Taxing Wages

2017-2018

SPECIAL FEATURE: THE TAXATION OF MEDIAN WAGE EARNERS

OECD

2019

Taxing Wages 2019

2017-2018



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Foreword

This annual publication provides details of taxes paid on wages in all 36 member countries of the OECD[1] The information contained in the Report covers the personal income tax and social security contributions paid by employees, the social security contributions and payroll taxes paid by their employers and cash benefits received by families. The objective of the Report is to illustrate how personal income taxes, social security contributions and payroll taxes are calculated and to examine how these levies and cash family benefits impact on net household incomes. The results also allow quantitative cross-country comparisons of labour cost levels and of the overall tax and benefit position of single persons and families.

The Report shows the amounts of taxes, social security contributions, payroll taxes and cash benefits for eight household 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 are taken in personal income taxes (before and after cash benefits), social security contributions and payroll taxes. Marginal tax rates show the part of an increase of gross earnings or total labour costs that is paid in these levies.

The focus of the Report is the presentation of new data on the tax/benefit position of employees in 2018. In addition, the new data is compared with corresponding data for the year 2017. The average worker is designated as a full-time employee (including manual and non-manual) in either industry sectors B-N inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4) or industry sectors C-K inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 3 (ISIC Rev.3).

The Report is structured as follows:

- Part I (Tax burden comparisons and trends) includes 6 chapters:
  - Chapter 1 contains an overview of the main results for 2018.
  - Chapter 2 contains the Special Feature on "The Taxation of Median Wage Earners".
  - Chapter 3 reviews the main results for 2018, which are summarised in comparative tables and figures included at the end of that section.

[1] 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).

On 25 May 2018, the OECD Council invited Colombia to become a Member. At the time of publication, the deposit of Colombia's instrument of accession to the OECD Convention was pending and therefore Colombia does not appear in the list of OECD Members and is not included in the OECD zone aggregates.

  - Chapter 4 presents a graphical exposition of the estimated tax burden on labour income in 2018 for gross wage earnings between 50% and 250% of the average wage.
  - Chapter 5 reviews the main results for 2017, which are summarised in the comparative tables at the end of the chapter and compares them with the 2018 figures.
  - Chapter 6 focuses on the historical trends in the tax burden for the period 2000-2018.
- Part II contains individual country tables specifying the wage levels considered and the associated tax burdens for eight separate household types, together with descriptions of each tax/benefit system.
- The Annex describes the methodology and its limitations.

The Report has been prepared by the OECD's Centre for Tax Policy and Administration (CTPA) under the auspices of the Working Party No.2 on Tax Policy Analysis and Tax Statistics (WP2) of the Committee on Fiscal Affairs. The Report was led by Dominique Paturot and written jointly with and under the supervision of Michelle Harding, Head of the Tax Data and Statistical Analysis Unit. The authors would also like to acknowledge Leonie Beisemann for her modelling and statistical inputs and authoring contributions, Hannah Simon for her authoring contributions and Michael Sharratt for the data management and dissemination as well as other colleagues in CTPA: David Bradbury, Bert Brys, Pascal Saint-Amans, Carrie Tyler, Marie-Aurélie Elkurd, and Karena Garnier for their support and valuable comments. The authors would like to thank the delegates of Working Party No.2 on Tax Policy Analysis and Tax Statistics and the Committee on Fiscal Affairs for their inputs. This document has been produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

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Executive Summary

In 2018 the OECD average tax wedge for the single worker earning the average wage was 36.1%, a decrease of 0.16 percentage points from 2017 and the fourth consecutive annual decrease. The tax wedge measures the difference between the labour costs to the employer and the corresponding net take-home pay of the employee. It is calculated as the sum of the total personal income tax (PIT) and social security contributions (SSCs) paid by employees and employers, minus cash benefits received, as a proportion of the total labour costs for employers.

Although the OECD average tax wedge decreased for the single worker in 2018, this was driven by large decreases in four countries, even though nearly two-thirds of OECD countries experienced a small increase. The four countries that experienced significant decreases were: Estonia (-2.54 percentage points), the United States (-2.19 percentage points), Hungary (-1.11 percentage points) and Belgium (-1.09 percentage points). These changes were due to income tax reforms in Estonia and the United States and to reductions in employer SSCs in Hungary and Belgium.

Despite the decrease in the OECD average, 22 OECD countries experienced a slight increase in the tax wedge on the single worker earning the average wage in 2018, although no country had an increase exceeding half a percentage point. In addition to the four most significant decreases in Estonia, the United States, Hungary and Belgium, ten other OECD countries also had small decreases in the tax wedge on the average worker in 2018 (less than one percentage point).

By contrast, the OECD average tax wedge for the one-earner couple has remained steady since 2017, at 26.6%. In 2018, the tax wedge for the one-earner couple decreased in 16 OECD countries, with the largest decreases seen in New Zealand (4.52 percentage points), Lithuania (2.50 percentage points), the United States and Estonia (both 2.41 percentage points) and Hungary (1.13 percentage points), Belgium (1.09 percentage points) and Greece (1.08 percentage points). The tax wedge for this household type was steady in Chile and increased in the other 19 OECD countries. With the exception of Poland (10.33 percentage points as a result of reduced child benefit payments), no country had an increase of over 1 percentage point.

The report also contains a special feature examining the taxation of the single worker at the median wage in OECD countries. The median wage provides a more consistent comparison than the average wage across the wage distribution in OECD countries, but is difficult to calculate due to data availability. In 2017, the OECD median worker earned 80.8% of the average wage and consequently had a lower tax burden, at 34.3% of labour costs compared to 36.2% for the average worker. Although the tax wedge is lower for the median wage earner than for the average wage earner in all OECD countries except Chile and Hungary, the difference in tax wedge is not significant in most countries.

Key findings

The average tax wedge in the OECD decreased in 2018 relative to 2017

- Across OECD countries, the average PIT and total employee and employer SSCs on employment incomes was 36.1% in 2018, a decrease of 0.16 percentage points.
- In 2018, the highest average tax wedges for single workers with no children earning the average national wage were in Belgium (52.7%), Germany (49.5%), Italy (47.9%), France (47.6%) and Austria (47.6%). The lowest were in Chile (7%), New Zealand (18.4%) and Mexico (19.7%).
- Between 2017 and 2018, the tax wedge increased in 22 of 36 countries and fell in 14. In four countries, the decreases were greater than 1 percentage point (as detailed above), whereas ten other countries experienced smaller decreases. No increase was greater than 0.5 percentage points, with the largest increase observed in Korea (0.49 percentage points).

The average tax wedge for families with children in 2018 was 26.6%

- In 2018, the highest tax wedges for one-earner couples with two children at the average wage were in France (39.4%) and Italy (39.1%). Austria, Belgium, Finland, Greece, Sweden and Turkey had tax wedges of between 37% and 38%. New Zealand had the lowest tax wedge (1.9%), followed by Chile (7.0%) and Switzerland (9.8%).
- Between 2017 and 2018, the largest increase in the tax wedge for this household type was in Poland (10.33 percentage points). The largest decreases were in New Zealand (4.52 percentage points), Lithuania (2.50 percentage points), Estonia and the United States (both 2.41 percentage points).
- The tax wedge for one-earner couples with children is lower than for single individuals without children in all OECD countries except in Chile and Mexico, where both household types face the same tax levels. The differences are more than 15% of labour costs in Belgium, Canada, the Czech Republic, Germany, Ireland, Luxembourg, New Zealand and Slovenia.

Taxation of the single worker at median wage in 2017 (Special Feature)

- The OECD average tax wedge for the single worker on the median wage in 2017 was 2.0 percentage points lower than for the single worker on the average wage (34.3% versus 36.2%, with the difference due to rounding).
- The average tax wedge on median workers in 2017 ranged from 52.0% in Belgium to 7% in Chile. In 21 countries, the median worker faced a tax wedge of between 30% and 45%.
- In 2017, almost all (94.0%) of the difference in the OECD average tax wedge between the median and the average wage was due to lower personal income taxes, with lower employer SSCs playing a role in six countries.

Part I. Tax burden comparisons and trends

This Section provides unique information for each of the OECD countries on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. It provides results for 2018 and 2017 and discusses the changes between the two years. Results reported cover the marginal and average tax burden for eight different household types. It presents detailed results of the evolution of the tax burden between 2000 and 2018 for those eight household types. This section also includes a Special Feature on "The Taxation of Median Wage Earners".

Chapter 1. Overview

This chapter presents the main results of the analysis of the taxation of labour income across OECD member countries in 2018. 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. The calculations also focus on the net personal average tax rate. This 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 analysis focuses on the single worker, with no children, at average earnings and makes a comparison with the single earner married couple with two children, at the same income level. A complementary analysis focuses on the two earner couple with two children, where one spouse earns the average wage and the other 67% of it.

This Report provides unique information for each of the 36 OECD countries on the income taxes paid by workers, their social security contributions, the transfers they receive in the form of cash benefits, as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for one- and two-earner households, and the implied total labour costs for employers. These data are widely used in academic research and in the formulation and evaluation of social and economic policies. The taxpayer-specific detail in this Report enables it to complement the information provided annually in Revenue Statistics, a publication providing internationally comparative data on tax levels and tax structures in OECD countries. The methodology followed in this Report is described briefly in the introduction section below and in more detail in the Annex.

The tables and charts present estimates of tax burdens and of the tax 'wedge' between labour costs and net take-home pay for eight illustrative household types on comparable levels of income. The key results for 2018 are summarised in second section below. Part I of the Report presents more detailed results for 2018, together with comparable results for 2017 and discusses the changes between the two years. Part II of the Report reviews historical changes in tax burdens between 2000 and 2018.

The present chapter 1 begins with an introduction to the Taxing Wages methodology that is followed by a review of the results of tax burden indicators for 2018. The review includes the tax wedge and the personal average tax rates results for a single worker, without children, earning the average wage, and also the corresponding indicators for a one-earner couple at the average wage level and a two-earner couple where one spouse earns the average wage and the other 67% of it, and assumes that both couples have two children. Finally, the chapter ends with a section on the change in the average wage levels by country and the industry classification on which they are based.

Introduction

This section briefly introduces the methodology employed for *Taxing Wages*, which focuses on full-time employees. It is assumed that their annual income from employment is equal to a given percentage of the average full-time adult gross wage earnings for each OECD economy, referred to as the average wage (AW). This covers both manual and non-manual workers for either industry sectors C-K inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 3 (ISIC Rev.3) or industry sectors B-N inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4).[1] Further details are provided in Table 1.8 as well as in the Annex of this Report. Additional assumptions are made about the personal circumstances of these wage earners in order to determine their tax/benefit position.

In *Taxing Wages*, the term tax includes the personal income tax, social security contributions and payroll taxes (which are aggregated with employer social contributions in the calculation of tax rates) payable on gross wage earnings. Consequently, any income tax that might be due on non-wage income and other kinds of taxes – e.g. corporate income tax, net wealth tax and consumption taxes – are not taken into account. The transfers included are those paid by general government as cash benefits, usually in respect of dependent children.

For most OECD countries, the tax year is equivalent to the calendar year, the exceptions being Australia, New Zealand and the United Kingdom. In the case of New Zealand and

the United Kingdom, where the tax year starts in April, the calculations apply a 'forward-looking' approach. This implies that, for example, the tax rates reported for 2018 are those for the tax year 2018-19. However, in Australia, where the tax year starts in July, it has been decided to take a 'backward looking' approach in order to present more reliable results. So, for example, the year 2018 in respect of Australia has been defined to mean its tax year 2017-2018.

Taxing Wages presents several measures of taxation on labour. Most emphasis is given to the tax wedge – a measure of the difference between labour costs to the employer and the corresponding net take-home pay of the employee – which is calculated by expressing the sum of personal income tax, employee plus employer social security contributions together with any payroll tax, minus benefits as a percentage of labour costs. Employer social security contributions and – in some countries – payroll taxes are added to gross wage earnings of employees in order to determine a measure of total labour costs. The average tax wedge measures identify that part of total labour costs which is taken in tax and social security contributions net of cash benefits. In contrast, the marginal tax wedge measures identify that part of an increase of total labour costs that is paid in taxes and social security contributions less cash benefits. However, it should be notified that this measure only includes payments that are classified as taxes. Employees and employers may also have to make non-tax compulsory payments[2] that may increase the indicators that are presented in the *Taxing Wages* publication. A report that is available on the *OECD Tax Database* presents "compulsory payment indicators" that combine the burden of taxes and NTCPs: http://www.oecd.org/tax/tax-policy/non-tax-compulsory-payments.pdf.

The calculations also focus on the net personal average tax rate. This 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 that part of an increase of gross wage earnings that is paid in personal income tax and employee social security contributions net of cash benefits.

Review of results for 2018

Tax Wedge

Table 1.1 shows that the tax wedge between total labour costs to the employer and the corresponding net take-home pay for single workers without children, at average earnings levels, varied widely across OECD countries in 2018 (see column 1). While in Austria, Belgium, France, Germany, Hungary and Italy, the tax wedge is 45% or more, it is lower than 20% in Chile, Mexico and New Zealand. The highest tax wedge is observed in Belgium (52.7%) and the lowest in Chile (7.0%). Table 1.1 shows that the average tax wedge in OECD countries was 36.1% in 2018.

The changes in tax wedge between 2017 and 2018 for the average worker without children are described in column 2 of Table 1.1. The OECD average decreased by 0.16 percentage points. Among the OECD member countries, the tax wedge increased in 22 countries and fell in 14. Decreases of more than one percentage point were observed in Estonia (2.54 percentage points), the United States (2.19 percentage points), Hungary (1.11 percentage points) and Belgium (1.09 percentage points). There were no increases exceeding one percentage point and the largest increase was observed in Korea (0.49 percentage points).

In general, the rises in tax wedge rates were driven by higher income taxes (see column 3). This was the major factor in 20 of the countries showing an overall increase. The largest increase in personal income taxes as a percentage of labour costs was in France (1.36 percentage points), largely due to an increase of 1.7 percentage points in the surtax rate (*Contribution Sociale Généralisée*), but the increase in personal income taxes was mostly offset by reduced social security contributions.

Decreases in the tax wedge were also derived for the most part from lower income taxes in 10 OECD countries (Denmark, Estonia, Finland, Latvia, Lithuania, Mexico, Norway, Portugal, Turkey and the United States). Income tax as a percentage of labour costs decreased by more than one percentage point in three of those countries: Latvia (1.29 percentage points) due to the introduction of a tax allowance and a progressive income tax schedule; the United States (2.14 percentage points) as a result of a higher basic tax allowance and lower marginal income tax rates; and Estonia (2.54 percentage points) due to a higher basic tax allowance. In three other OECD countries (Belgium, Germany and Hungary), the decreasing tax wedges were mostly driven by lower social security contributions. Employer social security contributions as a percentage of labour costs decreased in Belgium (0.83 percentage points) and in Hungary (1.67 percentage points) where the total contribution rate declined respectively from 32.19% to 27.14% and from 22.0% to 19.5% in 2018. In the United Kingdom, income taxes and the sum of employee and employer social security contributions evenly decreased as percentages of labour costs (both by 0.05 percentage points).

Table 1.2 and Figure 1.1 show the constituent components of the tax wedge in 2018, i.e. income tax, employee and employer social security contributions (including payroll taxes where applicable), as a percentage of labour costs for the average worker without children. The labour costs in Table 1.2 are expressed in US dollars with equivalent purchasing power.

The percentage of labour costs paid in income tax varies considerably within OECD countries. The lowest figures are in Chile (zero) and Korea (5.8%). The highest values are in Denmark (35.8%), with Australia, Belgium and Iceland all over 20%. The percentage of labour costs paid in employee social security contributions also varies widely, ranging from zero in Australia, Denmark and New Zealand to 17.3% in Germany and 19.0% in Slovenia. Employers in France pay 26.5% of labour costs in social security contributions, the highest amongst OECD countries. The corresponding figures are also 20% or more in 10 other countries - Austria, Belgium, the Czech Republic, Estonia, Greece, Italy, Lithuania, the Slovak Republic, Spain and Sweden.

As a percentage of labour costs, the total of employee and employer social security contributions exceeds 20% in more than half of the OECD countries. It also represents at least one-third of labour costs in eight OECD countries: Austria, the Czech Republic, France, Germany, Greece, Hungary, the Slovak Republic and Slovenia.

Table 1.1. Comparison of total tax wedge

As % of labour costs, 2018

Country1	Total Tax wedge 2018 (1)	Annual change, 2018/17 (in percentage points)[2]			
		Tax wedge (2)	Income tax (3)	Employee SSC (4)	Employer SSC[3] (5)
Belgium	52.7	-1.09	-0.37	0.11	-0.83
Germany	49.5	-0.09	0.06	-0.12	-0.04
Italy	47.9	0.20	0.20	0.00	0.00
France	47.6	0.04	1.36	-1.87	0.55
Austria	47.6	0.21	0.31	0.02	-0.12
Hungary	45.0	-1.11	0.25	0.31	-1.67
Czech Republic	43.7	0.38	0.38	0.00	0.00
Slovenia	43.3	0.34	0.34	0.00	0.00
Sweden	43.1	0.13	0.14	-0.01	0.00
Latvia	42.3	-0.60	-1.29	0.37	0.32
Finland	42.3	-0.40	-0.21	0.43	-0.62
Slovak Republic	41.7	0.14	0.27	0.02	-0.15
Greece	40.9	0.15	0.15	0.00	0.00
Portugal	40.7	-0.69	-0.69	0.00	0.00
Lithuania	40.6	-0.44	-0.44	0.00	0.00
Spain	39.4	0.13	0.13	0.00	0.00
Turkey	38.9	-0.13	-0.13	0.00	0.00
Luxembourg	38.2	0.37	0.44	0.01	-0.08
Netherlands	37.7	0.31	0.23	-0.16	0.24
Estonia	36.5	-2.54	-2.54	0.00	0.00
Norway	35.8	-0.13	-0.13	0.00	0.00
Poland	35.8	0.09	0.09	0.00	0.00
Denmark	35.7	-0.15	-0.19	0.00	0.00
Iceland	33.2	0.16	0.17	-0.01	0.00
Ireland	32.7	0.12	0.04	0.00	0.08
Japan	32.6	0.12	0.03	0.02	0.07
United Kingdom	30.9	-0.11	-0.05	-0.02	-0.03
Canada	30.7	0.11	0.21	-0.03	-0.07
United States	29.6	-2.19	-2.14	0.00	-0.06
Australia	28.9	0.27	0.27	0.00	0.00
Korea	23.0	0.49	0.34	0.08	0.07
Israel	22.4	0.36	0.30	0.04	0.02
Switzerland	22.2	0.14	0.14	0.00	0.00
Mexico	19.7	-0.71	-0.76	0.00	0.05
New Zealand	18.4	0.30	0.30	0.00	0.00
Chile	7.0	0.01	0.01	0.00	0.00
Unweighted average					
OECD Average	36.1	-0.16	-0.08	-0.02	-0.06

Note: Single individual without children at the income level of the average worker.
1. Countries ranked by decreasing total tax wedge.
2. Due to rounding, the changes in tax wedge in column (2) may differ by one-hundredth of a percentage point from the sum of columns (3)-(5). For Denmark, the Green Check (cash benefit) contributes to the difference as it is not included in columns (3)-(5).
3. Includes payroll taxes where applicable.
Sources: country submissions, OECD Economic Outlook Volume 2018 issue 2.

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Table 1.2. Income tax plus employee and employer social security contributions

As % of labour costs, 2018

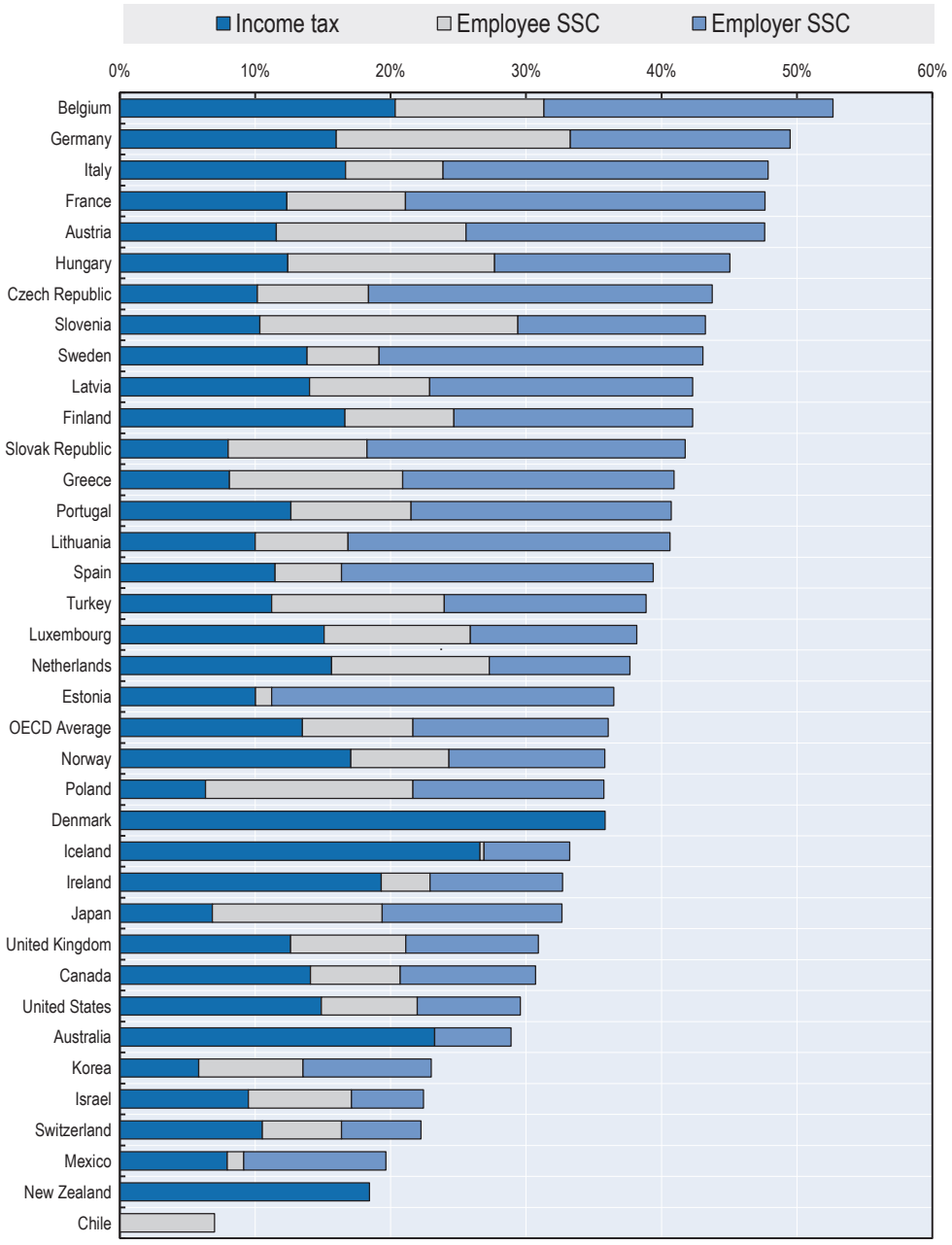
Country[1]	Total tax wedge[2] (1)	Income tax (2)	Social security contributions		Labour costs[4] (5)
			employee (3)	employer[3] (4)	
Switzerland	22.2	10.5	5.9	5.9	82 186
Germany	49.5	16.0	17.3	16.2	80 284
Belgium	52.7	20.3	11.0	21.3	79 308
Luxembourg	38.2	15.1	10.8	12.3	78 364
Austria	47.6	11.6	14.0	22.1	77 931
Netherlands	37.7	15.6	11.6	10.4	72 783
Iceland	33.2	26.6	0.3	6.3	70 994
France	47.6	12.3	8.8	26.5	70 105
Sweden	43.1	13.8	5.3	23.9	67 312
Ireland	32.7	19.3	3.6	9.8	66 433
Norway	35.8	17.1	7.3	11.5	64 592
Australia	28.9	23.3	0.0	5.6	63 375
United Kingdom	30.9	12.6	8.5	9.8	63 287
Korea	23.0	5.8	7.7	9.5	62 391
Denmark	35.7	35.8	0.0	0.0	61 827
Finland	42.3	16.6	8.1	17.6	61 353
Japan	32.6	6.8	12.5	13.3	59 776
Italy	47.9	16.7	7.2	24.0	59 594
United States	29.6	14.9	7.1	7.6	59 485
Spain	39.4	11.5	4.9	23.0	55 252
Canada	30.7	14.1	6.6	10.0	47 476
Greece	40.9	8.1	12.8	20.0	46 029
Israel	22.4	9.5	7.6	5.3	44 173
New Zealand	18.4	18.4	0.0	0.0	41 502
Czech Republic	43.7	10.2	8.2	25.4	41 154
Slovenia	43.3	10.3	19.0	13.9	39 742
Estonia	36.5	10.0	1.2	25.3	39 653
Portugal	40.7	12.6	8.9	19.2	39 435
Poland	35.8	6.3	15.3	14.1	36 644
Hungary	45.0	12.4	15.3	17.4	36 019
Turkey	38.9	11.2	12.8	14.9	35 336
Slovak Republic	41.7	8.0	10.3	23.5	32 868
Lithuania	40.6	10.0	6.9	23.8	32 421
Latvia	42.3	14.0	8.9	19.4	29 727
Chile	7.0	0.0	7.0	0.0	23 941
Mexico	19.7	7.9	1.2	10.5	14 616
Unweighted average					
OECD Average	36.1	13.5	8.2	14.4	53 816

Note: Single individual without children at the income level of the average worker.
1. Countries ranked by decreasing labour costs.
2. Due to rounding, the total in column (1) may differ by one tenth of a percentage point from the sum of columns (2)-(4). For Denmark, the Green Check (cash benefit) contributes to the difference as it is not included in columns (2)-(4).
3. Includes payroll taxes where applicable.
4. US dollars with equal purchasing power.
Sources: country submissions, OECD Economic Outlook Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933922726

Figure 1.1. Income tax plus employee and employer social security contributions, 2018

As a % of labour costs



Notes: Single individual without children at the income level of the average worker.
Includes payroll taxes where applicable.

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Personal average tax rates

The personal average tax rate is defined as income tax plus employee social security contributions as a percentage of gross wage earnings. Table 1.3 and Figure 1.2 show the personal average tax rates in 2018 for a single worker without children at the average earnings level. The average workers' gross wage earnings figures in Table 1.3 are expressed in terms of US dollars with equivalent purchasing power. Figure 1.2 provides a graphical representation of the personal average tax rate decomposed between income tax and employee social security contributions.

Table 1.3and Figure 1.2 show that on average, the personal average tax rate for a single worker at average earnings in OECD countries was 25.5% in 2018. Belgium at 39.8% of gross earnings had the highest rate with Denmark and Germany being the only other countries with rates of more than 35%. Chile and Mexico had the lowest personal average tax rates at 7.0% and 10.2% of gross average earnings respectively. Korea and Estonia were the other countries with a rate of 15% or less.

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

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

The mix of income tax and social security contributions paid out of gross wage earnings also varies greatly between countries as illustrated in Figure 1.2.

In 2018, the share of income tax within the personal average tax rate was higher than the share of the employee social security contributions for 25 of the 36 OECD member countries. No employee social security contributions were levied in Australia, Denmark and New Zealand and the rates were 4% or less of gross earnings in Estonia, Iceland, Ireland and Mexico. In contrast, the single worker at the average wage level paid substantially more (i.e., six percentage points or more) in employee social security contributions than in personal income tax in five countries – Chile, Greece, Japan, Poland and Slovenia. In Chile, the average worker paid a marginal amount of personal income tax in 2018 (0.01% of gross earnings). In six countries - the Czech Republic, Germany, Israel, Korea, the Slovak Republic and Turkey - the shares of personal income tax and employee social security contributions as percentages of gross earnings were very close (i.e., differences of less than 3 percentage points).

Table 1.3. Income tax plus employee social security contributions, 2018

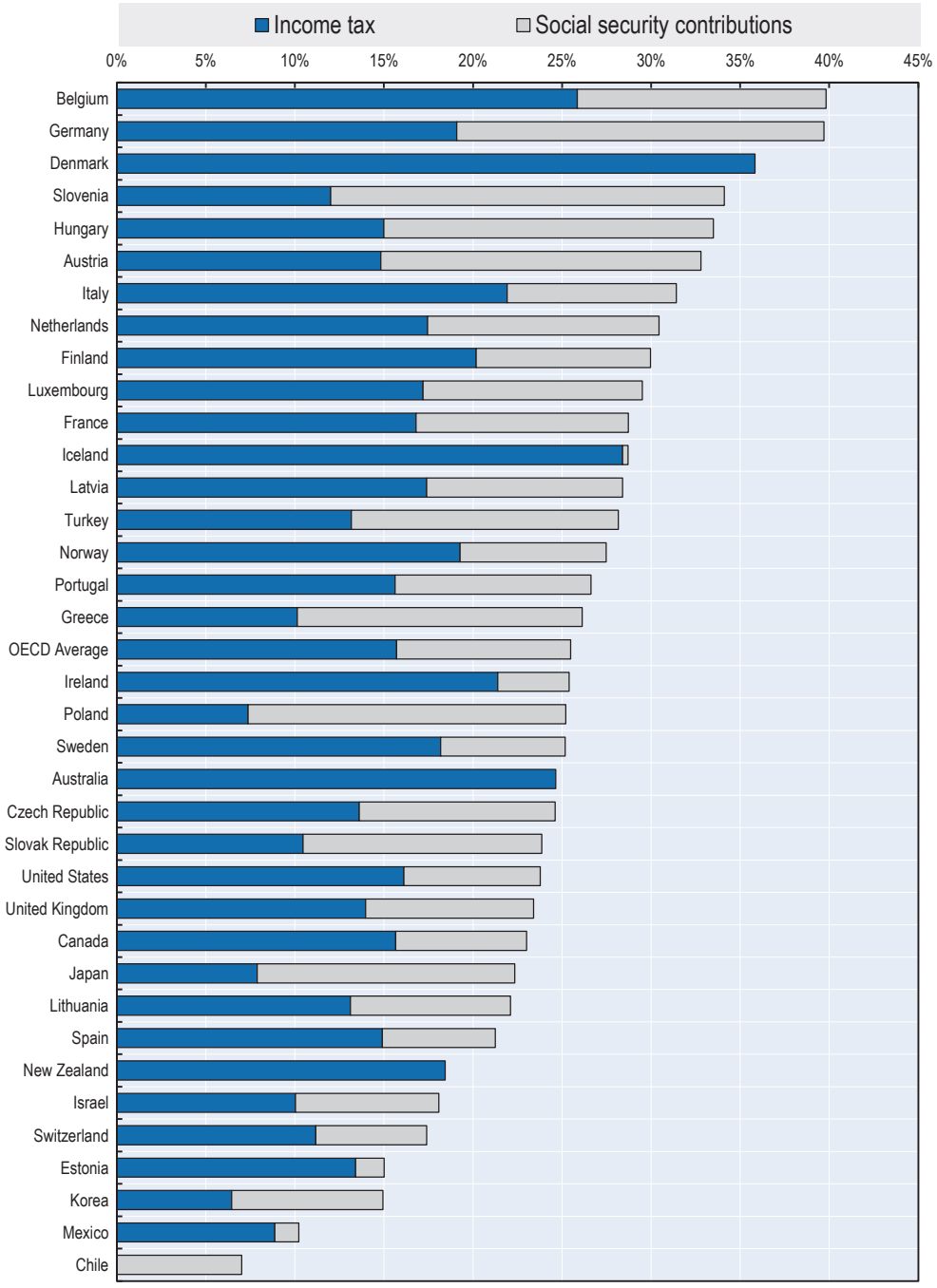
As % of gross wage earnings

Country[1]	Total payment[2] (1)	Income tax (2)	Employee social security contributions (3)	Gross wage earnings[3] (4)
Switzerland	17.4	11.2	6.2	77 370
Luxembourg	29.5	17.2	12.3	68 735
Germany	39.7	19.1	20.6	67 254
Iceland	28.7	28.4	0.3	66 505
Netherlands	30.5	17.5	13.0	65 227
Belgium	39.8	25.9	14.0	62 378
Denmark	35.7	35.8	0.0	61 827
Austria	32.8	14.8	18.0	60 737
Ireland	25.4	21.4	4.0	59 930
Australia	24.6	24.6	0.0	59 806
Norway	27.5	19.3	8.2	57 161
United Kingdom	23.4	14.0	9.4	57 095
Korea	14.9	6.4	8.5	56 488
United States	23.8	16.1	7.7	54 951
Japan	22.3	7.9	14.5	51 849
France	28.7	16.8	11.9	51 504
Sweden	25.2	18.2	7.0	51 219
Finland	30.0	20.2	9.8	50 542
Italy	31.4	21.9	9.5	45 291
Canada	23.0	15.7	7.4	42 730
Spain	21.3	14.9	6.4	42 535
Israel	18.1	10.0	8.0	41 825
New Zealand	18.4	18.4	0.0	41 502
Greece	26.1	10.1	16.0	36 806
Slovenia	34.1	12.0	22.1	34 231
Portugal	26.6	15.6	11.0	31 866
Poland	25.2	7.4	17.8	31 476
Czech Republic	24.6	13.6	11.0	30 712
Turkey	28.2	13.2	15.0	30 073
Hungary	33.5	15.0	18.5	29 768
Estonia	15.0	13.4	1.6	29 636
Slovak Republic	23.9	10.5	13.4	25 147
Lithuania	22.1	13.1	9.0	24 711
Latvia	28.4	17.4	11.0	23 949
Chile	7.0	0.0	7.0	23 941
Mexico	10.2	8.9	1.4	13 081
Unweighted average				
OECD Average	25.5	15.7	9.8	46 107

Note: Single individual at the income level of the average worker, without children.
1. Countries ranked by decreasing gross wage earnings.
2. Due to rounding total may differ by one tenth of a percentage point from aggregate of columns for income tax and social security contributions
3. US dollars with equal purchasing power.
Sources: country submissions, OECD Economic Outlook Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933922764

Figure 1.2. Percentage of gross wage earnings paid in income tax and employee social security contributions, 2018



Notes: Countries ranked by decreasing tax burden.
Single workers at the income level of the average worker.

StatLink http://dx.doi.org/10.1787/888933922707

Single versus one-earner couple taxpayers

Table 1.4 compares the tax wedges for a one-earner married couple with two children and a single individual without children, at average earnings levels. These tax wedges varied widely across OECD countries in 2018 (see columns 1 and 2). The size of the tax wedge for the couple with children is generally lower than the one observed for the individual without children, since many OECD countries provide a fiscal benefit to households with children through advantageous tax treatment and/or cash benefits. Hence, the OECD average tax wedge for the one-earner couple with two children was 26.6% compared to 36.1% for the single average worker.

The tax savings realised by a one-earner married couple compared to a single worker were greater than 20% of labour costs in Luxembourg, and greater than 15% of labour costs in seven other countries – Belgium, Canada, the Czech Republic, Germany, Ireland, New Zealand and Slovenia. The tax burdens of one-earner married couples and single workers on the average wage were the same in Chile and Mexico and differed by less than three percentage points in Israel, Korea and Turkey (see columns 1 and 2).

In 27 of the 36 OECD countries, there was only a small change (not exceeding plus or minus one percentage point) in the tax wedge of an average one-earner married couple with two children between 2017 and 2018 (see column 3). There was no change in Chile. There was an increase of greater than one percentage point only in Poland (10.33 percentage points) as a result of reduced income-tested child benefit payments. In contrast, the tax wedge for families fell by more than one percentage point in seven countries: Greece (1.08 percentage points), Belgium (1.09 percentage points), Hungary (1.13 percentage points), Estonia and the United States (both 2.41 percentage points), Lithuania (2.50 percentage points) and New Zealand (4.52 percentage points). The decreases in the tax wedge resulted from the introduction of, or increases in, tax provisions or cash benefits for dependent children in Greece, Hungary, Lithuania, New Zealand and the United States. By comparison, the decrease in the tax wedge of a single taxpayer without children at the average wage level was greater than one percentage point in four OECD countries (Belgium, Estonia, Hungary and the United States). Detailed explanations on the latter are given in the section on the tax wedge above.

A comparison of the changes in tax wedges between 2017 and 2018 for the one-earner married couples with two children and single persons without children, at the average wage level, is shown in column 5 of Table 1.4. The fiscal preference for families increased in 11 OECD countries: Chile, the Czech Republic, France, Greece, Hungary, Iceland, Lithuania, New Zealand, Sweden, Turkey and the United States. Additionally, the effects of changes in the tax system on the tax wedge were of the same magnitude for both household types in Belgium and Mexico. In seven countries: Chile, Hungary, Japan, Luxembourg, Spain, Switzerland and Turkey, the fiscal preference for families increased or decreased by 0.05 percentage points or less.

Table 1.4. Comparison of total tax wedge for single and one-earner couple taxpayers, 2018

As % of labour costs

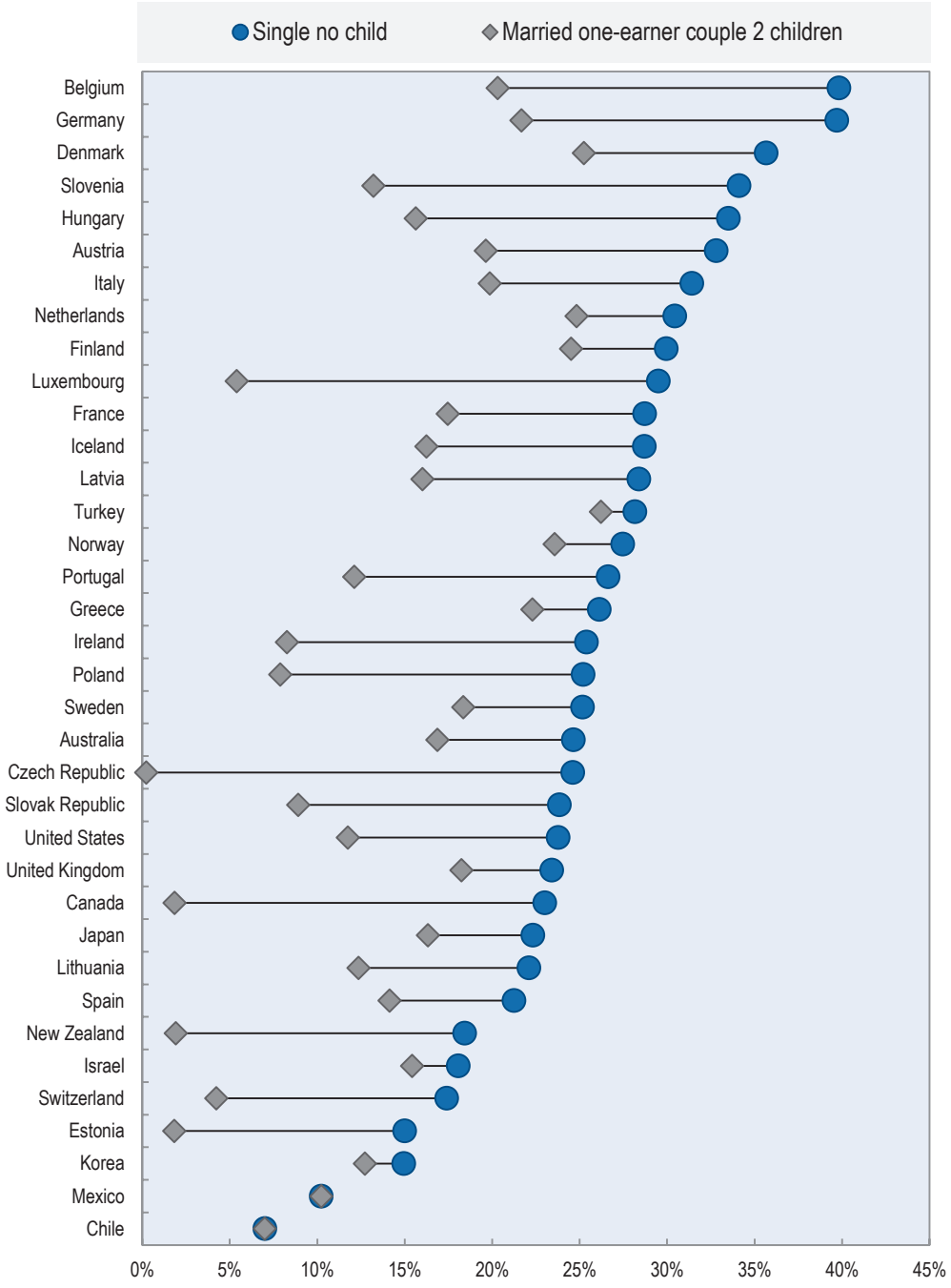
Country[1]	Family[2] Total Tax wedge 2018 (1)	Single[3] Total Tax wedge 2018 (2)	Annual change, 2018/17 (in percentage points)		
			FamilyTax wedge (3)	Single Tax wedge (4)	Difference between single and family (4)-(3) (5)
France	39.4	47.6	-0.07	0.04	0.11
Italy	39.1	47.9	0.53	0.20	-0.33
Greece	37.9	40.9	-1.08	0.15	1.23
Sweden	37.9	43.1	-0.36	0.13	0.49
Finland	37.8	42.3	-0.29	-0.40	-0.11
Austria	37.4	47.6	0.32	0.21	-0.12
Belgium	37.3	52.7	-1.09	-1.09	0.00
Turkey	37.2	38.9	-0.15	-0.13	0.03
Germany	34.4	49.5	0.05	-0.09	-0.14
Spain	33.9	39.4	0.17	0.13	-0.05
Lithuania	33.2	40.6	-2.50	-0.44	2.06
Netherlands	32.6	37.7	0.53	0.31	-0.22
Norway	32.4	35.8	0.89	-0.13	-1.03
Latvia	32.3	42.3	-0.43	-0.60	-0.17
Slovak Republic	30.3	41.7	0.75	0.14	-0.61
Hungary	30.3	45.0	-1.13	-1.11	0.02
Portugal	29.0	40.7	0.19	-0.69	-0.88
Japan	27.4	32.6	0.17	0.12	-0.05
Estonia	26.6	36.5	-2.41	-2.54	-0.13
United Kingdom	26.2	30.9	-0.04	-0.11	-0.07
Czech Republic	25.5	43.7	-0.35	0.38	0.72
Slovenia	25.2	43.3	0.81	0.34	-0.47
Denmark	25.2	35.7	0.04	-0.15	-0.18
Australia	21.5	28.9	0.82	0.27	-0.55
Iceland	21.5	33.2	-0.87	0.16	1.03
Korea	21.0	23.0	0.59	0.49	-0.10
Poland	20.9	35.8	10.33	0.09	-10.24
Israel	19.9	22.4	0.44	0.36	-0.08
Mexico	19.7	19.7	-0.71	-0.71	0.00
United States	18.5	29.6	-2.41	-2.19	0.22
Ireland	17.3	32.7	0.37	0.12	-0.25
Luxembourg	17.0	38.2	0.42	0.37	-0.05
Canada	11.7	30.7	0.97	0.11	-0.86
Switzerland	9.8	22.2	0.19	0.14	-0.05
Chile	7.0	7.0	0.00	0.01	0.01
New Zealand	1.9	18.4	-4.52	0.30	4.82
Unweighted average					
OECD Average	26.6	36.1	0.00	-0.16	-0.17

Notes:
1. Countries ranked by decreasing tax wedge of the family.
2. One earner married couple with two children and earnings at the average wage level.
3. Single individual without children and earnings at the average wage level.
Sources: country submissions, OECD Economic Outlook Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933922802

Figure 1.3. Income tax plus employee contributions less cash benefits, 2018

As % of gross wage earnings, by single and one-earner couple taxpayers



Notes: Countries ranked by decreasing rates for single taxpayer without children.
Household types: a single individual without children and earnings at the average wage level and a one earner married couple with two children and earnings at the average wage level.

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Figure 1.3 compares the net personal average tax rate for the average worker between single individuals and a one-earner married couple with two children. These results show the same pattern as the tax wedge results. This is because employer social security contributions, which are not taken into account in the former but included in the latter, are independent of household type. Due to tax reliefs and cash benefits for families with children, the one-earner married couple's disposable income is higher than the single individual's by more than 20% of earnings in four countries – the Czech Republic (24.39%), Luxembourg (24.11%), Canada (21.17%) and Slovenia (20.91%). At the lower end of the spectrum, the disposable income of the one-earner married couple is higher than the single individual by less than 10% of earnings in 14 countries – Lithuania (9.75%), Australia (7.78%), Spain (7.13%), Sweden (6.84%), Japan (6.01%), the Netherlands (5.63%), Finland (5.45%), the United Kingdom (5.17%), Norway (3.90%), Greece (3.82%), Israel (2.65%), Korea (2.23%), Turkey (1.95%) and Chile (0.01%). The burden is the same for both household types in Mexico.

Tax on labour income for two-earner couples

The preceding analysis focuses on two households with comparable levels of income: the single worker at 100% of average wage, and the married couple with one earner at 100% of average wage, with two children. This section extends the discussion to include a third household type: the two-earner married couple, earning 100% and 67% of average wage, with two children.

For this household type, the OECD average tax wedge as a percentage of labour costs for the household was 30.8% in 2018 (Figure 1.4 and Table 1.5). Belgium had a tax wedge of 45.1%, which was the highest among the OECD countries. The other countries with tax wedges exceeding 40% were Austria (40.3%), Italy (41.7%), France (42.4%) and Germany (42.6%). At the other extreme, the lowest tax wedge was observed in Chile (6.7%). The other countries with tax wedges of less than 20% were Israel and Switzerland (both 16.1%), New Zealand (17.1%) and Mexico (18.2%).

Figure 1.4 shows the average tax wedge and its components as a percentage of labour costs for the two-earner couple for 2018. On average across OECD countries income tax represented 10.57% of the labour costs and the sum of the employees and employers' social security contributions represented 22.46% of this. The OECD tax wedge is net of cash benefits, which represented 2.22% of labour costs in 2018.

