (see Table 3). Income taxes decreased considerably in most of these countries; the decrease in employer SSC has been larger than the decrease in employee SSC (see Figures A3). The tax wedge increased with more than 2 percentage points on average over the 150-350% AW income range in Mexico, Turkey, Korea, Greece and especially in Japan where the tax wedge increased with 4.1 percentage points. A very similar pattern is observed for two-earner married couples with 2 children.

**Table 3. Change in the average tax wedge by level of gross earnings as a % of the AW for two-earner married couples (wife at average and husband at variable earnings), 0 or 2 children, between 2000 and 2009**

	150-350% AW		150-180% of AW		180-230% of AW		230-280% of AW		280-350% of AW	
	0 children	2 children	0 children	2 children	0 children	2 children	0 children	2 children	0 children	2 children
Australia	-4.8%	-3.8%	-4.2%	-4.2%	-4.1%	-2.7%	-5.0%	-3.9%	-5.3%	-4.4%
Austria	0.2%	0.6%	0.2%	0.8%	0.4%	0.9%	0.1%	0.5%	0.2%	0.5%
Belgium	-2.8%	-2.8%	-3.2%	-3.2%	-2.7%	-2.7%	-2.7%	-2.7%	-2.8%	-2.8%
Canada	-2.5%	-3.2%	-2.1%	-3.2%	-2.3%	-3.3%	-2.5%	-3.0%	-2.9%	-3.3%
Czech Republic	-0.9%	-1.2%	-1.6%	-2.5%	-0.8%	-2.2%	-0.5%	-0.3%	-0.8%	-0.5%
Denmark	-3.0%	-3.1%	-3.5%	-3.7%	-2.9%	-3.0%	-2.8%	-2.9%	-2.9%	-3.0%
Finland	-5.2%	-4.5%	-5.6%	-4.5%	-5.3%	-4.5%	-5.3%	-4.6%	-4.9%	-4.4%
France	0.4%	1.3%	-0.6%	-0.4%	-0.2%	0.6%	0.6%	1.4%	1.3%	2.5%
Germany	-2.4%	-2.4%	-1.8%	-2.2%	-2.2%	-2.2%	-2.6%	-2.6%	-2.7%	-2.5%
Greece	3.1%	2.8%	3.4%	3.3%	3.8%	3.5%	3.3%	3.1%	2.5%	2.0%
Hungary	-1.0%	-0.5%	-2.8%	-2.2%	-1.4%	-0.8%	-1.0%	-0.5%	0.0%	0.3%
Iceland	0.4%	-0.4%	2.5%	2.6%	2.1%	1.6%	1.8%	0.8%	-2.6%	-3.9%
Ireland	-4.6%	-7.1%	-5.5%	-9.0%	-6.5%	-9.3%	-4.8%	-7.1%	-2.7%	-4.6%
Italy	-0.1%	-1.3%	-0.5%	-2.8%	-0.5%	-2.1%	0.1%	-1.0%	0.3%	-0.2%
Japan	4.1%	3.3%	4.4%	2.9%	4.4%	3.2%	4.2%	3.4%	3.7%	3.5%
Korea	2.3%	1.6%	2.7%	1.7%	3.1%	2.3%	2.6%	2.1%	1.2%	0.6%
Luxembourg	-3.2%	-2.7%	-3.2%	-2.5%	-2.9%	-2.4%	-3.1%	-2.6%	-3.3%	-3.0%
Mexico	2.1%	2.1%	3.5%	3.5%	3.2%	3.2%	2.2%	2.2%	0.5%	0.5%
Netherlands	-3.3%	-4.3%	-4.5%	-5.9%	-3.1%	-4.3%	-2.7%	-3.7%	-3.2%	-4.0%
New Zealand	-0.5%	-0.8%	-1.7%	-4.1%	-0.8%	-0.7%	-0.1%	-0.1%	0.0%	0.0%
Norway	-1.5%	-0.5%	-1.2%	0.3%	-1.3%	0.0%	-1.7%	-0.8%	-1.7%	-0.9%
Poland	-4.2%	-6.4%	-4.1%	-6.9%	-4.2%	-6.8%	-4.2%	-6.4%	-4.2%	-6.0%
Portugal	-0.1%	-0.1%	-0.3%	-0.6%	-0.5%	-0.6%	-0.5%	-0.4%	0.4%	0.8%
Slovak Republic	-4.5%	-6.7%	-5.0%	-5.7%	-4.1%	-7.3%	-4.4%	-6.8%	-4.7%	-6.5%
Spain	0.0%	0.1%	-0.5%	-0.6%	-0.4%	-0.4%	0.0%	0.0%	0.6%	0.8%
Sweden	-5.9%	-5.9%	-7.1%	-7.0%	-7.0%	-6.9%	-5.9%	-5.8%	-4.7%	-4.6%
Switzerland	-1.0%	-1.2%	-0.8%	-1.2%	-0.9%	-1.1%	-1.0%	-1.2%	-1.1%	-1.2%
Turkey	2.1%	1.8%	-1.7%	-2.2%	-1.0%	-1.4%	2.4%	2.1%	5.8%	5.5%
United Kingdom	0.5%	0.5%	0.0%	-0.3%	0.0%	0.1%	0.7%	0.8%	0.8%	0.8%
United States	-2.8%	-2.9%	-1.1%	-2.1%	-2.7%	-2.7%	-3.3%	-3.9%	-3.2%	-2.8%
OECD average	-1.3%	-1.6%	-1.5%	-2.1%	-1.3%	-1.7%	-1.2%	-1.5%	-1.2%	-1.4%
(Standard dev.)	2.6%	2.8%	2.9%	3.2%	2.8%	3.2%	2.7%	2.9%	2.7%	2.9%

### 3. Conclusion

The average tax wedge for single taxpayers without children decreased with about 1.4 percentage points over the 50% to 250% income range on average in the OECD during the 2000-2009 period (Table 1). A higher average tax wedge reduction of 2.1 percentage points is found for low wage earners (50-80%

of the AW) indicating that a number of countries (e.g. the Netherlands, Sweden, the Slovak Republic, Finland, Hungary) have implemented tax cuts targeted at low-income earners. Average earners, high-income earners and very high-income earners benefited from a similar decrease in the tax wedge (about 1.3 percentage points) on average in the OECD. Higher average tax wedge decreases are observed, on average across the OECD, for single parents with 2 children at all income levels but especially for low-income earners (earnings between 50% to 80% of the AW) who enjoyed a decrease of 3.9 percentage points since 2000 on average. Similar tax reform patterns can be observed in Table 2 for one-earner married couples and in Table 3 for two-earner married couples with and without children.

Income taxes paid by single taxpayers with/ without 2 children decreased with about 1 percentage point across the 50-250% AW income range on average in the OECD since 2000 but not in the Netherlands where the increase was more than compensated by a decrease in employee SSC. Employee SSC have been relatively constant across the OECD; larger increases in employee SSC were only observed in Hungary and Turkey. Stronger reductions can be observed for employer SSC – but the decrease has been lower than the decrease in income taxes – on average across the OECD and especially in Hungary and the Slovak Republic. Benefits for children increased strongly especially in Australia, Ireland and New Zealand on average across the 50-250% income range. Similar conclusions can be drawn when focusing on low-income single taxpayers (earning income from 50-80% of the AW). Some countries have lowered the family benefits that low-income taxpayers with children have received in 2000. This has been especially the case in the Czech Republic, Iceland, Poland and the Slovak Republic. Similar tax reform patterns can be observed for one-earner married couples, although there are some differences in some countries. The same is true for two-earner married couples although child benefits did not change strongly on average for this family type.

All OECD countries except Mexico tax families with children at lower rates than families without children. The differences between countries, however, are considerable. Single taxpayers at 67% of the AW, for instance, face the largest decrease in the tax wedge as a result of 2 children in Canada, New Zealand, Ireland, Australia and Luxembourg while there is hardly any tax wedge difference in Korea, Turkey, Poland and Spain. The difference in the tax wedge for families with or without children has increased over time in the majority of OECD member countries and especially for low-income families. Many countries have increased child benefits but other countries such as Hungary, the Czech Republic, Finland, Germany, Iceland and Norway have decreased child benefits either in real or nominal terms. The difference in the tax wedge is not only a result of child benefits but often also because of lower income taxes that families with children have to pay; these advantages are typically decreasing in income. Employee and employer SSC are typically not used by governments to implement a child-friendly tax system.