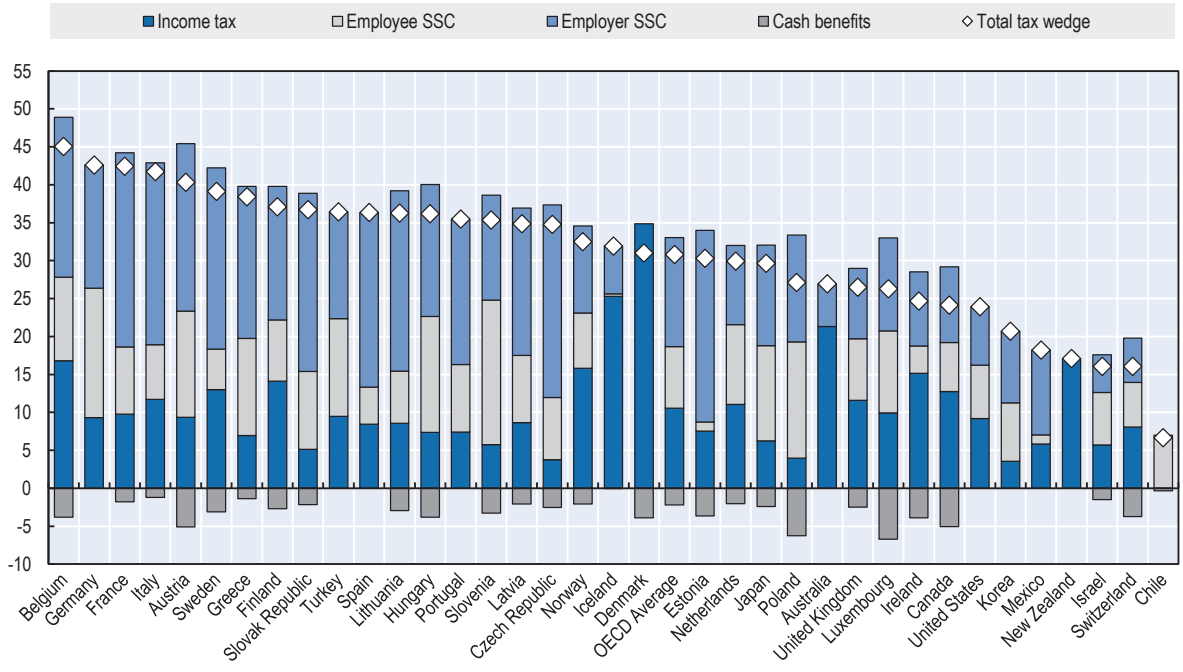
The cash benefits that are considered in the Taxing Wages publication are those universally paid to workers in respect of dependent children between the ages of six to eleven inclusive. In-work benefits that are paid to workers regardless of their family situation are also included in the calculations. For the observed two-earner couple, Denmark paid an income-tested cash benefit (the Green Check) that also benefited childless single workers.

Compared to 2017, the OECD average tax wedge of the two-earner couple decreased by 0.21 percentage points in 2018, as indicated in Table 1.5 (column 2), although it increased for 19 out of the 36 OECD countries and decreased in the 16 others. The tax wedge for the two-earner couple remained unchanged for Germany. There were no increases of more than one percentage point. Besides, for five of those countries with an overall increase, the changes were less than 0.20 percentage points. In contrast, decreases of more than one percentage point were observed for five countries: Hungary (1.12 percentage points), Belgium (1.20 percentage points), Latvia (1.56 percentage points), the United States (2.58 percentage points) and Estonia (3.57 percentage points).

In most countries with an increasing tax wedge, the change was mainly driven by higher income taxes. They accounted for the whole increase in the tax wedge in 15 countries: Australia, Austria, Canada, France, Iceland, Israel, Italy, Korea, Luxembourg, New Zealand, Poland, the Slovak Republic, Slovenia, Spain and Switzerland. In contrast, increasing total social security contributions were the main factor in Japan and Turkey. In Ireland and the Netherlands, income tax and total social security contributions increased evenly. However, most of those increases in income tax or social security contributions were augmented or alleviated by changes in cash benefits. In Ireland, the decrease in cash benefits as percentage of labour costs represented more than one third of the total increase in the tax wedge. In Iceland and Poland, the increase of cash benefits as percentage of labour costs alleviated the impact of increasing income taxes.

Figure 1.4. Income tax plus employee and employer social security contributions less cash benefits, 2018

For two-earner couples with two children, as % of labour costs



Note: Two earner married couple, one at 100% and the other at 67% of the average wage, with 2 children. Includes payroll taxes where applicable.

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Table 1.5. Comparison of total tax wedge for two-earner couples with children, 2018

As % of labour costs

Country[1]	Total Tax wedge 2018 (1)	Annual change, 2018/17 (in percentage points)[2]				
		Tax wedge (2)	Income tax (3)	Employee SSC (4)	Employer SSC[3] (5)	Cash benefits (6)
Belgium	45.1	-1.20	-0.60	0.08	-0.68	0.01
Germany	42.6	0.00	0.15	-0.12	-0.04	0.00
France	42.4	0.23	1.43	-1.91	0.67	-0.04
Italy	41.7	0.32	0.26	0.00	0.00	-0.06
Austria	40.3	0.27	0.32	0.02	-0.12	-0.05
Sweden	39.1	-0.17	0.12	0.00	0.00	0.29
Greece	38.4	-0.54	0.17	0.00	0.00	0.71
Finland	37.1	-0.26	-0.10	0.43	-0.62	-0.03
Slovak Republic	36.7	0.41	0.42	0.02	-0.15	-0.11
Turkey	36.4	0.18	-0.18	-0.06	0.42	0.00
Spain	36.3	0.15	0.15	0.00	0.00	0.00
Lithuania	36.3	-0.27	2.69	0.00	0.00	2.95
Hungary	36.2	-1.12	-0.09	0.31	-1.67	-0.33
Portugal	35.5	-0.77	-0.77	0.00	0.00	0.00
Slovenia	35.4	0.28	0.13	0.00	0.00	-0.14
Latvia	34.9	-1.56	-1.99	0.37	0.32	0.26
Czech Republic	34.8	-0.21	0.50	0.00	0.00	0.71
Norway	32.5	-0.08	-0.14	0.00	0.00	-0.06
Iceland	31.9	0.13	0.20	-0.01	0.00	0.06
Denmark	31.0	-0.06	-0.19	0.00	0.00	-0.14
Estonia	30.3	-3.57	-3.49	0.00	0.00	0.09
Netherlands	29.9	0.36	0.16	-0.06	0.24	-0.01
Japan	29.6	0.14	0.02	0.02	0.07	-0.02
Poland	27.1	0.10	0.26	0.00	0.00	0.16
Australia	27.0	0.35	0.35	0.00	0.00	0.00
United Kingdom	26.5	-0.08	-0.06	-0.03	-0.03	-0.05
Luxembourg	26.3	0.49	0.41	0.01	-0.08	-0.14
Ireland	24.7	0.29	0.10	0.00	0.08	-0.11
Canada	24.1	0.27	0.17	-0.01	-0.05	-0.16
United States	23.9	-2.58	-2.52	0.01	-0.07	0.00
Korea	20.7	0.57	0.42	0.08	0.07	0.00
Mexico	18.2	-0.45	-0.51	0.00	0.07	0.00
New Zealand	17.1	0.21	0.21	0.00	0.00	0.00
Israel	16.1	0.30	0.18	0.05	0.02	-0.05
Switzerland	16.1	0.21	0.15	0.00	0.00	-0.05
Chile	6.7	-0.01	0.00	0.00	0.00	0.01
Unweighted average						
OECD Average	30.8	-0.21	-0.05	-0.02	-0.04	0.10

Note: Two-earner married couple, one at 100% and the other at 67% of the average wage, with 2 children.
1. Countries ranked by decreasing total tax wedge.
2. Due to rounding, the changes in tax wedge in column (2) may differ by one hundredth of a percentage point from the sum of columns (3)-(6).
3. Includes payroll taxes where applicable.
Sources: country submissions, OECD Economic Outlook Volume 2018 issue 2.

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Table 1.6. Income tax plus employee social security contributions less cash benefits, 2018

For two-earner couples with two children, as % of gross wage earnings

Country[1]	Total payment[2] (1)	Income tax (2)	Employee social security contributions (3)	Cash benefits (4)	Gross wage earnings[3] (5)
Switzerland	10.9	8.6	6.2	4.0	129 208
Luxembourg	16.0	11.3	12.3	7.7	114 787
Germany	31.5	11.1	20.4	0.0	112 314
Iceland	27.3	27.0	0.4	0.1	111 063
Netherlands	21.8	12.3	11.7	2.3	108 929
Belgium	30.4	21.3	14.0	4.9	104 172
Denmark	31.0	34.9	0.0	3.9	103 251
Austria	23.4	12.0	18.0	6.6	101 431
Ireland	16.5	16.8	4.0	4.3	100 084
Australia	22.6	22.6	0.0	0.0	99 876
Norway	23.7	17.9	8.2	2.3	95 459
United Kingdom	19.0	12.8	8.9	2.7	95 349
Korea	12.4	3.9	8.5	0.0	94 334
United States	17.6	9.9	7.7	0.0	91 769
Japan	18.9	7.2	14.5	2.8	86 587
France	22.6	13.1	11.9	2.4	86 012
Sweden	20.0	17.1	7.0	4.1	85 536
Finland	23.7	17.1	9.8	3.3	84 405
Italy	23.3	15.4	9.5	1.6	75 636
Canada	15.7	14.2	7.2	5.6	71 360
Spain	17.3	10.9	6.4	0.0	71 033
Israel	11.7	6.0	7.3	1.6	69 847
New Zealand	17.1	17.1	0.0	0.0	69 308
Greece	23.0	8.7	16.0	1.7	67 612
Slovenia	25.0	6.7	22.1	3.8	57 165
Portugal	20.2	9.2	11.0	0.0	53 217
Poland	15.2	4.6	17.8	7.3	52 565
Czech Republic	12.6	5.0	11.0	3.4	51 289
Turkey	26.0	11.0	15.0	0.0	50 222
Hungary	22.8	8.9	18.5	4.6	49 712
Estonia	6.8	10.1	1.6	4.9	49 492
Slovak Republic	17.3	6.7	13.4	2.8	41 996
Lithuania	16.4	11.3	9.0	3.9	41 267
Latvia	19.2	10.7	11.0	2.6	39 994
Chile	6.7	0.0	7.0	0.3	39 982
Mexico	7.9	6.6	1.3	0.0	21 801
Unweighted average					
OECD Average	19.3	12.2	9.7	2.6	77 168

Notes: Two earner married couple, one at 100% and the other at 67% of the average wage, with 2 children.
1. Countries ranked by decreasing gross wage earnings.
2. Due to rounding total may differ by one tenth of a percentage point from aggregate of columns for income tax, social security contributions and cash benefits.
3. US dollars with equal purchasing power.
Sources: country submissions, OECD Economic Outlook Volume 2018 issue 2.

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Regarding the net personal average tax rate as a percentage of gross earnings the OECD average was 19.3% in 2018 for the two-earner couple with two children where one spouse earns the average wage and the other 67% of it. Table 1.6 shows the net personal average tax rates for the OECD countries and their components as a percentage of gross earnings. The household gross wage earnings figures in column 5 are expressed in terms of US dollars with equivalent purchasing power. Unlike the results shown in Table 1.3, in Table 1.6, cash benefits are taken into account and reduce the impact of the employees' income taxes and social security contributions (columns 2 plus 3 minus column 4).

The net personal average tax rate on the two-earner couple varied greatly among OECD countries in 2018, ranging from 6.7% in Chile to 31.5% in Germany. In other terms, the disposable income of the household after tax represented 93.3% of the couple's gross wage earnings in Chile while it represented 68.5% in Germany. Two other countries had a net personal average tax rate exceeding 30%: Belgium (30.4%) and Denmark (31.0%). At the other extreme, the net personal average tax rate was less than 10% in Mexico (7.9%) and Estonia (6.8%), as well as in Chile.

The *Taxing Wages* indicators focus on the structure of income tax systems on disposable income. To assess the overall impact of the government sector on people's welfare other factors such as indirect taxes (e.g. VAT) should also be taken into account, as should other forms of income (e.g. capital income). In addition, non-tax compulsory payments that affect households' disposable incomes are not included in the calculations presented in the publication, but further analyses on those payments are presented in the online report: http://www.oecd.org/tax/tax-policy/non-tax-compuslory-payments.pdf

Wages

Table 1.7 shows the gross wage earnings in national currency of the average worker in each OECD member country for 2017 and 2018. The figures for 2018 are estimated by the OECD Secretariat by applying the change in the compensation per employee in the total economy as presented in the *OECD Economic Outlook* (Volume 2018 issue 1) database to the final average wage values provided by OECD member countries. More information on the values of the average wage and the estimation methodology is included in the Annex of this Report.

The annual change in 2018 – shown in column 3 – varied between 0.8% in Japan and 12.1% in Turkey. To a large extent, the changes reflect the different inflation levels of individual OECD countries – see column 4 of Table 1.7. The annual change in real wage levels (before personal income tax and employee social security contributions) is within the range of -1% to +2% for 25 countries; see column 5 of Table 1.7. Ten of the remaining eleven countries show changes that are above this range: Slovenia (2.4%), Israel (2.7%), Korea (3.4%), the Slovak Republic (3.5%), Estonia (4.2%), Poland (5.1%), the Czech Republic (5.4%), Latvia (5.5%), Lithuania (6.1%) and Hungary (7.7%). In Turkey, the annual change in real wage before personal income tax and employee social security contributions was -4%.

In 26 out of the 36 OECD countries, taxpayers had higher real post-tax income in 2018 than in 2017 as real wages before tax increased faster or decreased slower than personal average tax rates; or the personal average tax rates decreased while the real wages before tax increased or remained unchanged; or the real wages before tax increased while the personal average tax rates remained unchanged (see column 6).

In contrast, taxpayers had lower real post-tax income in Australia, Austria, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Spain, Switzerland, Turkey and the United Kingdom:

- The real wage before tax decreased whereas the personal average tax rate increased in Japan and Spain.
- The personal average tax rate increased faster than the real wage before tax in Australia, Austria, Italy, Luxembourg, New Zealand and Switzerland.
- The real wage before tax decreased faster than the personal average tax rate in Turkey and the United Kingdom.
- The personal average tax rate increased while the real wage before tax remained unchanged in the Netherlands.

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, some countries do not include the wages earned by supervisory and managerial workers and not all countries exclude wage earnings from part-time workers (see Table A.4 in the Annex).

Table 1.8 provides more information on whether the average wages for the years 2000 to 2018 are based on industry sectors C-K inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 3 (ISIC Rev.3) or industry sectors B-N inclusive with reference to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4).

Most OECD countries have calculated average wage earnings on the basis of sectors B-N in the ISIC Rev. 4 Industry Classification at least since 2008. Some countries have revised the average wage values for prior years as well. Average wage values based on the ISIC Rev. 4 Classification or any variant are available for all years for Australia, Canada, the Czech Republic, Estonia, Finland, Greece, Hungary, Iceland, Italy, Japan, Latvia, Lithuania, the Slovak Republic, Slovenia, Spain and Switzerland.

Australia (for all years) and New Zealand (years 2004 to 2017) have provided values based on the 2006 ANZSIC industry classification, divisions B to N, which substantially overlaps the ISIC Rev.4, sectors B to N. For New Zealand, the years prior to 2004 continue to be based on sectors C-K in ANZSIC. Turkey has provided values based on the NACE Rev.2 classification sectors B-N from 2007 onwards. Values for the years prior to 2007 are based on the average production worker wage (ISIC rev.3.1, sector D). The average wages are not based on the sectors B-N in the ISIC Rev. 4 Industry Classification for the Netherlands (from 2012 onwards) and Mexico (all years).

Table 1.7. Comparison of wage levels

Country	Gross wage in national currency		Annual change, 2018/17 (percentage)			
	2017 (1)	2018 (2)	Gross wage (3)	Inflation1 (4)	Real wage before tax (5)	Change in personal average tax rate2 (6)
Australia	83 336	85 778	2.9	2.0	0.9	1.2
Austria	46 002	47 120	2.4	2.1	0.3	1.2
Belgium	47 527	48 455	2.0	2.3	-0.3	-1.9
Canada	51 626	53 350	3.3	2.3	1.0	0.8
Chile	9 348 496	9 669 058	3.4	2.5	0.9	0.1
Czech Republic	355 633	383 304	7.8	2.2	5.4	2.1
Denmark	412 045	421 547	2.3	0.9	1.4	-0.4
Estonia	14 992	16 103	7.4	3.1	4.2	-18.5
Finland	43 245	43 984	1.7	1.1	0.6	0.1
France	38 600	39 436	2.2	2.2	0.0	-1.6
Germany	49 100	50 546	2.9	1.9	1.1	-0.2
Greece	20 841	21 214	1.8	0.8	1.0	0.7
Hungary	3 730 608	4 138 492	10.9	3.0	7.7	0.0
Iceland	8 760 000	9 152 462	4.5	2.6	1.8	0.6
Ireland	45 500	46 774	2.8	0.8	2.0	0.3
Israel	147 912	153 221	3.6	0.9	2.7	2.1
Italy	30 755	31 292	1.7	1.3	0.4	0.8
Japan	5 145 307	5 188 742	0.8	1.0	-0.2	0.3
Korea	45 853 704	48 166 599	5.0	1.6	3.4	3.2
Latvia	10 980	11 881	8.2	2.6	5.5	-3.5
Lithuania	10 216	11 121	8.9	2.6	6.1	-2.5
Luxembourg	58 238	59 497	2.2	2.0	0.1	1.7
Mexico	116 276	122 208	5.1	4.9	0.2	-7.6
Netherlands	50 730	51 567	1.6	1.7	0.0	0.5
New Zealand	58 824	60 360	2.6	1.7	0.9	1.7
Norway	578 745	596 477	3.1	2.7	0.3	-0.5
Poland	50 573	54 191	7.2	1.9	5.1	0.4
Portugal	17 998	18 343	1.9	1.3	0.6	-3.1
Slovak Republic	11 419	12 131	6.2	2.7	3.5	1.4
Slovenia	18 839	19 671	4.4	2.0	2.4	1.2
Spain	26 550	26 923	1.4	1.9	-0.5	0.8
Sweden	435 821	453 539	4.1	2.0	2.0	0.7
Switzerland	89 599	90 908	1.5	1.0	0.5	0.9
Turkey	41 843	46 921	12.1	16.8	-4.0	-0.5
United Kingdom	38 575	39 328	2.0	2.5	-0.5	-0.4
United States	53 376	54 951	3.0	2.5	0.5	-8.9

Notes:
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 2017 and 2018.)
Sources: country submissions, OECD Economic Outlook Volume2018 issue 2.

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Table 1.8. Average Wage Industry Classification

	Years for which ISIC Rev. 3.1 or any variant (Sectors C-K) has been used to calculate the AW	Years for which ISIC Rev. 4 or any variant (Sectors B-N) has been used to calculate the AW
Australia[1]		2000-2018
Austria[2]	2004-2007	2008-2018
Belgium	2000-2007	2008-2018
Canada		2000-2018
Chile[3]		2009-2018
Czech Republic		2000-2018
Denmark[4]	2000-2007	2008-2018
Estonia		2000-2018
Finland		2000-2018
France	2000-2007	2008-2018
Germany	2000-2005	2006-2018
Greece[5]		2000-2018
Hungary		2000-2018
Iceland[6]		2000-2018
Ireland[7]		2008-2018
Israel[8]	2000-2012	2013-2018
Italy		2000-2018
Japan		2000-2018
Korea[9]	2000-2007	2008-2018
Latvia[10]		2000-2018
Lithuania		2000-2018
Luxembourg	2000-2004	2005-2018
Mexico[11]		
Netherlands[12]	2000-2007	2008-2011
New Zealand[13]	2000-2003	2004-2018
Norway	2000-2008	2009-2018
Poland	2000-2006	2007-2018
Portugal	2000-2005	2006-2018
Slovak Republic[14]		2000-2018
Slovenia		2000-2018
Spain		2000-2018
Sweden	2000-2007	2008-2018
Switzerland		2000-2018
Turkey[15]		2007-2018
United Kingdom	2000-2007	2008-2018
United States	2000-2006	2007-2018

Notes:
1. Australia: based on ANZSIC06 such that the categories substantially overlap with ISIC 4, sectors B-N.
2. Austria: 2000-2003 average wage values are not based on the NACE (ISIC) classification.
3. Chile: the values for 2000 to 2008 are estimates deriving from the annual changes in the average wages based on "CIIU Rev.3" (2009=100) between 2000 and 2008, and the average wage for 2009 based on CIIU Rev.4 (2016=100). From 2009, the values are based on ISIC4.CL2012 sectors B ton R, excluding O (8422) "Defense Activities" and O (8423) "Public order and safety activities".
4. Denmark: The AW values are based on sectors B-N and R-S (NACE rev 2).
5. Greece: the average annual earnings refer to full time employees for the sectors B to N of NACE Rev 2, including Division 95 and excluding Divisions 37, 39 and 75 for 2008 onwards.
6. Iceland: using national classification system that corresponds with the NACE rev. 2 classification system.
7. Ireland: Values from 2008 onwards are based on CSO table EHA05 for NACE rev.2 B-N. Values for prior years are the Secretariat's estimates, based on the growth rates of the average wages for sectors C to E in reference to NACE.

8. Israel: Information on data for Israel: http://oe.cd/israel-disclaimer.
9. Korea: average wage values are based on 6th Korean Standard Industrial Classification (KSIC) C-K for 2000-2001, 8th KISC C-M for 2002 to 2007 and 9th KISC B-N except E for 2008 onwards.
10. Latvia: Values are based on NACE rev.2 and cover the private sector that includes commercial companies with central or local government capital participation up to 50%, commercial companies of all types without central or local government capital participation, individual merchants, and peasant and fishermen farms with 50 and more employees.
11. Mexico: 2000-2018 AW values are based on the Mexican Classification of Economic Activities (Clasificación Mexicana de Actividades Económicas (CMAE)) which is based on one of the first versions of ISIC.
12. Netherlands: the average wages from 2012 onwards include all economic activities (sectors A to U from SBI2008). Values for the private sector only (sectors B to N) are not available.
13. New Zealand: see the note for Australia which applies from 2004.
14. Slovak Republic: average wage values based on ISIC Rev. 4 classification (B to N) and still include the self-employment data.
15. Turkey: the average wage is based on the average production worker wage ISIC rev. 3.1 sector D for years 2000 to 2006.

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Notes

[1] Not all national statistical agencies use ISIC Rev.3 or Rev.4 to classify industries. However, the Statistical Classification of Economic Activities in the European Community (NACE Rev.1 or Rev.2), the North American Industry Classification System (US NAICS 2012). The Australian and New Zealand Standard Industrial Classification (ANZSIC 2006) and the Korean Standard Industrial Classification (6th to 9th KISC) include a classification which broadly conforms either with industries C-K in ISIC Rev. 3 or industries B-N in ISIC Rev.4.

[2] Non-tax compulsory payments are requited and unrequited compulsory payments to privately-managed funds, welfare agencies or social insurance schemes outside general governments and to public enterprises (http://www.oecd.org/tax/tax-policy/tax-database.htm#NTCP).

Chapter 2. Special feature: The taxation of median wage earners

Introduction

Taxing Wages compares labour costs and the tax and benefit position of different household types in OECD countries, using country-specific average wages[1] as a reference point to enable comparisons across countries. The mean wage, however, is significantly influenced by the fact that wage differentials are much larger in the upper part of the wage distribution (above the median wage). Because of this, the mean does not necessarily reflect the wage of the representative individual. This sensitivity is increasingly important in the light of growing wage inequalities in many OECD countries.

An alternative measure of the average wage is the median wage. This divides the labour income distribution into two parts, with 50% of workers at lower wage incomes and 50% of workers with wage incomes above the median wage. Unlike the mean, which puts disproportionately greater weight on high earning individuals and falls at a different point in the wage distribution of every country, the median wage is not influenced by wage differentials in the upper part of the wage distribution and is hence smaller than the mean wage in the presence of labour income inequality.

This Special Feature examines the taxation of single median wage earners in OECD countries. For simplicity, the term "average wage" in this Special Feature is a mean and corresponds to the average wage used in the rest of the Report. The Special Feature begins by setting out the conceptual differences between the mean and median wage and the methodology used to estimate median wages for the purposes of this analysis. It then shows the headline indicators (net personal tax rates and the tax wedge) for median wage earners in OECD countries, contrasting these indicators with the same indicators for the average wage earner. To examine the case of a low-income worker, it then presents the same indicators for a worker at 67% of each of the median and average wage. Finally, it considers the composition of the tax wedge for the median and average worker at 67% and 100% of each wage, respectively.

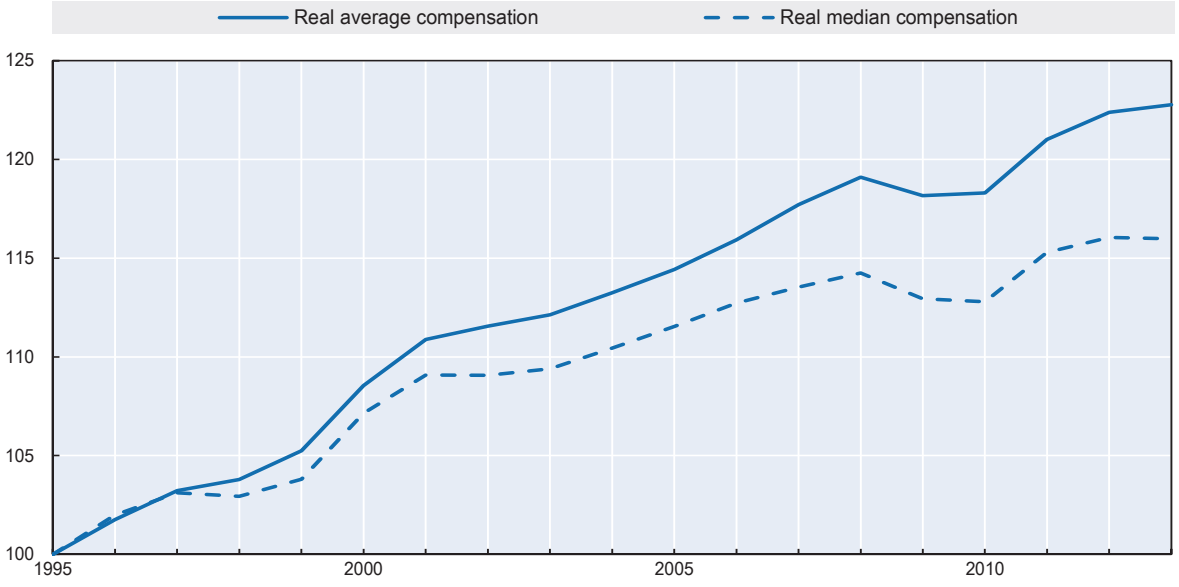
Differences in the average and median wage in OECD countries

The difference between the mean and the median wage is influenced by the level of labour income inequality in each country: the more unequal the distribution of wages, typically, the higher the divergence of mean and median labour income. Since 1995, the mean and median wage in OECD countries have diverged in the presence of increasing inequality, as shown in Figure 2.1. For most countries, the growing difference reflects increased wage differentials in the upper part of the distribution in combination with constant inequality in the lower part. One popular explanation for this is technological change; see OECD (2017) for a discussion of changes in wage inequality and the link to technological change.

The median wage, therefore, may be considered a more comparable reference point for the distribution of wage levels across countries. While the mean wage reflects the total level of labour income and the number of workers in the country, the median wage reflects the labour income of the representative individual at the midpoint of the income distribution. It partly accounts for cross-country differences in wage inequality, falling at the same point in the income distribution of each country. Using the median wage in the analysis results in a comparison of taxation at the same point of the income distribution in each country.

However, there are practical difficulties associated with the use of the median wage as a reference wage level for the *Taxing Wages* household types. The median wage requires comparable data on the wage distribution of a consistent group of full-time workers in each country, making data on the median wage harder to obtain than the mean wage. Obtaining median wages on a comparable basis to the mean wages used in *Taxing Wages* is more difficult still (manual and non-manual, sectors B-N inclusive). Therefore, this chapter draws on several data sources to approximate the median wages based on mean wage growth rates, as described in Box 2.1.

Figure 2.1. Real median wages compared to real mean wages



(1995 = 100)

Note: Employment weighted average of 24 countries (two-year moving averages ending in the indicated years). 1995-2013 for Finland, Germany, Japan, Korea, United States; 1995-2012 for France, Italy, Sweden; 1996-2013 for Austria, Belgium; United Kingdom; 1996-2012 for Australia, Spain; 1997-2013 for Czech Republic, Denmark, Hungary; 1997-2012 for Poland; 1998-2010 for Netherlands; 1998-2013 for Norway; 1998-2012 for Canada, New Zealand; 1999-2013 for Ireland; 2002-2011 for Israel; 2003-2013 for Slovak Republic. All series are deflated by the value added price index excluding the primary, housing and non-market sectors. The industries excluded are the following (ISIC rev. 4 classification): (1) Agriculture, Forestry and Fishing (A), (2) Mining and quarrying (B), (3) Real estate activities (L), (4) Public administration and defence, compulsory social security (O), (5) Education (P), (6) Human health and social work activities (Q), (7) Activities of households as employers (T), and (8) Activities of extraterritorial organisations and bodies (U).
Source: OECD National Accounts Database, OECD Earnings Database.

StatLink http://dx.doi.org/10.1787/888933922897

Box 2.1. Data on median wage and estimations used in the analysis

The mean wage is the simple average of all wage income of full-time employees and requires only information on the total wage income and the number of full-time employees in a country. Calculating the median wage requires additional information on the income distribution, making it harder to obtain timely and comparable data.

There is no standardised OECD wide data set on median earnings, and only a few countries were able to provide median earnings that aligned with the methodology of the Taxing Wages average wage (TW AW) for 2017 (Belgium, Sweden and Switzerland). The data for median earnings of the remaining countries is drawn from two databases:

- Median earnings for all EU OECD member states as well as Iceland, Norway and Turkey come from the Structure of Earnings Survey (EUROSTAT, 2014[1]), which is conducted every four years by Eurostat. The survey provides structural data on gross earnings, including data on median earnings. The median wage captures all economic activities with the exception of agriculture, public administration and defence (NACE Rev. 2 sections B to S (excluding O)) for companies with at least 10 employees. The latest year for which data is available is 2014.
- Data on median wages for the remaining OECD countries (Australia, Canada, Chile, Israel, Japan, Korea, Mexico, New Zealand and the United States) is taken from an internal earnings distribution database of the OECD Directorate for Employment, Labour and Social Affairs (ELS), which unites data from several different sources (such as national statistical institutions). Due to the variety of methodologies used, there is no unique definition of median wages and each of the data points is country dependent. Thus, there is a large variation in methodology, indicators (gross hourly, weekly, monthly or annual wage), type of worker (full-time, full-time equivalent, or full-time and part-time worker) and company coverage (inclusion or exclusion of companies with fewer than 10 employees). Likewise, the latest year available varies across countries and data is available for either 2015, 2016 or 2017.

One of the biggest issues with the median wage data set used in this Special Feature is its timeliness. The limited availability of median wage for 2017 requires estimations for the majority of the countries for the analysis in this chapter. The methodologies also differ, e.g. differences in sector coverage (inclusion of the public sector), company size (exclusion of companies with fewer than 10 employees) or the type of worker (full-time, full-time equivalent, full-time and part-time worker) relative to the TW AW. However, since both data sets (the SES and the ELS data set) contain median and average wage data for each of the countries, the ratio of the two indicators can be calculated and applied to the TW AW to estimate the median wage for the respective year in a manner that is consistent with the average wage used in the rest of Taxing Wages. To adjust the median wage to 2017, the growth rate of the TW AW between the base year and 2017 is applied.

The approach allows for methodological consistency for each country since the median wage has been estimated by reference to the same group of workers as the average wage to which it is compared. However, this estimation method implies that the ratio of the median and the average wage remains unchanged, regardless of the underlying

methodology of the data set, and that the average and median wage have grown at the same rate. This assumption is unlikely to be correct and will also differ between countries.

The different steps of the estimation are illustrated below with the example of Finland:

$$\frac{MW_{[SES2014]}}{AW_{[SES2014]}} * AW_{[TW2014]} * \frac{AW_{[TW2017]}}{AW_{[TW2014]}} \rightarrow \frac{40{,}937}{47{,}042} * 42{,}704 * \frac{43{,}245}{42{,}704}$$

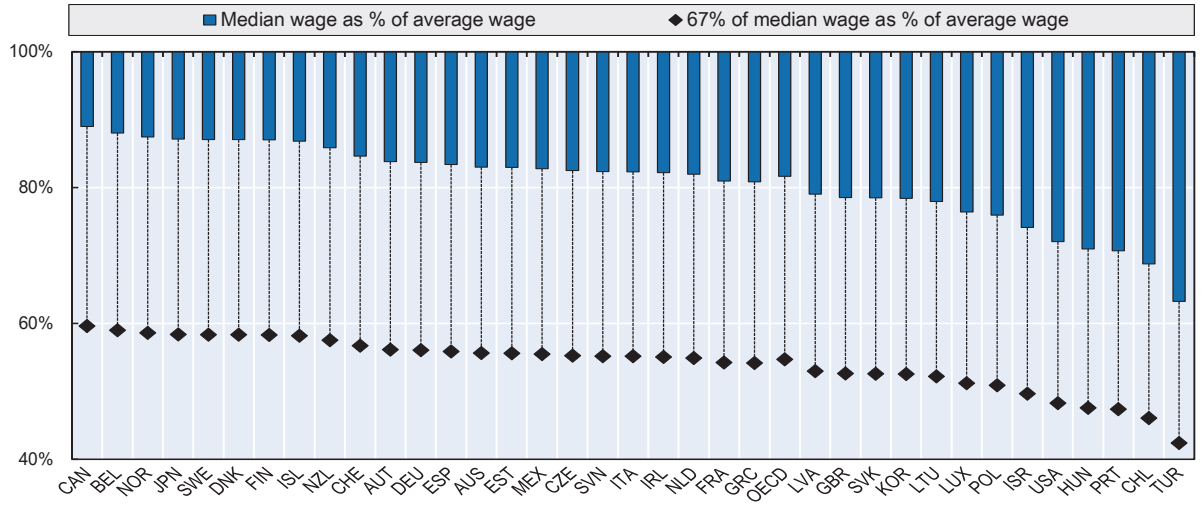
Ratio MW/AW | Base | Growth rate

$$\frac{MW_{[SES2014]}}{AW_{[SES2014]}} * AW_{[TW2017]} = MW_{[Estimated\ 2017]} \rightarrow \frac{40{,}937}{47{,}042} * 43{,}245 = 37{,}632$$

This methodology is used to ensure comparability across countries and with the average wages used in this report. Due to differing methodologies and sectors or employees covered, country estimates may differ from the estimates used in this analysis.

Using the estimations described in Box 1, the median wage was on average 80.8% of the average wage in OECD countries in 2017, as shown in Table 2.1. In 23 OECD countries, the median wage was between 80.8% and 90% of the average wage; and the dispersion of median wages was greater at the lower end of the distribution: the remaining thirteen countries had median wages of less than 80% of the average wage in 2017, with the lowest median wage, measured as a share of the average wage, occurring in Turkey, at 63.2%.

Figure 2.2. Median and average wages, 2017 (USD with equal purchasing power)



Note: Median wages derive from calculations using the EUROSTAT SES database for the EU member countries and Iceland, Norway, and Turkey and the OECD ELS earnings distribution database for Australia, Canada, Chile, Israel, Japan, Korea, Mexico, New Zealand and the United States. The median wage for Belgium, Sweden and Switzerland was provided by each country.
Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

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Table 2.1 shows the average and median wages used in this Special Feature, as well as 67% of each wage level. The distribution of median wages across OECD countries in

2017 was similar to the distribution of the average wage. Both the median and average wage were highest in Switzerland and lowest in Mexico (measured in purchasing-power parity adjusted figures), and the top and bottom five countries remain the same. The OECD average median wage of 36 314 (USD, PPP adjusted) represented 80.8% of the average wage of 44 475. The largest differences between the average and median wage in currency terms were observed in Luxembourg (USD 15 956) and the United States (USD 14 931).

Table 2.1. Average and median wages, USD, PPP adjusted, 2017

	Average wage		Median wage	
	100%	67%	100%	67%
Australia	57 694	38 655	47 894	32 089
Austria	58 949	39 496	49 400	33 098
Belgium	60 826	40 754	53 542	35 873
Canada	41 234	27 627	36 689	24 581
Chile	23 234	15 567	15 972	10 701
Czech Republic	28 381	19 015	23 408	15 683
Denmark	59 282	39 719	51 601	34 573
Estonia	27 973	18 742	23 210	15 551
Finland	49 305	33 035	42 907	28 747
France	49 769	33 345	40 291	26 995
Germany	65 105	43 620	54 476	36 499
Greece	35 545	23 815	28 739	19 255
Hungary	27 417	18 369	19 456	13 036
Iceland	63 605	42 615	55 230	37 004
Ireland	57 123	38 273	46 942	31 451
Israel	39 393	26 393	29 190	19 557
Italy	44 170	29 594	36 358	24 360
Japan	50 213	33 642	43 744	29 309
Korea	52 948	35 475	41 515	27 815
Latvia	22 374	14 991	17 683	11 848
Lithuania	22 773	15 258	17 745	11 889
Luxembourg	67 601	45 293	51 645	34 602
Mexico	12 861	8 617	10 646	7 132
Netherlands	64 170	42 994	52 580	35 229
New Zealand	39 994	26 796	34 343	23 010
Norway	57 470	38 505	50 259	33 674
Poland	28 896	19 360	21 938	14 699
Portugal	31 010	20 777	21 916	14 684
Slovak Republic	23 696	15 876	18 599	12 461
Slovenia	32 731	21 929	26 954	18 059
Spain	41 404	27 741	34 520	23 128
Sweden	49 210	32 971	42 844	28 706
Switzerland	75 096	50 314	63 543	42 574
Turkey	30 454	20 404	19 261	12 905
United Kingdom	55 818	37 398	43 831	29 367
United States	53 376	35 762	38 445	25 758
OECD	44 475	29 798	36 314	24 331

Source: Taxing Wages, EUROSTAT SES, OECD ELS earnings distribution databases and OECD Economic Outlook, Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933922935

Tax burden indicators for workers on the median and average wages, 2017

This section presents results for the single earner at 100% of the median and average wage in 2017, referred to respectively as the "median worker" and the "average worker".[2] It considers the net personal tax rates and tax wedges that applied to median workers in OECD countries in 2017 and contrasts these with the rates that applied to the average worker.

Net personal tax rates of the median and average worker

Net personal tax rates include the combined impact of income taxes, social security contributions (SSCs) paid by employees and cash benefits, measured as a percentage of gross wages. They can be measured as marginal rates (the amount payable on the next unit of currency earned) or as average rates by dividing the total amount payable by the gross wage.

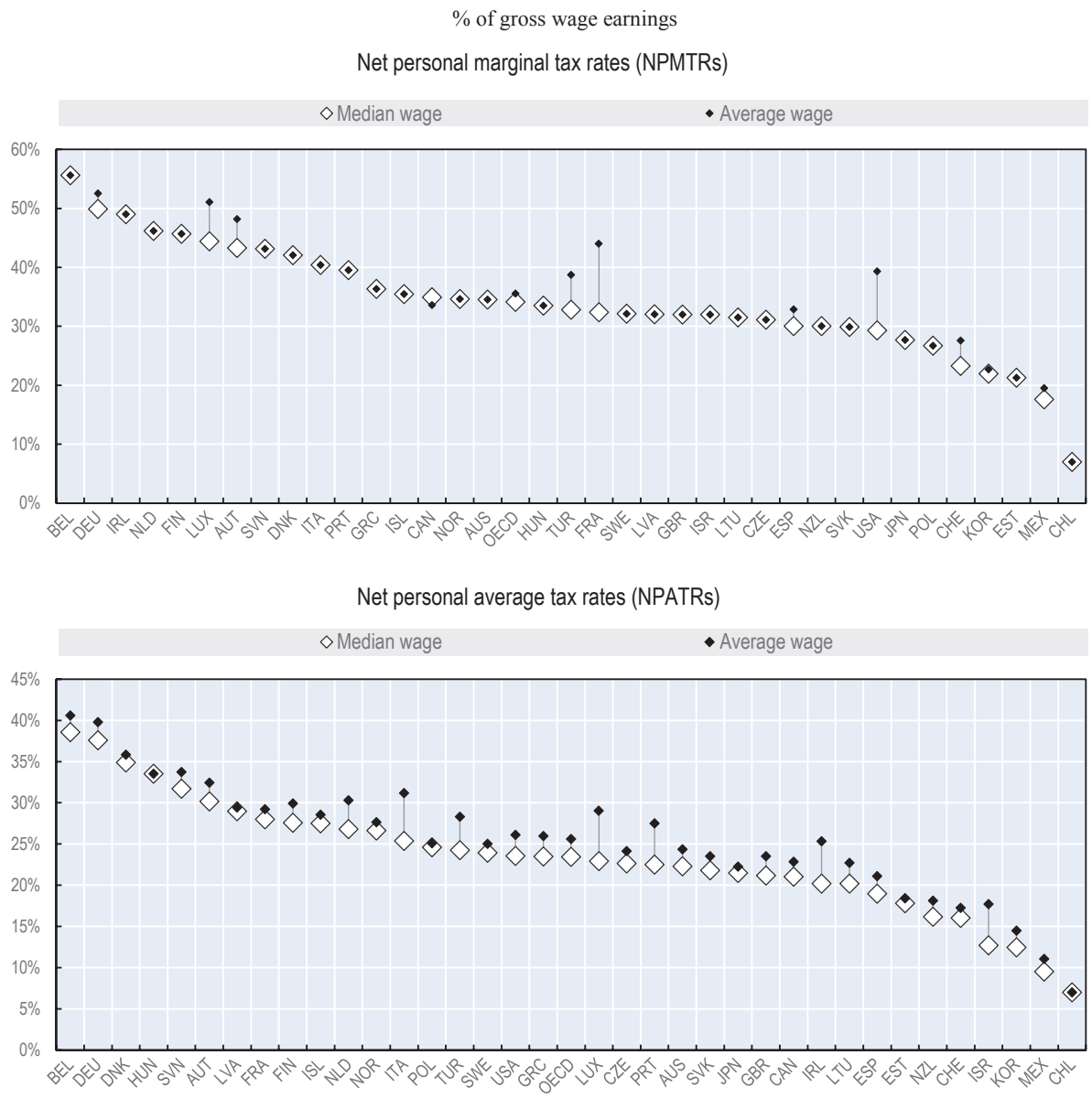
Figure 2.1 sets out the net personal tax rates for median and average workers in OECD countries in 2017. Net personal marginal tax rates (NPMTRs) are shown in the upper panel; and net personal average tax rates (NPATRs) are shown on the lower panel.

Figure 2.3 demonstrates that NPMTRs on the median wage in OECD countries in 2017 ranged from 55.6% in Belgium to 7.0% in Chile in 2017, with the distribution of rates being concentrated between 30% and 35% (14 countries). The OECD average NPMTR for the median worker is also within this range, at 34.1%.

The impact of measuring NPMTRs for the median rather than average worker will depend in part on the size of the differential between the median and average wage, in part on the progressivity of the personal tax system, and in part, due to the placement of both wage levels within the relevant bands. For example, the lower level of the median relative to average wage may mean that a lower tax bracket applies under the personal income tax system or may mean there is a change to the abatement rate of a credit or deduction.

The OECD average NPMTR in 2017 was 1.4 percentage points lower for the median worker relative to the average worker (34.1% compared to 35.5%). However, it is notable that in the case of a large number of OECD countries the NPMTRs remain the same at both these wage levels (e.g., the NPMTR on the average wage is the same as the NPMTR on the median wage in 25 OECD countries). Relatively small changes (less than four percentage points) between the NPMTR for the median and the average wage earners are observed in Canada - the only country where the NPMTR is higher on the median wage than on the average wage - as well as in Germany, Spain, Korea and Mexico. Concerning Canada, the NPMTR is higher for the worker at the median wage, who contributes to the unemployment insurance since their contributions have not reached their maximum amount. In contrast, at the average wage level, the maximum unemployment contributions have been reached and no unemployment contribution is paid on the additional dollar. Decreases of greater than four percentage points are observed in the remaining six countries (France, United States, Luxembourg, Turkey, Austria and Switzerland); in each case due to a decrease in the applicable marginal tax rate of personal income taxes.

Figure 2.3. Net personal tax rates for a single worker on median and average wages, 2017



Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

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Figure 2.3, in 2017 the NPATR for the single worker in OECD countries at the median wage varied from 38.5% in Belgium to 7% in Chile, with an average NPATR of 23.4%. At the median wage, NPATRs for the single worker are concentrated between 20% and 25% of gross wages (this is the case for 16 countries).

Given that average tax rates take into account all personal income taxes and employee SSCs paid, as well as cash benefits, in a progressive tax system they will be affected by a change in wage level even if the tax settings applied (e.g., the applicable tax bracket) do

not change. For example, the average wage and median wage earner might be placed within the same tax bracket but with the average wage at the higher end and the median wage at the lower end; resulting in a decrease in the average tax rate but no change in the marginal tax rate.

As median wages are lower than average wages in all OECD countries, and most OECD countries tax labour income progressively, NPATRs are lower for all but two OECD countries for the median worker relative to the average worker, as shown in the lower panel of Figure 2.3. No change is observed between the NPATR for the median and average worker in Chile and Hungary, as both countries apply flat taxation at these levels of labour income.

The distribution of NPATRs on the median wage across countries also differs from the distribution of NPATRs on the average wage, although the distribution is unchanged at the highest and lowest ends of the range: the top six countries and the bottom nine countries are the same for both levels of wage earnings. The average reduction in NPATRs across the OECD is from 25.6% for the average worker to 23.4% for the median worker, a decrease of 2.2 percentage points.

Tax wedge

The tax wedge takes into account personal income taxes, employee and employer SSCs and net cash benefits, measured as a percentage of total labour costs (i.e., gross wages plus employer SSCs). The key difference between net personal tax rates and the tax wedge is, therefore, the inclusion of employer SSCs in both the numerator and the denominator. The size of the employer SSCs relative to both NPATRs and gross wage determines the difference between the NPATR and tax wedge of each country.

Figure 2.4 shows the tax wedge for both the median and average workers in OECD countries, showing the marginal tax wedge in the upper panel and the average tax wedge in the lower panel. For the median worker, the marginal tax wedge in 2017 ranged from 66.4% in Belgium to 7% in Chile, with an OECD average of 43.5%; median workers in sixteen OECD countries had tax wedges of between 40% and 50%. Similarly, the average tax wedge on median workers in 2017 ranged from 52.0% in Belgium to 7% in Chile, with an OECD average of 34.3%. The median worker in 21 OECD countries faced a tax wedge of between 30% and 45%.

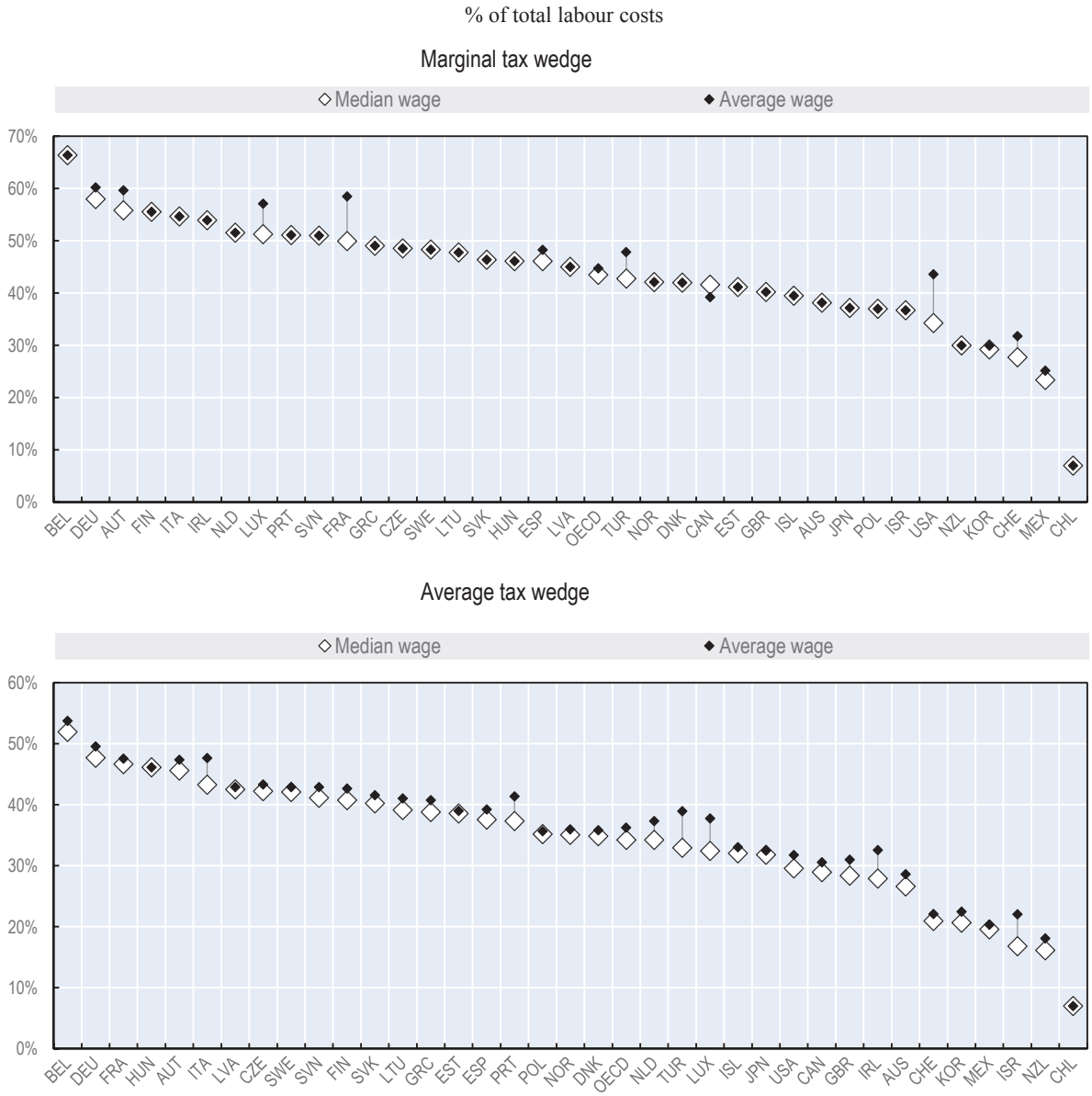
When the tax wedge on the median worker is compared to the tax wedge on the average worker, differences will result from the impact of the different levels of wage income in the progressive nature of each individual tax system. Consequently, as the difference between the net personal tax rate indicator and the tax wedge are driven by the inclusion of employer SSCs in the latter, changes in the tax wedge at the median rather than the average wage will follow those observed in the NPATR analysis, except where the change in wage level affects the amount of employer SSCs paid.

In almost all OECD countries in 2017, there was no difference between the amount of employer SSCs paid at the average versus the median wage. This is shown in Figure 2.5, which decomposes the change in the average tax wedge. For the OECD average tax wedge in 2017, 94.0% of the difference between the tax wedge at the median and the average wage is derived from personal income taxes, with most of the remainder being derived from employer SSCs. However, employer SSCs change between the median and the average wage in only six countries and the level of this change is small, with the only

change of greater than one percentage point seen in Turkey (3.4 percentage points) and changes of less than 0.7 percentage points seen in all other countries.

The small changes in employer SSCs as a result of a switch from the average to the median wage mean that the differences observed between the average and the median wage in relation to net personal tax rates are also seen in relation to the tax wedge at both income levels. When calculated for median compared to average workers, the scale and direction of change in the marginal tax wedge for all countries are the same as for the NPMTR in each country. In 2017, the OECD average marginal tax wedge for the median worker is 1.2 percentage points lower than for the average worker (44.7% compared to 43.5%), as shown in Figure 2.4 (upper panel).

Figure 2.4. Tax wedges for single workers on median and average wages, 2017



Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

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Figure 2.4 also shows the average tax wedge for median relative to average earners, with the intra-country differences in the tax wedge for these two wage levels also being relatively consistent with the changes observed in the NPATRs, although the overall country positions differ depending on the underlying level of SSCs in these countries. The OECD average tax wedge for the median worker in 2017 was 2.0 percentage points lower than for the average worker (34.3% versus 36.2%, with the residual due to rounding).

Table 2.2 sets out the key indicators for median and average wage earners in 2017.

Table 2.2. Tax burden indicators, average and median wage earners, 2017

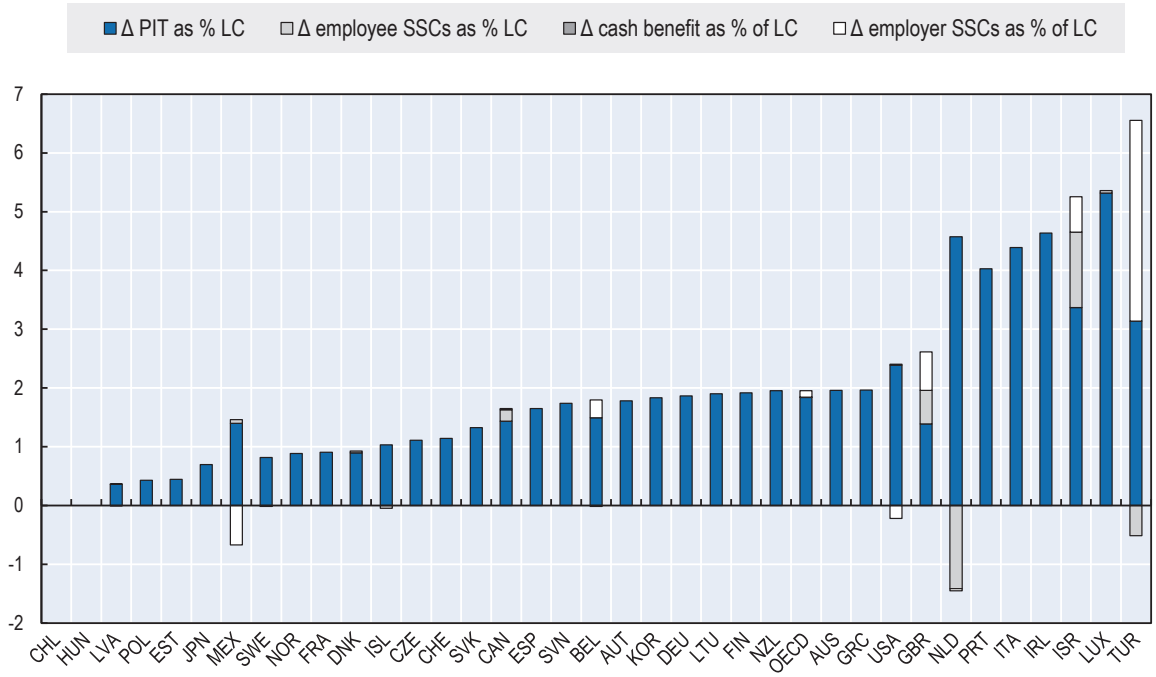
	Average wage				Median wage			
	NPMTR	NPATR	Marginal tax wedge	Tax wedge	NPMTR	NPATR	Marginal tax wedge	Tax wedge
Australia	34.5	24.4	38.2	28.6	34.5	22.3	38.2	26.7
Austria	48.2	32.4	59.7	47.4	43.3	30.1	55.8	45.6
Belgium	55.6	40.6	66.4	53.8	55.6	38.5	66.4	52.0
Canada	33.6	22.8	39.2	30.6	34.9	21.0	41.6	29.0
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	31.1	24.1	48.6	43.4	31.1	22.6	48.6	42.3
Denmark	42.0	35.8	42.0	35.8	42.0	34.9	42.0	34.9
Estonia	21.3	18.4	41.2	39.0	21.3	17.8	41.2	38.6
Finland	45.7	29.9	55.6	42.7	45.7	27.6	55.6	40.8
France	44.0	29.2	58.5	47.6	32.4	28.0	49.9	46.7
Germany	52.5	39.8	60.3	49.6	49.9	37.6	58.0	47.7
Greece	36.3	25.9	49.1	40.8	36.3	23.5	49.1	38.8
Hungary	33.5	33.5	46.2	46.2	33.5	33.5	46.2	46.2
Iceland	35.5	28.5	39.5	33.1	35.5	27.5	39.5	32.1
Ireland	49.0	25.3	54.0	32.6	49.0	20.2	54.0	27.9
Israel	32.0	17.7	36.7	22.1	32.0	12.7	36.7	16.8
Italy	40.4	31.2	54.7	47.7	40.4	25.4	54.7	43.3
Japan	27.7	22.3	37.2	32.5	27.7	21.5	37.2	31.8
Korea	22.7	14.5	30.0	22.5	21.9	12.5	29.3	20.7
Latvia	32.0	29.4	45.0	42.9	32.0	29.0	45.0	42.6
Lithuania	31.5	22.7	47.8	41.1	31.5	20.2	47.8	39.2
Luxembourg	51.1	29.0	57.1	37.8	44.4	22.9	51.3	32.4
Mexico	19.5	11.1	25.2	20.4	17.6	9.5	23.4	19.6
Netherlands	46.2	30.3	51.6	37.4	46.2	26.8	51.6	34.2
New Zealand	30.0	18.1	30.0	18.1	30.0	16.2	30.0	16.2
Norway	34.6	27.6	42.1	35.9	34.6	26.6	42.1	35.1
Poland	26.7	25.1	37.0	35.7	26.7	24.6	37.0	35.2
Portugal	39.5	27.5	51.1	41.4	39.5	22.5	51.1	37.4
Slovak Republic	29.9	23.5	46.4	41.6	29.9	21.8	46.4	40.3
Slovenia	43.1	33.7	51.0	42.9	43.1	31.7	51.0	41.2
Spain	32.9	21.1	48.3	39.3	30.0	19.0	46.1	37.6
Sweden	32.1	25.0	48.3	42.9	32.1	23.9	48.3	42.1
Switzerland	27.6	17.2	31.8	22.1	23.3	16.0	27.8	21.0
Turkey	38.7	28.3	47.8	39.0	32.8	24.3	42.8	33.0
United Kingdom	32.0	23.5	40.2	31.0	32.0	21.2	40.2	28.4
United States	39.3	26.1	43.6	31.8	29.3	23.5	34.3	29.6
OECD	35.5	25.6	44.7	36.2	34.1	23.4	43.5	34.3

Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

StatLink http://dx.doi.org/10.1787/888933922992

Figure 2.5. Decomposition in differences in average tax wedge at 100% of median and average earnings, 2017

Difference in percentage points of total labour costs



Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

StatLink http://dx.doi.org/10.1787/888933923011

Tax burden indicators for low-income workers: contrasting 67% of median and average wages, 2017

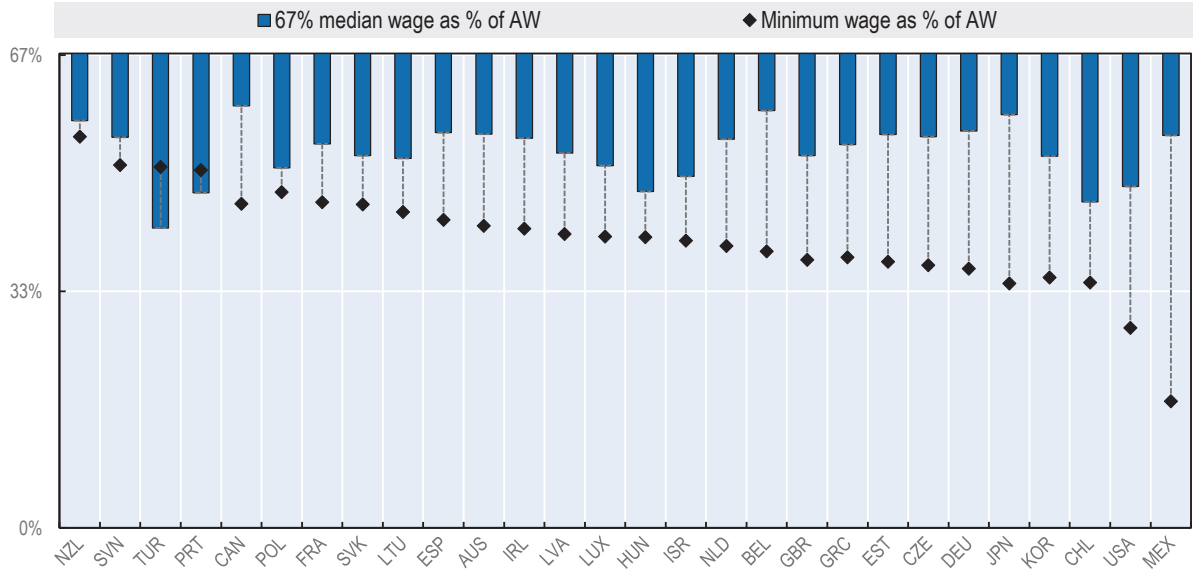
A second household type for which Taxing Wages calculates tax burden indicators are low-income earners, represented by the single individual earning 67% of the average wage. This section calculates the tax burden indicators for workers at 67% of the median wage, indicating the net personal average tax rates and tax wedges that apply at this level of earnings, and contrasting it to the worker earning 67% of the average wage.

On average across the OECD, 67% of the median wage in 2017 was 54.1% of the average wage. Across all OECD countries in 2017, 67% of the median wage ranged from 59.6% of the average wage in Canada to 42.4% of the average wage in Turkey. Table 2.1 above, shows the level of 67% of both median and average wages in all OECD countries in PPP-adjusted USD.

Given that the median wage is more representative of the distribution of wages in OECD countries, and provides a more consistent basis for comparison across the distribution of each country, the worker at 67% of median wage is also more representative of low-income earners across the OECD than the similar household type measured on the basis of the average wage. Contrasting the level of minimum wages in OECD countries with the level of 67% of median wage earnings, both measured as a percentage of average

wage Figure 2.6, demonstrates that 67% of median earnings is closer to the level of minimum wage observed in all OECD countries in which a minimum wage applies, although in the case of Chile and Turkey, this earnings level falls below the minimum wage.

Figure 2.6. 67% of median wage compared to minimum wage, 2017



Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases. OECD database: Minimum wages at current prices in national currency units.

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Net personal tax rates at 67% of the median and average wage

Net personal marginal tax rates on workers at 67% of the median wage ranged from 73.5% in Belgium to 7.0% in Chile in 2017, with an OECD average of 31.7%. The distribution of rates is more concentrated at the lower end of the spectrum, with 16 OECD countries having NPMTRs at this wage level between 25% and 35%. The two outliers are Belgium and France which have comparatively high NPMTRs at over 65% of gross wage earnings, more than 20 percentage points higher than the third highest NPMTR. The high marginal tax rates in Belgium and France are due to the lack of a reduction of employee SSCs in Belgium at 67% of median wage earnings and decreasing in-work benefits for the 67% median wage earner in France. These are two examples of a well-known issue: the targeting of in work tax credits and similar provisions at low wages results in spikes in marginal tax rates. The same phenomenon could occur in other countries at other wage levels, due the wide use of in work tax credits. The results for Belgium and France should therefore be interpreted as examples of a more general issue.

Partially for these reasons, Belgium and France are also two of the four countries in which a single earner at 67% of the median wage faces a higher NPMTR than a worker at 67% of the average wage; the other two countries being Spain, which also has comparatively high NPMTRs, and the Slovak Republic. The high NPMTRs for the median worker in these countries are primarily related to SSCs or a reduction in allowances:

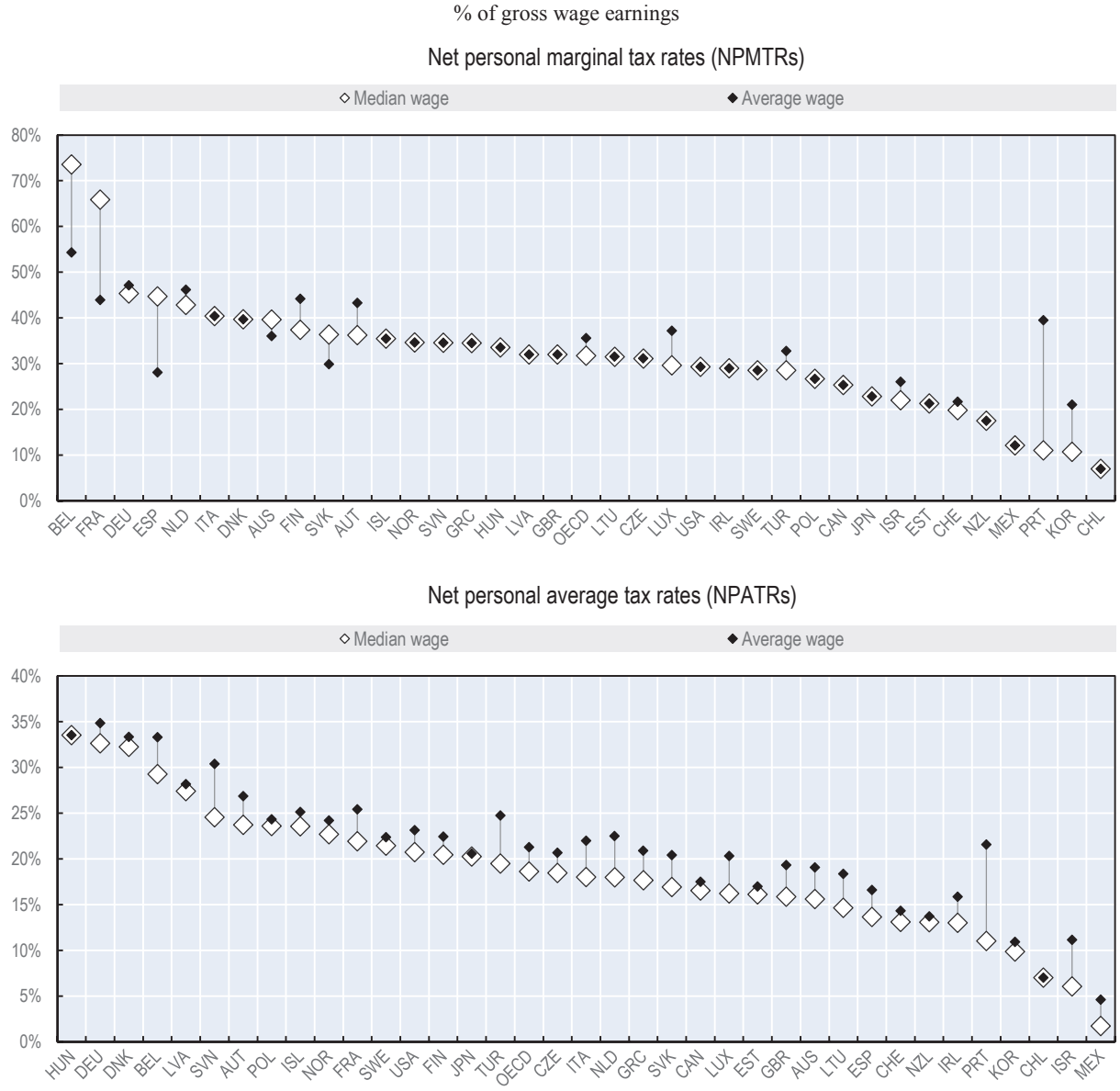
- in Belgium, the SSC reduction is not applied at 67% of the AW;
- in France, no in-work benefit is paid at 67% of the AW;
- in Spain the withdrawal effect of the tax allowance against increasing earnings is captured in the marginal rate at 67% of median wage;
- in the Slovak Republic where a health insurance allowance reduces SSCs at 67% of the median wage but not at 67% of the AW, and the withdrawal effect of the SSC allowance against increasing earnings is captured in the marginal rate for 67% of the median wage.

There was no difference between the NPMTRs at 67% of the median and the average wage in 21 countries and the remaining 11 countries had lower NPMTRs for the worker at 67% of the median wage relative to the average wage. The largest reductions in NPMTRs for the worker at 67% of the median, compared to 67% of the average, wage were observed in Portugal, at 28.5 percentage points, and Korea at 10.4 percentage points. In all other countries the reduction in NPMTR for a worker at 67% of the median wage relative to the average wage was less than eight percentage points. The OECD average NPMTR for the wage earner at 67% of the median wage was 3.8 percentage points lower than for the worker at 67% of the average wage (31.7% compared to 35.5%).

Tax wedge at 67% of the median and average wage

When the total amount of tax paid at the employee level is considered, the picture is quite different. The NPATR was lower or the same in all countries for the wage earner at 67% of the median wage relative to the wage earner at 67% of the average wage. Net personal average tax rates at 67% of median wage earnings ranged from 32.3% in Hungary to 1.7% in Mexico, with an OECD average of 18.6%. The average NPATR on the earner at 67% of the median wage was 3.2 percentage points lower than for an earner at 67% of the average wage (21.3%). Across the OECD, no difference was observed in two countries: in Hungary, which also had the highest NPATR on both levels of income earner; and in Chile, which had the third lowest NPATR. The largest difference in the NPATR between 67% of the median and average wage was in Portugal, which was driven by the fact that, unlike at 67% of the AW, no personal income tax is paid at 67% of the median wage.

Figure 2.7. Net personal tax rates for a single worker on 67% of median and average wage, 2017



Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

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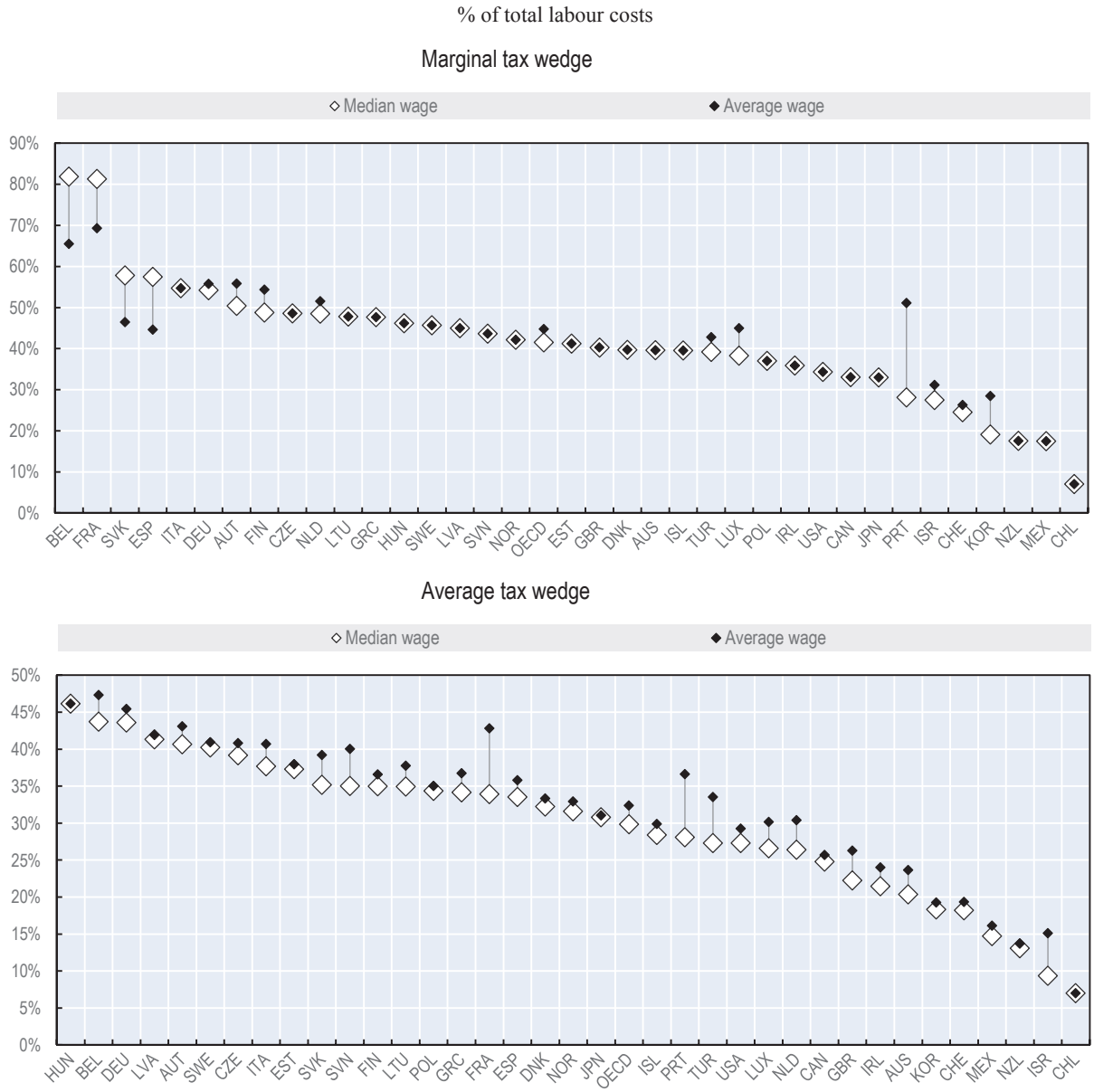
By including the employer SSCs to calculate the tax wedge, Figure 2.8 shows that the difference for marginal and average tax wedges between these two income levels is generally similar, for each country, to the difference between NPMTRs and NPATRs, although the magnitude of the difference in the tax wedge indicator changes depending on the size of employer SSCs in each jurisdiction.

As for NPMTRs, in most countries the marginal tax wedge is the same for median and average earners at 67% of each wage level. The NPMTR on the worker at 67% of the

median wage is higher than the NPMTR at 67% of the average wage in four countries (Belgium, France, Slovak Republic and Spain, as discussed earlier) and lower in 11 countries, with the most pronounced decrease seen again in Portugal, as discussed above. The difference between the marginal tax wedge between 67% of the median and 67% of the average wage in the Slovak Republic is due to the health insurance allowance that reduces employee and employer SSCs at 67% of the median wage but does not apply at 67% of the AW .

The average tax wedge on the single worker at 67% of the median wage is highest in Hungary (46.2% of gross wage earnings) and lowest in Chile (7.0%) with an OECD average of 29.8%. The OECD average tax wedge on a worker at 67% of the median wage is 3.2 percentage points lower than the tax wedge applying at 67% of the average wage (32.4%). The strongest reductions in the tax wedge between 67% of the median and 67% of the average wage are seen in Portugal (where no personal income tax applies at 67% of the median wage), France (where the in-work benefit is paid at 67% of the median wage) and Turkey (where a tax credit is paid on earnings below the minimum wage, which is the case at 67% of median wage).

Figure 2.8. Tax wedges for single workers on 67% of median and average wage, 2017



Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

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Table 2.3 sets out the key indicators for median and average wage earners at 67% of each wage level in 2017.

Table 2.3. Tax burden indicators at 67% of average and median wage, 2017

	67% average wage				67% median wage			
	NPMTR	NPATR	Marginal tax wedge	Tax wedge	NPMTR	NPATR	Marginal tax wedge	Tax wedge
Australia	36.0	19.1	39.6	23.6	39.6	15.6	39.6	20.4
Austria	43.3	26.9	55.8	43.1	36.2	23.7	50.4	40.6
Belgium	54.3	33.3	65.5	47.3	73.5	29.2	81.9	43.7
Canada	25.3	17.5	33.0	25.7	25.3	16.5	33.0	24.8
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	31.1	20.7	48.6	40.8	31.1	18.5	48.6	39.1
Denmark	39.7	33.3	39.7	33.3	39.7	32.2	39.7	32.2
Estonia	21.3	17.0	41.2	38.0	21.3	16.1	41.2	37.3
Finland	44.1	22.4	54.3	36.6	37.4	20.5	48.8	35.0
France	43.9	25.4	69.3	42.8	65.8	21.9	81.3	33.9
Germany	47.1	34.8	55.7	45.4	45.3	32.6	54.2	43.6
Greece	34.5	20.9	47.6	36.7	34.5	17.7	47.6	34.2
Hungary	33.5	33.5	46.2	46.2	33.5	33.5	46.2	46.2
Iceland	35.5	25.1	39.5	29.9	35.5	23.6	39.5	28.4
Ireland	29.0	15.8	35.9	24.0	29.0	13.0	35.9	21.4
Israel	26.0	11.2	31.2	15.1	22.0	6.0	27.4	9.3
Italy	40.4	21.9	54.7	40.7	40.4	18.0	54.7	37.7
Japan	22.8	20.6	33.0	31.0	22.8	20.2	33.0	30.8
Korea	21.0	10.9	28.5	19.3	10.7	9.9	19.1	18.3
Latvia	32.0	28.2	45.0	41.9	32.0	27.4	45.0	41.3
Lithuania	31.5	18.4	47.8	37.8	31.5	14.6	47.8	34.9
Luxembourg	37.2	20.3	45.0	30.2	29.6	16.2	38.3	26.6
Mexico	12.1	4.6	17.5	16.1	12.1	1.7	17.5	14.7
Netherlands	46.2	22.5	51.6	30.4	42.8	18.0	48.5	26.4
New Zealand	17.5	13.7	17.5	13.7	17.5	13.1	17.5	13.1
Norway	34.6	24.2	42.1	32.9	34.6	22.7	42.1	31.6
Poland	26.7	24.3	37.0	35.0	26.7	23.6	37.0	34.4
Portugal	39.5	21.6	51.1	36.6	11.0	11.0	28.1	28.1
Slovak Republic	29.9	20.4	46.4	39.2	36.3	16.9	57.8	35.2
Slovenia	34.6	30.4	43.6	40.0	34.6	24.5	43.6	35.0
Spain	28.1	16.6	44.6	35.8	44.7	13.6	57.4	33.5
Sweden	28.6	22.4	45.6	40.9	28.6	21.4	45.6	40.2
Switzerland	21.7	14.3	26.3	19.4	19.8	13.1	24.5	18.2
Turkey	32.8	24.7	42.8	33.5	28.5	19.5	39.2	27.3
United Kingdom	32.0	19.3	40.2	26.3	32.0	15.8	40.2	22.3
United States	29.3	23.1	34.3	29.2	29.3	20.7	34.3	27.3
OECD	35.5	21.3	44.7	32.4	31.7	18.6	41.5	29.8

Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

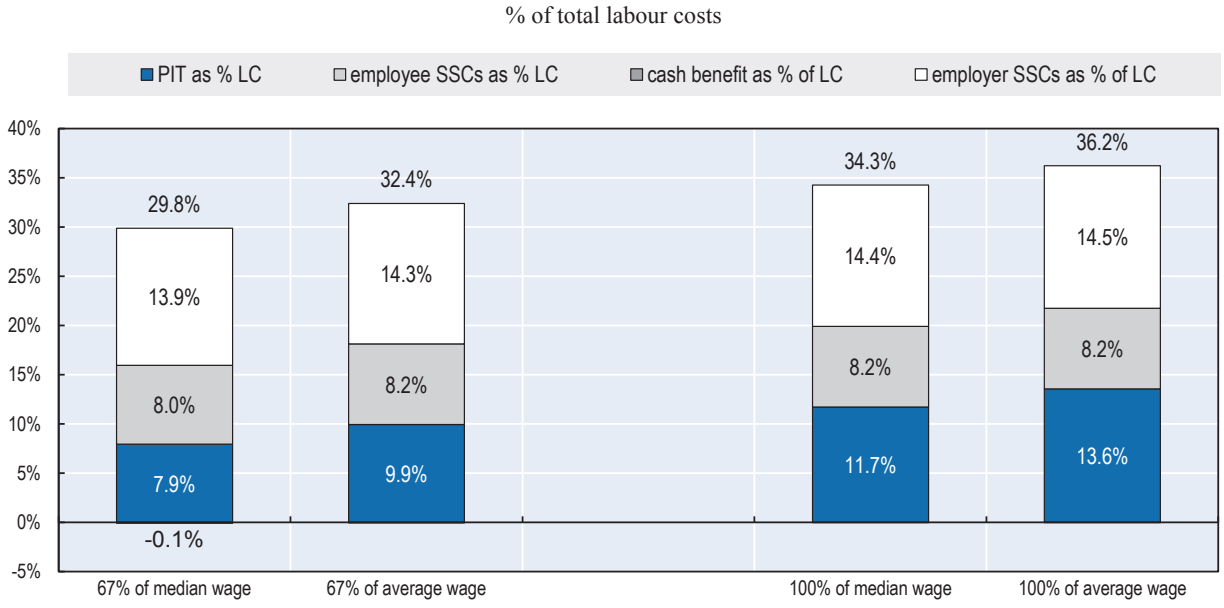
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Comparing the composition of the average tax wedge for 100% and 67% of median and average wage earnings

Differences in the labour taxation of median and average wage earnings arise due to the interaction of lower wage levels at median earnings with the progressive nature of most labour taxation systems in the OECD. This progressivity is primarily seen in the personal income tax system and in the availability of deductions and allowances for personal income taxpayers. Both employer and employee SSCs, are less progressive and contribute less to the change in net personal tax rates and tax wedges as the wage level decreases.

Figure 2.9 shows the decomposition of the OECD average tax wedge for each of the four income levels shown in this Special Feature. Within both pairs of income levels (100% of the median and the average wage; and 67% of each), personal income taxes change most when median rather than average wage levels are considered. This is due to the progressive tax schedules that apply in almost all OECD countries and due to deductions and allowances that apply up to a maximum level of income. The amount of personal income taxes, measured as a percentage of total labour costs, increases roughly two percentage points on average between 67% of the median wage and 67% of the average wage and just slightly less than two percentage points between 100% of the median wage and the average wage. Personal income taxes also increase in almost every OECD country when moving from the median wage to the comparable level of average wage.

Figure 2.9. Decomposition of OECD average tax wedge at different wage levels, 2017



Source: Taxing Wages models using data on median wages from EUROSTAT SES and OECD ELS earnings distribution databases.

StatLink http://dx.doi.org/10.1787/888933923106

Employer SSCs also increase, on average, when moving from the median wage to the comparable level of the average wage. When moving between 67% of both wage levels, employer SSCs increase by 0.4 percentage points and the increase is smaller between the median and average wage, at 0.1 percentage points. The small size of this increase

reflects the fact that across OECD countries, differences in employer SSCs are seen in only nine OECD countries between 67% of each wage level and in only six countries between 100% of each wage level.

Employee SSCs are the same, on average, for the worker at 67% of the average wage and the wage earner at both the median and the average wage, and slightly lower for the worker at 67% of median wage, the lowest income level of the group. This again reflects that differences in employee SSCs, even at 67% of both wage levels, are only seen in six OECD countries. Finally, the impact of cash benefits is very limited for these family types, showing a reduction on average of 0.1% for the worker at 67% of the median wage and no reduction for the other family types, but would be more significant if compared against the low-income earner with children where cash benefits are more prominent (as shown in the special feature in the 2018 edition of Taxing Wages).

Conclusions

Compared to the average wage, the median wage can be considered a better measure of the impact of taxation across the distribution of wage earnings, because it is less influenced by outliers. This is particularly important in the presence of increasing inequality in most OECD countries. The median wage also permits a comparison of labour taxation across OECD countries at a consistent point in the wage distribution of each country, which is not the case when using the average wage as a reference point. However, the main drawback in using the median wage is that calculating the median wage is more difficult than calculating the average wage. Due to a lack of comparable data, a number of estimations have had to be used in this Special Feature to ensure that the median wage is both timely and consistent with the methodology for the average wage used in the rest of the Report.

Median wages are consistently lower than average wages in OECD countries, at 80.8% of the average wage in 2017 (i.e., the OECD average) and in 24 OECD countries, the median wage is closer to 67% than to 100% of the average wage. The interaction of the lower wage levels and the progressive labour taxation applied in OECD countries means that the average tax burden, calculated either as net personal tax rates or the tax wedge, is lower (or in rare cases the same) for the worker on the median wage relative to the worker on the average wage. This is the case in all OECD countries except Chile and Hungary, although the difference is not significant in most countries. The findings suggest that taxes at the mean wage are – for most countries – a helpful approximation of taxes at the median wage.

To assess the impact of labour taxation on low-income workers, a reference point of 67% of median wage can also offer a better representation of low-income workers than 67% of average wage. Sixty-seven percent of the median wage is closer to the minimum wage in almost all countries for which data is available and only below the level of minimum wage in two countries (Turkey and Portugal). Net personal average tax rates and the average tax wedge are, therefore, again lower in all OECD countries for the worker at 67% of the median wage. Marginal tax rates for the worker on 67% of the median wage are the same as for the worker on 67% of the average wage in 24 countries and lower in 11 countries. However, in four countries, the NPMTR and the marginal tax wedge are higher for the worker on 67% of the median wage compared to those on 67% of the average wage. These are examples of spikes in the marginal tax rate that result from the targeting of in work tax credits and other provisions at low wages. Similar results could

appear in other countries at other wage levels and the issue is not specific to these four countries.

The lower tax levels applying to the median rather than average wage levels are primarily driven by personal income taxation, which is the most progressive of the major components of the labour tax system in most OECD countries. Employee SSCs play a negligible role and while employer SSCs are higher on average, these generally only have an impact in a handful of countries. Cash benefits do not play a large role in the tax rates on median earnings, even at 67% of median earnings, but would likely play a larger role if families with children were included in the analysis.

Notes

[1] The average wage used in this publication is the mean of all wage incomes of full-time employees (including manual and non-manual) in sectors B-N inclusive, as explained in the Annex.

[2] The average worker corresponds to the single wage earner at 100% of average wage discussed in the rest of the Report.

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Chapter 3. 2018 tax burdens

The 2018 tax burden results based on the eight model household types are presented in Tables 3.1 to 3.13 and Figures 3.1 to 3.7. The model household types vary by marital status, number of children and economic status: single taxpayers, without children, earning 67%, 100% and 167% of the average wage (AW); a single parent, with two children, earning 67% of the AW; a single earner couple at the AW level with two children; two-earner couples at 133% and 167% of the AW with two children; and a two-earner couple, without children, at 133% of the AW.

The chapter presents different measures for the average tax burdens (tax wedge, personal tax rate, net personal tax rate, personal income tax rate and employee social security contribution rate) and marginal rates (tax wedge and net personal tax rate). The results for two measures of tax progressivity are also considered: tax elasticity on gross earnings and labour costs.

Average tax burdens

Table 3.1[1] and Figure 3.1 show the average tax wedge (combined burden of income tax, employee and employer social security contributions) taking into account the amount of cash benefits each specific household type is entitled to. Total taxes due minus transfers received are expressed as a percentage of labour costs, defined as gross wage *plus* employers' social security contributions (including payroll taxes). In the case of a single person on average wage the tax wedge ranges from 7.0% (Chile) and 18.4% (New Zealand) to 49.5% (Germany) and 52.7% (Belgium). For a one-earner married couple, with two children, at the same wage level the tax wedge is lowest in New Zealand (1.9%) and Chile (7.0%) and highest in Italy (39.1%) and France (39.4%). As stated in Chapter 1, the tax 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 both receipt of cash benefits and/or more advantageous tax treatment. It is also interesting to note that the tax wedge for a single parent, with two children, earning 67% of the average wage is negative in New Zealand (-20.5%), Canada (-15.2%), and Poland (-12.0%). This is due to the amount of cash benefits received by these families plus any applicable non-wastable tax credits that exceed the sum of the total tax and social security contributions that are due.

Table 3.2 and Figure 3.2 present the combined burden of the personal income tax and employee social security contributions, expressed as a percentage of gross wage earnings (the corresponding measures for income tax and employee contributions separately are shown in Tables 3.4 and 3.5). A single person at the average wage level without children has the highest average tax plus contributions burden in Belgium (39.8%). The lowest average rates were in Chile (7.0%), Mexico (10.2%), Korea (14.9%), Estonia (15.0%), Switzerland (17.4%), Israel (18.1%) and New Zealand (18.4%).

Table 3.3 shows the combined burden of income tax and employee social security contributions, reduced by the entitlement to cash benefits, for each household type. Figure 3.3 illustrates this burden for single individuals without children and one-earner married couples with two children, with both household types on average earnings. Comparing Table 3.2 and Table 3.3, the average tax rates for families with children (columns 4 -7) are lower in Table 3.3because most OECD countries support families with children through cash benefits.

A lower burden is also observed for a single individual, without children, at 67% of the average wage in Canada because of a cash transfer paid to mitigate the burden imposed by the federal consumption tax (i.e. the *Goods and Services Tax Credit*; further details can be found in the country chapter contained in Part II of this Report). The same is true in Denmark for single taxpayers at 67% and 100% of the average wage and two-earner married couples, without children, at 133% of the average wage who receive a *Green Check* to compensate for increased environmental taxes.

Comparing Table 3.2 and Table 3.3, for single parents, with two children, earning 67% of the average wage, 30 countries provide cash benefits. In Poland, Canada and New Zealand these represent respectively 47.2%, 38.6% and 35.6% of income and they are at least 25% of income in Denmark (27.0%). 29 countries provide benefits for a one-earner married couple, with two children, earning the average wage level, although these are less generous relative to income, ranging up to 16.5% (Canada and New Zealand). The lower level of cash benefits for the married couple can be attributed to three reasons: single parents may be eligible for more generous treatment; the benefits themselves may be fixed in absolute amount; or the benefits may be subject to income testing.

Table 3.4 shows personal income tax due as a percentage of gross wage earnings. For single persons, without children, at the average wage (column 2) – the income tax burden varies between 0,01% (Chile) and 35.8% (Denmark). In most OECD member countries, at the average wage level, the income tax burden for one-earner married couples with two children is lower than that faced by single persons (compare columns 2 and 5). These differences are clearly illustrated in Figure 3.4. In nine OECD countries, the income tax burden faced by a one-earner married couple with two children is less than half that faced by a single individual (Germany, Hungary, Luxembourg, Poland, Portugal, the Slovak Republic, Slovenia, Switzerland and the United States). In contrast, there is no difference in eight countries – Australia, Finland, Israel, Lithuania, Mexico, New Zealand, Norway and Sweden. In Chile, the one-earner married couple at the AW level with children did not pay personal income tax.

There is only one OECD member country where a married average worker with two children has a negative personal income tax burden. This is due to the presence of non-wastable tax credits, whereby credits are paid in excess of the taxes otherwise due. This results in tax burdens of -5.1% in the Czech Republic. Similarly, single parents, with two children, earning 67% of the average wage show a negative tax burden in six countries – the Czech Republic, Germany, Israel, Poland, Spain and the United States. In two other countries – Chile and Hungary – this household type pays no income tax.

A comparison of columns 5 and 6 in Table 3.4 demonstrates that if the second spouse has a job which pays 33% of the average wage, the income tax burden of the household (now expressed as 133% of the average wage) is slightly higher in seventeen countries, the largest differences being in the Czech Republic (6.2 percentage points) and Germany (5.6 percentage points). At the same time, the income tax burden is lower in eighteen countries, the largest differences being in Finland (-5.0 percentage points), Australia (-4.3 percentage points) and the Netherlands (-4.0 percentage points). There is no impact on the tax burden in Chile.

An important consideration in the design of an income tax is the level of progressivity - the rate at which the income tax burden increases with income. A comparison of columns 1 to 3 in Table 3.4 provides an insight into the levels of progressivity in the income tax systems of OECD countries. Comparing the income tax burden of single individuals at the average wage level with their counterparts at 167% of the average wage (columns 2 and 3), the lower paid worker faces a lower tax burden in all countries except in Hungary. There, a flat tax rate is applied on labour income and all households without children pay the same percentage of income tax. The same is true for single individuals at 67% of the average wage level compared with their counterparts at the average wage level. Finally the burden faced by single individuals at 67% of the average wage level represents 25% or less of the burden faced by their counterparts at 167% in four OECD countries: Chile (0%), Mexico and the Netherlands (both 24%) and Korea (25%).

The addition of social security contributions to the average tax rate reduces this progressivity as well as the proportional tax savings (i.e. tax savings of the low income workers relative to the higher income workers). When comparing Table 3.2 with Table 3.4, the OECD personal average tax burden of single individuals at 67% of the average wage level is only 32% lower than their counterparts at 167% compared to the OECD average tax savings of 47% for personal income taxes alone. The OECD average tax savings observed for one-earner married couples with two children at the average wage level relative to the average single workers falls from 34% to 21%. These lower figures

reflect that there is little variation between social security contribution rates across household types, as shown in Table 3.5.

Table 3.5 shows employee social security contributions as a percentage of gross wage earnings. For a single worker without children at the average wage (column 2) the contribution rate varies between zero (Australia, Denmark and New Zealand) and 22.1% (Slovenia). Australia, Denmark and New Zealand do not levy any employee social security contributions paid to general government and there are three other countries with very low rates - Iceland (0.3%), Mexico (1.4%) and Estonia (1.6%). 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 ceiling usually applies to wage levels higher than 167% of the average wage. The flat rates result in a constant average burden of employee social security contributions for most countries between 33% and 167% of average wage earnings. Constant proportional burden for employee social security contributions for over the eight model household types, is observed in (in decreasing order of rates) Slovenia (22.1%), Poland (17.8%), Greece (16.0%), Turkey (15.0%), the Czech Republic, Latvia and Portugal (all 11.0%), Finland (9.8%), Lithuania (9.0%), Norway (8.2%), the United States (7.7%), Chile (7.0%), Spain (6.4%), Switzerland (6.2%) and Estonia (1.6%).

In addition, at the average wage level only Germany and the Netherlands impose different burdens of social security contributions on employees according to their family status (see Figure 3.5).

Marginal tax burdens

Table 3.6 and Figure 3.6 show the percentage of the marginal increase in labour costs that is deducted through the combined effect of increasing personal income tax, employee and employer (including payroll taxes) social security contributions and decreasing cash transfers. It is assumed that the gross earnings of the principal earner rise by 1 currency unit. This is the marginal tax wedge. In most cases, it absorbs 25% to 55% of an increase in labour costs for single individuals on average wage without children. However, in seven OECD countries these individuals face higher marginal wedges – Belgium (65.1%), Italy (61.7%), Germany (60.2%), Austria (59.6%), France (58.4%), Luxembourg (57.1%) and Finland (55.4%). Mexico (23.4%) and Chile (10.2%) have the lowest marginal tax wedge.