In most OECD countries, taxpayers that are married to a partner who has no wage income face a lower tax wedge than if they would have been single. This “non-earning spouse”-bonus is typically implemented because of “ability-to-pay” and fairness considerations. The bonus is about 3 percentage points for taxpayers at average earnings without children. On average across the OECD, tax reforms during the period 2000-2009 have been equally beneficial to one-earner married couples without children than to single taxpayers without children. However, the “non-earning spouse”-bonus for families without children has increased since 2000 for low-income families. Similar observations can be made with respect to the “non-earning spouse”-bonus for families with 2 children, although the average bonus is lower for families with children than for families without children (about 1.4 percentage points for families with 2 children at average earnings in 2009). This is mainly because the tax burden for especially lower income single parents with children is already low in many countries. In Denmark, the Netherlands, Finland, Norway, Hungary, Greece and Canada, this even leads to a “non-earning spouse”- (marriage) penalty for single parents at average earnings with 2 children.

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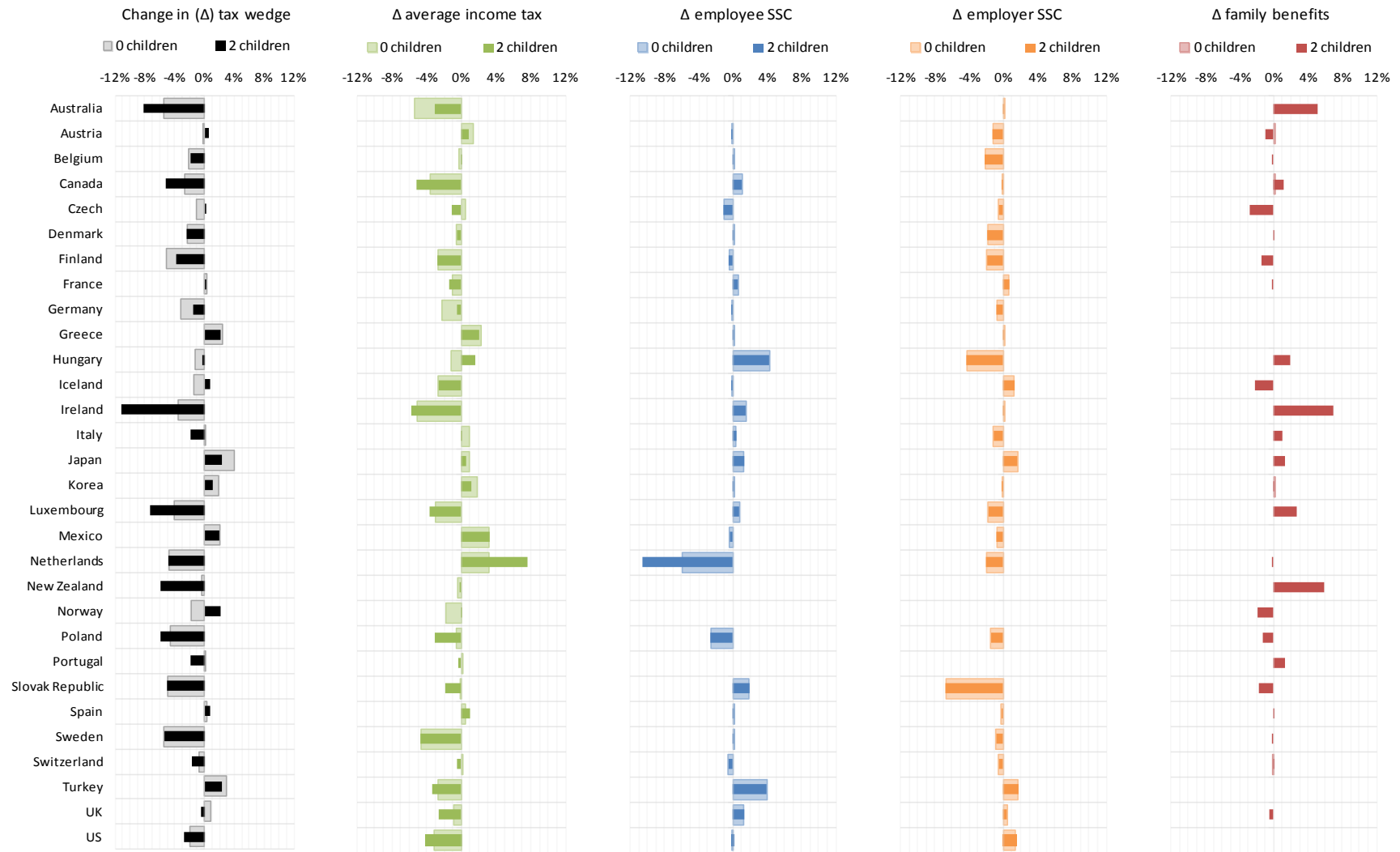
OECD, 2010, *Revenue Statistics 1965-2009*.

OECD, 2011, *Taxing Wages 2009-2010*.

## **ANNEX**

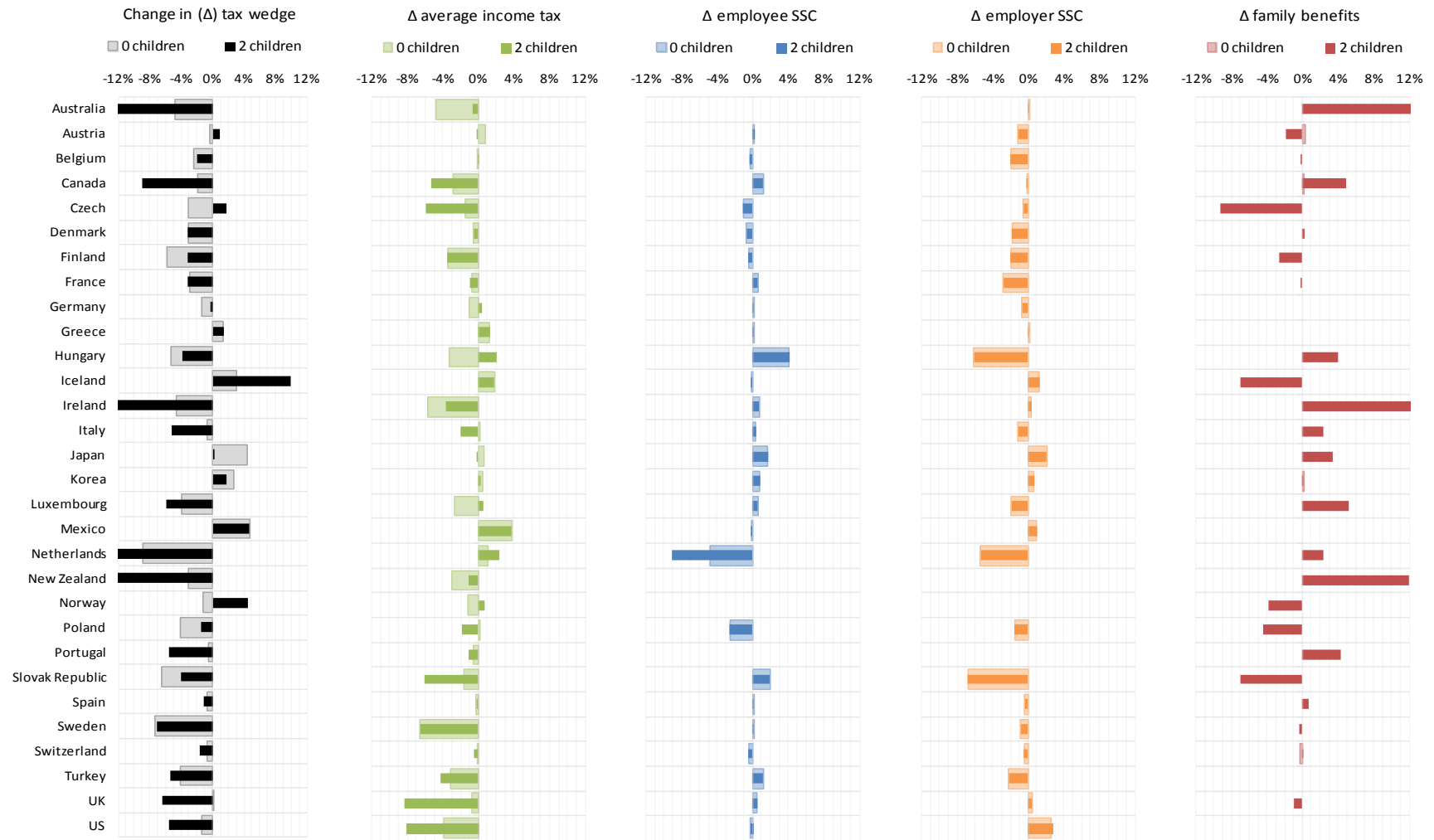
### **DECOMPOSITION OF THE CHANGE IN THE AVERAGE TAX WEDGE**

**Figure A1. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
Single taxpayers with 0 or 2 children with gross earnings from 50-250% of the AW**