In twenty-six OECD member countries, the marginal tax wedge for one-earner married couples at average earnings with two children is either the same or within 5 percentage points as that for single persons at average wage earnings with no children. The marginal tax wedge is more than 5 percentage points lower for one-earner married couples in six countries: Luxembourg (17.5 percentage points), France (16.1 percentage points), United States (9.3 percentage points), Germany (7.9 percentage points), Slovenia and Switzerland (both 7.4 percentage points). In contrast, 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, in Canada (36.1 percentage points), New Zealand (25.0 percentage points), Iceland (9.0 percentage points) and the Netherlands (5.7 percentage points). These higher marginal rates arise because of the phase out of income-tested tax reliefs and/or cash benefits. When an income-tested measure is being phased out, the reduction in the relief or benefit compounds the increase in the tax payable. These programmes are set out in greater detail in the relevant country chapters in Part II of the Report.

Table 3.7 and Figure 3.7 show the incremental change to personal income tax and employee social security contributions less cash benefits when gross wage earnings increase at the margin (it is assumed that the gross earnings of the principal earner rise by 1 currency unit). As in the case of the tax wedge, in most cases personal income tax and employee social security contributions absorb 25% to 55% of a worker's pay rise for single individuals without children at the average wage level. The marginal tax rate for the average worker is higher than 55% only in Belgium (55.6%) and lower than 25% only in Chile (10.2%), Mexico (17.6%) and Korea (22.8%).

In twenty-five OECD member countries, the net marginal personal tax rate for one-earner married couples with two children at the average wage level is either the same or within 5 percentage points as that for single persons with no children. The marginal rate is more than 5 percentage points lower for the one-earner married couples in seven countries: France (22.0 percentage points), Luxembourg (20.0 percentage points), the United States (10.0 percentage points), Germany (9.5 percentage points), Slovenia (8.6 percentage points), Switzerland (7.9 percentage points), and Portugal (5.5 percentage points). In contrast, 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 in Canada (39.4 percentage points), New Zealand (25.0 percentage points), Iceland (9.6 percentage points) and the Netherlands (6.4 percentage points). Similar to the marginal tax wedges, these higher marginal rates arise because of the phase out of income-tested tax reliefs and/or cash transfers.

Table 3.8 shows the percentage increase in net income relative to the percentage increase in gross wages when the latter increases by 1 currency unit, i.e. the elasticity of after-tax income.[2] Under a proportional tax system, net income would increase by the same percentage as the increase in gross earnings, in which case the elasticity is equal to 1. The more progressive the system is – at the income level considered – the lower this elasticity will be. In the case of the one-earner married couples, with two children, at the average wage, column 5 of Table 3.8 shows that Canada (0.28), New Zealand (0.46), Belgium and Ireland (both 0.56) have, on this measure, the most progressive systems of income tax plus employee social security contributions taking into account tax provisions and cash transfers for children at this income level. In contrast, Chile (1.00), France (0.95) and Mexico (0.92) either implement or are close to a proportional system of income tax plus employee social security contributions – at least for this household type.

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

Table 3.9 provides a different elasticity measure: the percentage increase in net income relative to the percentage increase in labour costs (i.e. gross wage earnings plus employer social security contributions and payroll taxes) when the latter rises by 1 currency unit.[3] In this case, taxes and social security contributions paid by employers are also part of the analysis. In half of the OECD member countries the value of this elasticity lies between 0.5 and 0.97 for the eight selected household types. This elasticity is below 0.5 for single parents earning 67% of the average wage level in Belgium (0.47), Australia and Canada (both 0.42), Slovenia (0.41), France (0.36), Ireland (0.27), the United Kingdom (0.26) and Poland (0.03) and for one-earner married couples at the average wage level with two children in New Zealand (0.46) and Canada (0.28). In contrast, the elasticity is between 0.98 and 1.0 for most of the household types in Chile and some household types in

Hungary, Japan, Mexico and Poland, and one household type in Estonia, Latvia and Lithuania for the single worker earning 167% of the average wage (all 1.00). Under this elasticity measure the income tax system is regressive for a single individual at 167% of the average wage in Germany (1.14) and Austria (1.20).

Table 3.10 and Table 3.11 set out figures for gross wage earnings and net income for the eight household types 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 3.10, column 4) over USD 40 000 in thirteen countries: Switzerland (USD 63 909), Luxembourg (USD 48 456), Korea (USD 48 045), Iceland (USD 47 410), the Netherlands (USD 45 364), Australia (USD 45 066), Ireland (USD 44 709), the United Kingdom (USD 43 733), the United States (USD 41889), Norway (USD 41 459), Austria (USD 40 813), Germany (USD 40 547) and Japan (USD 40 266). The corresponding lowest levels were in Mexico (USD 11 743), Latvia (USD 17 149), the Slovak Republic (USD 19 148), Lithuania (USD 19 247) and Hungary (USD 19 796). In the case of a one-earner married couple with two children at the average earnings level (see Table 3.11), families take home over USD 50 000 in Germany, Iceland, Ireland, Luxembourg and Switzerland; with the lowest level again being in Mexico. With the exceptions of Chile and Mexico, the one-earner married couple takes home more than the single individual, both household types at the average wage level, due to the favourable tax treatment of this household and/or the cash transfers to which they are entitled.

Table 3.12 and Table 3.13 show the corresponding figures to Table 3.10 and Table 3.11 for labour costs and net income. Thus, the 'net' columns in Table 3.10 and Table 3.11 are identical to those in Table 3.12 and Table 3.13, respectively. Usually, labour costs are much higher than gross wages, because any employer social security contributions (including payroll taxes) are taken into account. If measured in US dollars with equal purchasing power, labour costs for single workers earning the average wage level (see Table 3.12) are highest in Switzerland (USD 82 186), Germany (USD 80 2844) and Belgium (USD 79 308), and lowest in Mexico (USD 14 616), Chile (USD 23 941) and Latvia (USD 29 727). Annual labour costs are equal to annual gross wage in Chile, Denmark and New Zealand. In those countries neither compulsory employer social security contributions nor payroll taxes paid to general government are levied on wages. However, employers in Chile and Denmark are subject to non-tax compulsory payments.

Notes

[1] Tables 3.1 to 3.7 show figures rounded to the first decimal. Due to rounding, changes in percentage points that are presented in the text may differ by one-tenth of a percentage point relative to those in the Tables.

[2] The reported elasticities in Table 3.8 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 3.7 and AETR is the average rate of income tax plus employee social security contributions less cash benefits reported in Table 3.3.

[3] The reported elasticities in Table 3.9 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 3.6 and AETR is the average rate of income tax plus employee and employer social security contributions less cash benefits reported in Table 3.1.

Table 3.1. Income tax plus employee and employer contributions less cash benefits, 2018

As % of labour costs, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	24.1	28.9	34.3	1.9	21.5	24.8	27.0	24.8
Austria	43.3	47.6	50.9	28.1	37.4	36.8	40.3	43.7
Belgium	46.1	52.7	59.0	32.2	37.3	37.2	45.1	43.7
Canada	25.8	30.7	32.1	-15.2	11.7	19.9	24.1	27.6
Chile	7.0	7.0	8.3	6.2	7.0	4.8	6.7	7.0
Czech Republic	41.4	43.7	45.7	21.4	25.5	31.3	34.8	41.3
Denmark	33.2	35.7	41.5	4.9	25.2	28.8	31.0	33.4
Estonia	32.9	36.5	41.2	18.0	26.6	28.4	30.3	34.2
Finland	36.1	42.3	48.6	25.8	37.8	34.8	37.1	38.2
France	43.1	47.6	54.1	25.2	39.4	36.9	42.4	42.2
Germany	45.4	49.5	51.3	31.5	34.4	39.0	42.6	45.3
Greece	36.9	40.9	46.6	30.7	37.9	37.5	38.4	39.5
Hungary	45.0	45.0	45.0	21.9	30.3	33.9	36.2	45.0
Iceland	30.1	33.2	38.0	19.5	21.5	28.2	31.9	30.0
Ireland	24.2	32.7	41.5	3.1	17.3	19.0	24.7	23.9
Israel[1]	15.5	22.4	31.8	2.4	19.9	16.7	16.1	18.6
Italy	40.9	47.9	54.0	25.9	39.1	38.6	41.7	42.9
Japan	31.2	32.6	35.1	25.2	27.4	28.2	29.6	31.3
Korea	19.8	23.0	25.4	17.6	21.0	20.4	20.7	21.6
Latvia	38.7	42.3	42.6	23.8	32.3	31.7	34.9	39.2
Lithuania	37.1	40.6	42.1	26.0	33.2	35.8	36.3	39.4
Luxembourg	30.4	38.2	45.5	7.4	17.0	20.8	26.3	29.3
Mexico	16.1	19.7	22.7	16.1	19.7	17.9	18.2	17.9
Netherlands	30.8	37.7	42.2	7.1	32.6	28.2	29.9	33.1
New Zealand	13.8	18.4	24.0	-20.5	1.9	10.8	17.1	17.0
Norway	32.8	35.8	41.6	22.4	32.4	30.4	32.5	33.0
Poland	35.1	35.8	36.3	-12.0	20.9	24.6	27.1	35.1
Portugal	36.5	40.7	46.0	22.1	29.0	30.2	35.5	36.4
Slovak Republic	39.5	41.7	43.6	29.3	30.3	33.8	36.7	39.0
Slovenia	40.0	43.3	46.7	13.7	25.2	34.9	35.4	43.6
Spain	35.9	39.4	43.8	24.5	33.9	35.5	36.3	36.5
Sweden	41.0	43.1	51.8	33.3	37.9	37.5	39.1	41.4
Switzerland	19.5	22.2	26.9	4.7	9.8	12.9	16.1	20.0
Turkey	34.2	38.9	42.5	32.7	37.2	34.9	36.4	35.7
United Kingdom	26.1	30.9	37.3	10.4	26.2	22.9	26.5	26.0
United States	27.6	29.6	34.1	9.6	18.5	22.0	23.9	27.5
Unweighted average								
OECD-Average	**32.1**	**36.1**	**40.4**	**16.0**	**26.6**	**28.1**	**30.8**	**32.9**
OECD-EU 23	**37.4**	**41.6**	**46.0**	**19.8**	**30.7**	**32.1**	**35.2**	**37.9**

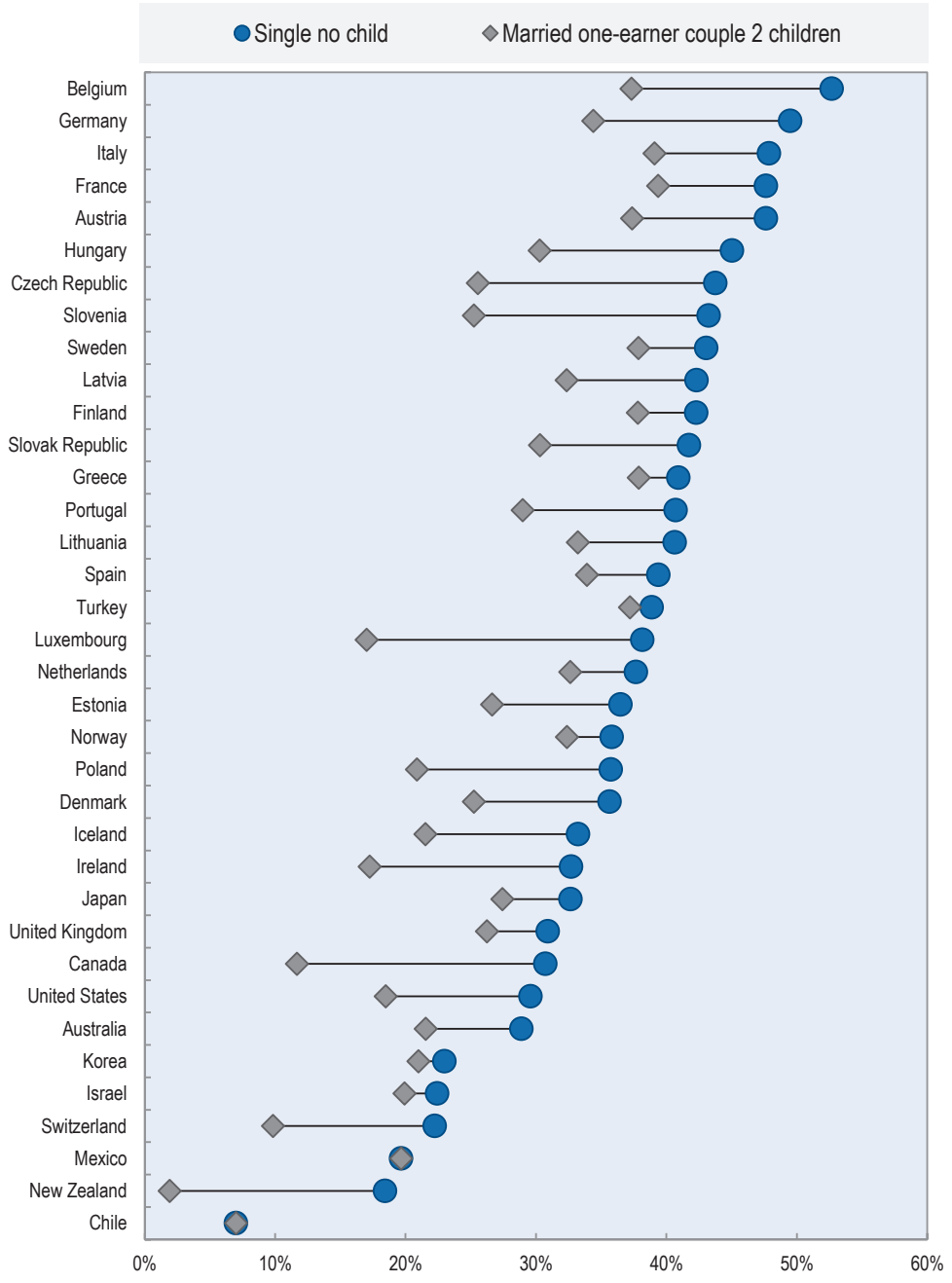
Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933924626

Figure 3.1. Income tax plus employee and employer contributions less cash benefits, 2018

As a % of labour costs, by household type



Notes: The family type 'single no child' corresponds to a wage level of 100% of average wage. The family type 'married one earner couple 2 children' corresponds to a combined wage level of 100%-0% of average wage.
Source: OECD calculations based on country submissions and OECD Economic Outlook, Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933923125

Table 3.2. Income tax plus employee contributions, 2018

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	19.6	24.6	30.4	19.6	24.6	20.3	22.6	20.3
Austria	27.2	32.8	38.0	24.1	30.6	27.2	30.0	27.8
Belgium	32.1	39.8	47.9	26.6	28.4	28.7	35.3	30.6
Canada	18.9	23.0	26.3	10.6	18.4	19.7	21.4	19.7
Chile	7.0	7.0	8.3	7.0	7.0	7.0	7.0	7.0
Czech Republic	21.4	24.6	27.2	3.2	5.9	12.2	16.0	21.4
Denmark	33.5	35.8	41.5	31.9	31.8	33.7	34.9	33.7
Estonia	10.2	15.0	21.3	6.7	10.0	10.0	11.7	11.7
Finland	22.4	30.0	37.6	22.4	30.0	25.0	26.9	25.0
France	24.9	28.7	34.1	21.4	21.4	21.6	25.0	25.5
Germany	34.8	39.7	43.8	18.2	21.7	27.2	31.5	34.7
Greece	21.1	26.1	33.2	20.4	26.6	24.0	24.7	24.3
Hungary	33.5	33.5	33.5	18.4	23.4	25.9	27.4	33.5
Iceland	25.4	28.7	33.8	25.4	21.6	25.3	27.4	25.3
Ireland	15.9	25.4	35.1	10.7	15.5	16.1	20.8	16.1
Israel[1]	11.5	18.1	27.5	3.8	18.1	14.5	13.3	14.5
Italy	22.3	31.4	39.4	14.8	24.7	21.5	24.9	24.9
Japan	20.6	22.3	26.0	20.6	21.0	20.8	21.7	20.8
Korea	11.5	14.9	18.7	9.0	12.7	12.1	12.4	13.4
Latvia	23.8	28.4	28.8	11.8	20.3	18.4	21.7	24.5
Lithuania	17.5	22.1	24.0	17.5	22.1	18.9	20.3	18.9
Luxembourg	20.7	29.5	37.9	13.6	18.2	19.4	23.6	19.4
Mexico	4.4	10.2	14.9	4.4	10.2	6.3	7.9	6.3
Netherlands	22.7	30.5	37.8	14.6	29.0	22.7	24.1	25.3
New Zealand	13.8	18.4	24.0	15.1	18.4	17.0	17.1	17.0
Norway	24.0	27.5	34.0	21.0	27.5	24.3	26.1	24.3
Poland	24.5	25.2	25.8	16.8	20.1	21.4	22.5	24.5
Portugal	21.4	26.6	33.2	11.7	15.7	16.4	20.2	21.3
Slovak Republic	20.9	23.9	26.3	14.5	13.6	17.1	20.1	20.3
Slovenia	30.3	34.1	38.1	24.1	25.8	26.3	28.8	31.1
Spain	16.8	21.3	27.0	2.0	14.1	16.2	17.3	17.6
Sweden	22.5	25.2	36.7	22.5	25.2	23.0	24.1	23.0
Switzerland	14.4	17.4	22.4	8.7	10.8	12.4	14.8	15.0
Turkey	24.6	28.2	32.4	22.9	26.2	24.4	26.0	25.3
United Kingdom	19.2	23.4	29.8	8.8	22.8	19.1	21.7	19.1
United States	21.4	23.8	28.8	1.9	11.7	15.4	17.6	21.3
Unweighted average								
OECD-Average	**21.0**	**25.5**	**30.7**	**15.2**	**20.1**	**19.8**	**21.9**	**21.8**
OECD-EU 23	**23.5**	**28.4**	**33.8**	**16.4**	**21.6**	**21.4**	**24.1**	**24.1**

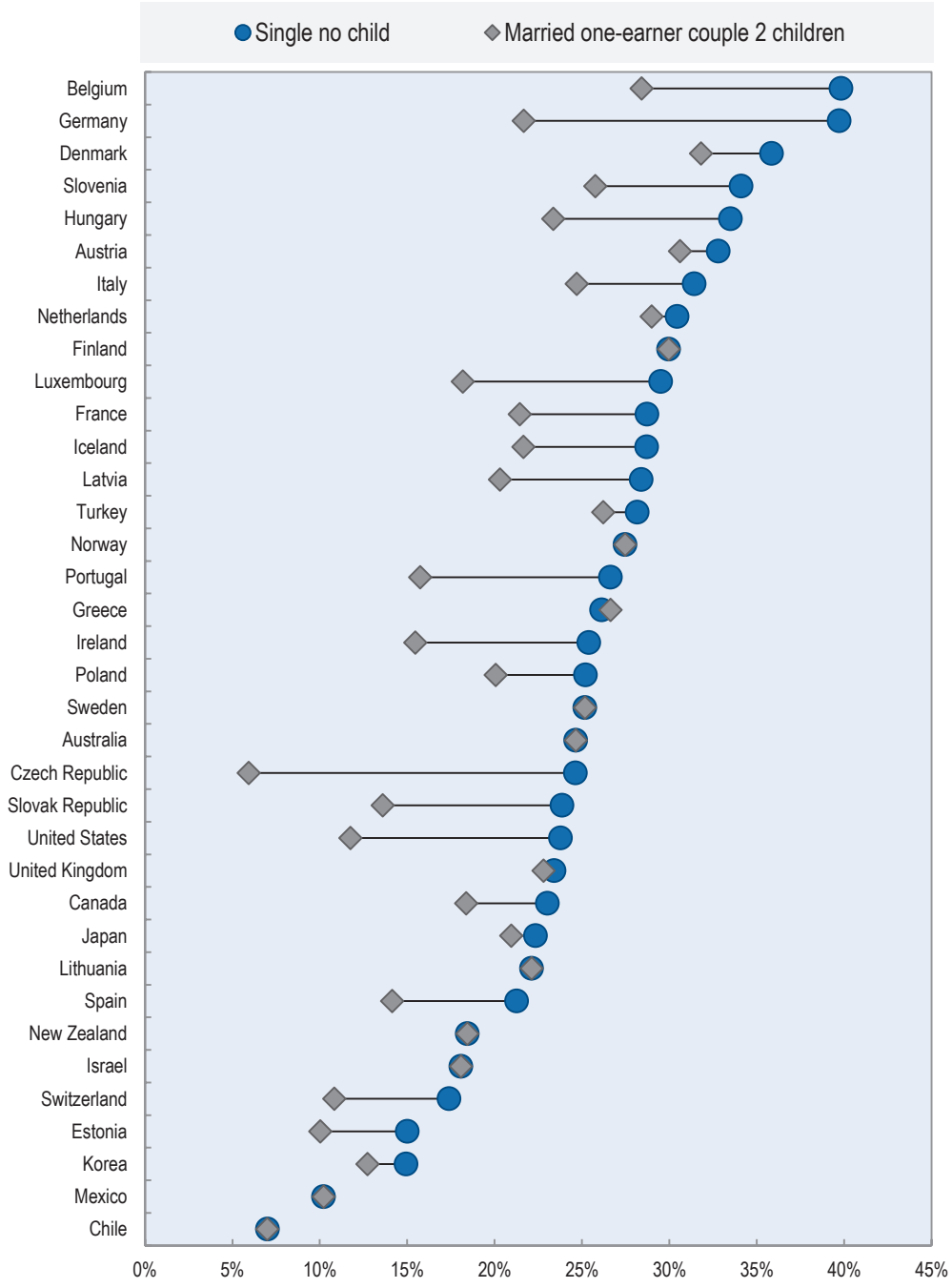
Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933924645

Figure 3.2. Income tax plus employee contributions, 2018

As % of gross wage earnings, by household type and wage level



Notes: The family type 'single no child' corresponds to a wage level of 100% of average wage. The family type 'married one earner couple 2 children' corresponds to a combined wage level of 100%-0% of average wage.
Sources: country submissions, OECD Economic Outlook Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933923144

Table 3.3. Income tax plus employee contributions less cash benefits, 2018

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	19.6	24.6	30.4	-3.9	16.9	20.3	22.6	20.3
Austria	27.2	32.8	38.0	7.8	19.6	19.0	23.4	27.8
Belgium	32.1	39.8	47.9	14.5	20.3	22.6	30.4	30.6
Canada	17.6	23.0	26.3	-27.9	1.8	11.2	15.7	19.7
Chile	7.0	7.0	8.3	6.2	7.0	4.8	6.7	7.0
Czech Republic	21.4	24.6	27.2	-5.3	0.2	7.9	12.6	21.4
Denmark	33.2	35.7	41.5	4.9	25.2	28.8	31.0	33.4
Estonia	10.2	15.0	21.3	-9.8	1.8	3.8	6.8	11.7
Finland	22.4	30.0	37.6	9.9	24.5	20.9	23.7	25.0
France	24.9	28.7	34.1	1.4	17.5	18.6	22.6	25.5
Germany	34.8	39.7	43.8	18.2	21.7	27.2	31.5	34.7
Greece	21.1	26.1	33.2	13.3	22.3	21.8	23.0	24.3
Hungary	33.5	33.5	33.5	5.5	15.6	20.1	22.8	33.5
Iceland	25.4	28.7	33.8	14.0	16.2	23.4	27.3	25.3
Ireland	15.9	25.4	35.1	-7.4	8.3	10.7	16.5	16.1
Israel[1]	11.5	18.1	27.5	-2.1	15.4	12.5	11.7	14.5
Italy	22.3	31.4	39.4	2.5	19.9	19.2	23.3	24.9
Japan	20.6	22.3	26.0	13.7	16.3	17.3	18.9	20.8
Korea	11.5	14.9	18.7	9.0	12.7	12.1	12.4	13.4
Latvia	23.8	28.4	28.8	5.4	16.0	15.2	19.2	24.5
Lithuania	17.5	22.1	24.0	2.9	12.4	14.0	16.4	18.9
Luxembourg	20.7	29.5	37.9	-5.5	5.4	9.7	16.0	19.4
Mexico	4.4	10.2	14.9	4.4	10.2	6.3	7.9	6.3
Netherlands	22.7	30.5	37.8	-3.7	24.8	19.8	21.8	25.3
New Zealand	13.8	18.4	24.0	-20.5	1.9	10.8	17.1	17.0
Norway	24.0	27.5	34.0	12.3	23.6	21.4	23.7	24.3
Poland	24.5	25.2	25.8	-30.4	7.9	12.2	15.2	24.5
Portugal	21.4	26.6	33.2	3.6	12.1	13.7	20.2	21.3
Slovak Republic	20.9	23.9	26.3	7.5	8.9	13.5	17.3	20.3
Slovenia	30.3	34.1	38.1	-0.2	13.2	20.6	25.0	31.1
Spain	16.8	21.3	27.0	2.0	14.1	16.2	17.3	17.6
Sweden	22.5	25.2	36.7	12.3	18.3	17.8	20.0	23.0
Switzerland	14.4	17.4	22.4	-1.2	4.2	7.5	10.9	15.0
Turkey	24.6	28.2	32.4	22.9	26.2	24.4	26.0	25.3
United Kingdom	19.2	23.4	29.8	2.0	18.2	15.6	19.0	19.1
United States	21.4	23.8	28.8	1.9	11.7	15.4	17.6	21.3
Unweighted average								
OECD-Average	**21.0**	**25.5**	**30.7**	**2.2**	**14.2**	**16.0**	**19.3**	**21.8**
OECD-EU 23	**23.4**	**28.4**	**33.8**	**2.2**	**15.1**	**16.9**	**20.6**	**24.1**

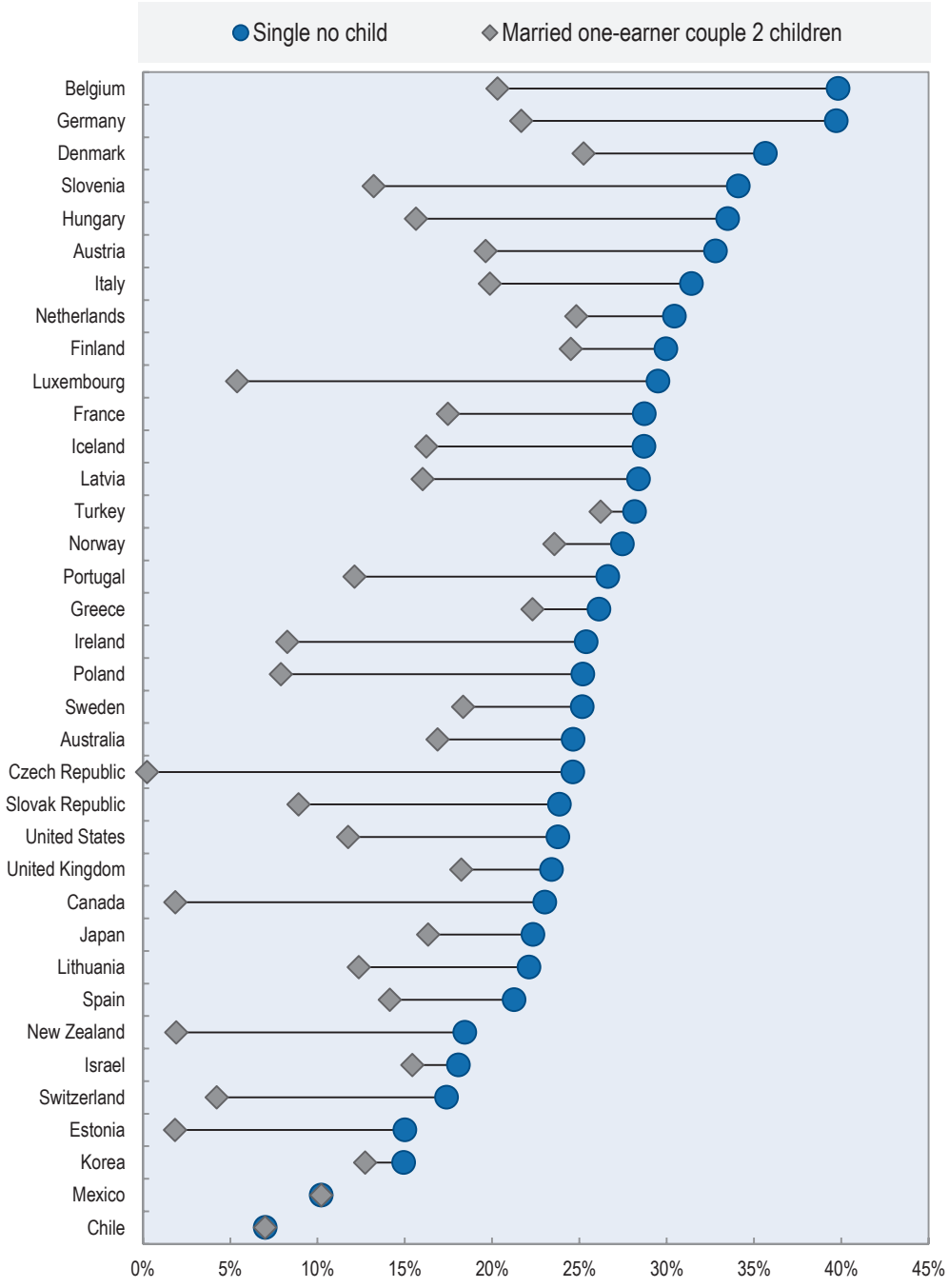
Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924664*

Figure 3.3. Income tax plus employee contributions less cash benefits, 2018

As % of gross wage earnings, by household type and wage level



Notes: The family type 'single no child' corresponds to a wage level of 100% of average wage. The family type 'married one earner couple 2 children' corresponds to a combined wage level of 100%-0% of average wage.
Source: OECD calculations based on country submissions and OECD Economic Outlook, Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933923163

Table 3.4. Income tax, 2018

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	19.6	24.6	30.4	19.6	24.6	20.3	22.6	20.3
Austria	9.3	14.8	21.6	6.2	12.6	10.0	12.0	10.6
Belgium	18.2	25.9	33.9	12.8	14.4	18.0	21.3	19.9
Canada	11.9	15.7	21.6	3.7	11.0	12.8	14.2	12.8
Chile	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Czech Republic	10.4	13.6	16.2	-7.8	-5.1	1.2	5.0	10.4
Denmark	33.5	35.8	41.5	31.9	31.8	33.7	34.9	33.7
Estonia	8.6	13.4	19.7	5.1	8.4	8.4	10.1	10.1
Finland	12.6	20.2	27.8	12.6	20.2	15.2	17.1	15.2
France	13.0	16.8	22.9	9.5	9.5	9.7	13.1	13.5
Germany	14.1	19.1	27.6	-2.1	1.3	6.9	11.1	14.1
Greece	5.1	10.1	17.2	4.4	10.6	8.0	8.7	8.3
Hungary	15.0	15.0	15.0	0.0	4.9	7.4	8.9	15.0
Iceland	24.9	28.4	33.6	24.9	21.3	24.8	27.0	24.8
Ireland	11.9	21.4	31.1	6.7	11.5	13.1	16.8	13.1
Israel[1]	5.4	10.0	17.8	-2.3	10.0	7.5	6.0	7.5
Italy	12.8	21.9	29.8	5.3	15.2	12.0	15.4	15.4
Japan	6.2	7.9	12.9	6.2	6.5	6.3	7.2	6.3
Korea	3.0	6.4	11.7	0.5	4.2	3.6	3.9	4.9
Latvia	12.8	17.4	17.8	0.8	9.3	7.4	10.7	13.5
Lithuania	8.5	13.1	15.0	8.5	13.1	9.9	11.3	9.9
Luxembourg	8.4	17.2	25.5	1.3	5.9	7.1	11.3	7.1
Mexico	3.2	8.9	13.4	3.2	8.9	5.0	6.6	5.0
Netherlands	6.8	17.5	28.2	4.7	17.1	13.1	12.3	13.7
New Zealand	13.8	18.4	24.0	15.1	18.4	17.0	17.1	17.0
Norway	15.8	19.3	25.8	12.8	19.3	16.1	17.9	16.1
Poland	6.7	7.4	8.0	-1.0	2.2	3.5	4.6	6.6
Portugal	10.4	15.6	22.2	0.7	4.7	5.4	9.2	10.3
Slovak Republic	7.5	10.5	12.9	1.1	0.2	4.7	6.7	7.9
Slovenia	8.2	12.0	16.0	2.0	3.7	4.2	6.7	9.0
Spain	10.4	14.9	20.7	-4.4	7.8	9.9	10.9	11.2
Sweden	15.5	18.2	32.0	15.5	18.2	16.0	17.1	16.0
Switzerland	8.2	11.2	16.1	2.4	4.6	6.2	8.6	8.8
Turkey	9.6	13.2	17.4	7.9	11.2	9.4	11.0	10.3
United Kingdom	11.0	14.0	22.3	0.7	13.4	10.9	12.8	10.9
United States	13.7	16.1	21.1	-5.8	4.1	7.7	9.9	13.7
Unweighted average								
OECD-Average	**11.3**	**15.7**	**21.4**	**5.6**	**10.4**	**10.3**	**12.2**	**12.3**
OECD-EU 23	**11.8**	**16.8**	**22.8**	**5.0**	**10.0**	**10.2**	**12.5**	**12.8**

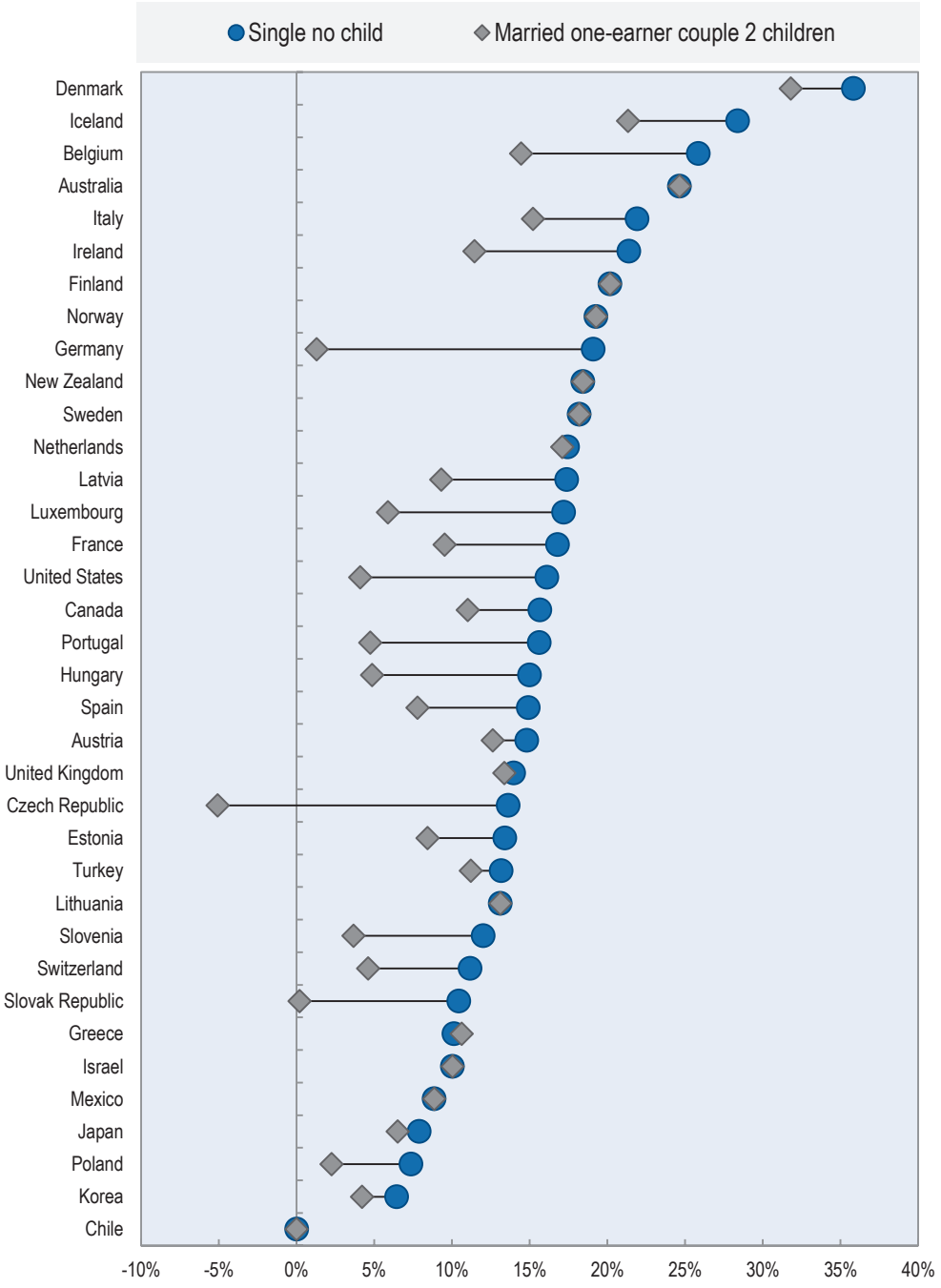
Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924683*

Figure 3.4. Income tax, 2018

As % of gross wage earnings, by household type



Notes: The family type 'single no child' corresponds to a wage level of 100% of average wage. The family type 'married one earner couple 2 children' corresponds to a combined wage level of 100%-0% of average wage.
Source: OECD calculations based on country submissions and OECD Economic Outlook, Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933923182

Table 3.5. Employee contributions, 2018

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Austria	18.0	18.0	16.4	18.0	18.0	17.2	18.0	17.2
Belgium	13.9	14.0	14.0	13.9	14.0	10.7	14.0	10.7
Canada	7.0	7.4	4.7	7.0	7.4	6.9	7.2	6.9
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Finland	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
France	11.9	11.9	11.2	11.9	11.9	11.9	11.9	11.9
Germany	20.6	20.6	16.2	20.4	20.4	20.4	20.4	20.6
Greece	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Hungary	18.5	18.5	18.5	18.4	18.5	18.5	18.5	18.5
Iceland	0.5	0.3	0.2	0.5	0.3	0.5	0.4	0.5
Ireland	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0
Israel[1]	6.1	8.0	9.6	6.1	8.0	6.9	7.3	6.9
Italy	9.5	9.5	9.6	9.5	9.5	9.5	9.5	9.5
Japan	14.5	14.5	13.2	14.5	14.5	14.5	14.5	14.5
Korea	8.5	8.5	7.0	8.5	8.5	8.5	8.5	8.5
Latvia	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Lithuania	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Luxembourg	12.2	12.3	12.4	12.2	12.3	12.2	12.3	12.2
Mexico	1.3	1.4	1.5	1.3	1.4	1.3	1.3	1.3
Netherlands	15.9	13.0	9.6	9.9	11.9	9.6	11.7	11.6
New Zealand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Norway	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
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	13.4	13.4	13.4	12.4	13.4	12.4
Slovenia	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
Spain	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Sweden	7.0	7.0	4.7	7.0	7.0	7.0	7.0	7.0
Switzerland	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Turkey	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
United Kingdom	8.2	9.4	7.5	8.2	9.4	8.1	8.9	8.1
United States	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Unweighted average								
OECD-Average	**9.7**	**9.8**	**9.3**	**9.6**	**9.7**	**9.4**	**9.7**	**9.5**
OECD-EU 23	**11.7**	**11.6**	**11.0**	**11.4**	**11.6**	**11.1**	**11.5**	**11.2**

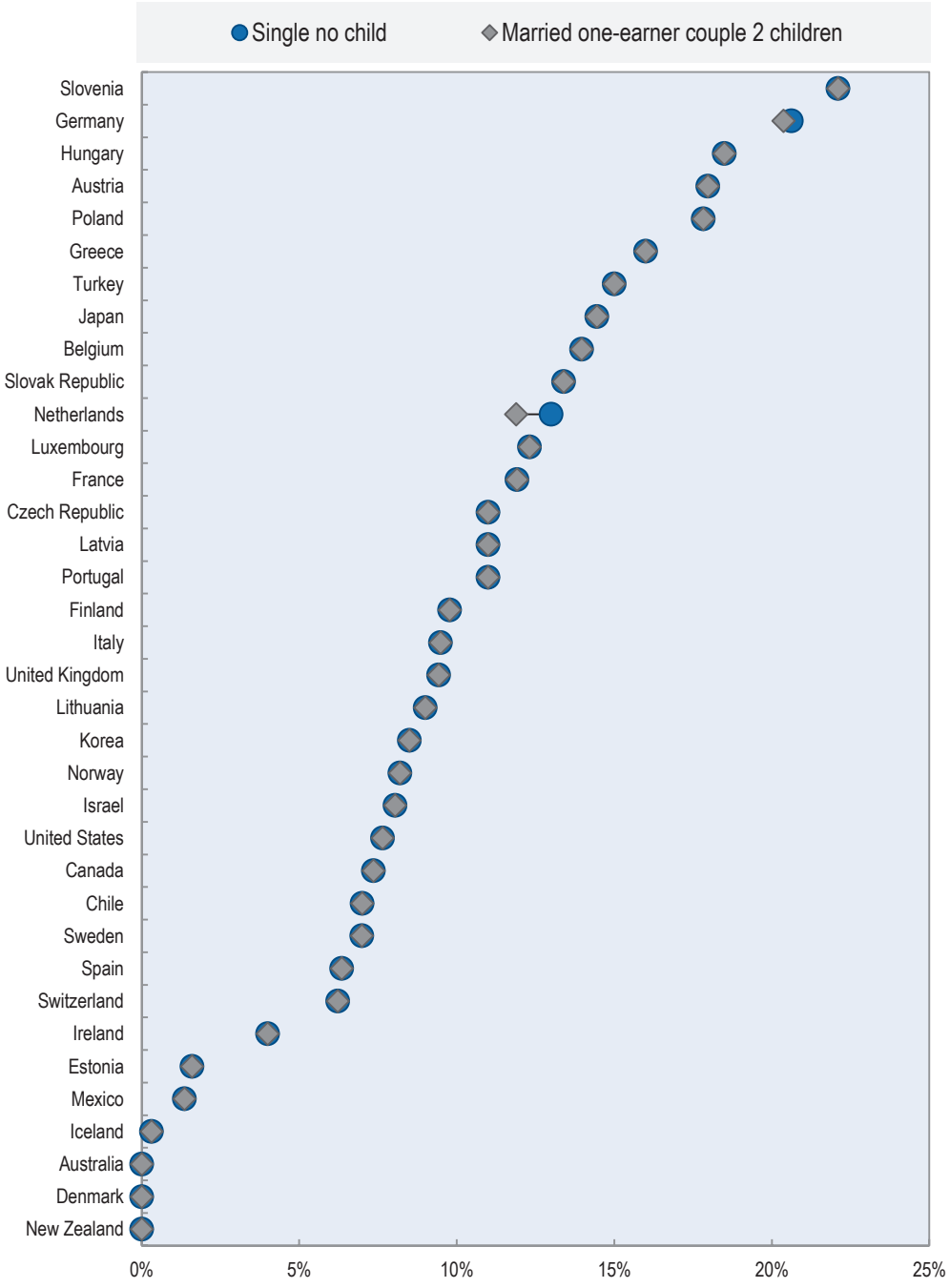
Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933924702

Figure 3.5. Employee contributions, 2018

As % of gross wage earnings, by household type



Notes: The family type 'single no child' corresponds to a wage level of 100% of average wage. The family type 'married one earner couple 2 children' corresponds to a combined wage level of 100%-0% of average wage.
Source: OECD calculations based on country submissions and OECD Economic Outlook, Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933923201

Table 3.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, 2018

As % of labour costs, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	39.6	38.2	42.4	58.5	38.2	38.2	38.2	38.2
Austria	55.8	59.6	40.9	55.8	59.6	59.6	59.6	59.6
Belgium	68.3	65.1	67.8	68.3	65.1	65.1	64.2	65.1
Canada	33.0	39.2	36.6	51.7	75.3	44.4	44.4	39.2
Chile	7.0	10.2	10.2	7.0	7.0	7.0	7.0	10.2
Czech Republic	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
Denmark	39.6	42.1	55.9	38.1	42.1	42.1	42.1	42.1
Estonia	41.2	49.5	41.2	41.2	49.5	49.5	49.5	49.5
Finland	54.0	55.4	58.3	54.0	55.4	55.4	55.4	55.4
France	69.7	58.4	59.5	73.4	42.3	52.8	61.2	59.9
Germany	55.6	60.2	44.3	53.7	52.3	55.3	57.7	55.5
Greece	47.6	49.1	56.3	47.6	49.1	49.1	49.1	49.1
Hungary	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Iceland	39.5	39.5	47.9	49.9	48.5	46.3	46.3	39.5
Ireland	35.7	53.8	56.7	74.3	53.8	53.8	53.8	53.8
Israel[1]	31.2	36.7	50.7	34.3	36.7	36.7	36.7	36.7
Italy	54.7	61.7	62.9	55.9	62.8	62.8	62.2	61.7
Japan	33.1	37.3	35.1	33.1	37.3	37.3	37.3	37.3
Korea	28.6	30.1	32.1	22.3	30.1	30.1	30.1	30.1
Latvia	49.8	49.8	42.6	49.8	49.8	49.8	49.8	49.8
Lithuania	47.8	47.8	42.1	47.8	47.8	47.8	47.8	47.8
Luxembourg	46.6	57.1	55.8	51.7	39.6	44.6	52.9	44.6
Mexico	17.5	23.4	28.4	17.5	23.4	23.4	23.4	23.4
Netherlands	51.7	51.7	52.3	52.2	57.4	51.7	51.7	51.7
New Zealand	17.5	30.0	33.0	17.5	55.0	55.0	30.0	30.0
Norway	42.0	42.0	52.7	42.0	42.0	42.0	42.0	42.0
Poland	37.0	37.0	37.0	96.9	37.0	37.0	37.0	37.0
Portugal	46.7	51.1	58.0	46.7	46.7	46.7	51.1	46.7
Slovak Republic	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3
Slovenia	64.3	51.0	55.7	64.3	43.6	43.6	43.6	51.0
Spain	44.6	48.3	54.1	44.6	46.1	48.3	48.3	48.3
Sweden	45.6	48.3	69.7	45.6	48.3	48.3	48.3	48.3
Switzerland	26.3	31.8	35.8	18.8	24.4	26.9	29.4	28.6
Turkey	42.8	47.8	47.8	42.8	47.8	47.8	47.8	47.8
United Kingdom	40.2	40.2	49.0	76.3	40.2	40.2	40.2	40.2
United States	31.5	40.8	40.8	52.3	31.5	31.5	31.5	31.5
Unweighted average								
OECD-Average	**42.4**	**45.1**	**47.0**	**47.9**	**45.2**	**44.7**	**44.7**	**44.2**
OECD-EU 23	**49.4**	**51.2**	**52.2**	**55.6**	**49.1**	**49.7**	**50.7**	**50.3**

Notes: ch = children

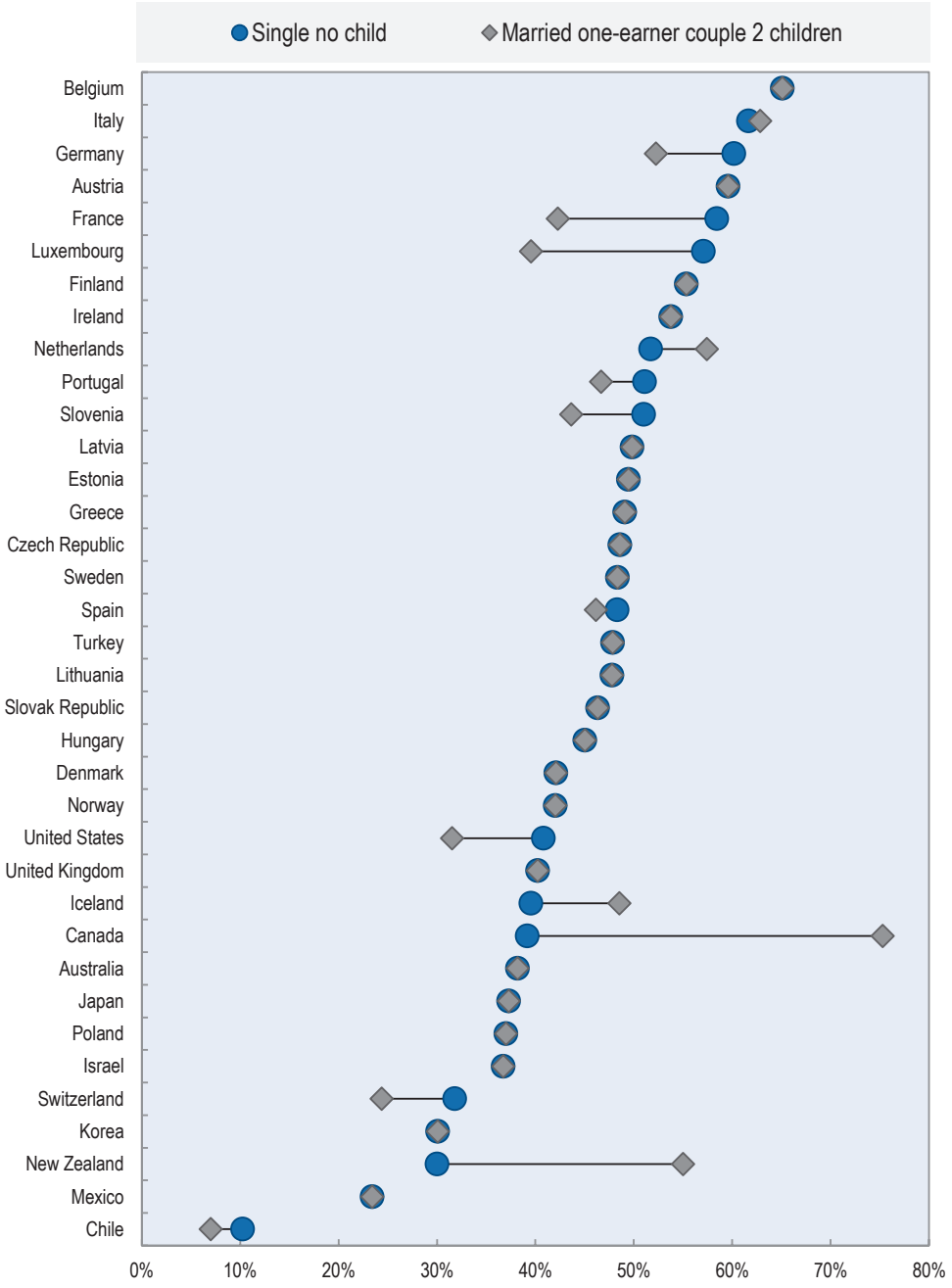
It is assumed that gross earnings of the principal earner in the household rise. The outcome may differ if the wage of the spouse goes up especially if partners are taxed individually.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924721*

Figure 3.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, 2018

As % of labour costs, by household type



Notes: The family type "single no child" corresponds to a wage level of 100% of average wage. The family type "married one earner couple
2 children" corresponds to a combined wage level of 100%-0% of average wage.
Source: OECD calculations based on country submissions and OECD Economic Outlook, Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933923220

Table 3.7. Marginal rate of income tax plus employee contributions less cash benefits, 2018

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	36.0	34.5	39.0	56.0	34.5	34.5	34.5	34.5
Austria	43.3	48.2	36.9	43.3	48.2	48.2	48.2	48.2
Belgium	55.6	55.6	59.1	55.6	55.6	55.6	54.5	55.6
Canada	25.3	33.6	33.9	46.1	73.0	39.3	39.3	33.6
Chile	7.0	10.2	10.2	7.0	7.0	7.0	7.0	10.2
Czech Republic	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
Denmark	39.6	42.1	55.9	38.1	42.1	42.1	42.1	42.1
Estonia	21.3	32.4	21.3	21.3	32.4	32.4	32.4	32.4
Finland	44.2	45.8	49.4	44.2	45.8	45.8	45.8	45.8
France	44.4	43.4	42.1	51.1	21.4	35.8	47.2	45.4
Germany	47.0	52.5	44.3	44.7	43.0	46.6	49.5	46.9
Greece	34.5	36.3	45.4	34.5	36.3	36.3	36.3	36.3
Hungary	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
Iceland	35.5	35.5	44.4	46.5	45.1	42.7	42.7	35.5
Ireland	28.8	48.8	52.0	71.5	48.8	48.8	48.8	48.8
Israel[1]	26.0	32.0	47.0	29.4	32.0	32.0	32.0	32.0
Italy	40.4	49.5	51.2	42.0	51.1	51.1	50.3	49.5
Japan	22.8	27.7	31.1	22.8	27.7	27.7	27.7	27.7
Korea	21.1	22.8	28.0	14.2	22.8	22.8	22.8	22.8
Latvia	37.7	37.7	28.8	37.7	37.7	37.7	37.7	37.7
Lithuania	31.5	31.5	24.0	31.5	31.5	31.5	31.5	31.5
Luxembourg	39.1	51.1	49.6	44.9	31.1	36.8	46.3	36.8
Mexico	12.1	17.6	22.9	12.1	17.6	17.6	17.6	17.6
Netherlands	46.2	46.2	52.3	46.8	52.6	46.2	46.2	46.2
New Zealand	17.5	30.0	33.0	17.5	55.0	55.0	30.0	30.0
Norway	34.5	34.5	46.6	34.5	34.5	34.5	34.5	34.5
Poland	26.7	26.7	26.7	96.3	26.7	26.7	26.7	26.7
Portugal	34.0	39.5	48.0	34.0	34.0	34.0	39.5	34.0
Slovak Republic	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Slovenia	58.5	43.1	48.6	58.5	34.6	34.6	34.6	43.1
Spain	28.1	32.9	40.4	28.1	30.0	32.9	32.9	32.9
Sweden	28.6	32.1	60.1	28.6	32.1	32.1	32.1	32.1
Switzerland	21.7	27.6	32.2	13.8	19.7	22.3	25.0	24.1
Turkey	32.8	38.7	38.7	32.8	38.7	38.7	38.7	38.7
United Kingdom	32.0	32.0	42.0	73.0	32.0	32.0	32.0	32.0
United States	26.3	36.3	36.3	48.6	26.3	26.3	26.3	26.3
Unweighted average								
OECD-Average	**32.6**	**36.2**	**39.3**	**38.9**	**36.0**	**35.6**	**35.7**	**35.2**
OECD-EU 23	**37.2**	**40.1**	**42.3**	**44.3**	**37.5**	**38.3**	**39.5**	**39.1**

Notes: ch = children

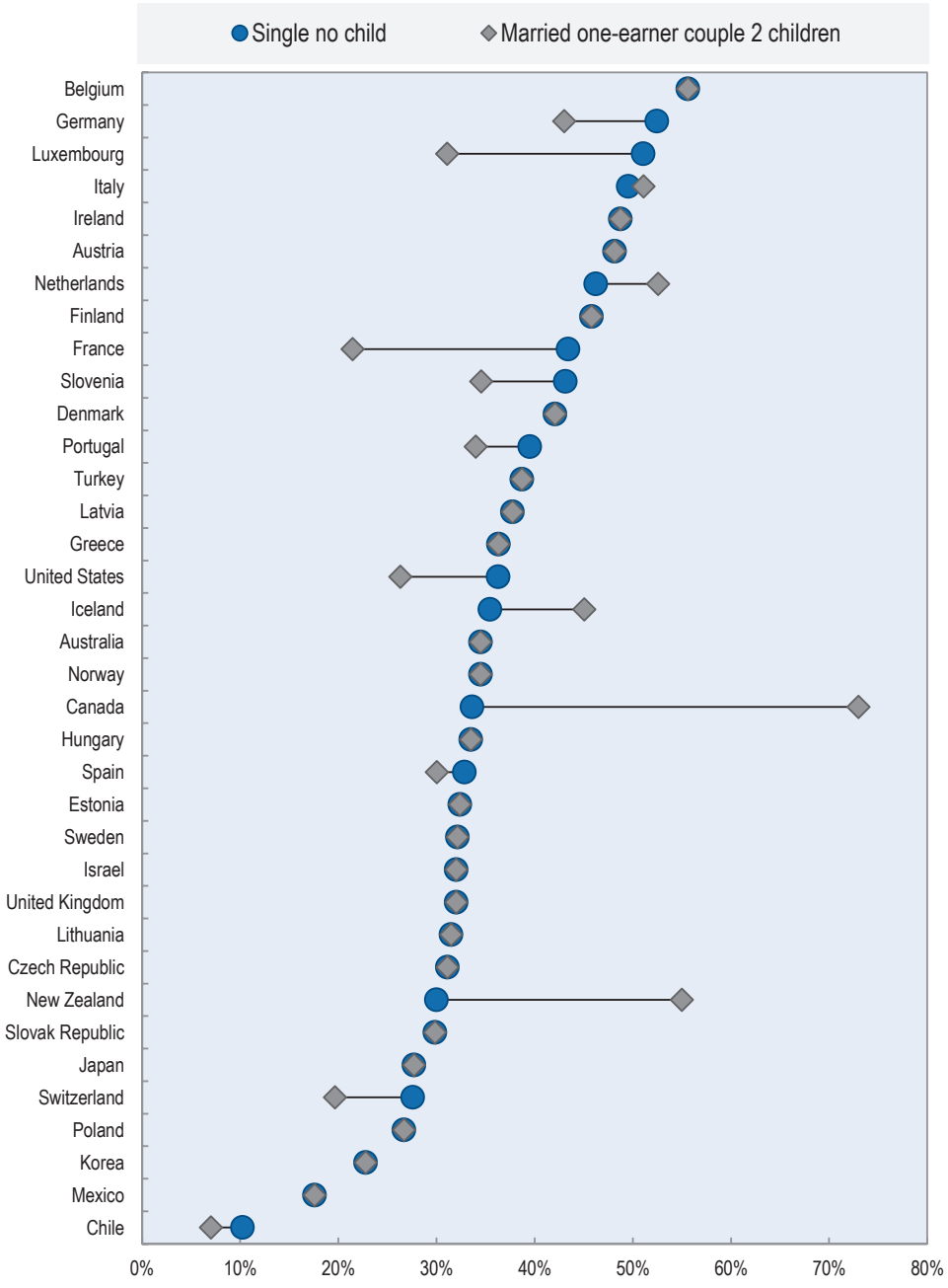
It is assumed that gross earnings of the principal earner in the household rise. The outcome may differ if the wage of the spouse especially if partners are taxed individually.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924740*

Figure 3.7. Marginal rate of income tax plus employee contributions less cash benefits, 2018

As % of gross wage earnings, by household type



Notes: The family type 'single no child' corresponds to a wage level of 100% of average wage. The family type 'married one earner couple 2 children' corresponds to a combined wage level of 100%-0% of average wage.
Source: OECD calculations based on country submissions and OECD Economic Outlook, Volume 2018 issue 2.

StatLink http://dx.doi.org/10.1787/888933923239

Table 3.8. Percentage increase in net income relative to percentage increase in gross wages, 2018

After an increase of 1 currency unit in gross wages, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	0.80	0.87	0.88	0.42	0.79	0.82	0.85	0.82
Austria	0.78	0.77	1.02	0.62	0.64	0.64	0.68	0.72
Belgium	0.65	0.74	0.78	0.52	0.56	0.57	0.65	0.64
Canada	0.91	0.86	0.90	0.42	0.28	0.68	0.72	0.83
Chile	1.00	0.97	0.98	0.99	1.00	0.98	1.00	0.97
Czech Republic	0.88	0.91	0.95	0.65	0.69	0.75	0.79	0.88
Denmark	0.90	0.90	0.75	0.65	0.77	0.81	0.84	0.87
Estonia	0.88	0.80	1.00	0.72	0.69	0.70	0.73	0.77
Finland	0.72	0.77	0.81	0.62	0.72	0.68	0.71	0.72
France	0.74	0.79	0.88	0.50	0.95	0.79	0.68	0.73
Germany	0.81	0.79	0.99	0.68	0.73	0.73	0.74	0.81
Greece	0.83	0.86	0.82	0.76	0.82	0.81	0.83	0.84
Hungary	1.00	1.00	1.00	0.70	0.79	0.83	0.86	1.00
Iceland	0.86	0.91	0.84	0.62	0.66	0.75	0.79	0.86
Ireland	0.85	0.69	0.74	0.27	0.56	0.57	0.61	0.61
Israel[1]	0.84	0.83	0.73	0.69	0.80	0.78	0.77	0.79
Italy	0.77	0.74	0.81	0.60	0.61	0.61	0.65	0.67
Japan	0.97	0.93	0.93	0.89	0.86	0.87	0.89	0.91
Korea	0.89	0.91	0.89	0.94	0.88	0.88	0.88	0.89
Latvia	0.82	0.87	1.00	0.66	0.74	0.73	0.77	0.82
Lithuania	0.83	0.88	1.00	0.71	0.78	0.80	0.82	0.84
Luxembourg	0.77	0.69	0.81	0.52	0.73	0.70	0.64	0.78
Mexico	0.92	0.92	0.91	0.92	0.92	0.88	0.89	0.88
Netherlands	0.70	0.77	0.77	0.51	0.63	0.67	0.69	0.72
New Zealand	0.96	0.86	0.88	0.68	0.46	0.50	0.84	0.84
Norway	0.86	0.90	0.81	0.75	0.86	0.83	0.86	0.87
Poland	0.97	0.98	0.99	0.03	0.80	0.84	0.86	0.97
Portugal	0.84	0.82	0.78	0.68	0.75	0.76	0.76	0.84
Slovak Republic	0.89	0.92	0.95	0.76	0.77	0.81	0.85	0.88
Slovenia	0.60	0.86	0.83	0.41	0.75	0.82	0.87	0.83
Spain	0.86	0.85	0.82	0.73	0.81	0.80	0.81	0.81
Sweden	0.92	0.91	0.63	0.81	0.83	0.83	0.85	0.88
Switzerland	0.92	0.88	0.87	0.85	0.84	0.84	0.84	0.89
Turkey	0.89	0.85	0.91	0.87	0.83	0.81	0.83	0.82
United Kingdom	0.84	0.89	0.83	0.28	0.83	0.81	0.84	0.84
United States	0.94	0.84	0.89	0.52	0.84	0.87	0.89	0.94
Unweighted average								
OECD-Average	**0.85**	**0.85**	**0.87**	**0.64**	**0.75**	**0.77**	**0.79**	**0.83**
OECD-EU 23	**0.82**	**0.84**	**0.87**	**0.58**	**0.74**	**0.74**	**0.76**	**0.80**

Notes: ch = children

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. The reported elasticities in Table 3.8 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 3.7 and AETR is the average rate plus employee social security contributions less cash benefits reported in Table 3.3.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

StatLink *http://dx.doi.org/10.1787/888933924759*

Table 3.9. Percentage increase in net income relative to percentage increase in gross labour cost, 2018

After an increase of 1 currency unit in gross labour cost, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	0.80	0.87	0.88	0.42	0.79	0.82	0.85	0.82
Austria	0.78	0.77	1.20	0.62	0.64	0.64	0.68	0.72
Belgium	0.59	0.74	0.78	0.47	0.56	0.56	0.65	0.62
Canada	0.90	0.88	0.93	0.42	0.28	0.69	0.73	0.84
Chile	1.00	0.97	0.98	0.99	1.00	0.98	1.00	0.97
Czech Republic	0.88	0.91	0.95	0.65	0.69	0.75	0.79	0.88
Denmark	0.90	0.90	0.75	0.65	0.77	0.81	0.84	0.87
Estonia	0.88	0.80	1.00	0.72	0.69	0.71	0.73	0.77
Finland	0.72	0.77	0.81	0.62	0.72	0.68	0.71	0.72
France	0.53	0.79	0.88	0.36	0.95	0.75	0.67	0.69
Germany	0.81	0.79	1.14	0.68	0.73	0.73	0.74	0.81
Greece	0.83	0.86	0.82	0.76	0.82	0.81	0.83	0.84
Hungary	1.00	1.00	1.00	0.70	0.79	0.83	0.86	1.00
Iceland	0.86	0.91	0.84	0.62	0.66	0.75	0.79	0.86
Ireland	0.85	0.69	0.74	0.27	0.56	0.57	0.61	0.61
Israel[1]	0.81	0.82	0.72	0.67	0.79	0.76	0.75	0.78
Italy	0.77	0.74	0.81	0.60	0.61	0.61	0.65	0.67
Japan	0.97	0.93	1.00	0.89	0.86	0.87	0.89	0.91
Korea	0.89	0.91	0.91	0.94	0.88	0.88	0.88	0.89
Latvia	0.82	0.87	1.00	0.66	0.74	0.73	0.77	0.82
Lithuania	0.83	0.88	1.00	0.71	0.78	0.81	0.82	0.86
Luxembourg	0.77	0.69	0.81	0.52	0.73	0.70	0.64	0.78
Mexico	0.98	0.95	0.93	0.98	0.95	0.93	0.94	0.93
Netherlands	0.70	0.77	0.83	0.51	0.63	0.67	0.69	0.72
New Zealand	0.96	0.86	0.88	0.68	0.46	0.50	0.84	0.84
Norway	0.86	0.90	0.81	0.75	0.86	0.83	0.86	0.87
Poland	0.97	0.98	0.99	0.03	0.80	0.84	0.86	0.97
Portugal	0.84	0.82	0.78	0.68	0.75	0.76	0.76	0.84
Slovak Republic	0.89	0.92	0.95	0.76	0.77	0.81	0.85	0.88
Slovenia	0.60	0.86	0.83	0.41	0.75	0.87	0.87	0.87
Spain	0.86	0.85	0.82	0.73	0.81	0.80	0.81	0.81
Sweden	0.92	0.91	0.63	0.81	0.83	0.83	0.85	0.88
Switzerland	0.92	0.88	0.88	0.85	0.84	0.84	0.84	0.89
Turkey	0.87	0.85	0.91	0.85	0.83	0.80	0.82	0.81
United Kingdom	0.81	0.86	0.81	0.26	0.81	0.77	0.81	0.81
United States	0.95	0.84	0.90	0.53	0.84	0.88	0.90	0.94
Unweighted average								
OECD-Average	**0.84**	**0.85**	**0.89**	**0.63**	**0.75**	**0.77**	**0.79**	**0.83**
OECD-EU 23	**0.81**	**0.83**	**0.88**	**0.57**	**0.74**	**0.74**	**0.76**	**0.80**

Notes: ch = children

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. The reported elasticities in Table 3.9 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 3.6 and AETR is the average rate plus employee and employer social security contributions less cash benefits reported in Table 3.1.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

StatLink *http://dx.doi.org/10.1787/888933924778*

Table 3.10. Annual gross wage and net income, single person, 2018

In US dollars using PPP, by household type and wage level

	Single no ch 67 (% AW)		Single no ch 100 (% AW)		Single no ch 167 (% AW)		Single 2 ch 67 (% AW)	
	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes
Australia	40 070	32 235	59 806	45 066	99 876	69 547	40 070	41 633
Austria	40 694	29 608	60 737	40 813	101 431	62 908	40 694	37 529
Belgium	41 794	28 398	62 378	37 535	104 172	54 305	41 794	35 716
Canada	28 629	23 581	42 730	32 895	71 360	52 605	28 629	36 628
Chile	16 041	14 918	23 941	22 264	39 982	36 660	16 041	15 051
Czech Republic	20 577	16 168	30 712	23 151	51 289	37 328	20 577	21 668
Denmark	41 424	27 678	61 827	39 780	103 251	60 393	41 424	39 403
Estonia	19 856	17 839	29 636	25 190	49 492	38 960	19 856	21 796
Finland	33 863	26 278	50 542	35 399	84 405	52 688	33 863	30 502
France	34 508	25 901	51 504	36 712	86 012	56 684	34 508	34 025
Germany	45 060	29 394	67 254	40 547	112 314	63 164	45 060	36 840
Greece	24 660	19 454	36 806	27 189	61 466	41 062	24 660	21 376
Hungary	19 944	13 263	29 768	19 796	49 712	33 059	19 944	18 839
Iceland	44 558	33 246	66 505	47 410	111 063	73 498	44 558	38 311
Ireland	40 153	33 751	59 930	44 709	100 084	64 952	40 153	43 116
Israel[1]	28 022	24 801	41 825	34 264	69 847	50 661	28 022	28 624
Italy	30 345	23 590	45 291	31 062	75 636	45 806	30 345	29 600
Japan	34 739	27 574	51 849	40 266	86 587	64 045	34 739	29 973
Korea	37 847	33 506	56 488	48 045	94 334	76 667	37 847	34 430
Latvia	16 046	12 219	23 949	17 149	39 994	28 476	16 046	15 181
Lithuania	16 556	13 661	24 711	19 247	41 267	31 363	16 556	16 072
Luxembourg	46 052	36 530	68 735	48 456	114 787	71 329	46 052	48 604
Mexico	8 764	8 375	13 081	11 743	21 845	18 592	8 764	8 375
Netherlands	43 702	33 790	65 227	45 364	108 929	67 784	43 702	45 333
New Zealand	27 806	23 972	41 502	33 851	69 308	52 680	27 806	33 510
Norway	38 298	29 103	57 161	41 459	95 459	62 975	38 298	33 592
Poland	21 089	15 927	31 476	23 544	52 565	39 008	21 089	27 492
Portugal	21 350	16 778	31 866	23 381	53 217	35 537	21 350	20 590
Slovak Republic	16 849	13 327	25 147	19 148	41 996	30 967	16 849	15 578
Slovenia	22 935	15 984	34 231	22 553	57 165	35 365	22 935	22 986
Spain	28 498	23 722	42 535	33 492	71 033	51 840	28 498	27 937
Sweden	34 317	26 596	51 219	38 326	85 536	54 158	34 317	30 097
Switzerland	51 838	44 348	77 370	63 909	129 208	100 317	51 838	52 458
Turkey	20 149	15 193	30 073	21 603	50 222	33 952	20 149	15 545
United Kingdom	38 254	30 921	57 095	43 733	95 349	66 940	38 254	37 474
United States	36 817	28 949	54 951	41 889	91 769	65 342	36 817	36 125
Unweighted average								
OECD-Average	**30 892**	**24 183**	**46 107**	**33 915**	**76 999**	**52 267**	**30 892**	**30 056**
OECD-EU 23	**30 371**	**23 077**	**45 329**	**32 012**	**75 700**	**48 873**	**30 371**	**29 468**

Note: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.

StatLink *http://dx.doi.org/10.1787/888933924797*

Table 3.11. Annual gross wage and net income, married couple, 2018

In US dollars using PPP, by household type and wage level

	Married 2 ch 100-0 (% AW)		Married 2 ch 100-33 (% AW)[2]		Married 2 ch 100-67 (% AW)[2]		Married no ch 100-33 (% AW)[2]	
	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes
Australia	59 806	49 719	79 542	63 379	99 876	77 302	79 542	63 379
Austria	60 737	48 813	80 780	65 469	101 431	77 678	80 780	58 331
Belgium	62 378	49 708	82 963	64 201	104 172	72 500	82 963	57 581
Canada	42 730	41 940	56 831	50 492	71 360	60 141	56 831	45 646
Chile	23 941	22 265	31 842	30 303	39 982	37 317	31 842	29 611
Czech Republic	30 712	30 642	40 847	37 625	51 289	44 819	40 847	32 124
Denmark	61 827	46 223	82 230	58 544	103 251	71 249	82 230	54 752
Estonia	29 636	29 094	39 416	37 923	49 492	46 138	39 416	34 813
Finland	50 542	38 153	67 221	53 200	84 405	64 431	67 221	50 446
France	51 504	42 510	68 500	55 736	86 012	66 545	68 500	51 060
Germany	67 254	52 678	89 448	65 085	112 314	76 962	89 448	58 430
Greece	40 486	31 455	53 847	42 095	67 612	52 072	53 847	40 756
Hungary	29 768	25 113	39 591	31 645	49 712	38 376	39 591	26 328
Iceland	66 505	55 706	88 451	67 765	111 063	80 730	88 451	66 062
Ireland	59 930	54 972	79 707	71 206	100 084	83 588	79 707	66 901
Israel[1]	41 825	35 375	55 627	48 694	69 847	61 689	55 627	47 583
Italy	45 291	36 294	60 237	48 642	75 636	57 996	60 237	45 267
Japan	51 849	43 381	68 959	57 047	86 587	70 238	68 959	54 649
Korea	56 488	49 303	75 128	66 044	94 334	82 616	75 128	65 076
Latvia	23 949	20 112	31 852	27 012	39 994	32 331	31 852	24 050
Lithuania	24 711	21 657	32 866	28 268	41 267	34 508	32 866	26 668
Luxembourg	68 735	65 030	91 417	82 512	114 787	96 464	91 417	73 716
Mexico	13 081	11 743	17 441	16 338	21 801	20 080	17 441	16 338
Netherlands	65 227	49 033	86 751	69 544	108 929	85 176	86 751	64 816
New Zealand	41 502	40 711	55 198	49 260	69 308	57 465	55 198	45 823
Norway	57 161	43 690	76 024	59 789	95 459	72 793	76 024	57 558
Poland	31 476	28 992	41 863	36 748	52 565	44 596	41 863	31 623
Portugal	31 866	28 006	42 382	36 586	53 217	42 484	42 382	33 346
Slovak Republic	25 147	22 908	33 446	28 918	41 996	34 727	33 446	26 667
Slovenia	34 231	29 710	45 527	36 161	57 165	42 893	45 527	31 353
Spain	42 535	36 525	56 571	47 402	71 033	58 745	56 571	46 637
Sweden	51 219	41 827	68 121	55 980	85 536	68 422	68 121	52 479
Switzerland	77 370	74 101	102 902	95 200	129 208	115 184	102 902	87 476
Turkey	30 073	22 188	39 997	30 219	50 222	37 147	39 997	29 868
United Kingdom	57 095	46 683	75 937	64 058	95 349	77 258	75 937	61 454
United States	54 951	48 498	73 085	61 862	91 769	75 632	73 085	57 494
Unweighted average								
OECD-Average	**46 209**	**39 299**	**61 460**	**51 138**	**77 168**	**61 619**	**61 460**	**47 671**
OECD-EU 23	**45 489**	**38 093**	**60 501**	**49 763**	**75 967**	**59 563**	**60 501**	**45 635**

Note: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924816*

Table 3.12. Annual labour costs and net income, single person, 2018

In US dollars using PPP, by household type and wage level

	Single no ch 67 (% AW)		Single no ch 100 (% AW)		Single no ch 167 (% AW)		Single 2 ch 67 (% AW)	
	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes
Australia	42 461	32 235	63 375	45 066	105 836	69 547	42 461	41 633
Austria	52 214	29 608	77 931	40 813	128 249	62 908	52 214	37 529
Belgium	52 653	28 398	79 308	37 535	132 444	54 305	52 653	35 716
Canada	31 784	23 581	47 476	32 895	77 418	52 605	31 784	36 628
Chile	16 041	14 918	23 941	22 264	39 982	36 660	16 041	15 051
Czech Republic	27 573	16 168	41 154	23 151	68 727	37 328	27 573	21 668
Denmark	41 424	27 678	61 827	39 780	103 251	60 393	41 424	39 403
Estonia	26 568	17 839	39 653	25 190	66 221	38 960	26 568	21 796
Finland	41 106	26 278	61 353	35 399	102 459	52 688	41 106	30 502
France	45 511	25 901	70 105	36 712	123 460	56 684	45 511	34 025
Germany	53 791	29 394	80 284	40 547	129 581	63 164	53 791	36 840
Greece	30 840	19 454	46 029	27 189	76 869	41 062	30 840	21 376
Hungary	24 133	13 263	36 019	19 796	60 152	33 059	24 133	18 839
Iceland	47 566	33 246	70 994	47 410	118 560	73 498	47 566	38 311
Ireland	44 510	33 751	66 433	44 709	110 943	64 952	44 510	43 116
Israel[1]	29 336	24 801	44 173	34 264	74 297	50 661	29 336	28 624
Italy	39 928	23 590	59 594	31 062	99 522	45 806	39 928	29 600
Japan	40 050	27 574	59 776	40 266	98 706	64 045	40 050	29 973
Korea	41 802	33 506	62 391	48 045	102 791	76 667	41 802	34 430
Latvia	19 920	12 219	29 727	17 149	49 637	28 476	19 920	15 181
Lithuania	21 722	13 661	32 421	19 247	54 143	31 363	21 722	16 072
Luxembourg	52 504	36 530	78 364	48 456	130 868	71 329	52 504	48 604
Mexico	9 978	8 375	14 616	11 743	24 048	18 592	9 978	8 375
Netherlands	48 804	33 790	72 783	45 364	117 301	67 784	48 804	45 333
New Zealand	27 806	23 972	41 502	33 851	69 308	52 680	27 806	33 510
Norway	43 277	29 103	64 592	41 459	107 869	62 975	43 277	33 592
Poland	24 552	15 927	36 644	23 544	61 196	39 008	24 552	27 492
Portugal	26 421	16 778	39 435	23 381	65 856	35 537	26 421	20 590
Slovak Republic	22 021	13 327	32 868	19 148	54 889	30 967	22 021	15 578
Slovenia	26 627	15 984	39 742	22 553	66 369	35 365	26 627	22 986
Spain	37 019	23 722	55 252	33 492	92 271	51 840	37 019	27 937
Sweden	45 099	26 596	67 312	38 326	112 411	54 158	45 099	30 097
Switzerland	55 065	44 348	82 186	63 909	137 233	100 317	55 065	52 458
Turkey	23 098	15 193	35 336	21 603	59 011	33 952	23 098	15 545
United Kingdom	41 845	30 921	63 287	43 733	106 820	66 940	41 845	37 474
United States	39 964	28 949	59 485	41 889	99 119	65 342	39 964	36 125
Unweighted average								
OECD-Average	**35 973**	**24 183**	**53 816**	**33 915**	**89 662**	**52 267**	**35 973**	**30 056**
OECD-EU 23	**36 817**	**23 077**	**55 110**	**32 012**	**91 897**	**48 873**	**36 817**	**29 468**

Note: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.

StatLink *http://dx.doi.org/10.1787/888933924835*

Table 3.13. Annual labour costs and net income, married couple, 2018

In US dollars using PPP, by household type and wage level

	Married 2 ch 100-0 (% AW)		Married 2 ch 100-33 (% AW)[2]		Married 2 ch 100-67 (% AW)[2]		Married no ch 100-33 (% AW)[2]	
	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes
Australia	63 375	49 719	84 288	63 379	105 836	77 302	84 288	63 379
Austria	77 931	48 813	103 648	65 469	130 144	77 678	103 648	58 331
Belgium	79 308	49 708	102 281	64 201	131 961	72 500	102 281	57 581
Canada	47 476	41 940	63 061	50 492	79 261	60 141	63 061	45 646
Chile	23 941	22 265	31 842	30 303	39 982	37 317	31 842	29 611
Czech Republic	41 154	30 642	54 735	37 625	68 727	44 819	54 735	32 124
Denmark	61 827	46 223	82 230	58 544	103 251	71 249	82 230	54 752
Estonia	39 653	29 094	52 936	37 923	66 221	46 138	52 936	34 813
Finland	61 353	38 153	81 599	53 200	102 459	64 431	81 599	50 446
France	70 105	42 510	88 389	55 736	115 616	66 545	88 389	51 060
Germany	80 284	52 678	106 778	65 085	134 075	76 962	106 778	58 430
Greece	50 632	31 455	67 341	42 095	84 556	52 072	67 341	40 756
Hungary	36 019	25 113	47 905	31 645	60 152	38 376	47 905	26 328
Iceland	70 994	55 706	94 422	67 765	118 560	80 730	94 422	66 062
Ireland	66 433	54 972	87 911	71 206	110 943	83 588	87 911	66 901
Israel[1]	44 173	35 375	58 451	48 694	73 508	61 689	58 451	47 583
Italy	59 594	36 294	79 260	48 642	99 522	57 996	79 260	45 267
Japan	59 776	43 381	79 503	57 047	99 827	70 238	79 503	54 649
Korea	62 391	49 303	82 980	66 044	104 192	82 616	82 980	65 076
Latvia	29 727	20 112	39 542	27 012	49 646	32 331	39 542	24 050
Lithuania	32 421	21 657	44 016	28 268	54 143	34 508	44 016	26 668
Luxembourg	78 364	65 030	104 224	82 512	130 868	96 464	104 224	73 716
Mexico	14 616	11 743	19 903	16 338	24 547	20 080	19 903	16 338
Netherlands	72 783	49 033	96 861	69 544	121 587	85 176	96 861	64 816
New Zealand	41 502	40 711	55 198	49 260	69 308	57 465	55 198	45 823
Norway	64 592	43 690	85 908	59 789	107 869	72 793	85 908	57 558
Poland	36 644	28 992	48 737	36 748	61 196	44 596	48 737	31 623
Portugal	39 435	28 006	52 448	36 586	65 856	42 484	52 448	33 346
Slovak Republic	32 868	22 908	43 714	28 918	54 889	34 727	43 714	26 667
Slovenia	39 742	29 710	55 549	36 161	66 369	42 893	55 549	31 353
Spain	55 252	36 525	73 486	47 402	92 271	58 745	73 486	46 637
Sweden	67 312	41 827	89 525	55 980	112 411	68 422	89 525	52 479
Switzerland	82 186	74 101	109 308	95 200	137 251	115 184	109 308	87 476
Turkey	35 336	22 188	46 420	30 219	58 434	37 147	46 420	29 868
United Kingdom	63 287	46 683	83 041	64 058	105 132	77 258	83 041	61 454
United States	59 485	48 498	79 336	61 862	99 449	75 632	79 336	57 494
Unweighted average								
OECD-Average	**53 944**	**39 299**	**71 577**	**51 138**	**90 001**	**61 619**	**71 577**	**47 671**
OECD-EU 23	**55 310**	**38 093**	**73 311**	**49 763**	**92 261**	**59 563**	**73 311**	**45 635**

Note: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924854*

Chapter 4. Graphical exposition of the 2018 tax burden

The chapter presents a graphical exposition of the tax burdens on labour income in 2018 for gross wage earnings ranging from 50% to 250% of the average wage. These are illustrated in separate graphs for each of four household types and for each OECD member country. The household types are single taxpayers without children; single parents with two children; one-earner married couples without children and one-earner married couples with two children.

The graphs are divided in two sets showing the average and the marginal tax wedge components as percentage of total labour costs (central and local income taxes; employee and employer social security contributions and cash benefits). The graphs also show the net personal average and marginal tax rates.

The graphs in this section show the tax burden on labour income in 2018 for gross wage earnings between 50% and 250% of the average wage (AW). For each OECD member country, there are separate graphs for four household types: single taxpayers without children, single parents with two children, one-earner married couples without children and one-earner married couples with two children. The net personal average and marginal tax rates ([the change in] personal income taxes and employee social security contributions net of cash benefits as a percentage of [the change in] gross wage earnings) are included in the graphs that show respectively the average and the marginal tax wedge.[1]

The graphs illustrate the relative importance of the different components of the tax wedges: central government income taxes, local government income taxes, employee social security contributions, employer social security contributions (including payroll taxes where applicable) and cash benefits as a percentage of total labour costs. It should be noted that a decreasing share in total labour costs implies that the values of tax payments less benefits are not increasing as rapidly as the corresponding total labour costs. It does not necessarily imply that the values of payments less benefits are decreasing in cash terms.

Low-income households are treated favourably by the tax-benefit system in many OECD countries. Negative central government income taxes are observed in Belgium because of the non-wastable tax credits for low income workers and for dependent children; in Canada[2] because of the non-wastable working income tax benefit; in the Czech Republic, Germany, the Slovak Republic and the United Kingdom because of non-wastable child tax credits; in Israel because of the non-wastable earned income tax credit (EITC) for families with children (since 2016, single parents have been eligible for the EITC for a wider income range); in Italy because of the Fiscal Bonus targeting low income workers; in Latvia because of a non-wastable tax credit calculated on the over-paid tax of the previous year, which was introduced in 2016; in Luxembourg and Spain because of non-wastable tax credits for single parents; in Mexico[3] because of the non-wastable employment subsidy credit; in Poland because of a conditional refundable child tax credit since 2015 and in the United States because of the non-wastable EITC and the child tax credit. Concerning Sweden, the charts show negative central government income taxes due to an EITC. However, the tax credit is wastable in the sense that it cannot reduce the total individual's tax payments to less than zero. As a matter of fact, the EITC is also deducted from the local government income tax.

When cash benefits are also taken into account, single parents and/or one-earner married couples with two children do not pay income taxes and employee social security contributions at income levels between 50% and 100% of the AW in twenty-one OECD member countries. For example, the net personal average tax rate becomes positive in Canada at 97% of the AW for the single parent and 98% of the AW for the one-earner couple with children, in Estonia at 96% of the AW for the single parent and 95% of the AW for the one-earner couple with children, in New Zealand at 97% of the AW for the single parent and the one-earner couple with two children and in Poland at 96% of the AW for the one-earner couple with children. In the Czech Republic, Israel, the Slovak Republic and the United Kingdom, the negative net personal average tax rates resulted from the combined effect of refundable tax credits and cash benefit payments. In contrast, the net personal average tax rate for single parents or one-earner couples with children were negative mainly due to refundable tax credits in Spain (up to 63% of the AW for the single parent) and the United States (up to 64% of the AW for the single parent and 72% of the AW for the one-earner couple with children).

There are large variations in cash benefit levels across OECD countries. They represent about a quarter or more of total labour costs for low-income single parents and/or one-earner married couples with two children in Australia, Canada, Denmark, France, Ireland, New Zealand, Poland and Slovenia.

The marginal tax wedge is relatively flat across the earnings distribution in some countries because of the flat social security contribution and personal income tax rates. Single taxpayers without children face a flat marginal tax wedge all over the 50% to 250% of AW income range in the Czech Republic (48.6%) and Hungary (45.0%). The marginal tax wedge is also relatively constant in Iceland, Lithuania and the United Kingdom. In Iceland, the marginal tax wedge is 39.5% on earnings below 122% of the AW and then 47.9% on earnings from 123% of the AW to 250% of the AW. In Lithuania, it is 47.8% on earnings below 125% of the AW and 42.1% from 126% of the AW to 250% of the AW. In the United Kingdom, it is 40.2% on earnings below 117% of the AW and then 49.0% on earnings between 118% and 250% of the AW.

Social security contributions are levied at flat rates in many OECD countries. Some countries have an earnings ceiling above which no additional social security contributions have to be paid. The variations in the marginal social security contributions are in general the same for the four household types, since the contribution rates or income ceilings do not vary depending on the marital status or the number of dependent children. Nevertheless, in Hungary the marginal employee social security contributions are higher for the families with children, at low income levels, due to the impact of the withdrawal of the child tax allowance with increasing earnings. Families whose combined personal income tax base is not sufficient to claim the maximum amount of the family tax allowance can deduct the remaining sum from the health insurance and pension contributions.

Within the income range of 50% to 250% of the AW, the marginal employer social security rates fall to zero as a result of income ceilings in Germany (at 155% of the AW), Luxembourg (at 202% of the AW), the Netherlands (at 111% of the AW) and Spain (169% of the AW). The marginal employee social security rates fall to zero in Austria (at 153% of the AW), Canada (at 105% of the AW), Germany (at 155% of the AW), Spain (at 169% of the AW) and Sweden (at 112% of the AW).

In addition, taxpayers experience declining marginal employee and/or employer social security contribution rates as percentage of total labour costs over some parts of the earnings range as income increases. This can be observed in Austria, Belgium, Canada, France, Germany, Japan, Korea, Luxembourg, the Netherlands, Poland, the Slovak Republic, Switzerland, the United Kingdom and the United States. Large decreases in the marginal rates as percentage of total labour costs were observed in Luxembourg where the marginal employee social security contribution rate drops from 10.92% to 1.40% on earnings above 203% of the AW, in the United Kingdom where the marginal employee social security contribution rate drops from 10.54% to 1.76% of earnings above 117% of the AW and in the United States where the marginal employer and employee social security contribution rates drop from 7.11% to 1.43% on earnings above 233% of the AW.

Taxpayers face marginal tax rates and wedges of about 70% or more in several of OECD countries at particular earnings levels. This is the case for taxpayers below the average wage without children in Austria, Belgium, France, Italy, Mexico, Portugal and Turkey. They also apply to families with children in Australia, Austria, Belgium, Canada, Chile, France, Greece, Ireland, Italy, Japan, Lithuania, Luxembourg, Mexico, Poland, Portugal,

the Slovak Republic, Slovenia, Spain, Turkey and the United Kingdom. In many countries, these high marginal tax rates are partly the result, as income rises, in reductions in benefits, allowances or tax credits that are targeted at low-income taxpayers.

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

Notes

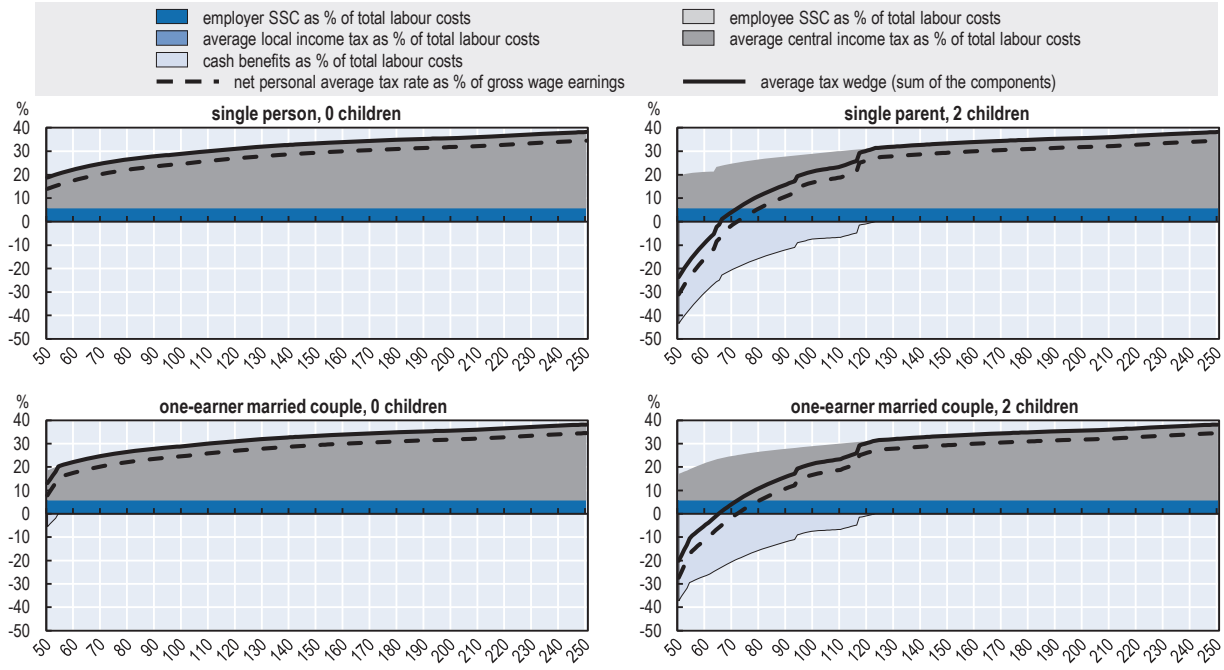
[1] The marginal tax wedges in the graphs are calculated in a slightly different manner than the marginal tax rates that are included in the rest of the Taxing Wages publication. In Taxing Wages, marginal rates are usually calculated by increasing gross earnings by one currency unit (except for the spouse in the one-earner married couple whose earnings increase by 33% 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.

[2] Although it is not visible on the charts, the central government income tax was negative for income levels below 53% of the AW for the single parent and the couple with two children.

[3] Although it is not visible on the charts, the central government income tax was negative for income levels below 54% of the AW for the single parent and the couple with two children.