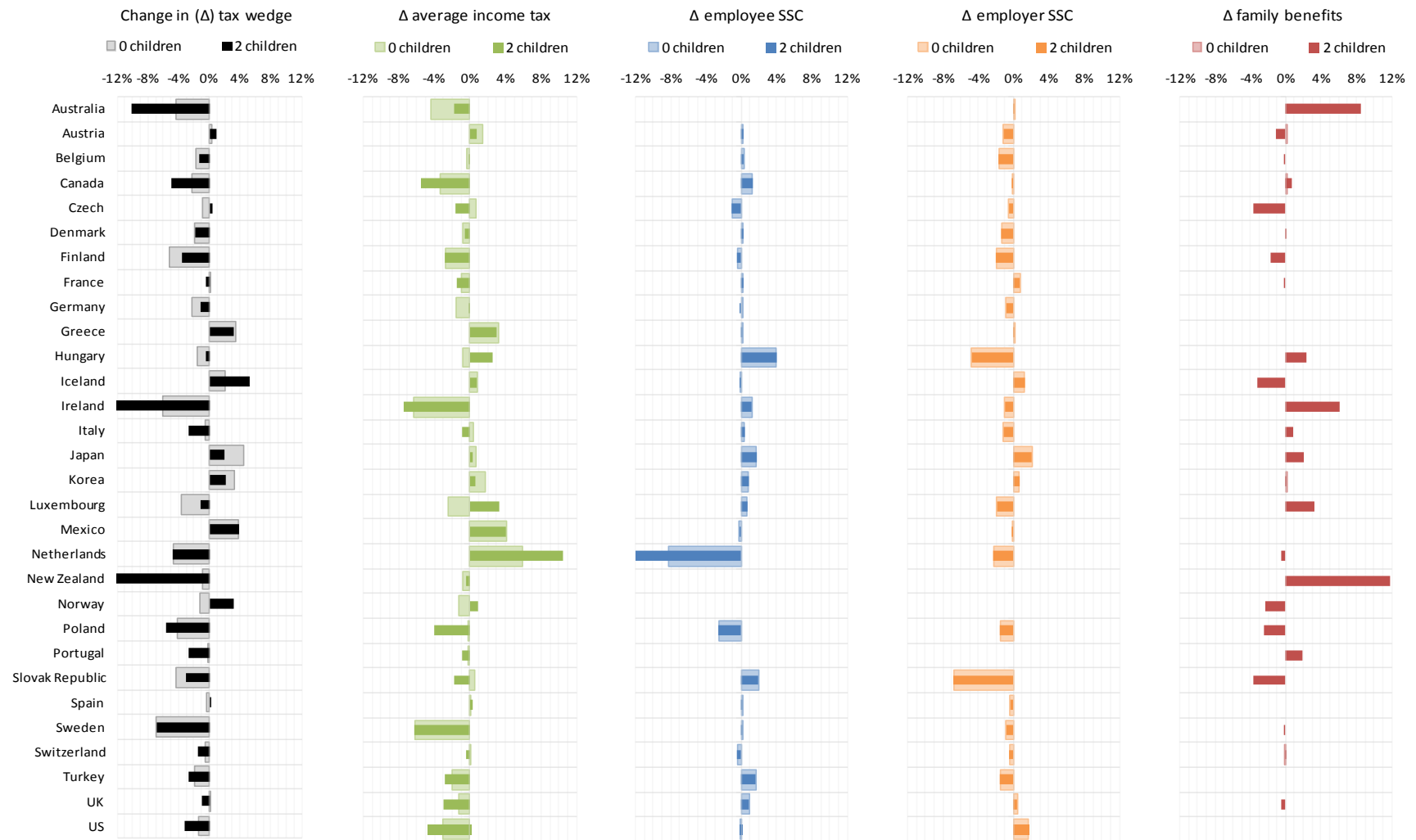


**Figure A1. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
Single taxpayers with 0 or 2 children with gross earnings from 50-80% of the AW**

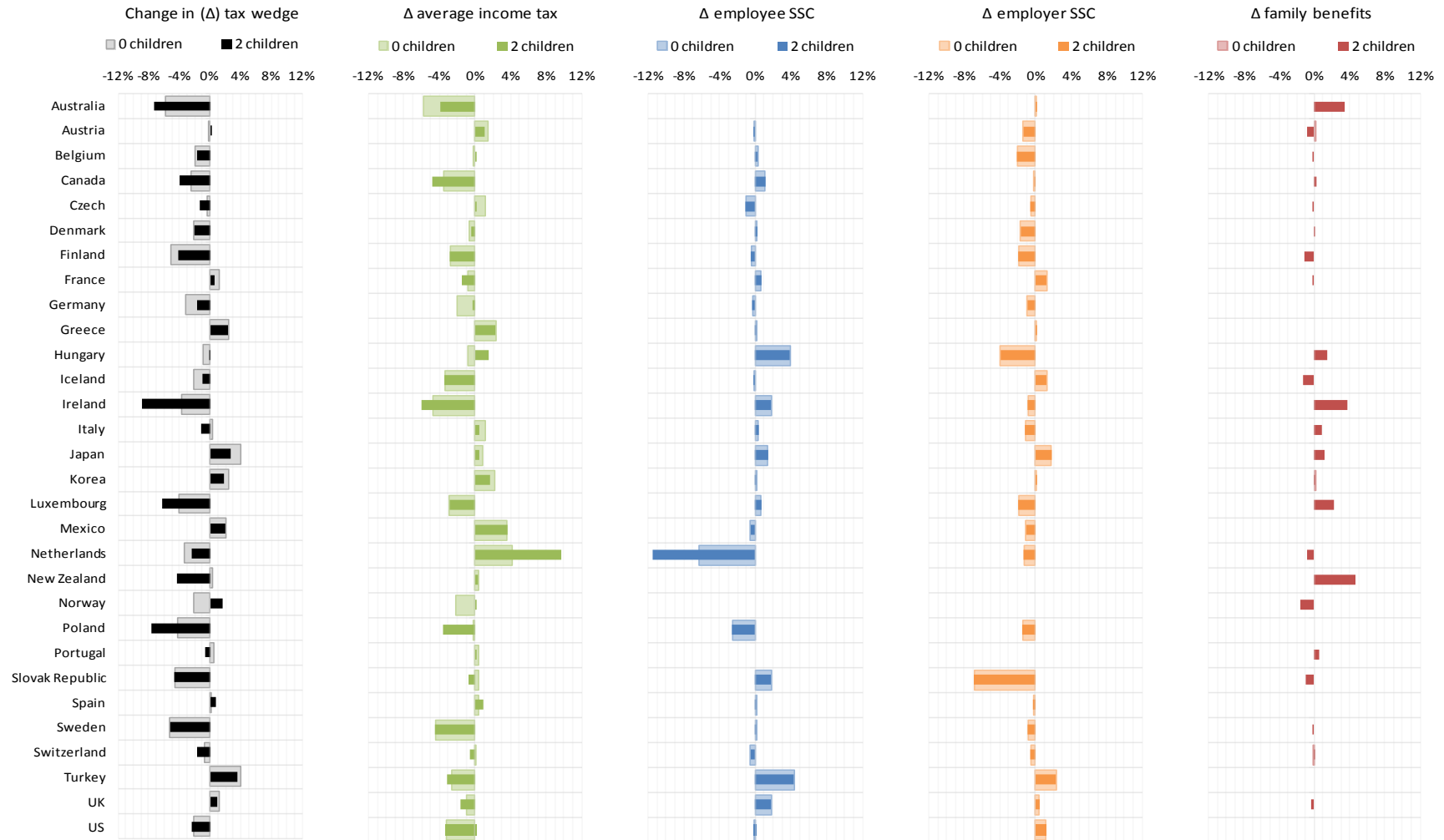


**Figure A1. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
*Single taxpayers with 0 or 2 children with gross earnings from 80-130% of the AW***

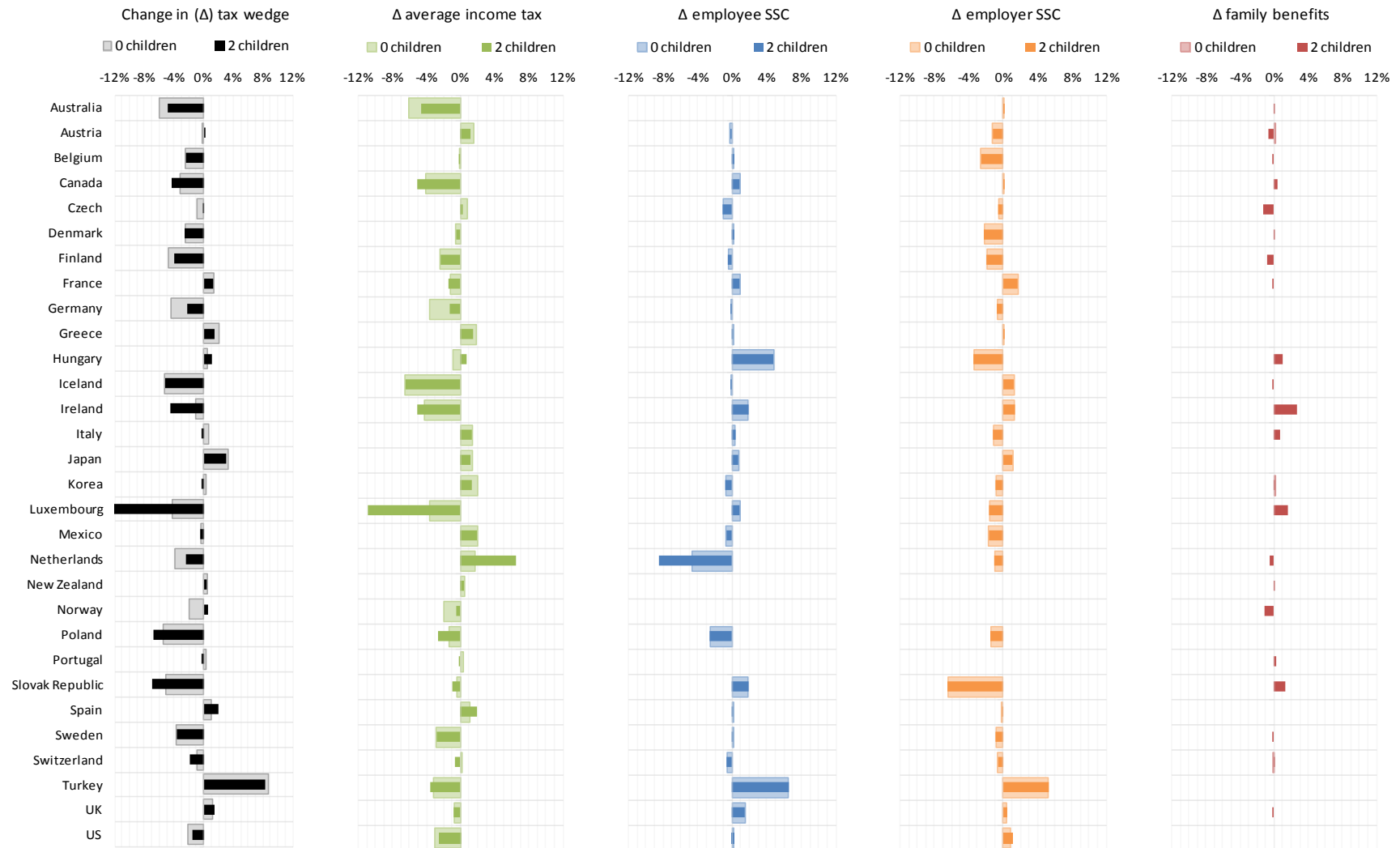




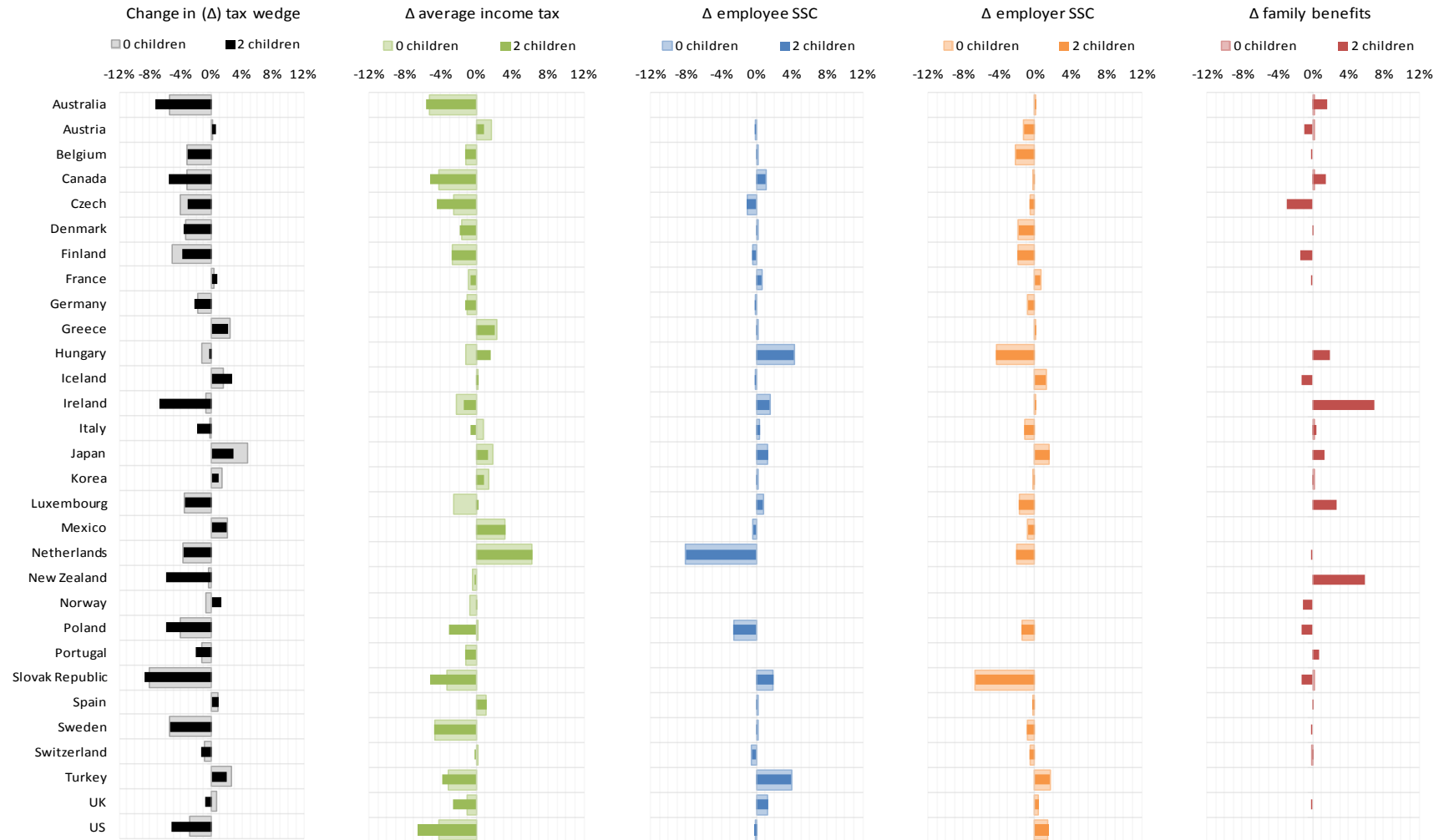
**Figure A1. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
Single taxpayers with 0 or 2 children with gross earnings from 130-180% of the AW**