Australia 2018: average tax wedge decomposition

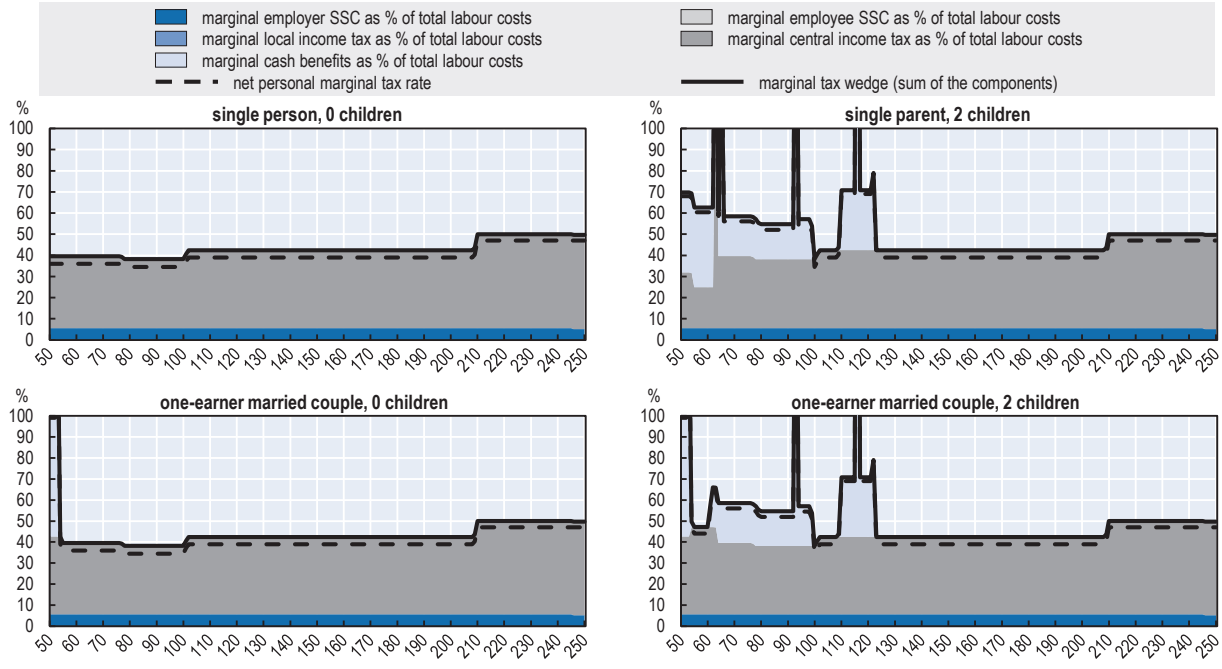
by level of gross earnings expressed as a % of the average wage



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Australia 2018: marginal tax wedge decomposition

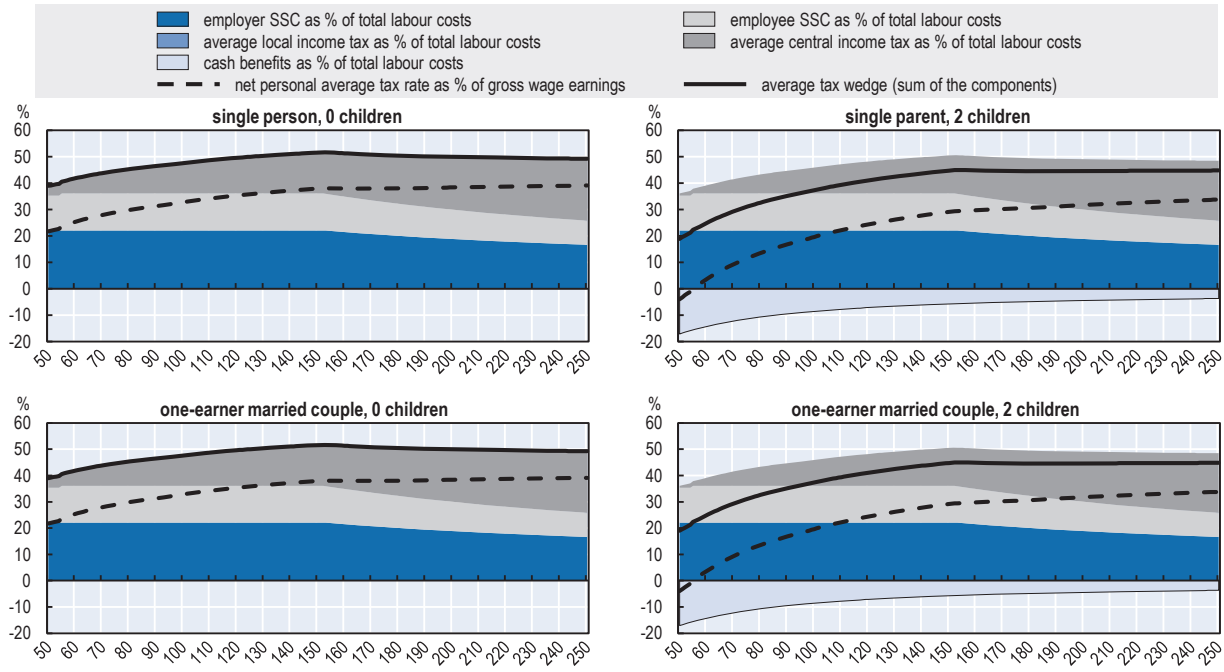
by level of gross earnings expressed as a % of the average wage



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Austria 2018: average tax wedge decomposition

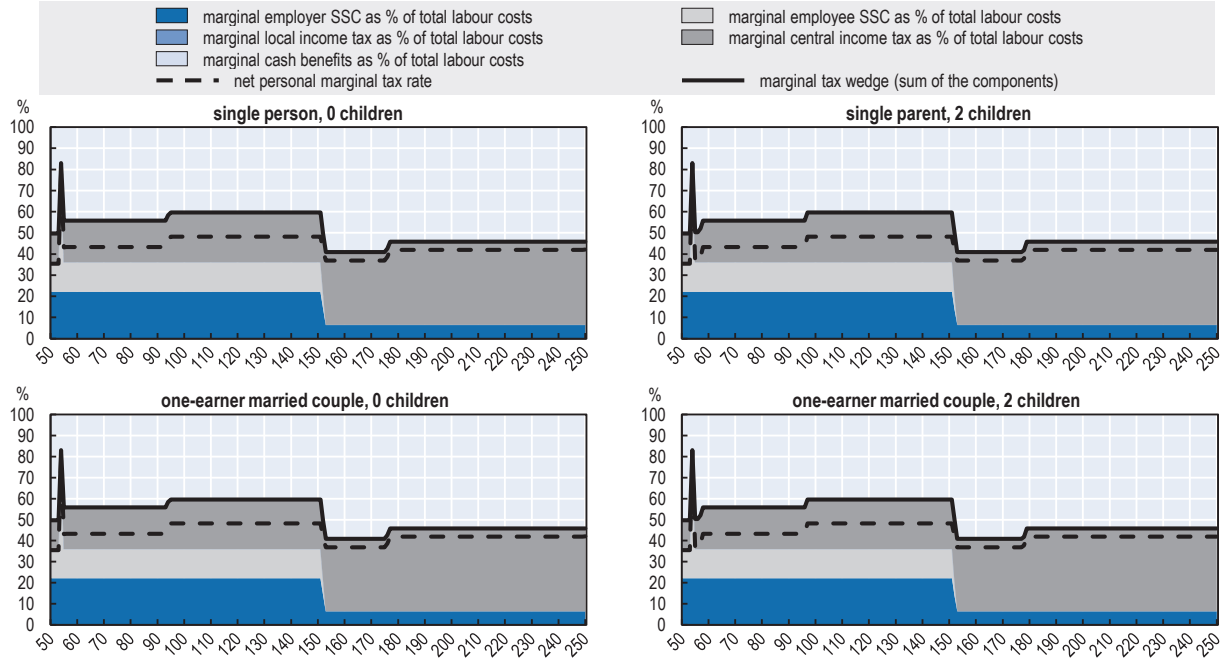
by level of gross earnings expressed as a % of the average wage



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Austria 2018: marginal tax wedge decomposition

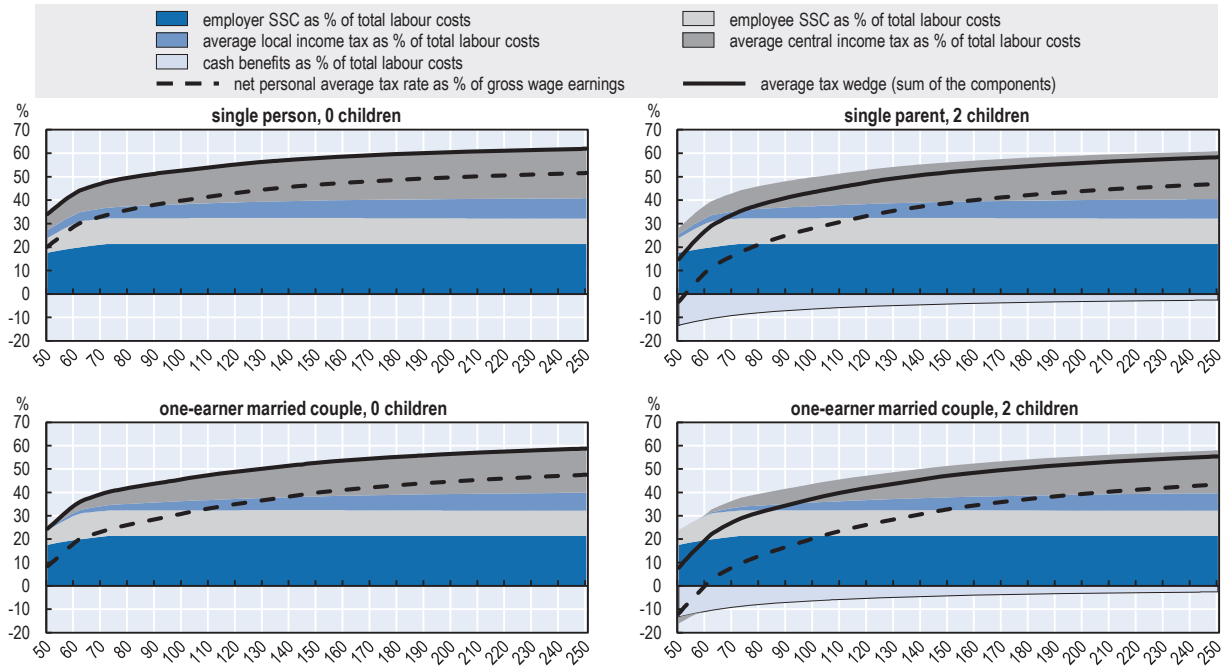
by level of gross earnings expressed as a % of the average wage



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Belgium 2018: average tax wedge decomposition

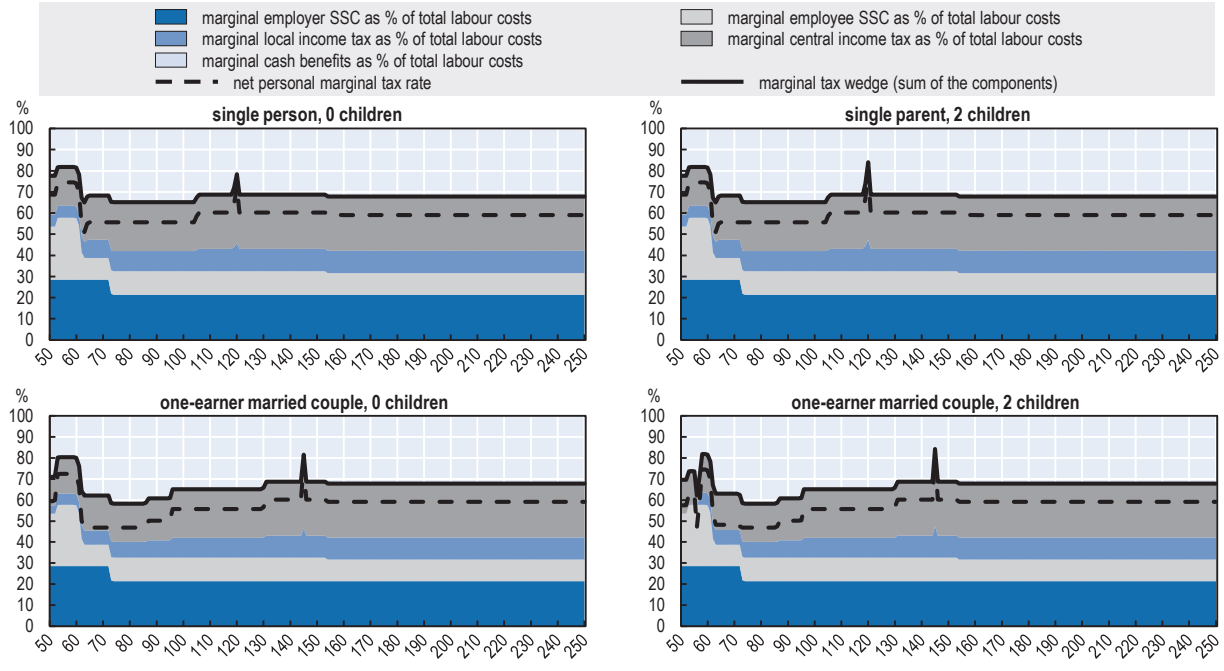
by level of gross earnings expressed as a % of the average wage



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Belgium 2018: marginal tax wedge decomposition

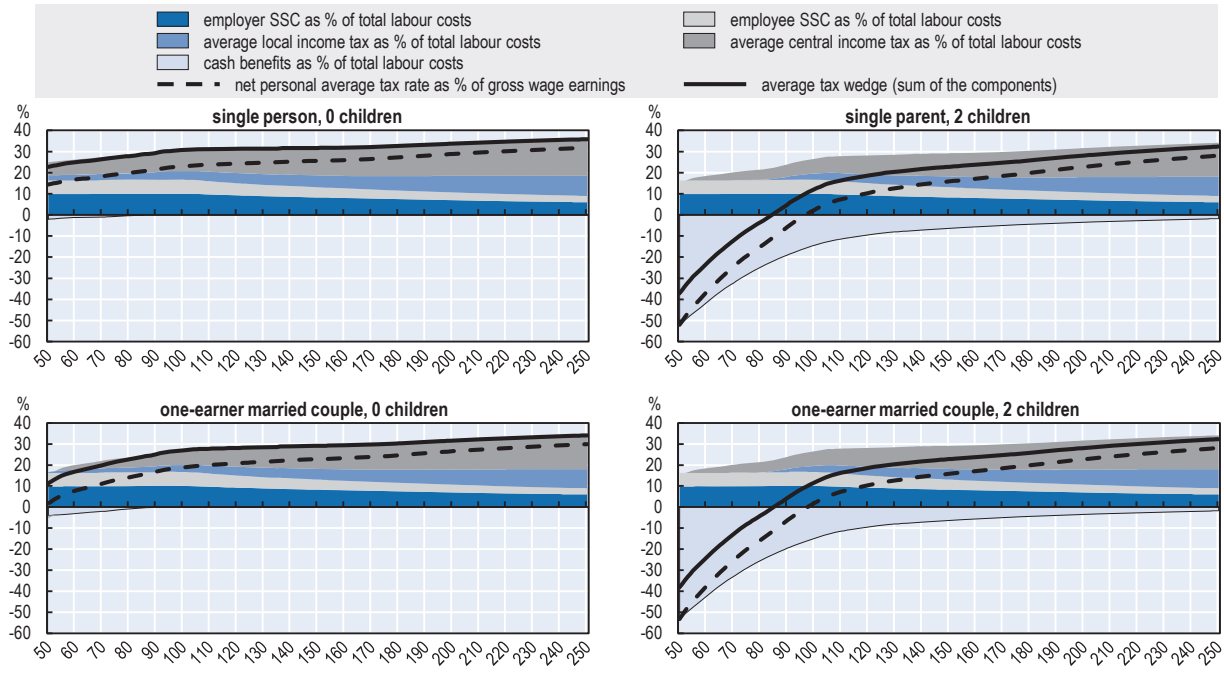
by level of gross earnings expressed as a % of the average wage



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Canada 2018: average tax wedge decomposition

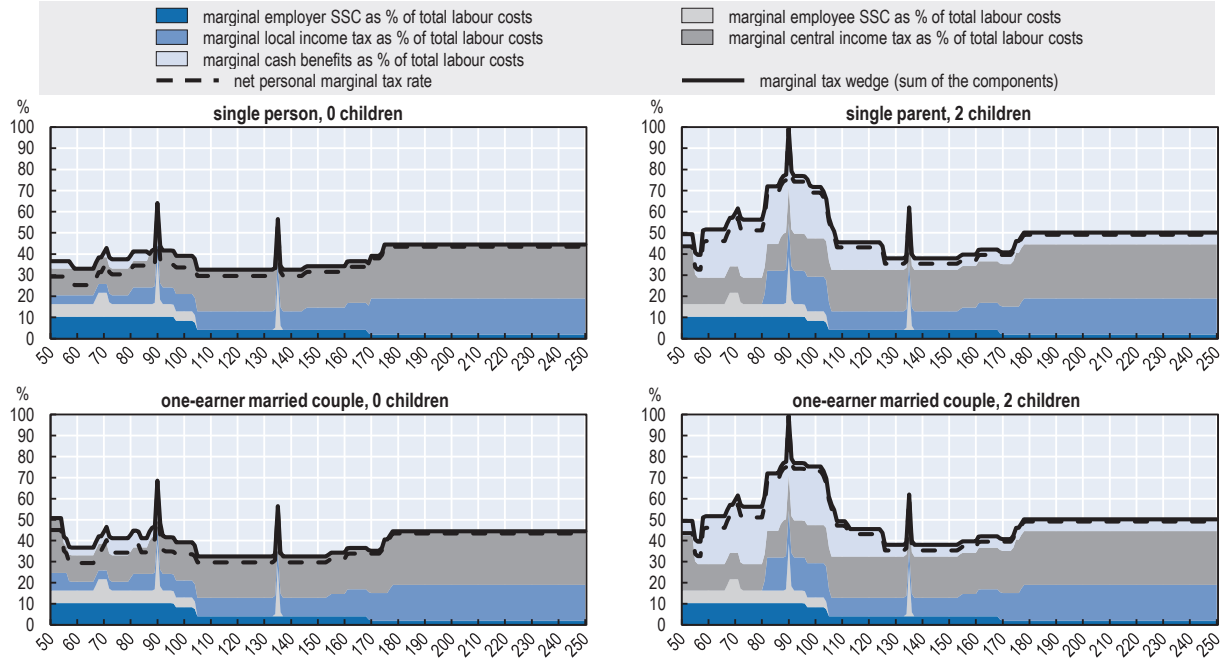
by level of gross earnings expressed as a % of the average wage



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Canada 2018: marginal tax wedge decomposition

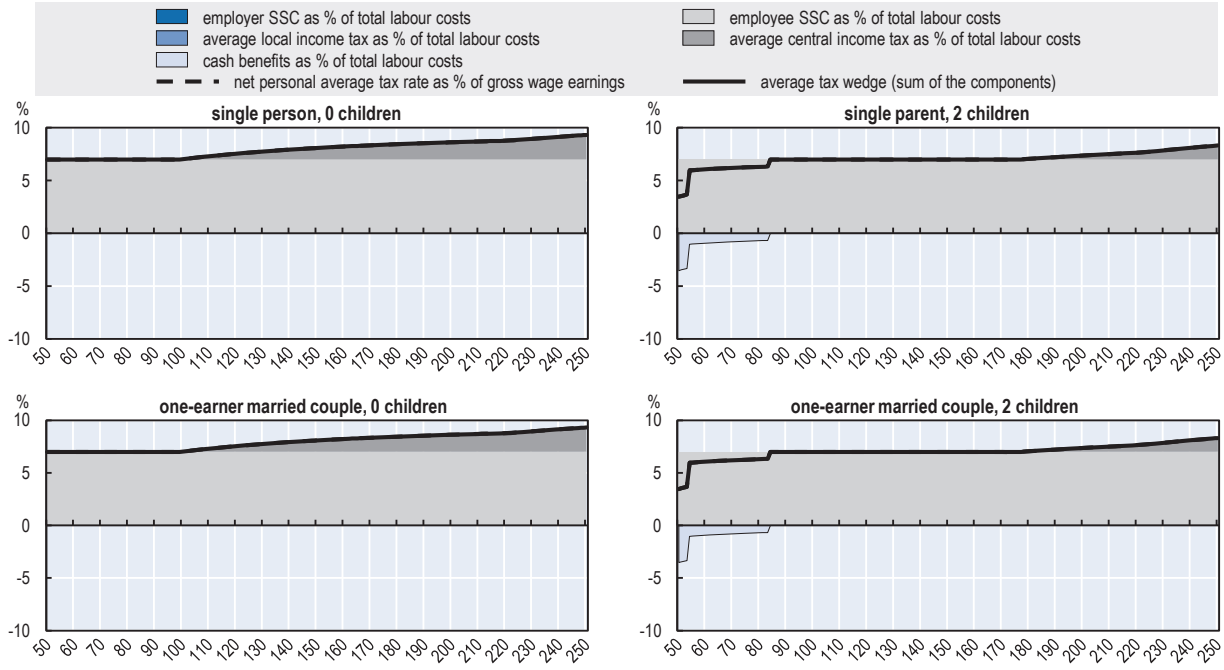
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923391

Chile 2018: average tax wedge decomposition

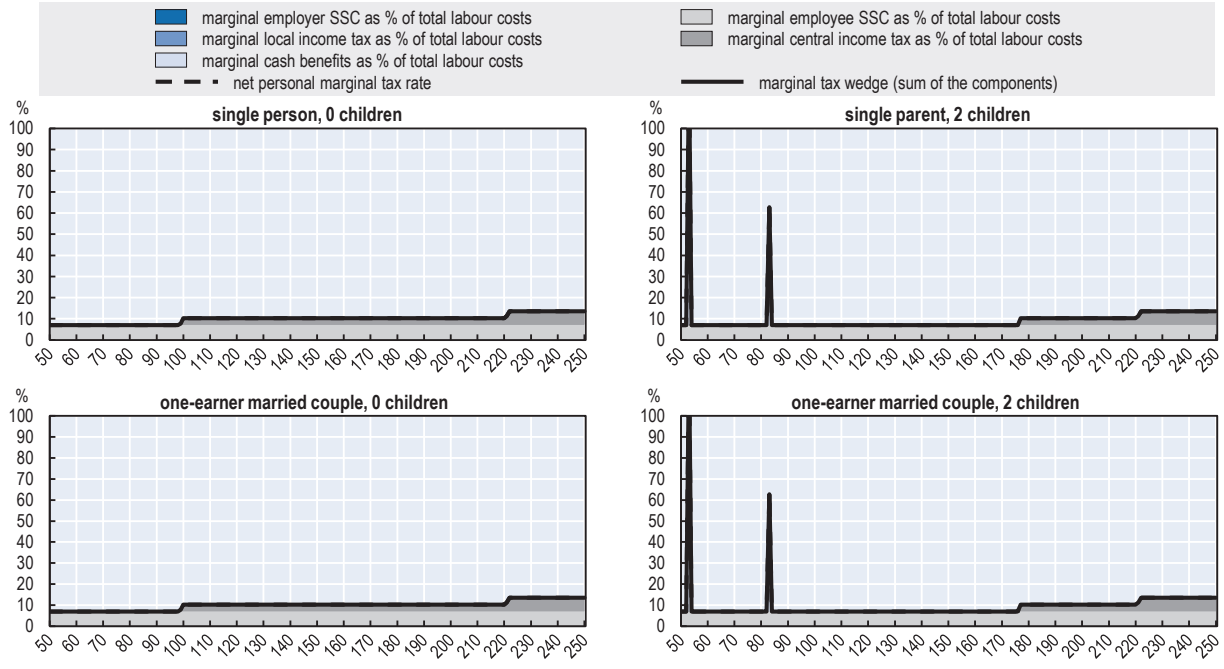
by level of gross earnings expressed as a % of the average wage



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Chile 2018: marginal tax wedge decomposition

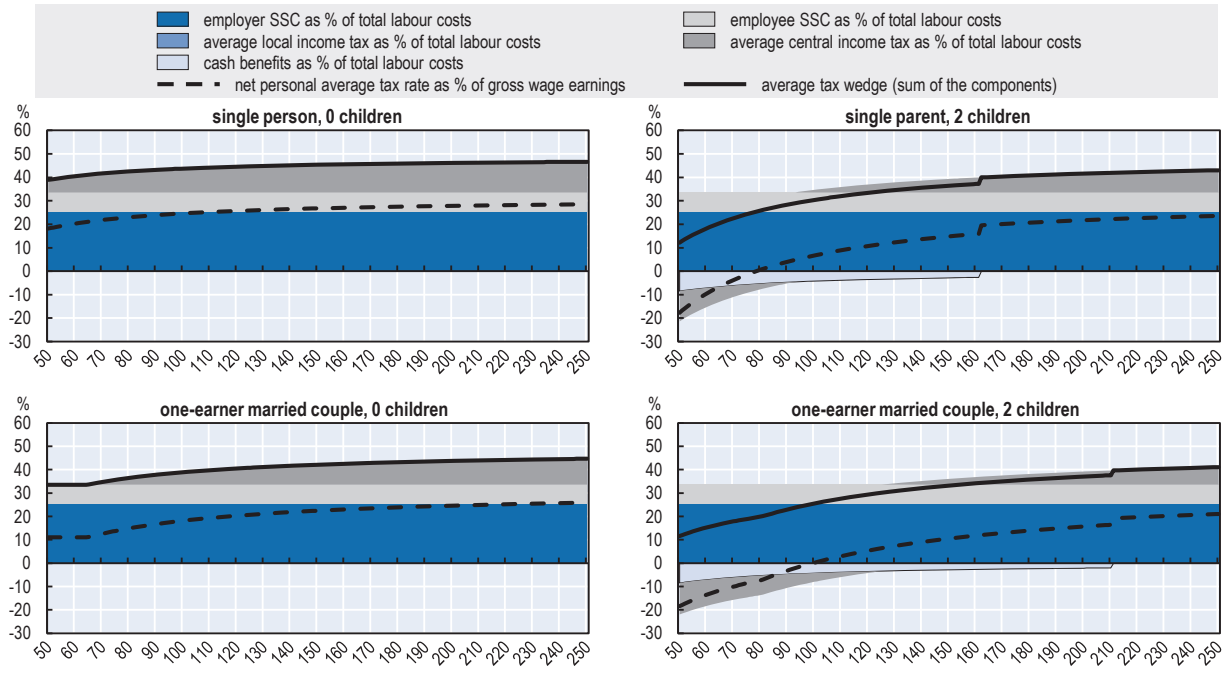
by level of gross earnings expressed as a % of the average wage



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Czech Republic 2018: average tax wedge decomposition

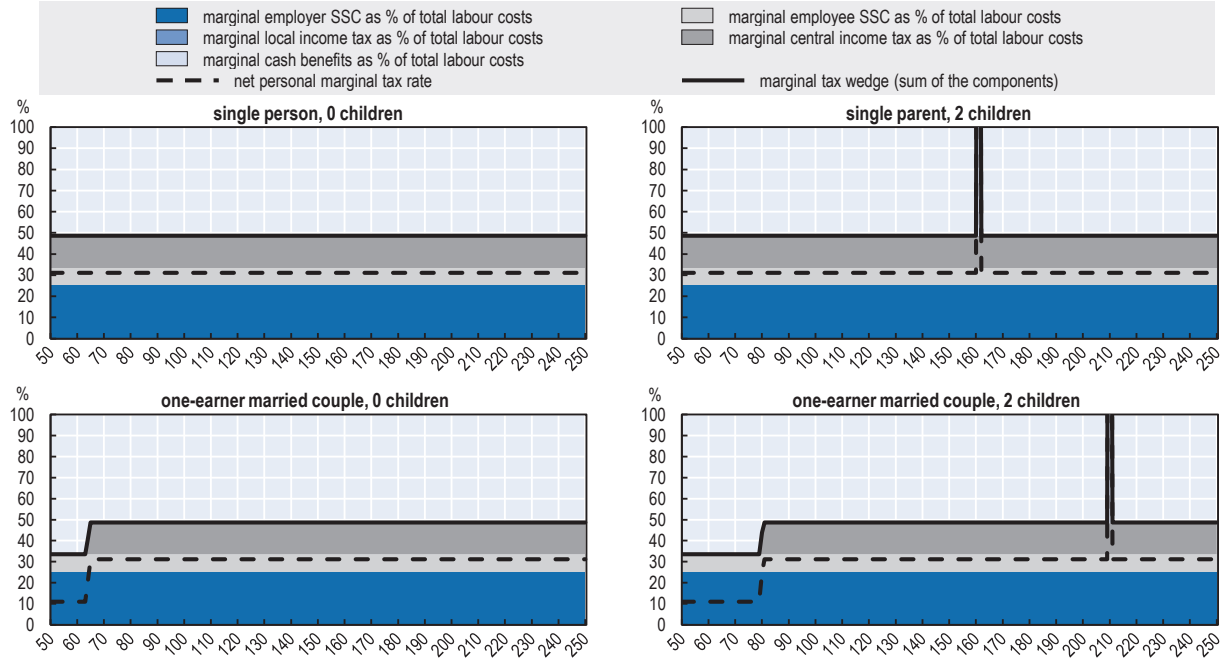
by level of gross earnings expressed as a % of the average wage



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Czech Republic 2018: marginal tax wedge decomposition

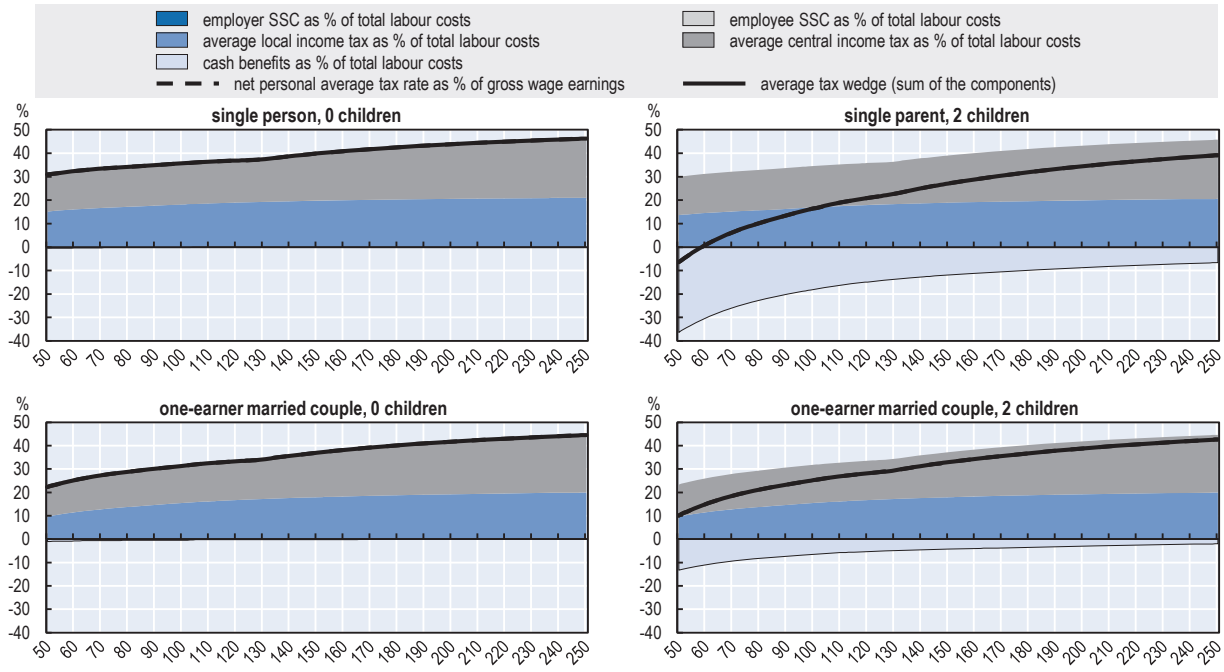
by level of gross earnings expressed as a % of the average wage



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Denmark 2018: average tax wedge decomposition

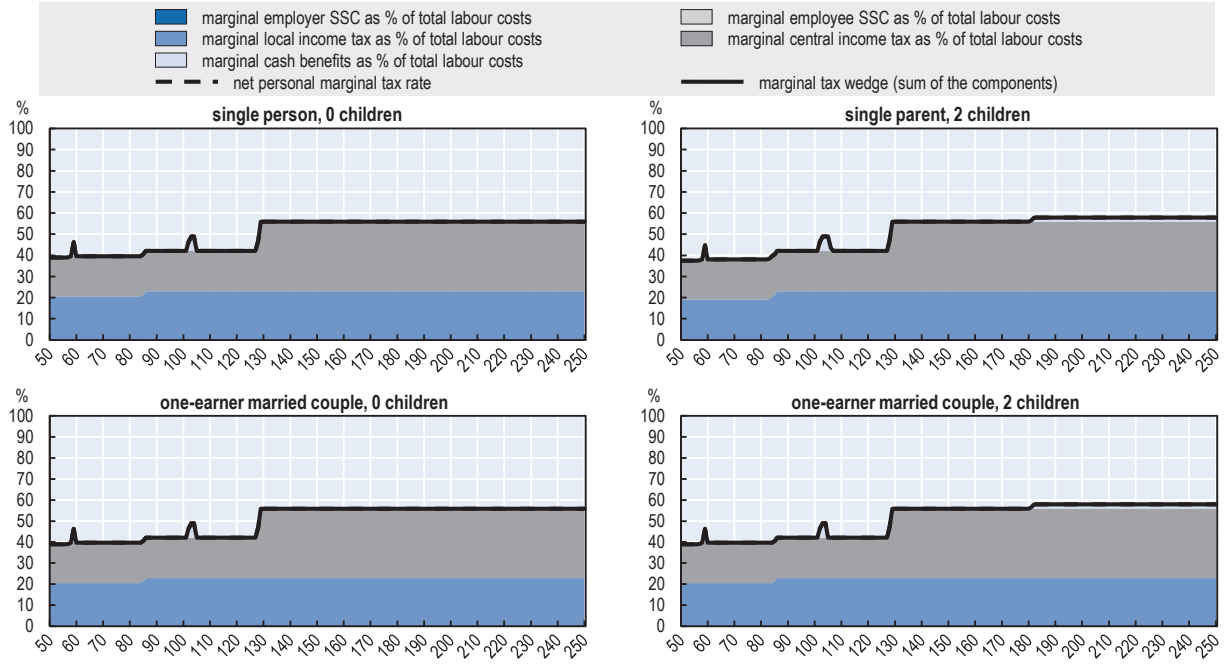
by level of gross earnings expressed as a % of the average wage



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Denmark 2018: marginal tax wedge decomposition

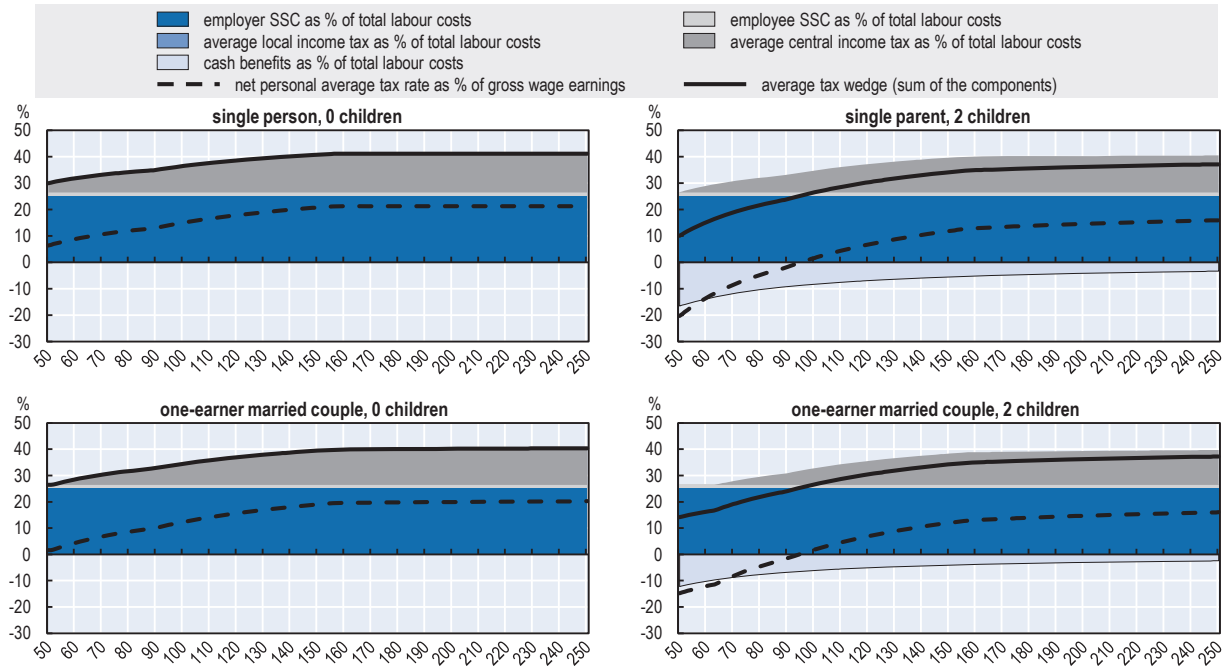
by level of gross earnings expressed as a % of the average wage



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Estonia 2018: average tax wedge decomposition

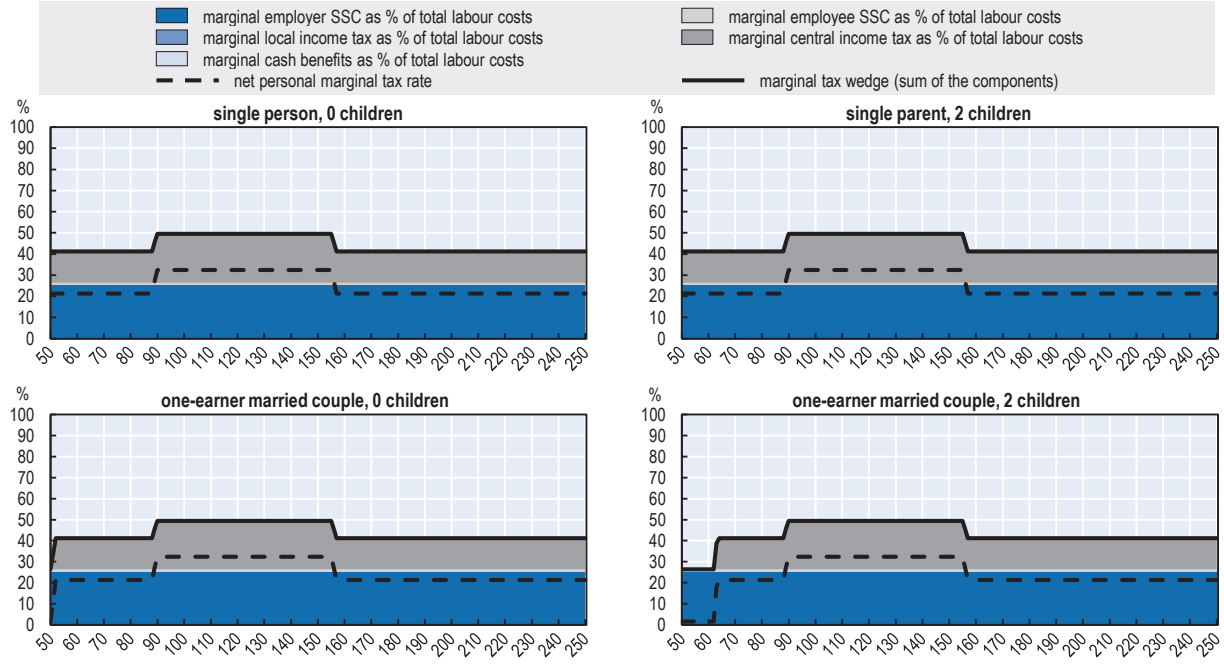
by level of gross earnings expressed as a % of the average wage



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Estonia 2018: marginal tax wedge decomposition

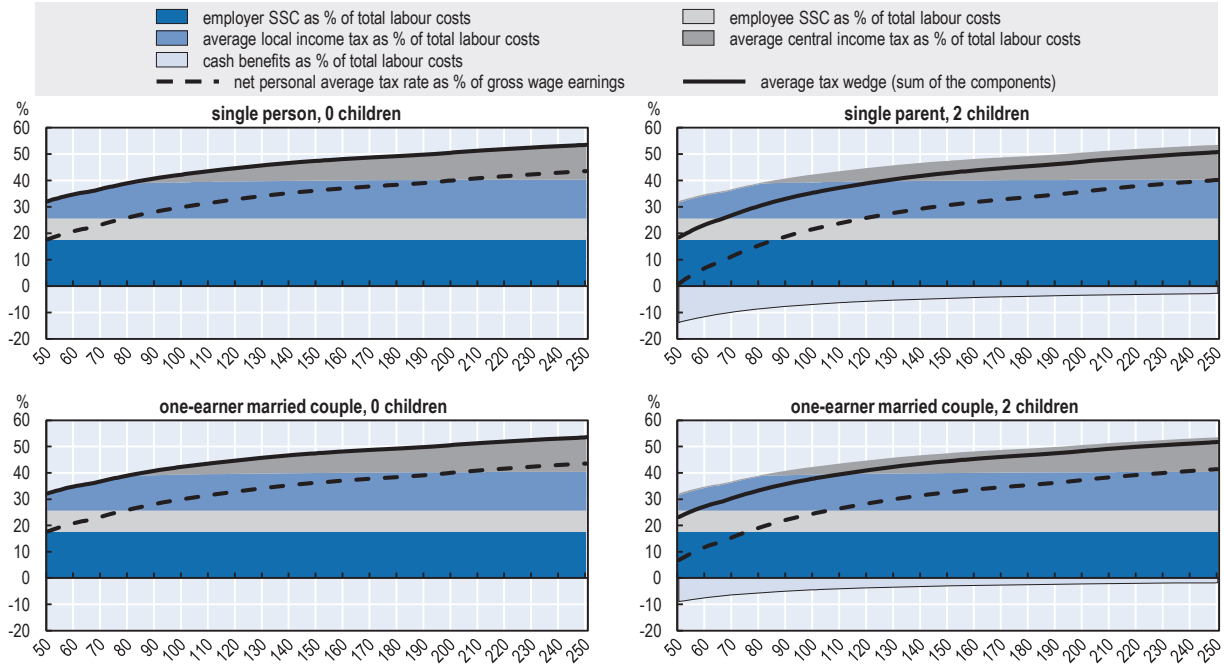
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923543

Finland 2018: average tax wedge decomposition

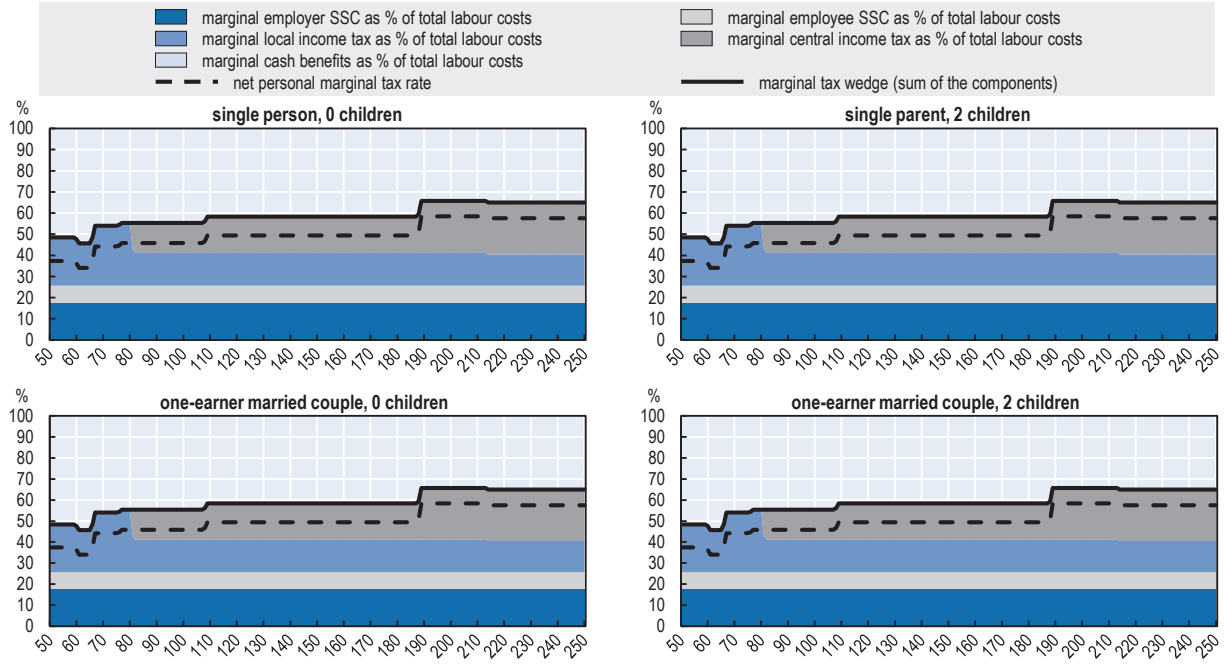
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923562

Finland 2018: marginal tax wedge decomposition

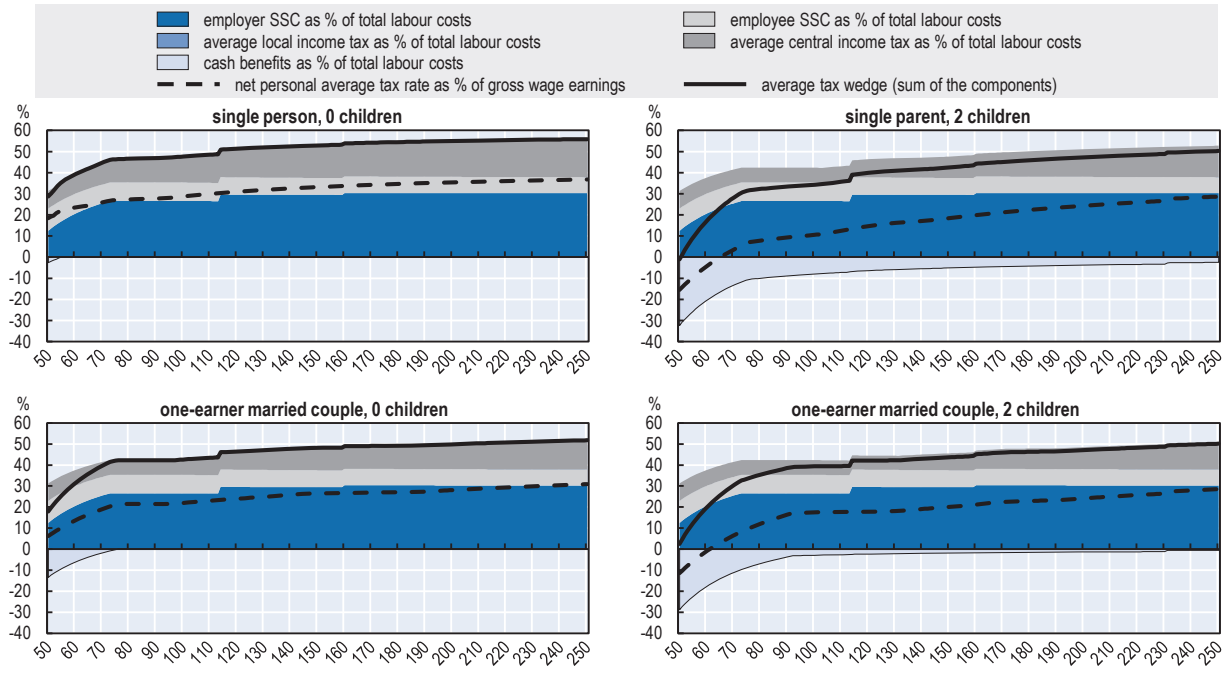
by level of gross earnings expressed as a % of the average wage



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France 2018: average tax wedge decomposition