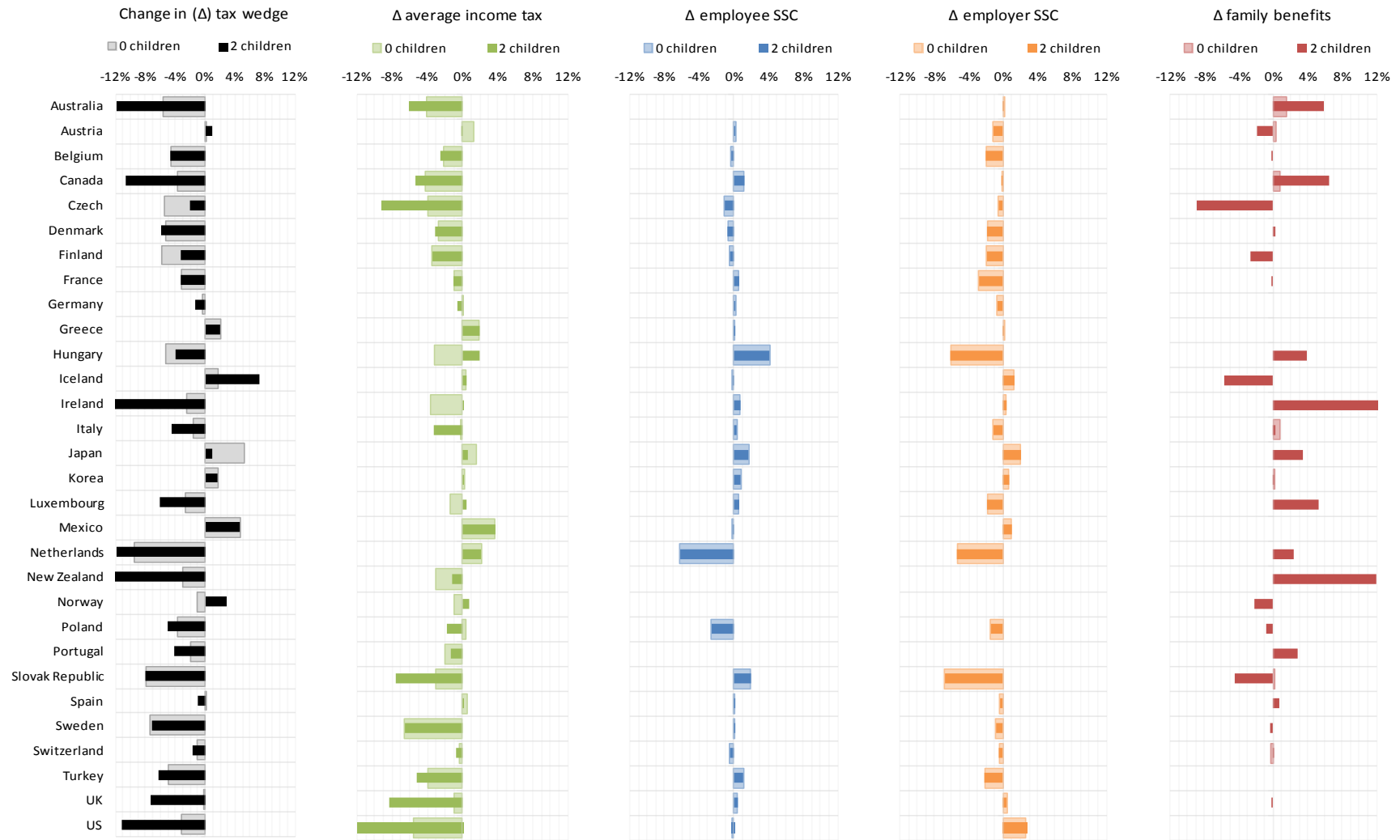
**Figure A1. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
Single taxpayers with 0 or 2 children with gross earnings from 180-250% of the AW**



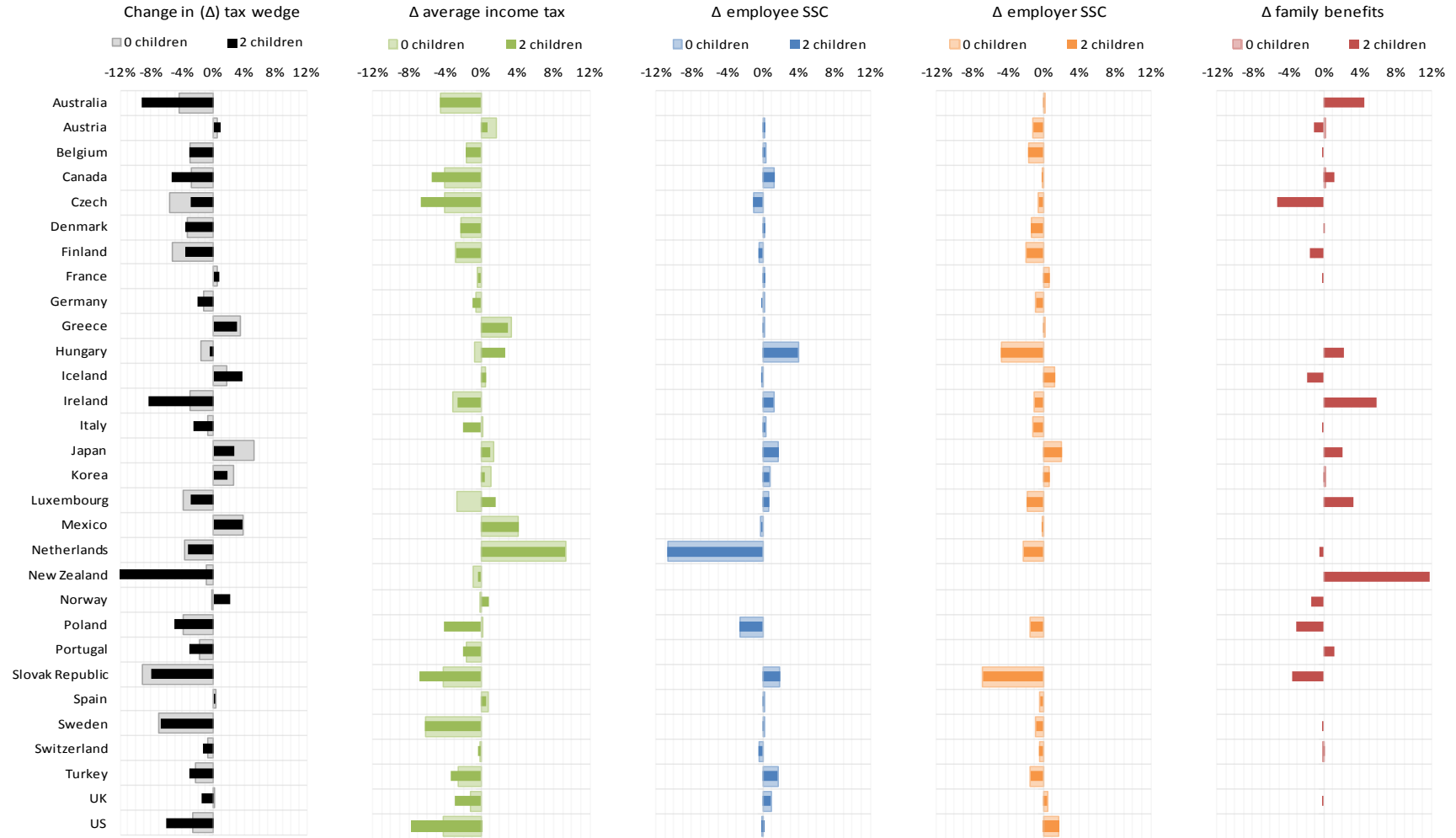
**Figure A2. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
One-earner married couple with 0 or 2 children with gross earnings from 50-250% of the AW**



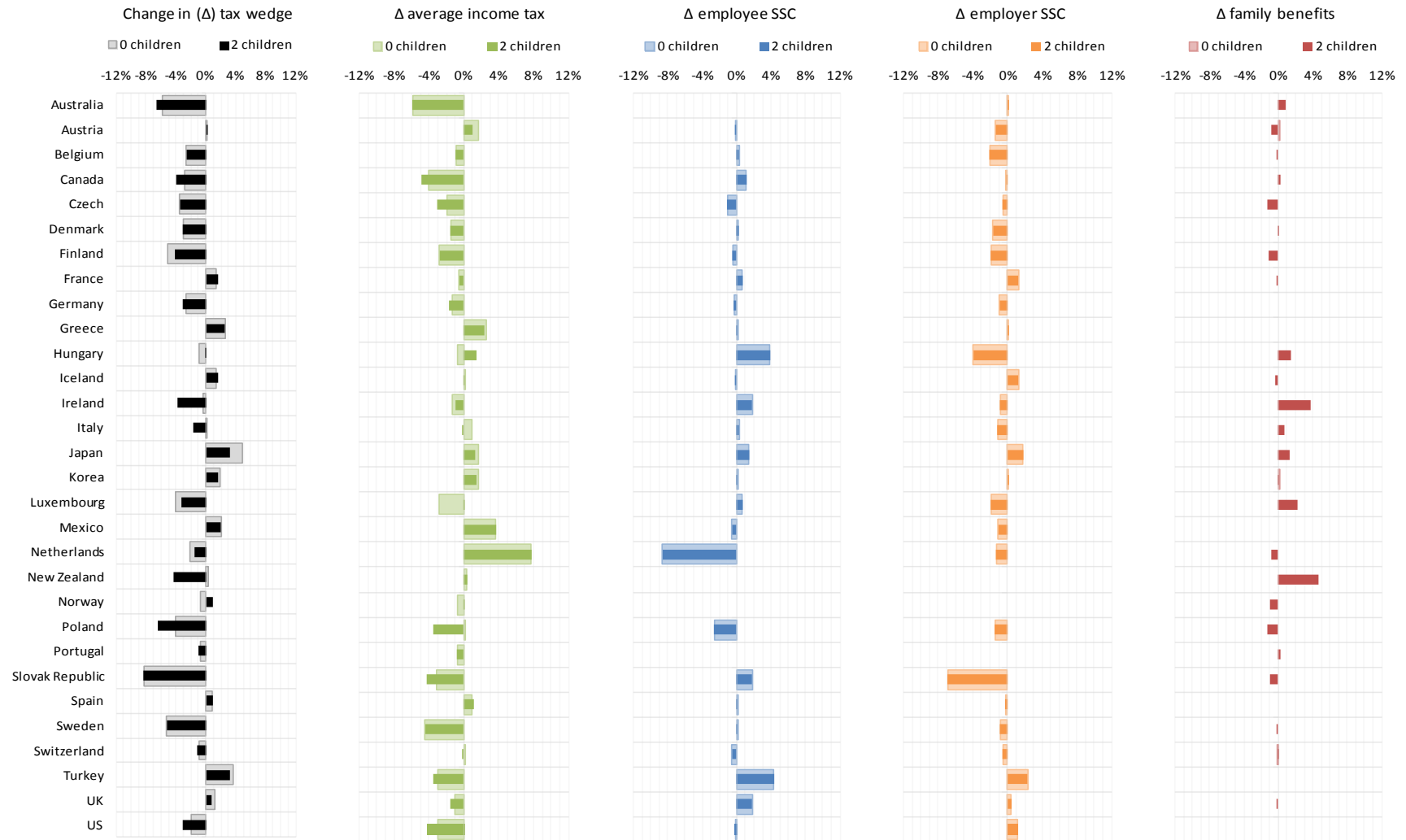
**Figure A2. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
One-earner married couple with 0 or 2 children with gross earnings from 50-80% of the AW**