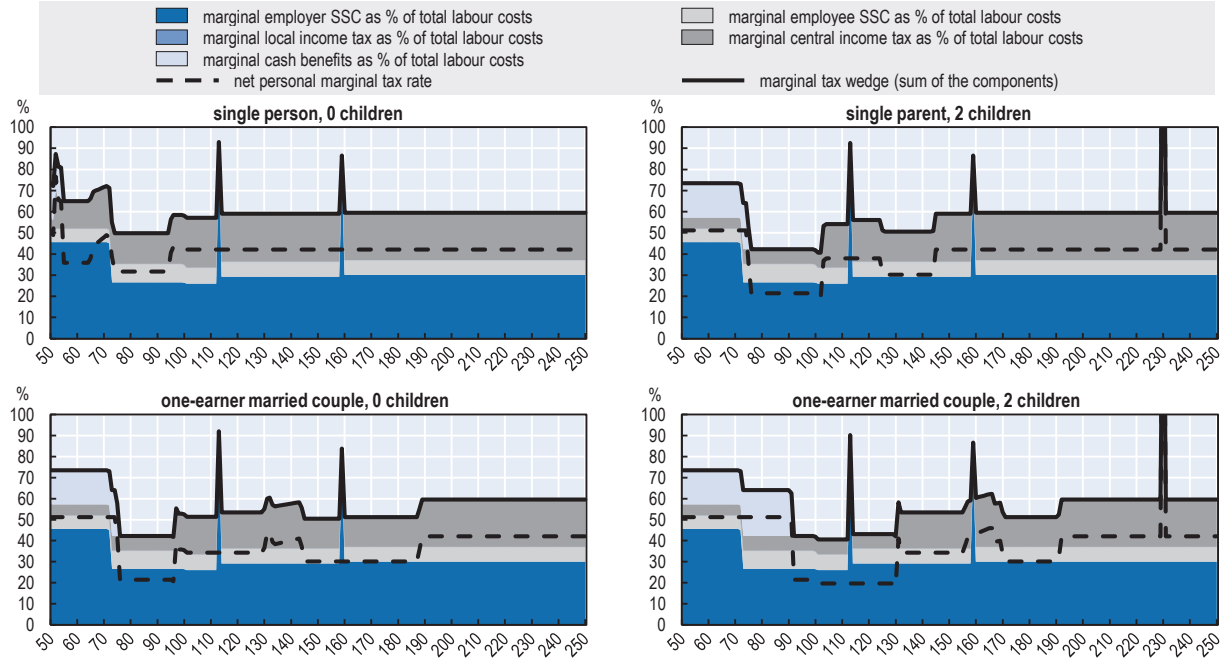
by level of gross earnings expressed as a % of the average wage



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France 2018: marginal tax wedge decomposition

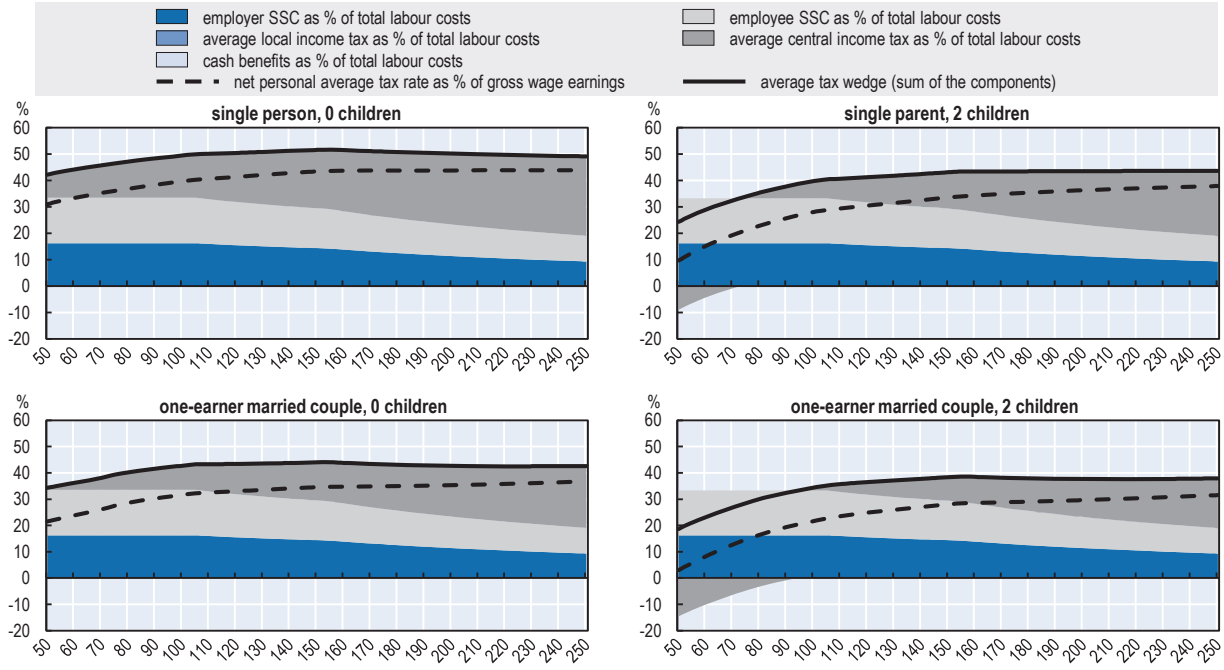
by level of gross earnings expressed as a % of the average wage



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Germany 2018: average tax wedge decomposition

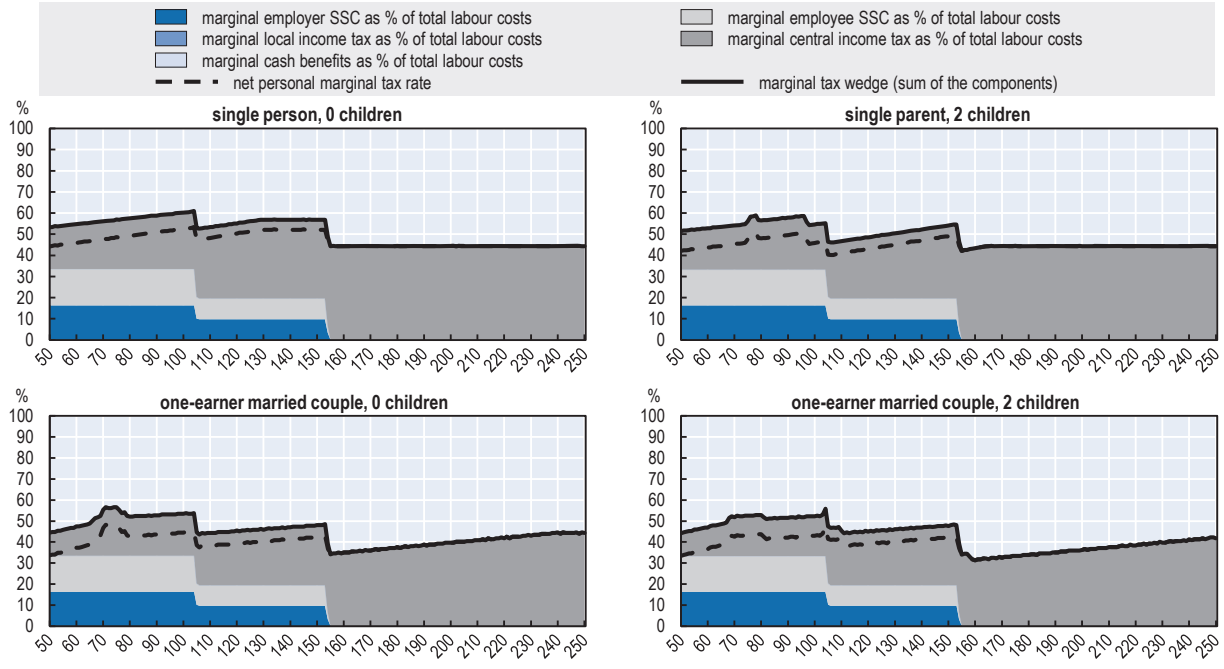
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923638

Germany 2018: marginal tax wedge decomposition

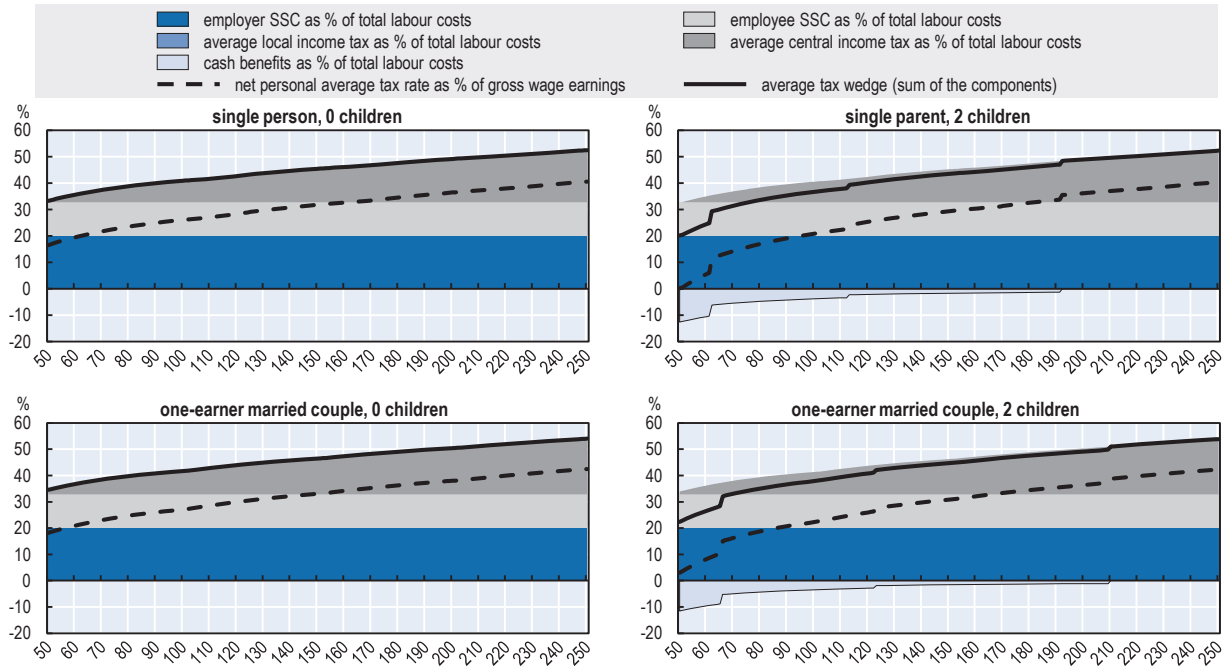
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923657

Greece 2018: average tax wedge decomposition

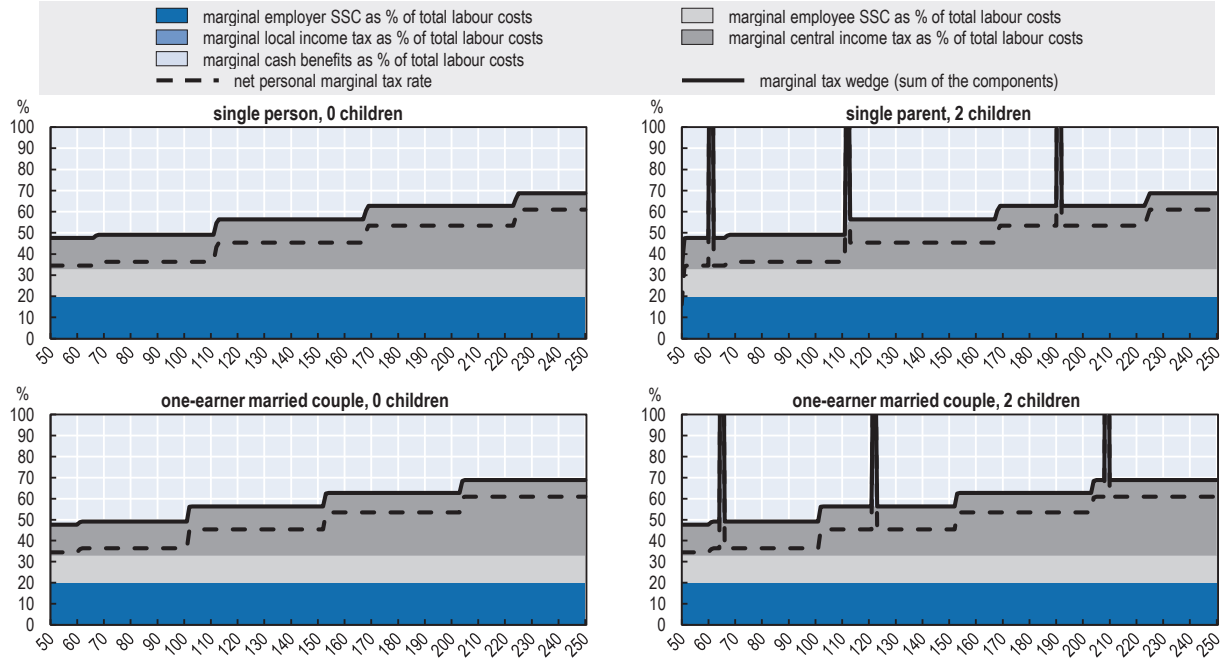
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923676

Greece 2018: marginal tax wedge decomposition

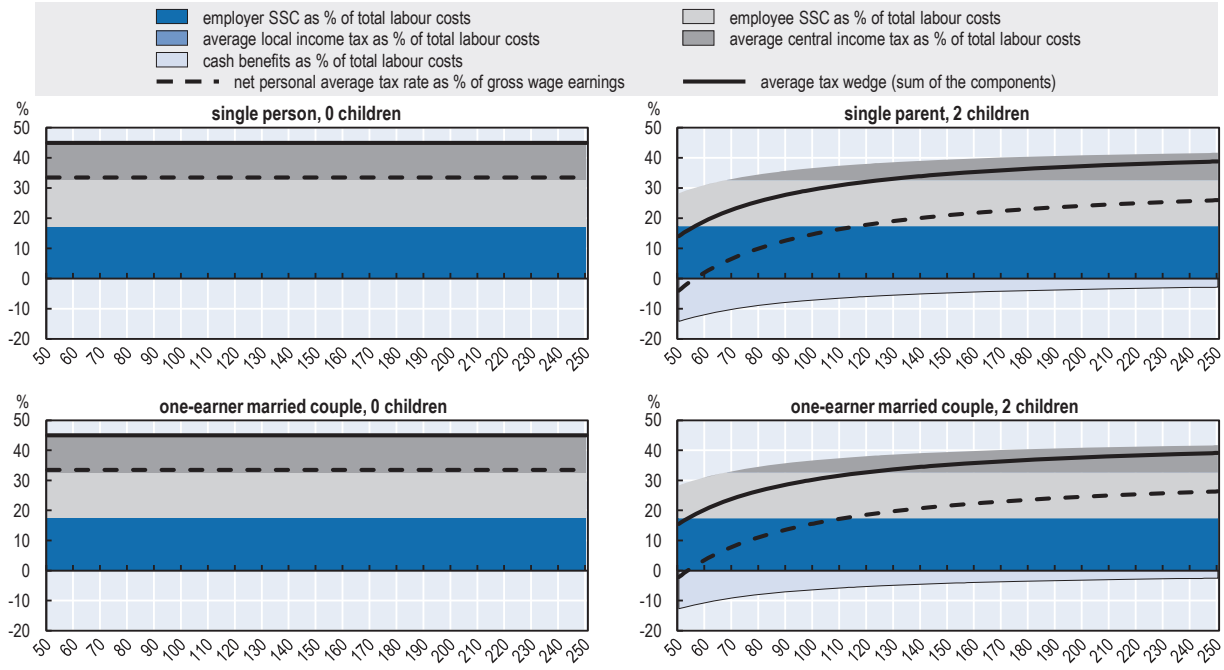
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923695

Hungary 2018: average tax wedge decomposition

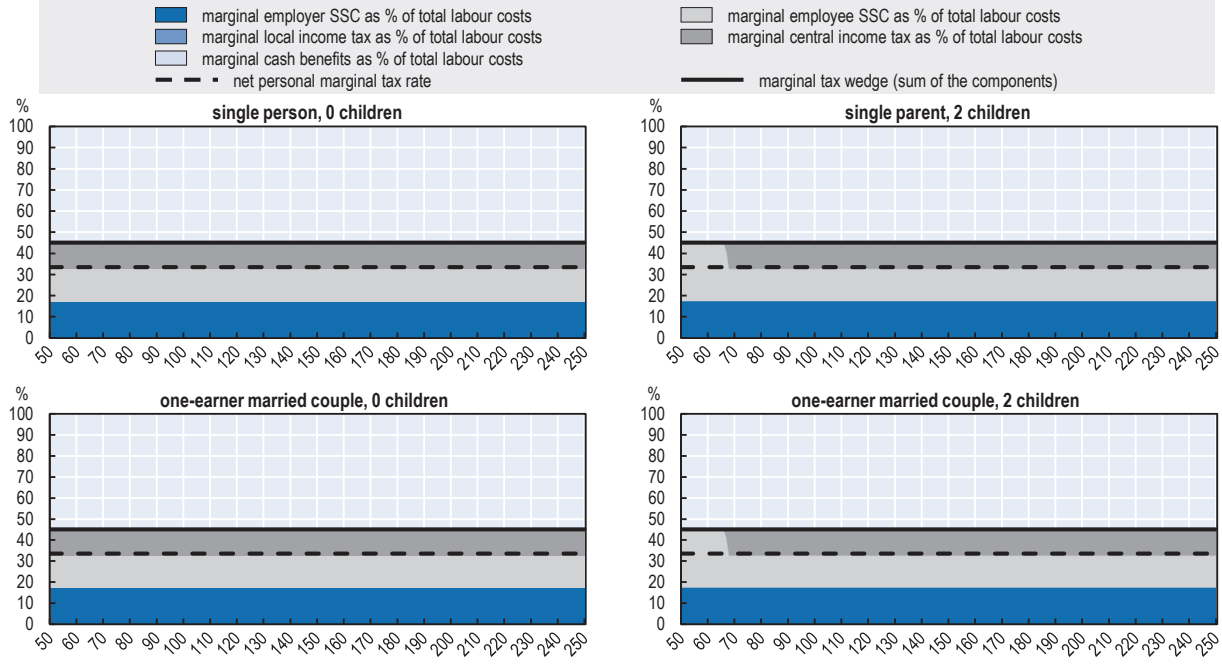
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923714

Hungary 2018: marginal tax wedge decomposition

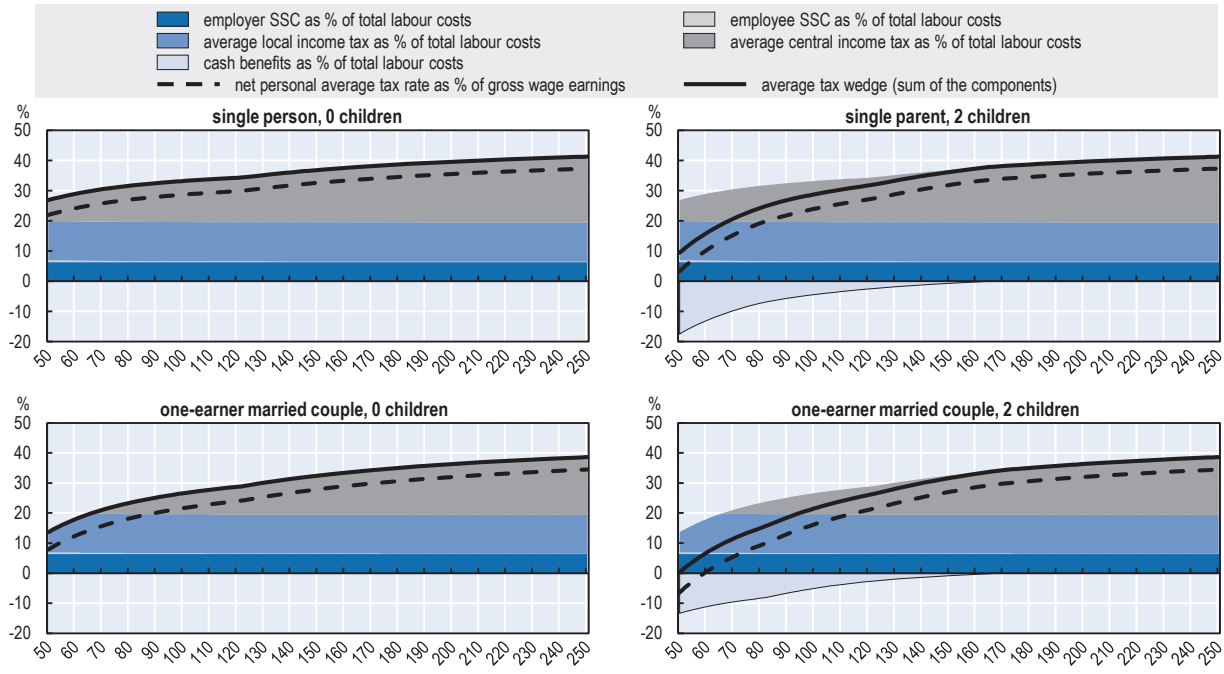
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923733

Iceland 2018: average tax wedge decomposition

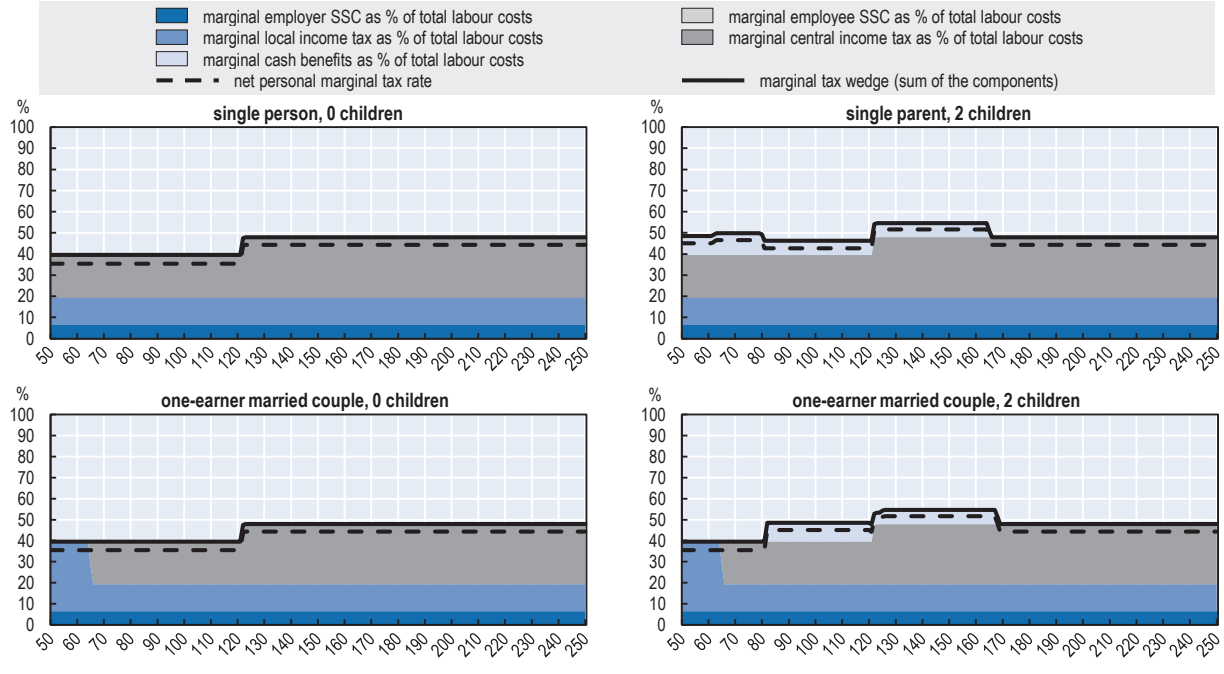
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923752

Iceland 2018: marginal tax wedge decomposition

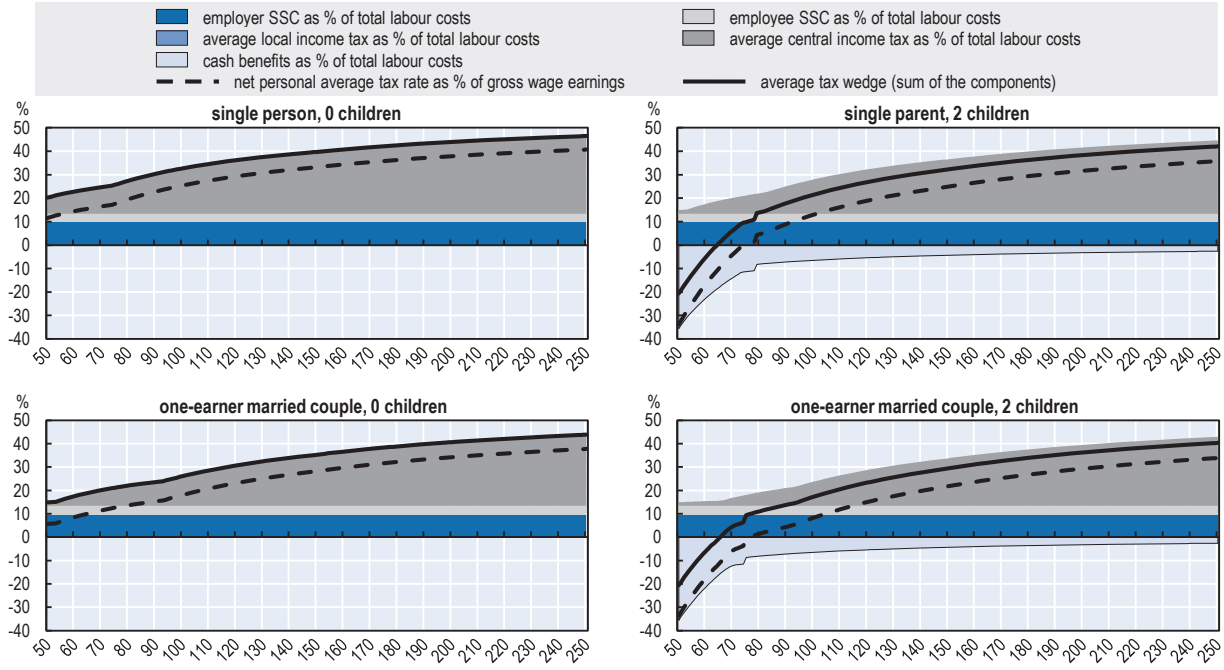
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923771

Ireland 2018: average tax wedge decomposition

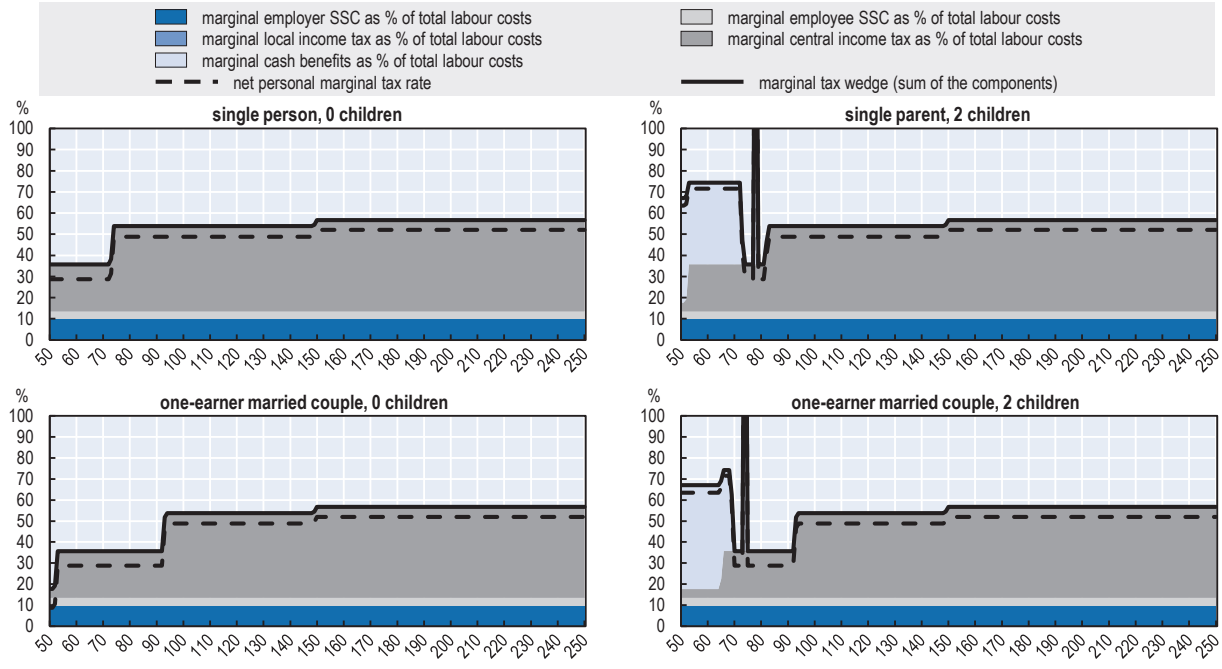
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923790

Ireland 2018: marginal tax wedge decomposition

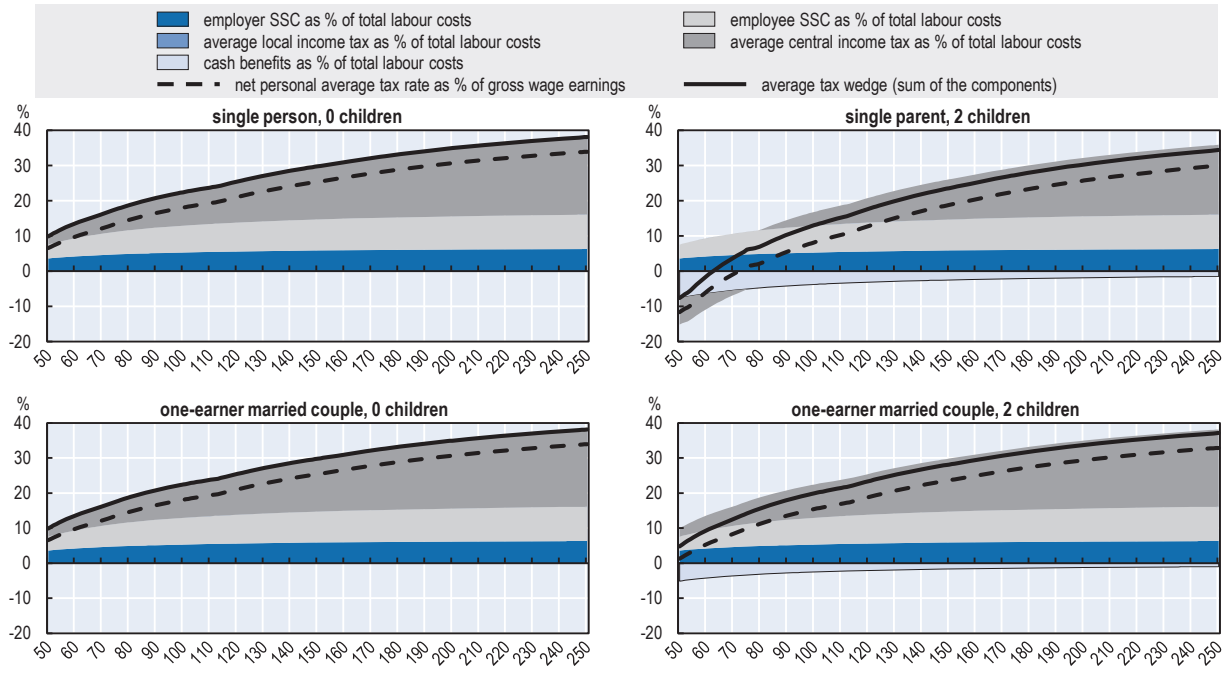
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923809

Israel 2018: average tax wedge decomposition

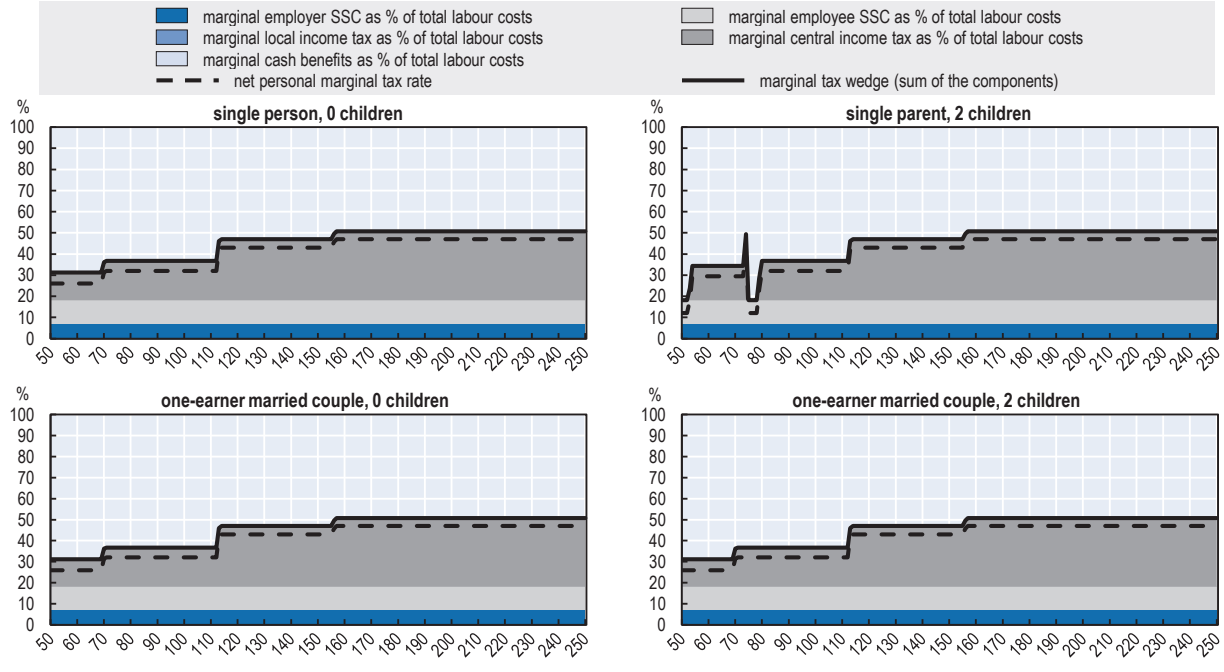
by level of gross earnings expressed as a % of the average wage



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Israel 2018: marginal tax wedge decomposition

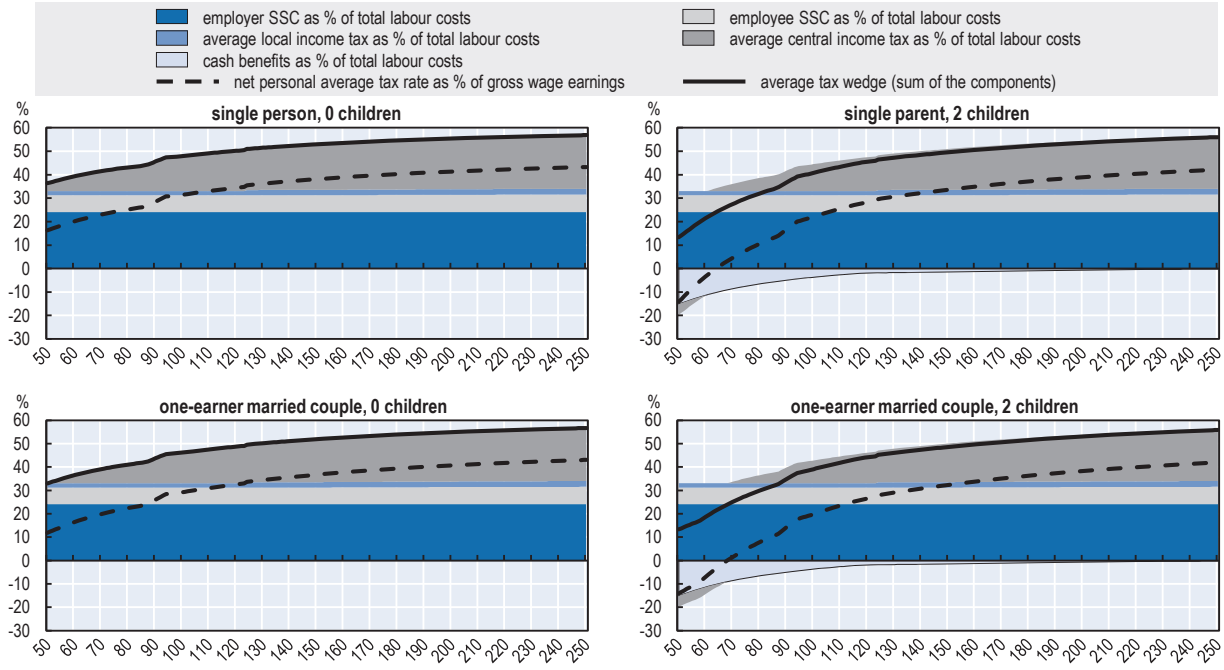
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923847

Italy 2018: average tax wedge decomposition

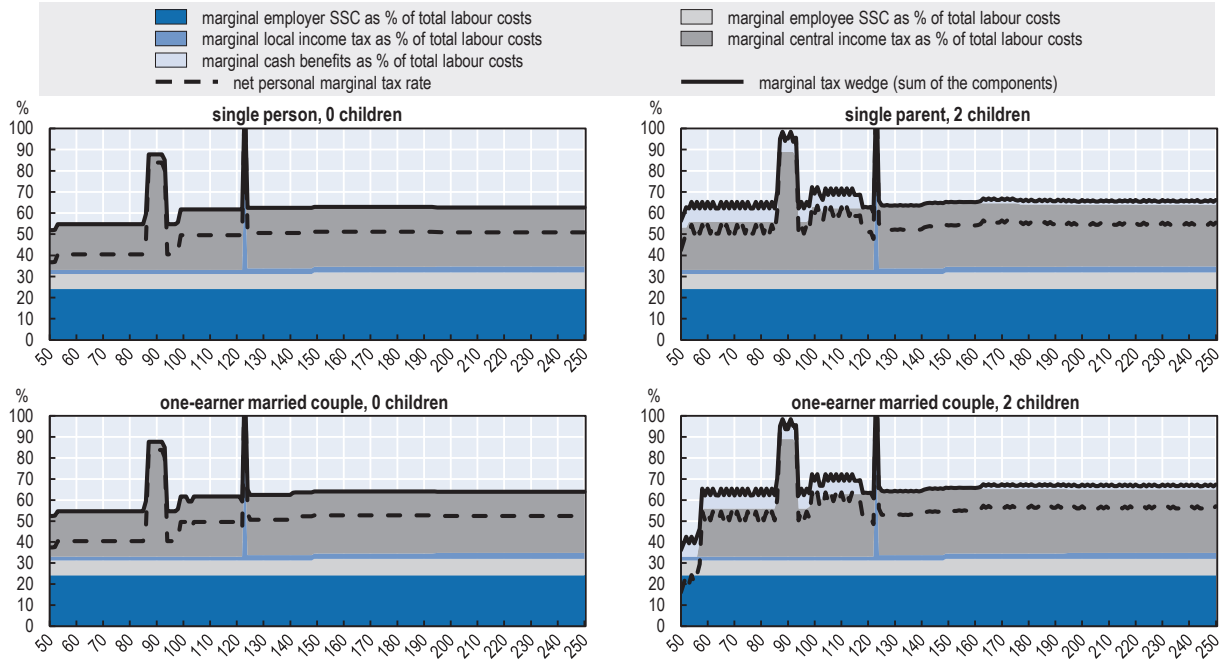
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923866

Italy 2018: marginal tax wedge decomposition

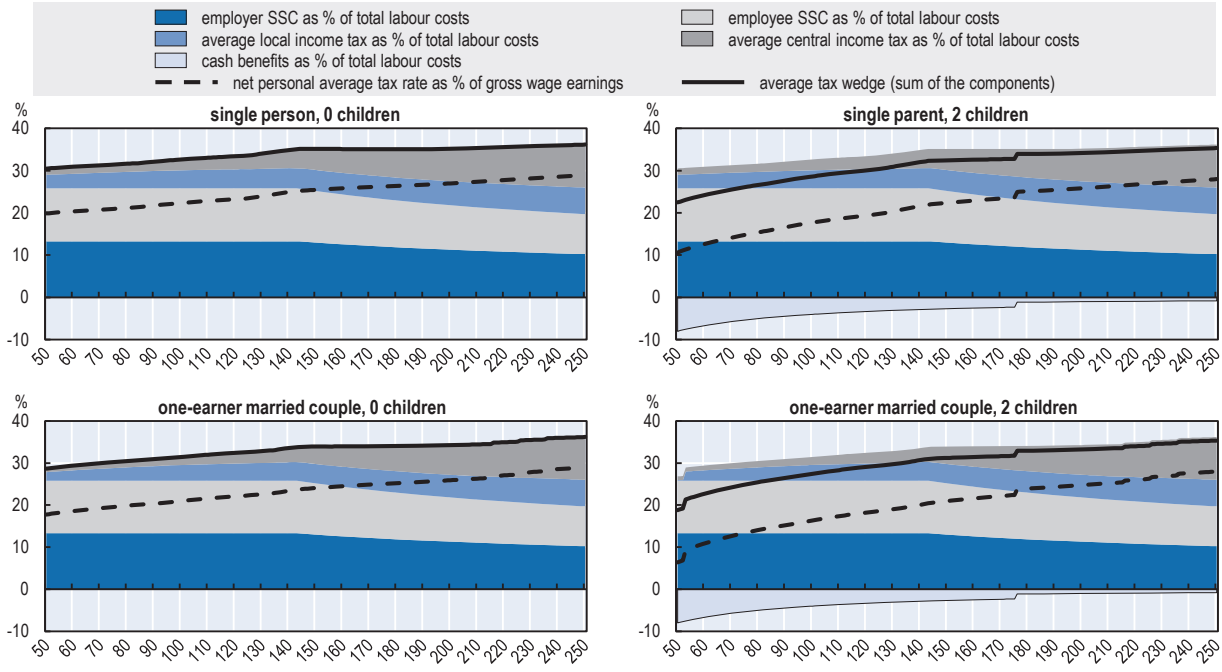
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923885

Japan 2018: average tax wedge decomposition

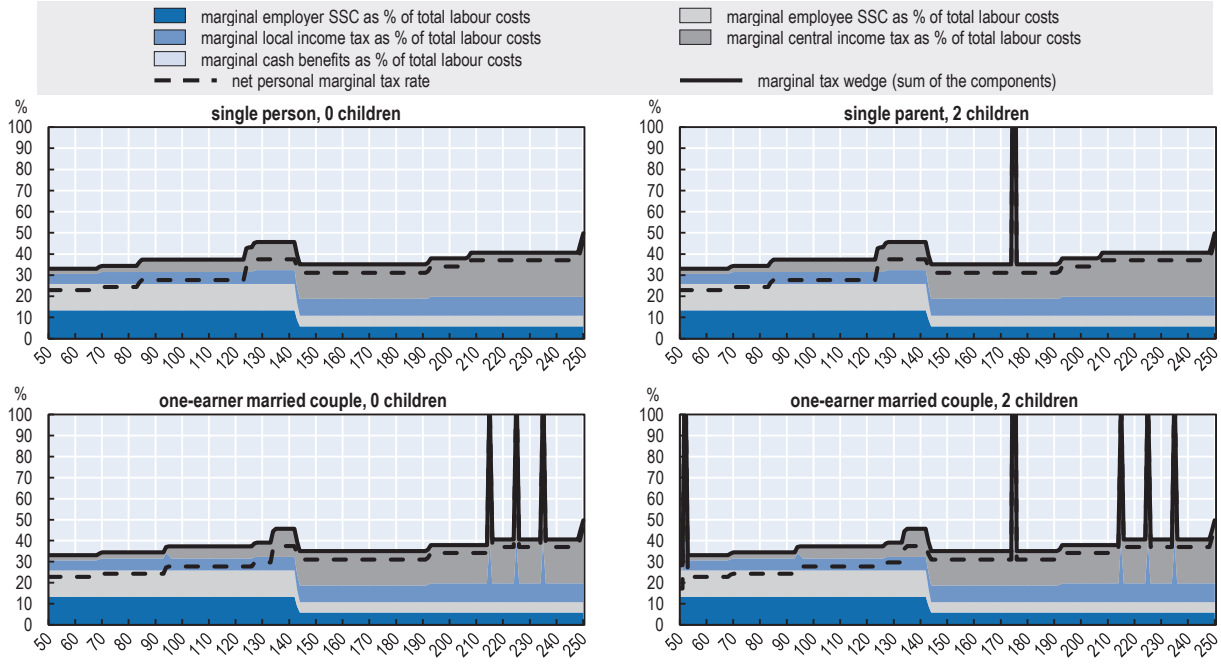
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923904

Japan 2018: marginal tax wedge decomposition

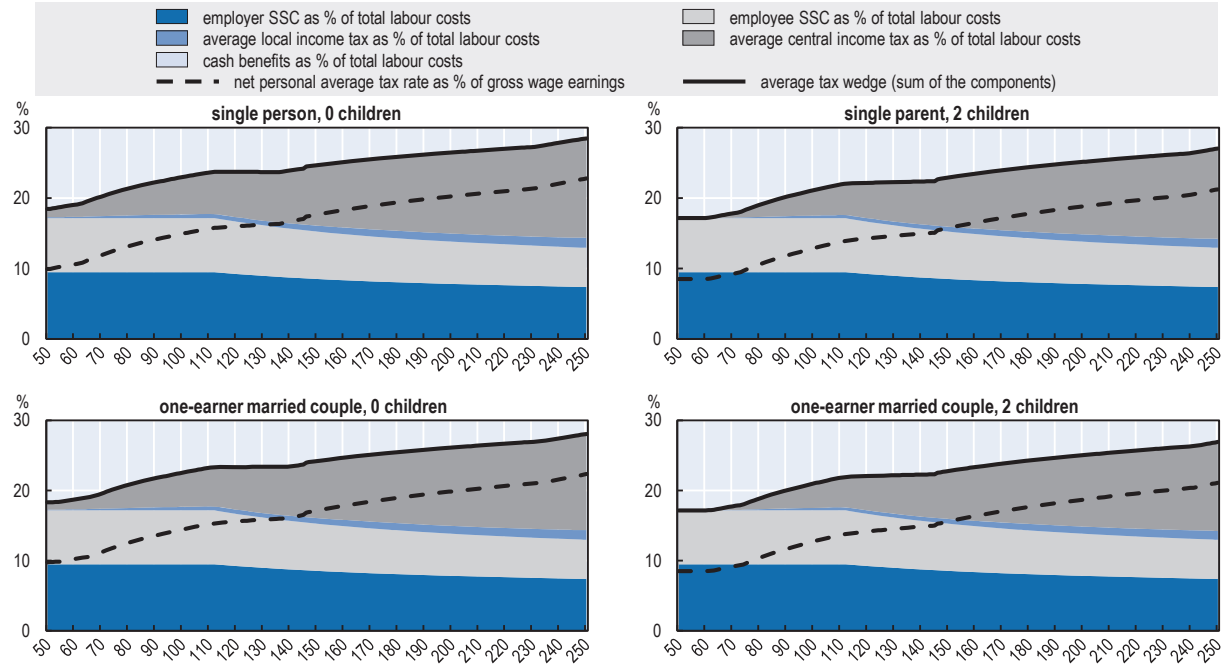
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923923