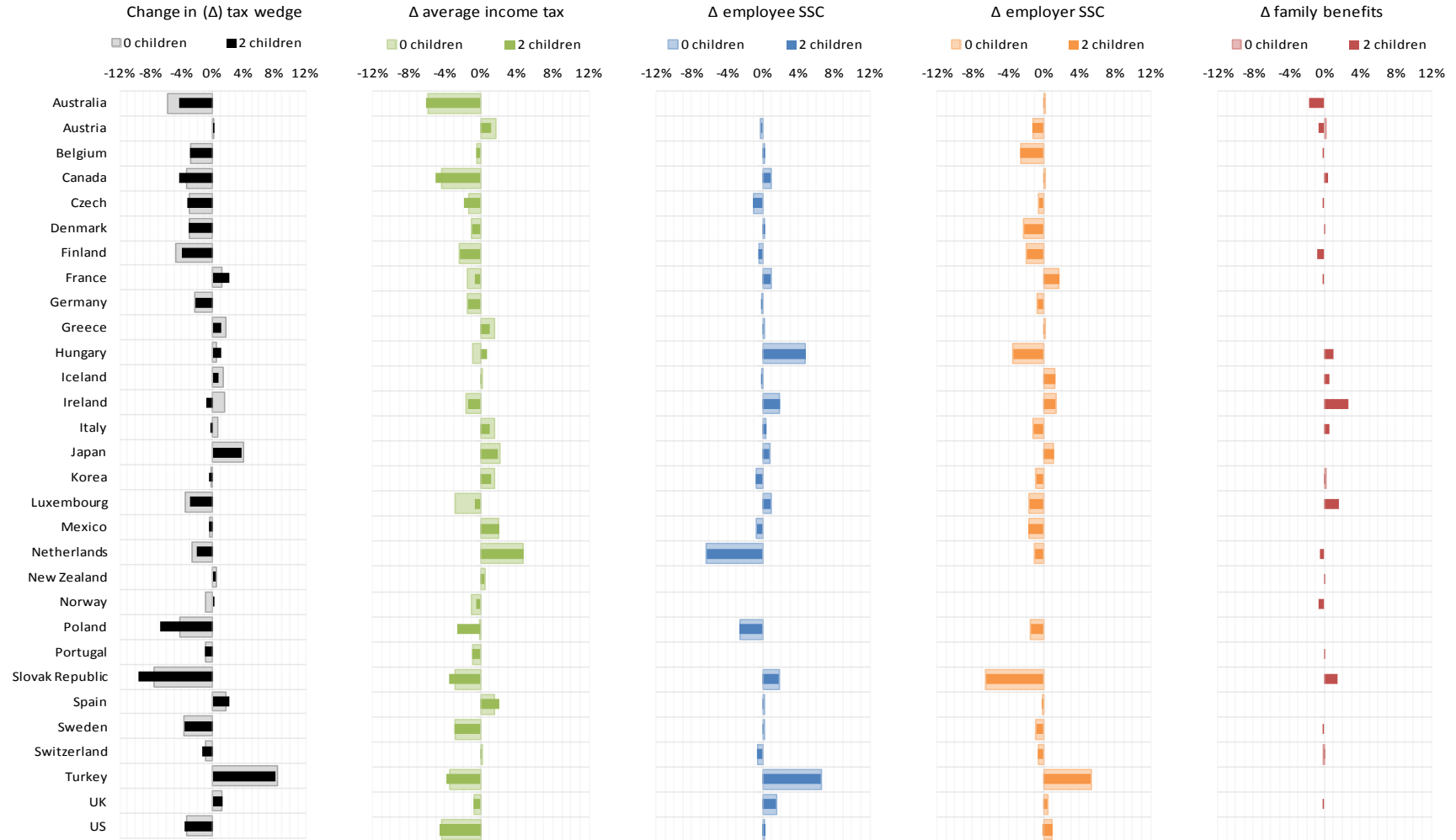
**Figure A2. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
One-earner married couple with 0 or 2 children with gross earnings from 80-130% of the AW**



**Figure A2. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
One-earner married couple with 0 or 2 children with gross earnings from 130-180% of the AW**

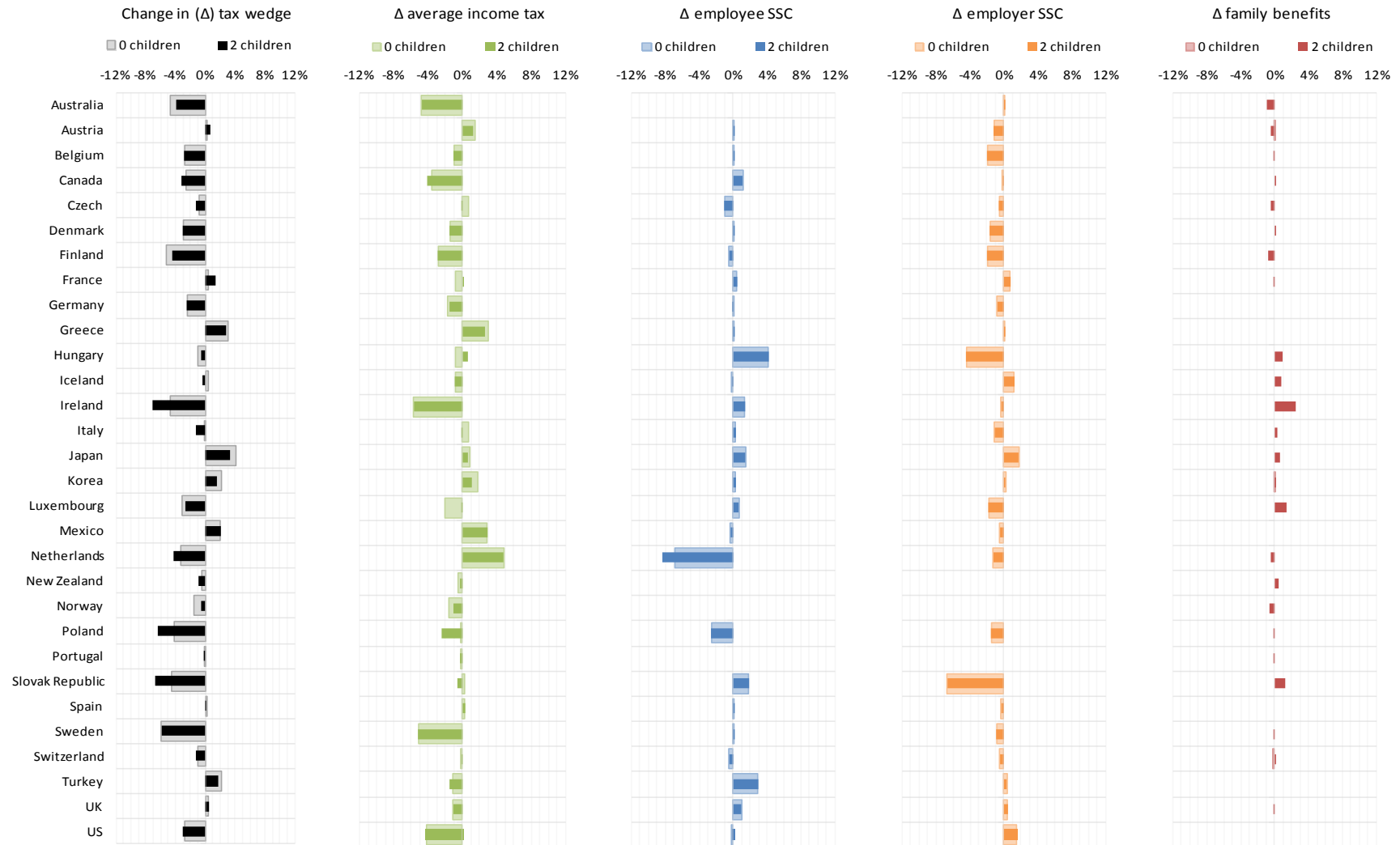


**Figure A2. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
One-earner married couple with 0 or 2 children with gross earnings from 180-250% of the AW**

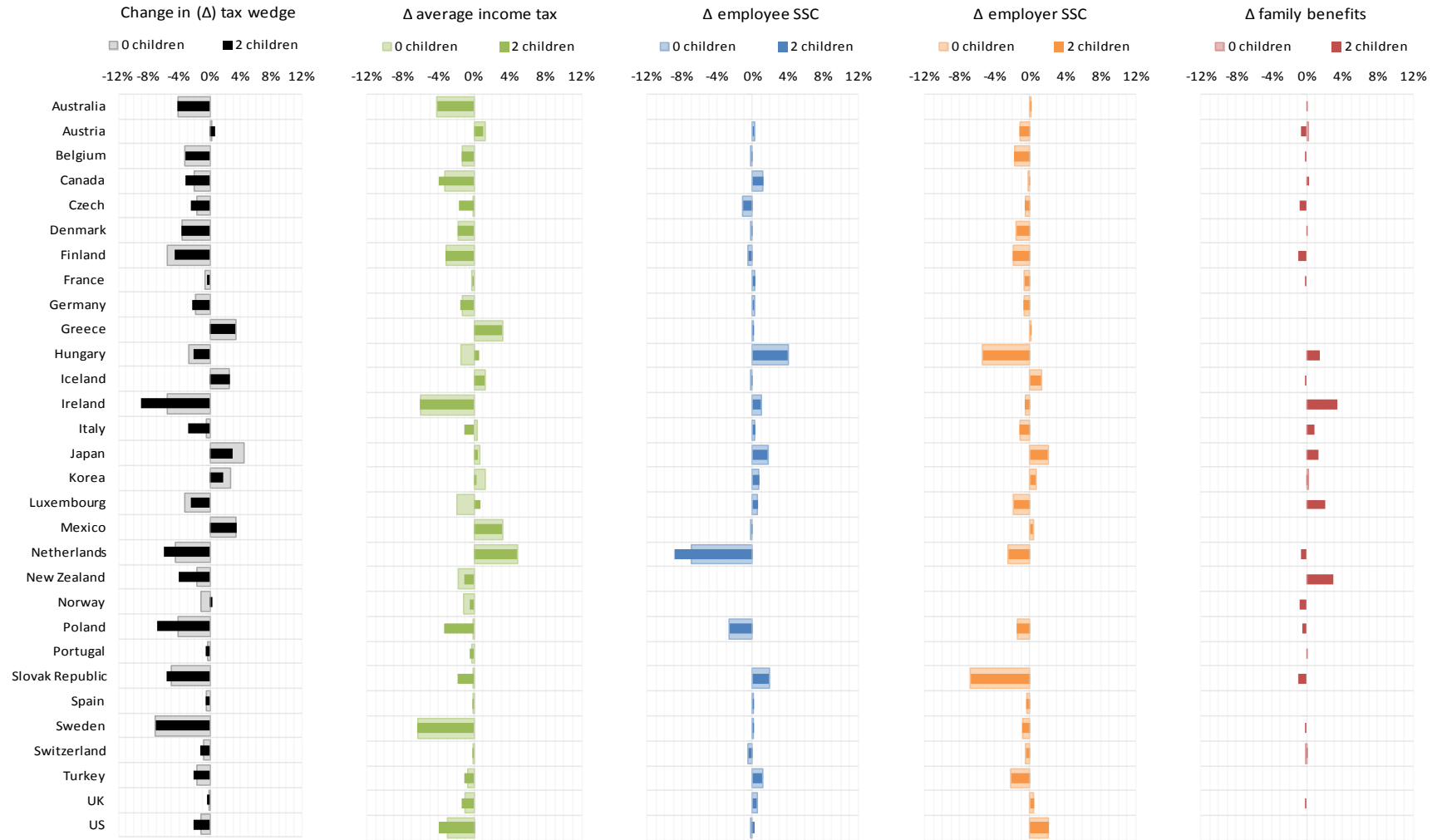




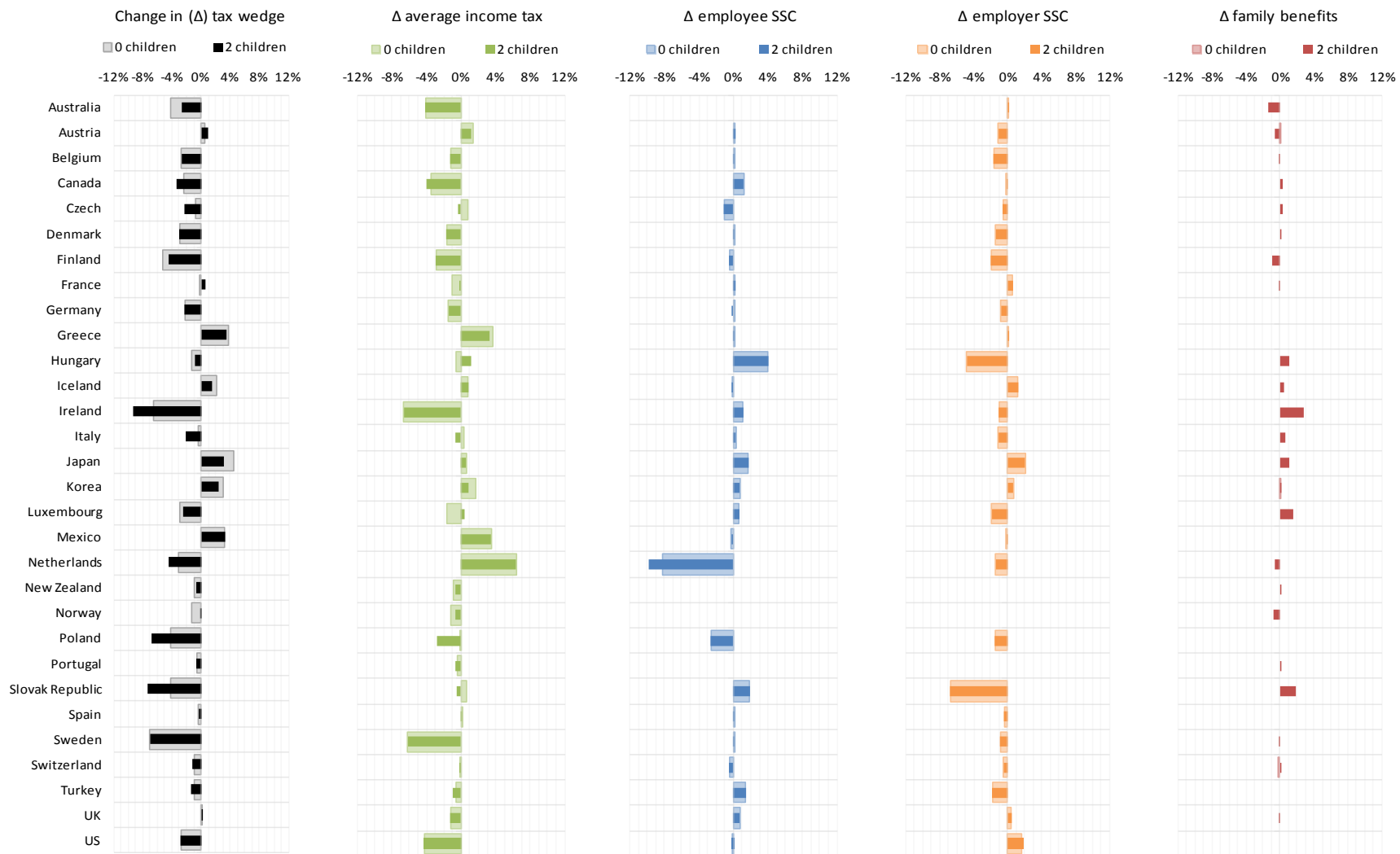
**Figure A3. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW: Two-earner married couple, husband at variable and wife at average earnings with 0 or 2 children, gross earnings from 150-350% of the AW**



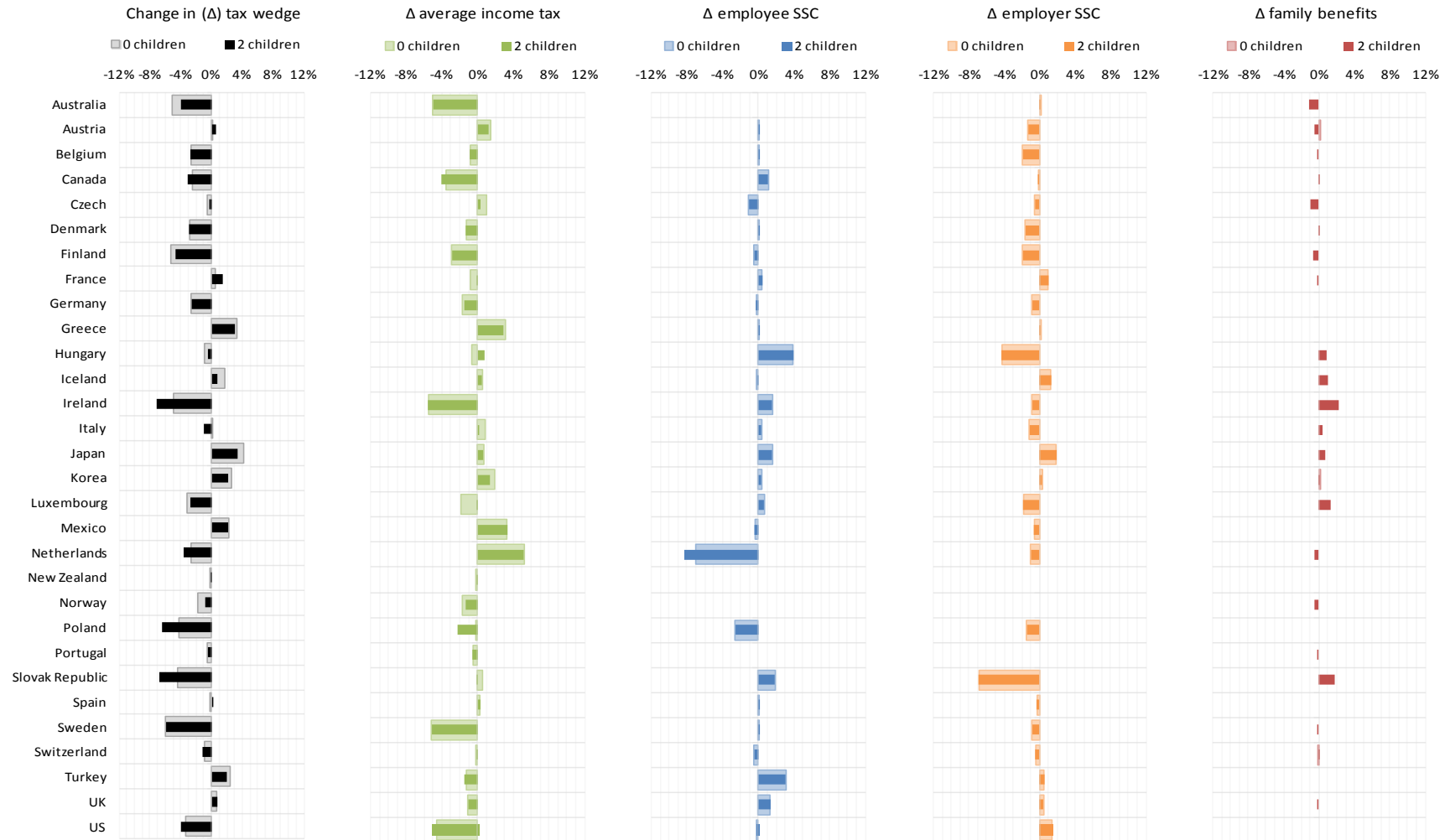
**Figure A3. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
Two-earner married couple, husband at variable and wife at average earnings with 0 or 2 children, gross earnings from 150-180% of the AW**



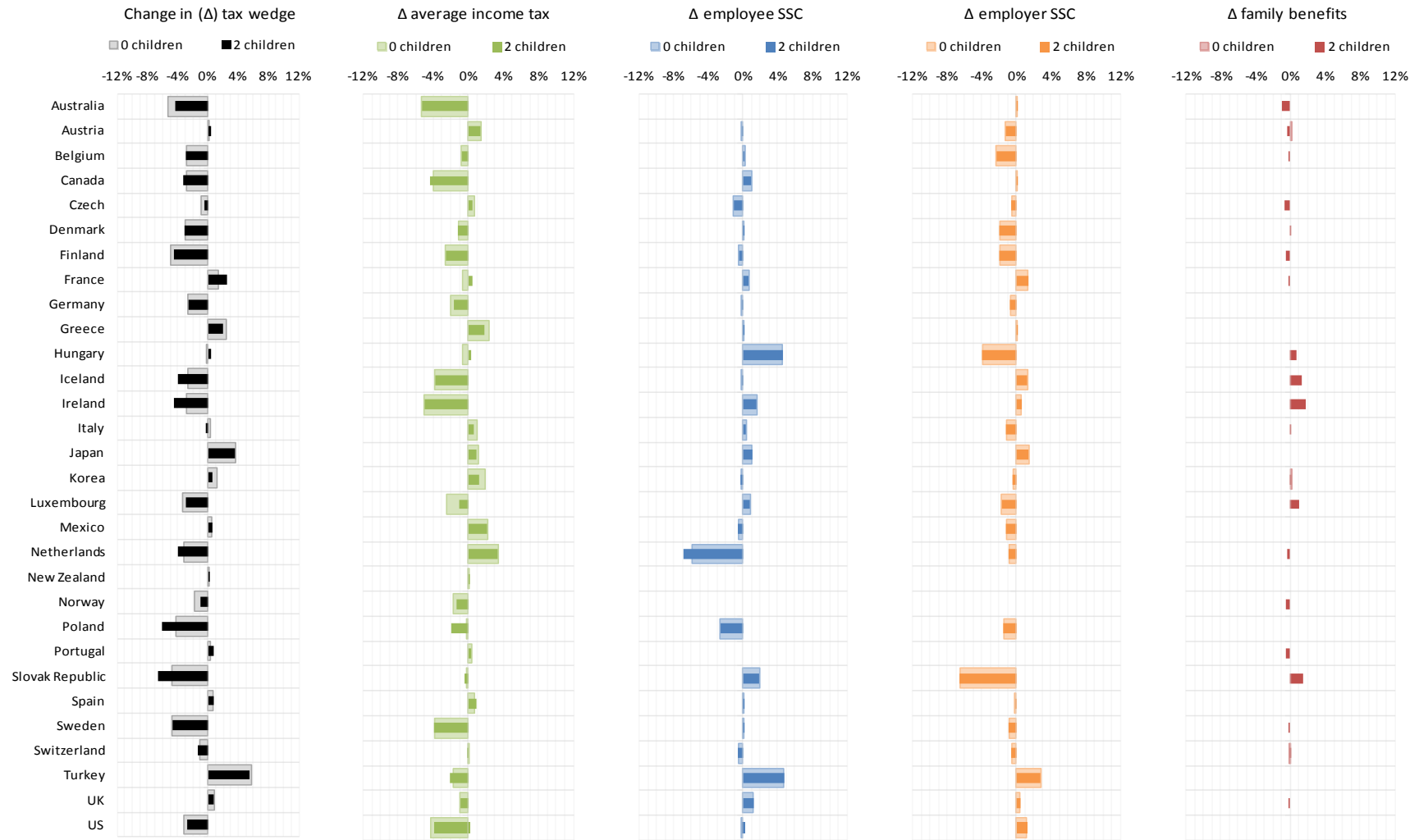
**Figure A3. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
Two-earner married couple, husband at variable and wife at average earnings with 0 or 2 children, gross earnings from 180-230% of the AW**



**Figure A3. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW: Two-earner married couple, husband at variable and wife at average earnings with 0 or 2 children, gross earnings from 230-280% of the AW**



**Figure A3. Decomposition of the average change in the average tax wedge (2000-2009) by level of gross earnings as a % of the AW:  
Two-earner married couple, husband at variable and wife at average earnings with 0 or 2 children, gross earnings from 280-350% of the AW**



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