Korea 2018: average tax wedge decomposition

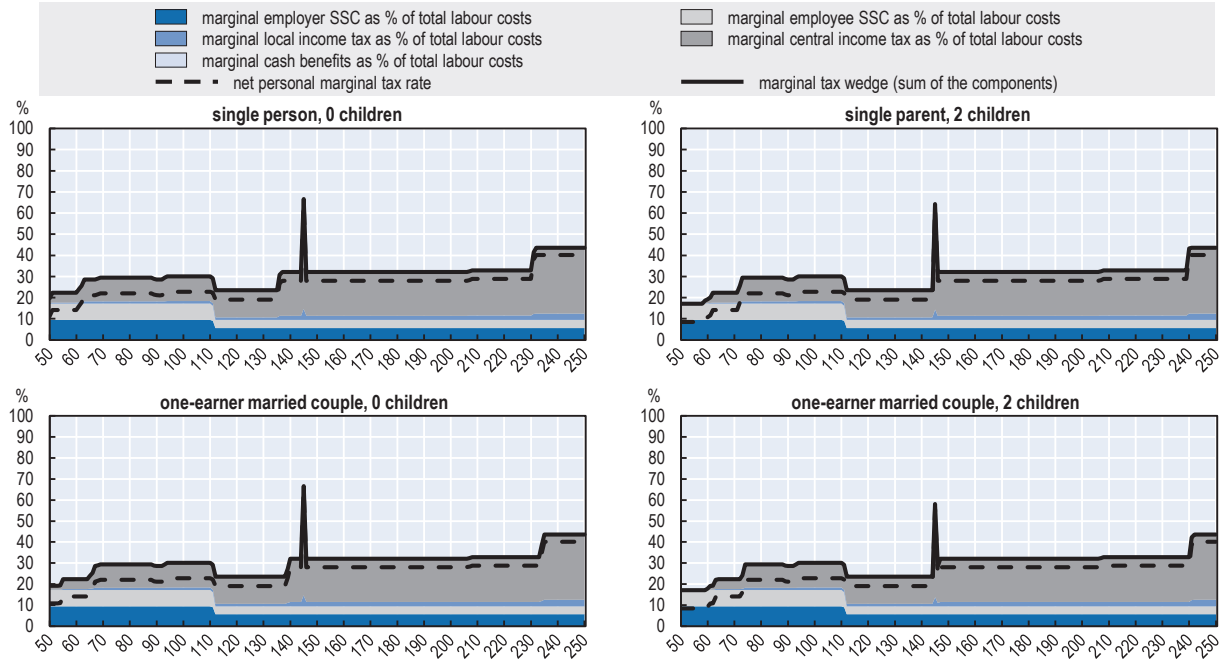
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923942

Korea 2018: marginal tax wedge decomposition

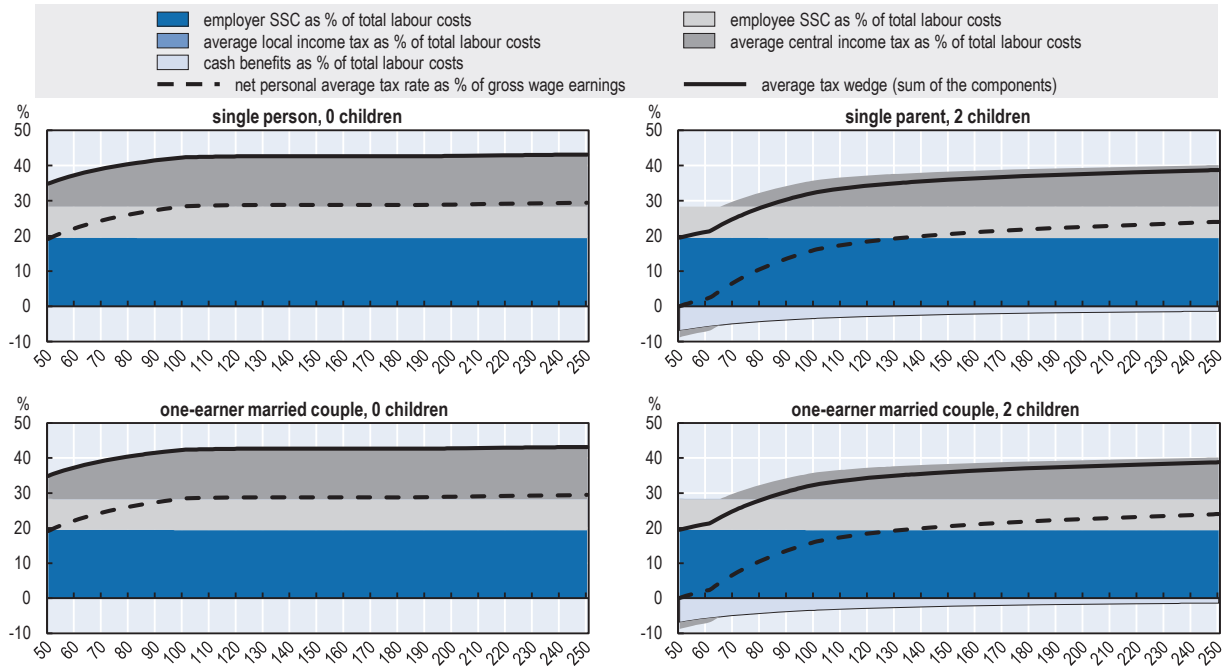
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923961

Latvia 2018: average tax wedge decomposition

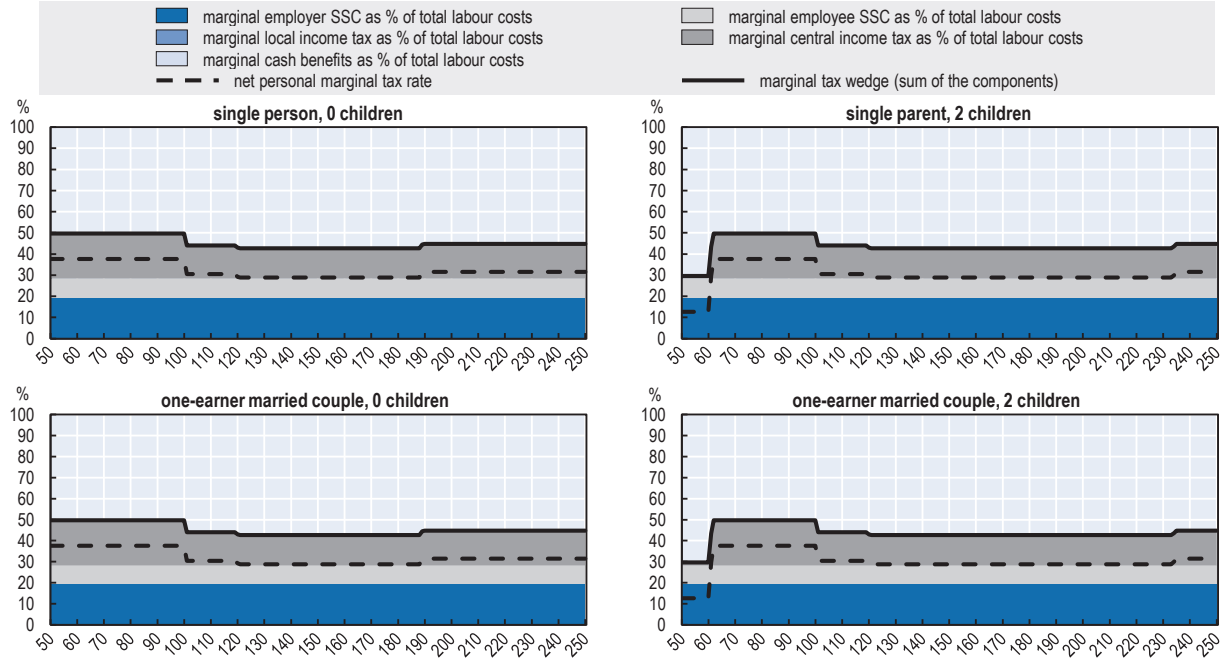
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923980

Latvia 2018: marginal tax wedge decomposition

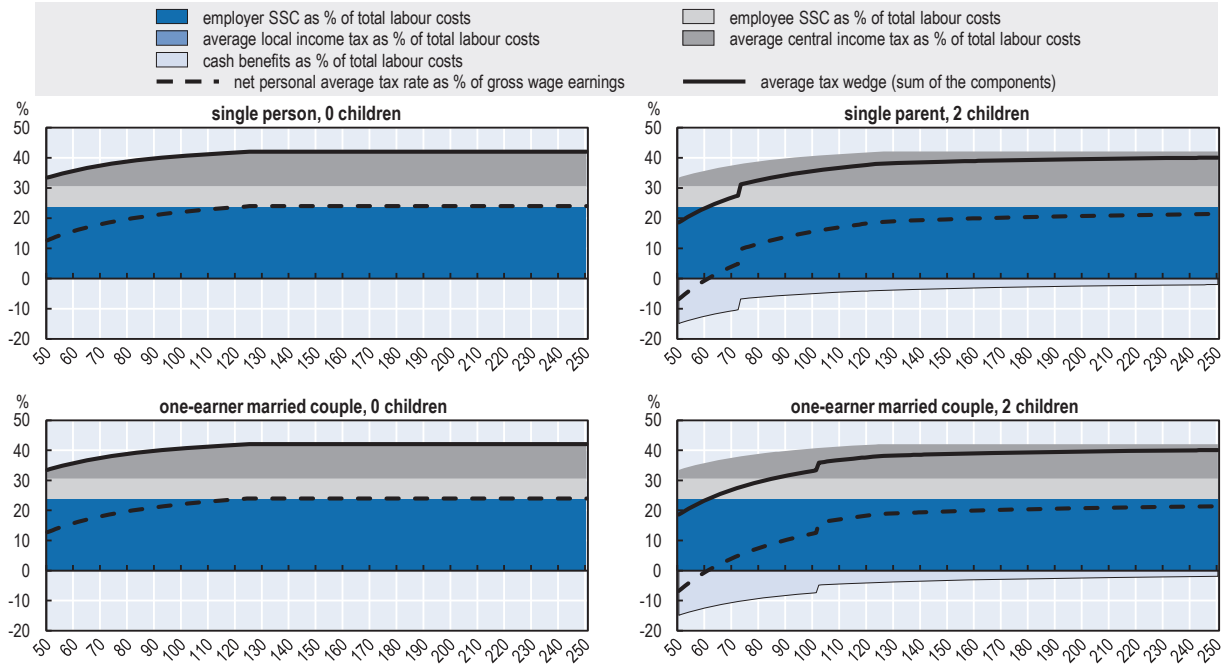
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933923999

Lithuania 2018: average tax wedge decomposition

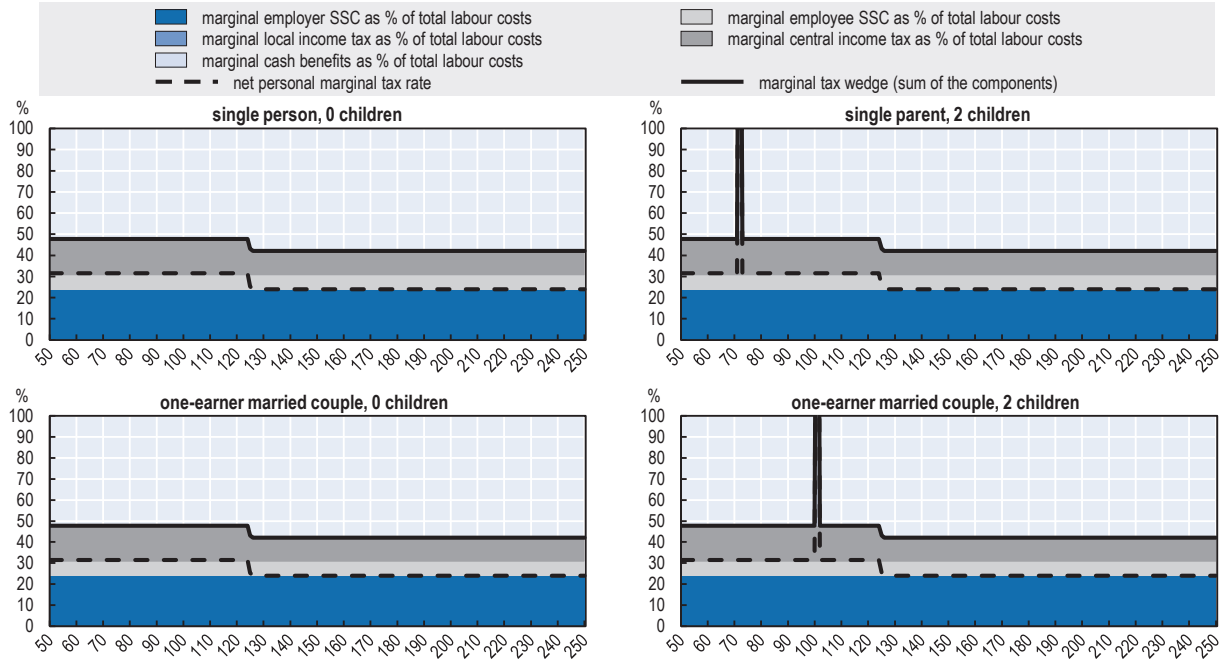
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924018

Lithuania 2018: marginal tax wedge decomposition

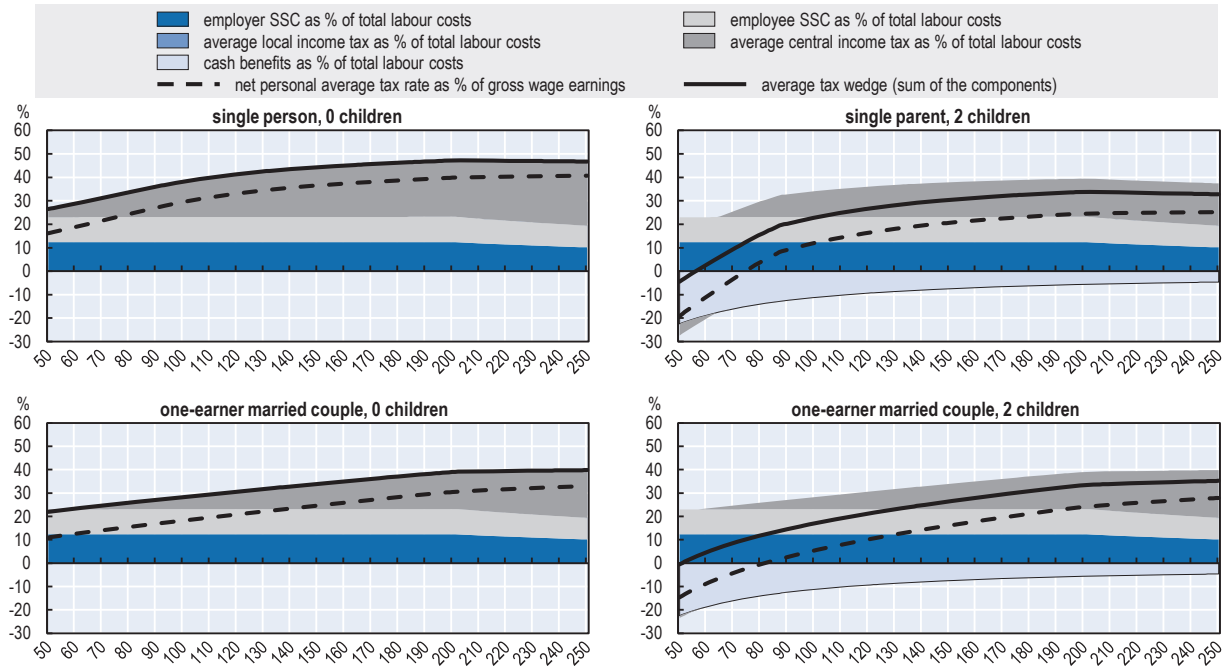
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924037

Luxembourg 2018: average tax wedge decomposition

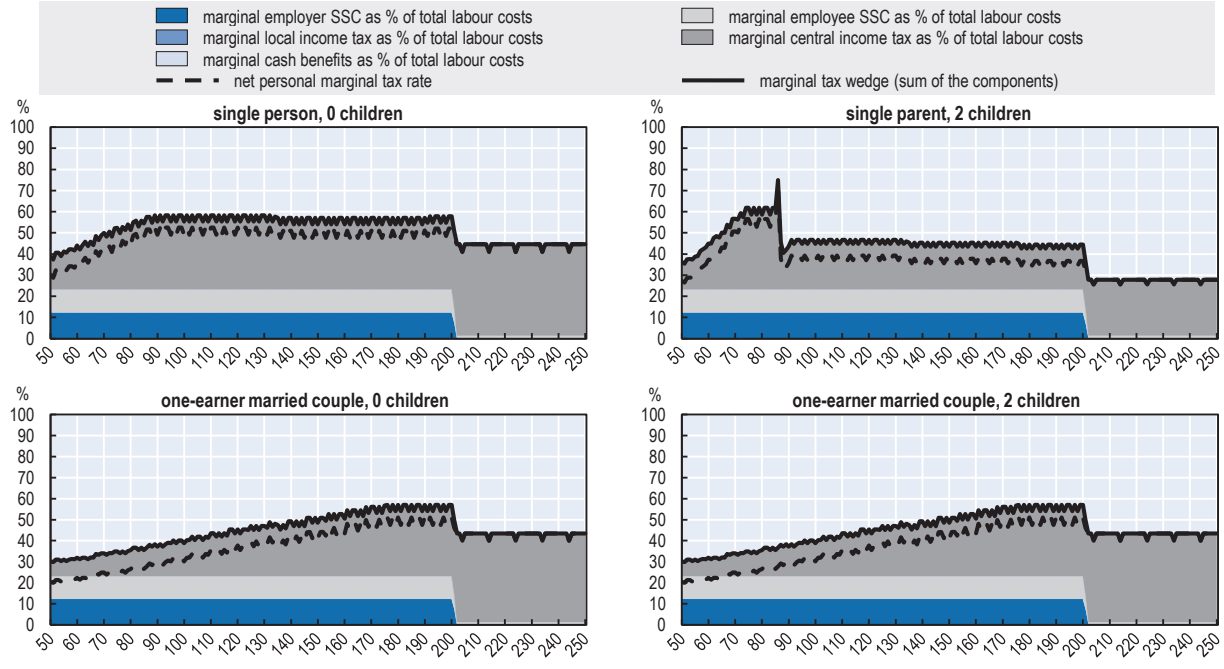
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924056

Luxembourg 2018: marginal tax wedge decomposition

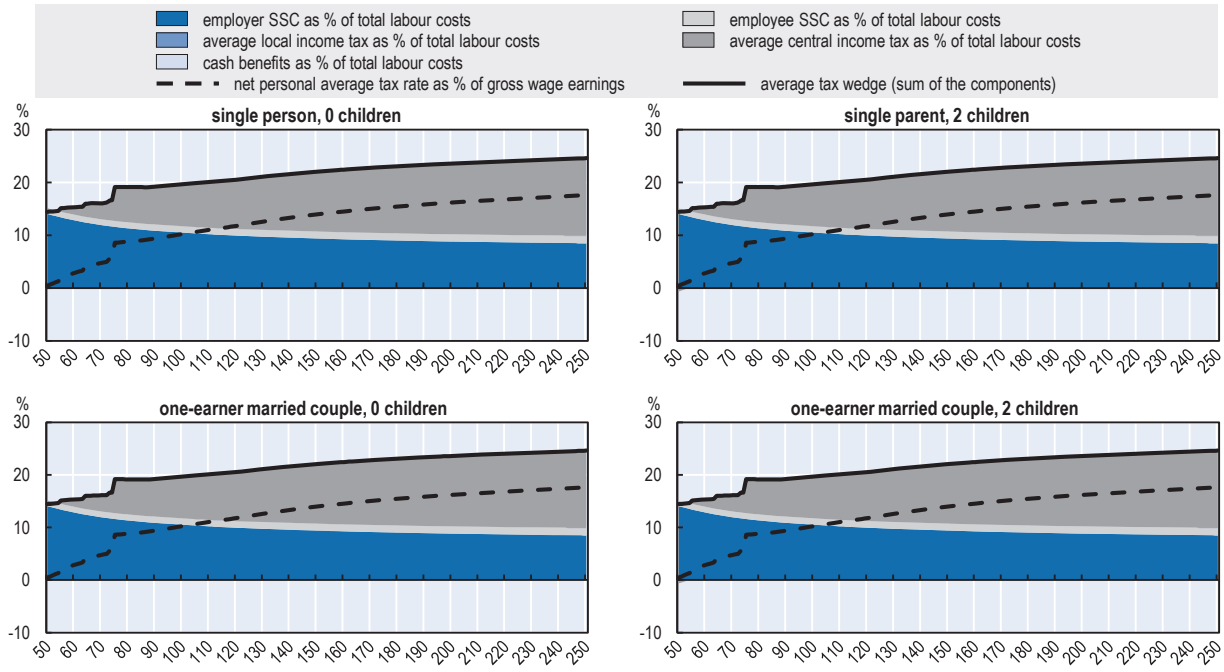
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924075

Mexico 2018: average tax wedge decomposition

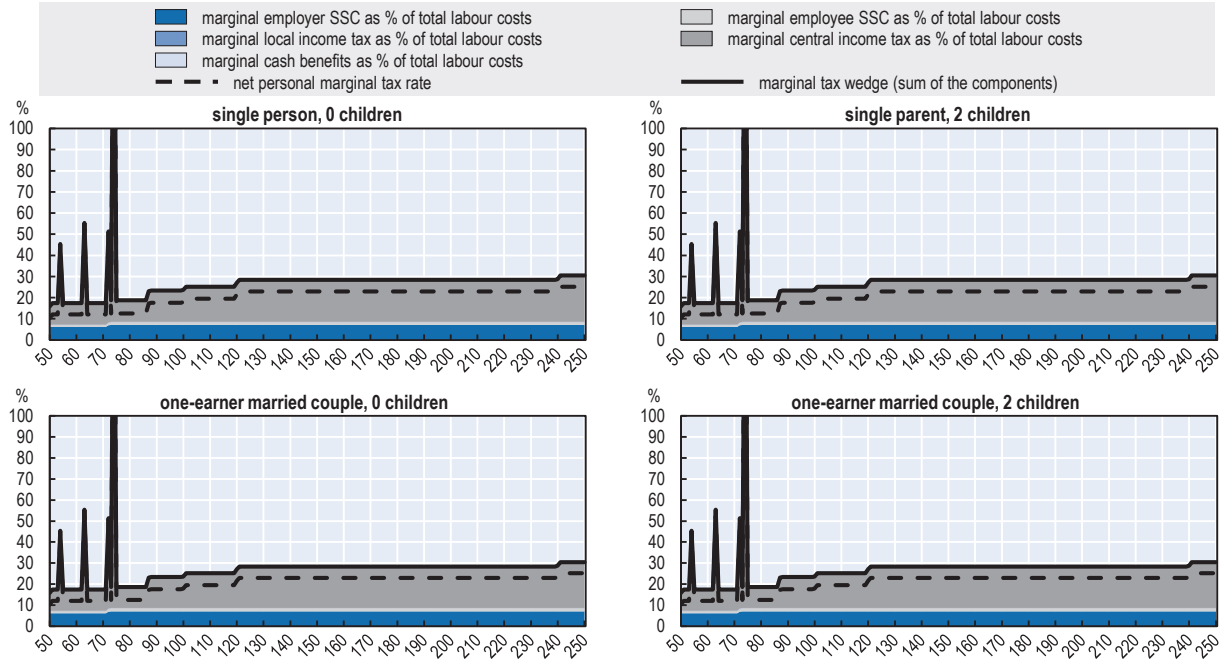
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924094

Mexico 2018: marginal tax wedge decomposition

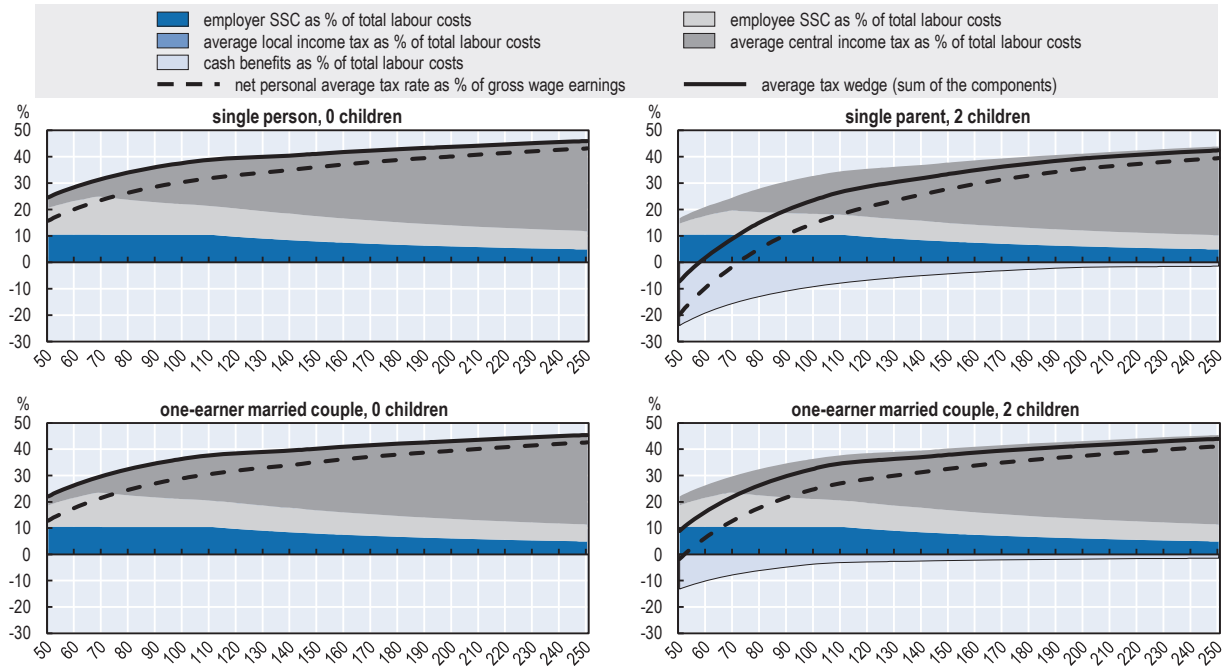
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924113

Netherlands 2018: average tax wedge decomposition

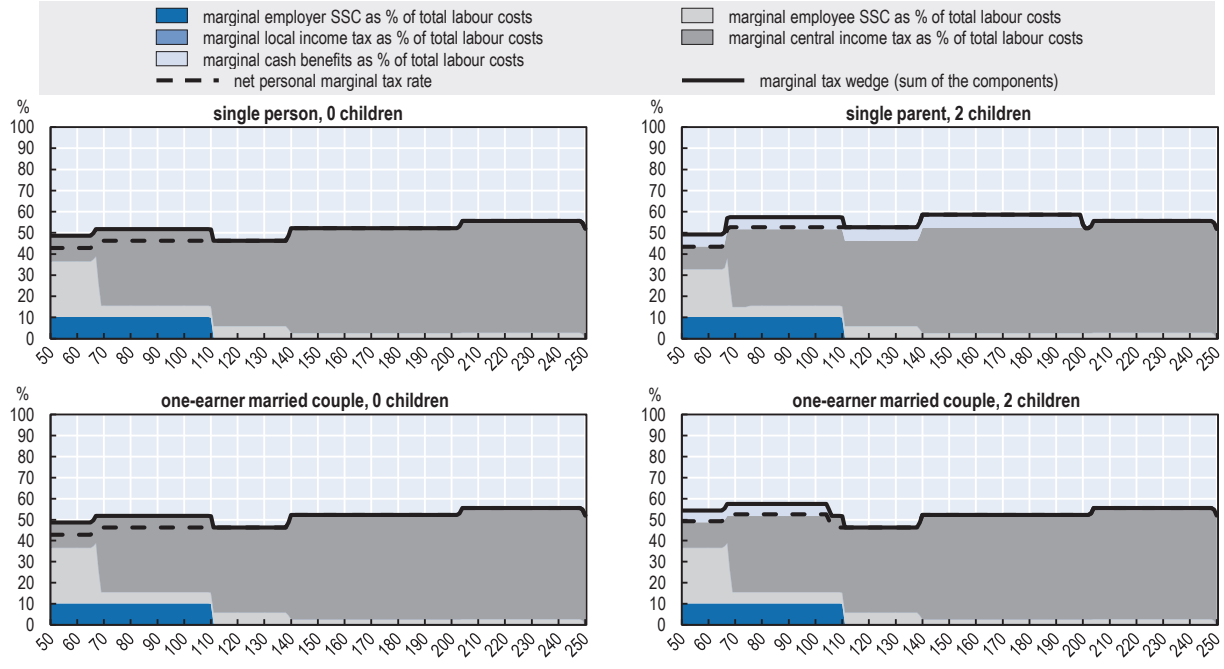
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924132

Netherlands 2018: marginal tax wedge decomposition

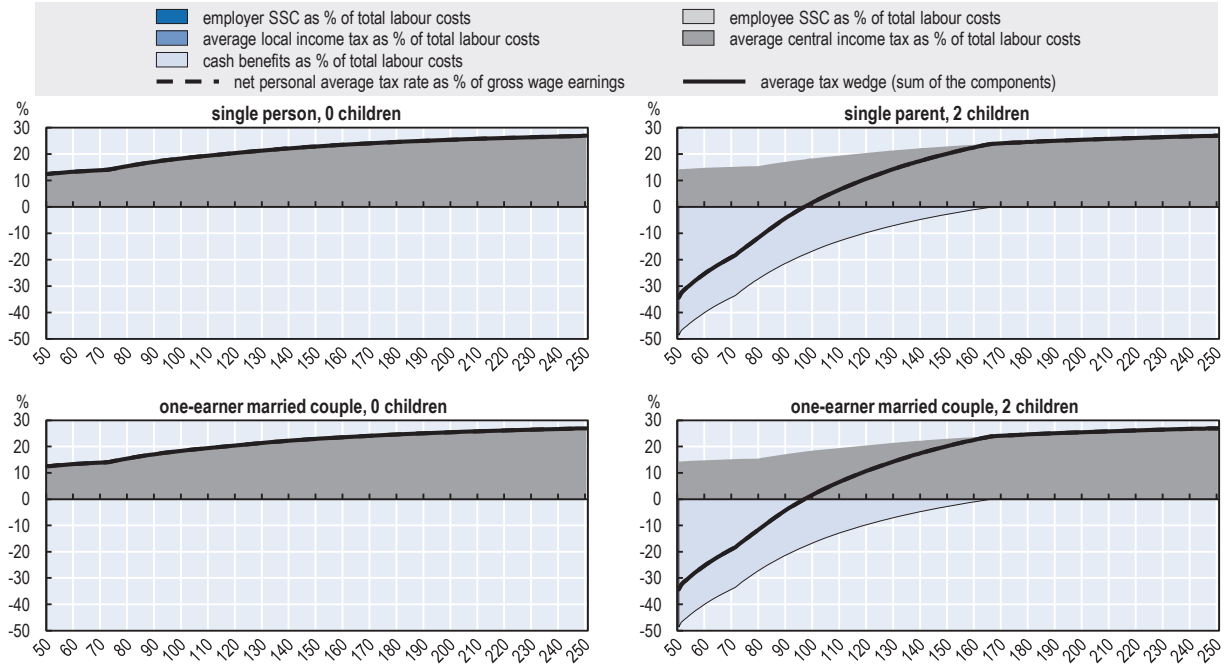
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924151

New Zealand 2018: average tax wedge decomposition

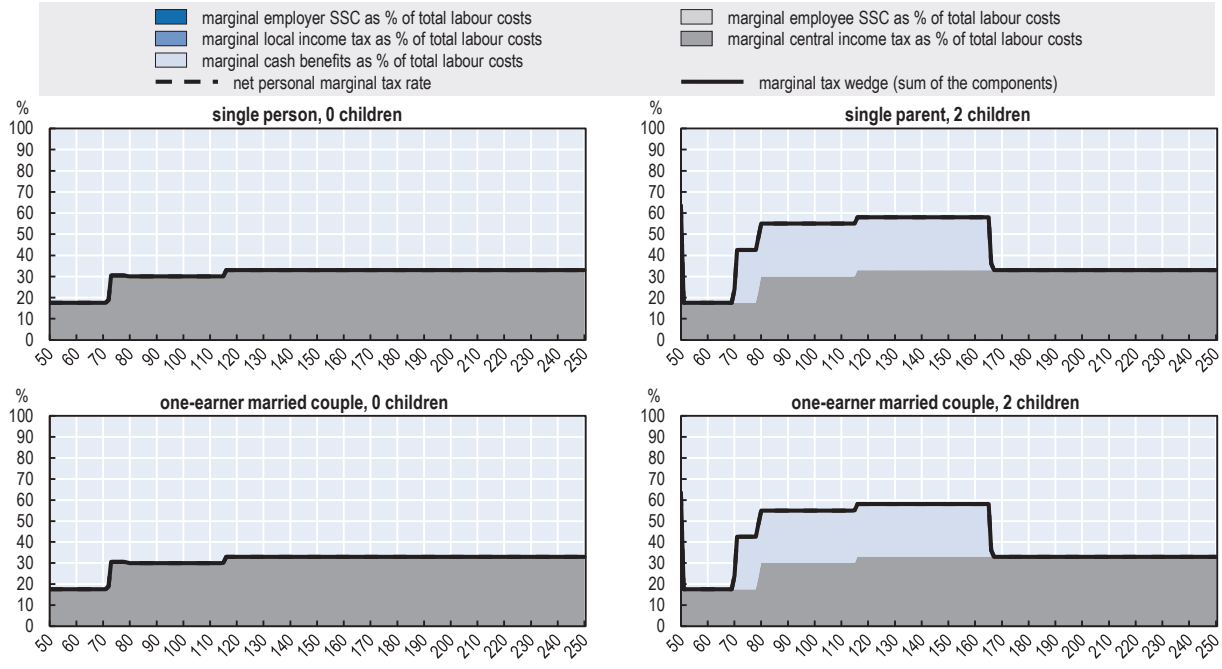
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924170

New Zealand 2018: marginal tax wedge decomposition

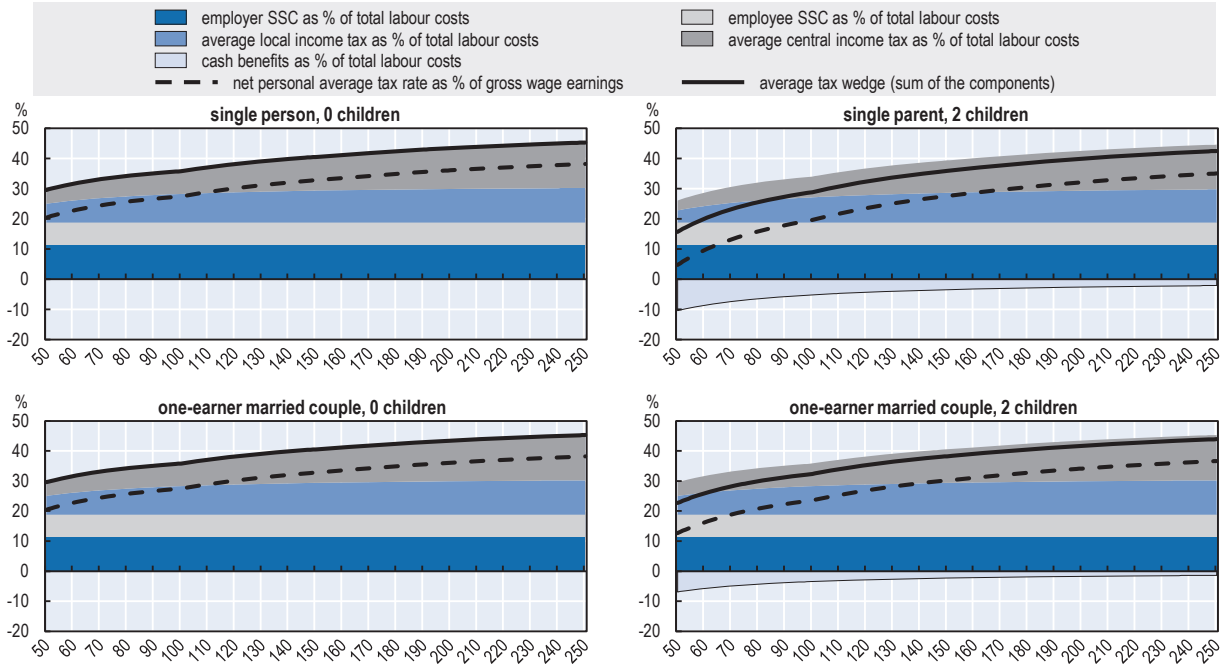
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924189

Norway 2018: average tax wedge decomposition

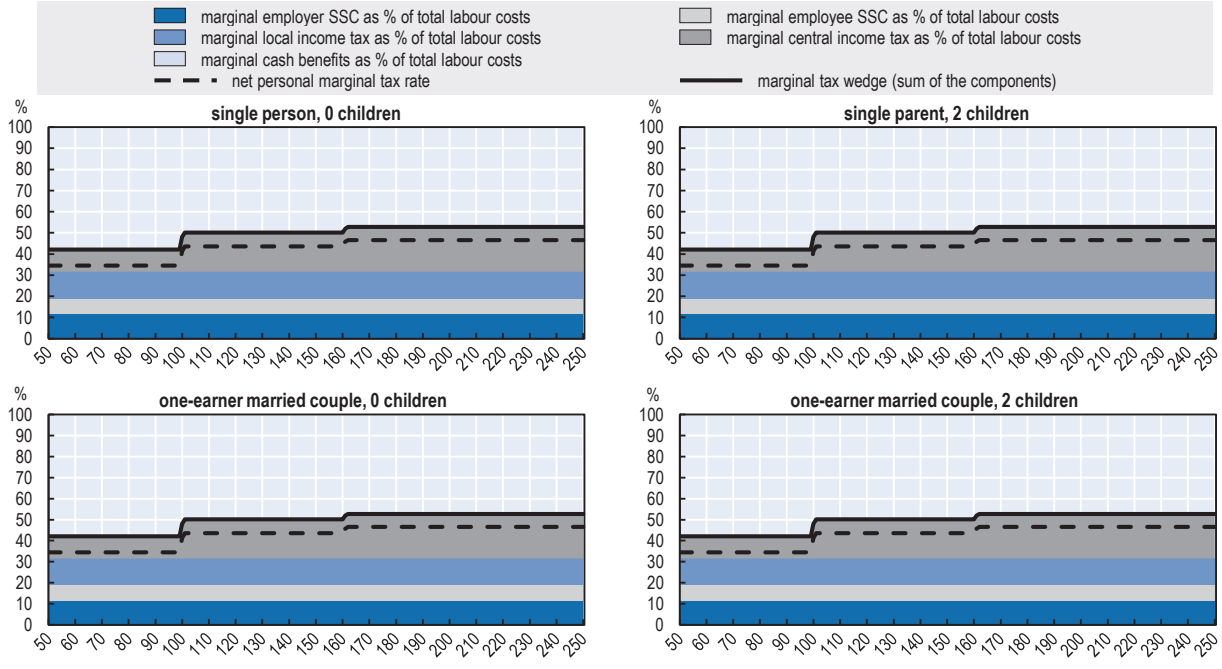
by level of gross earnings expressed as a % of the average wage



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

Norway 2018: marginal tax wedge decomposition

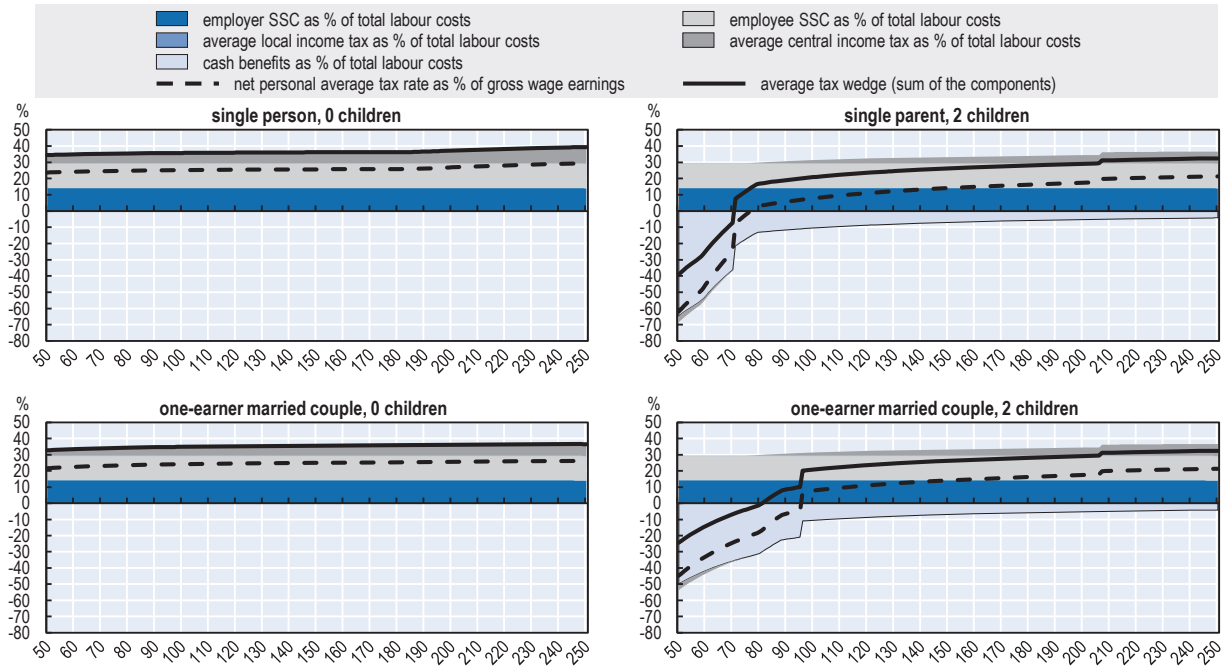
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924227

Poland 2018: average tax wedge decomposition

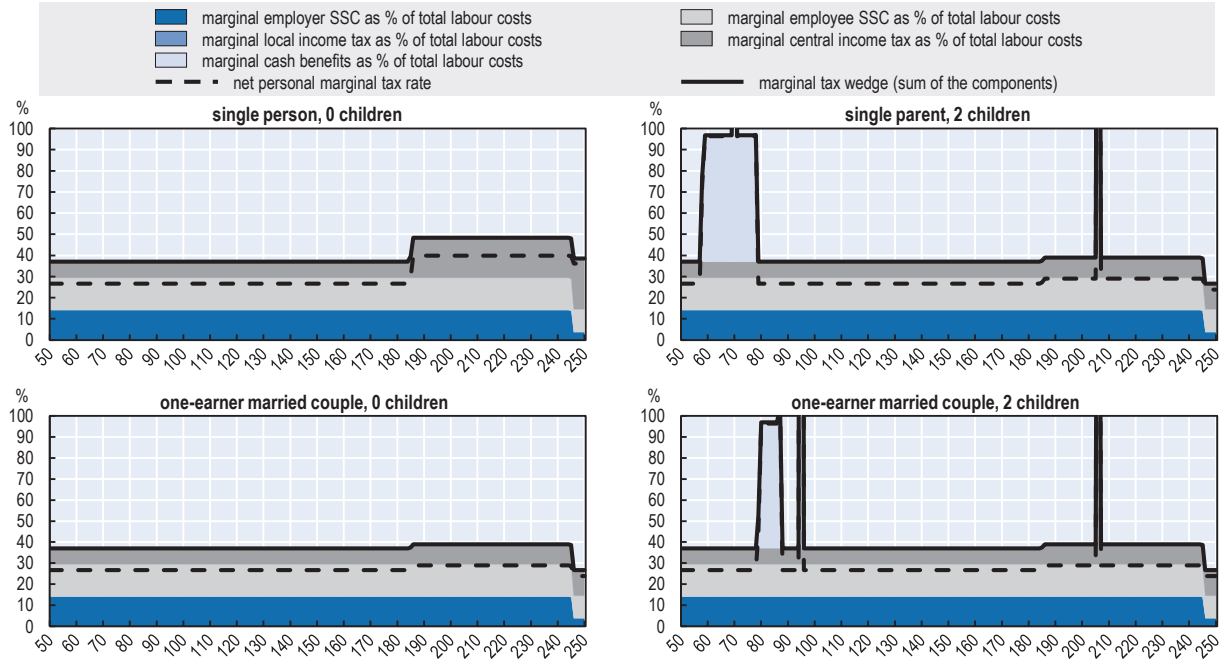
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924246

Poland 2018: marginal tax wedge decomposition

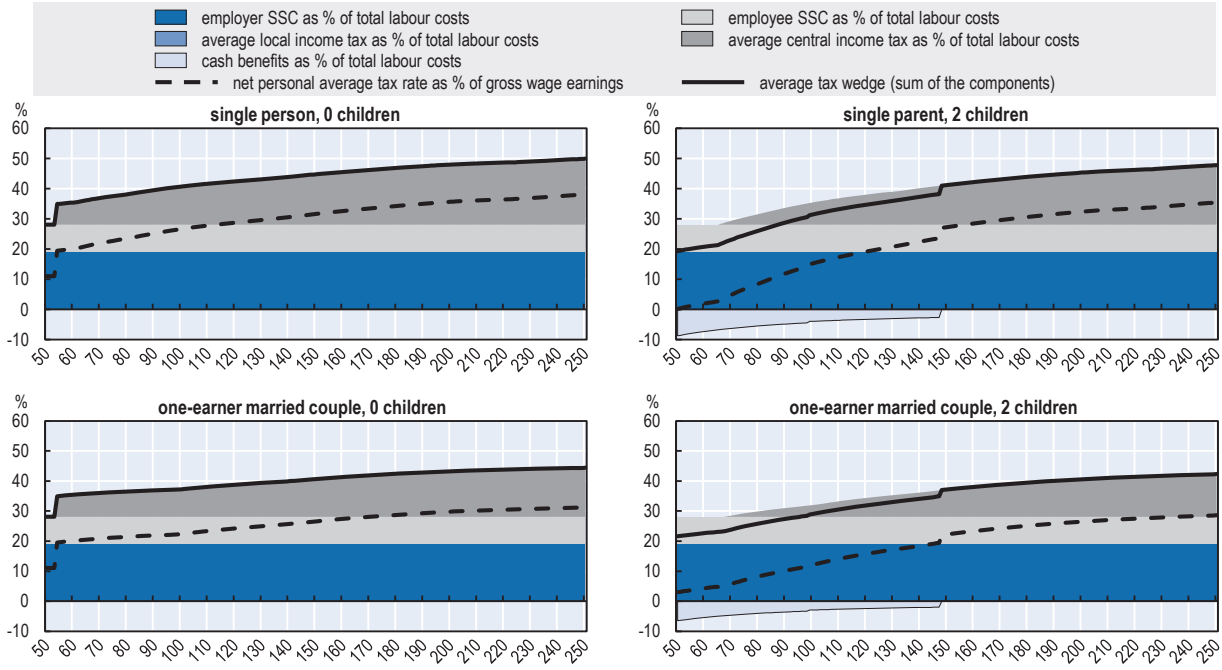
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924265

Portugal 2018: average tax wedge decomposition

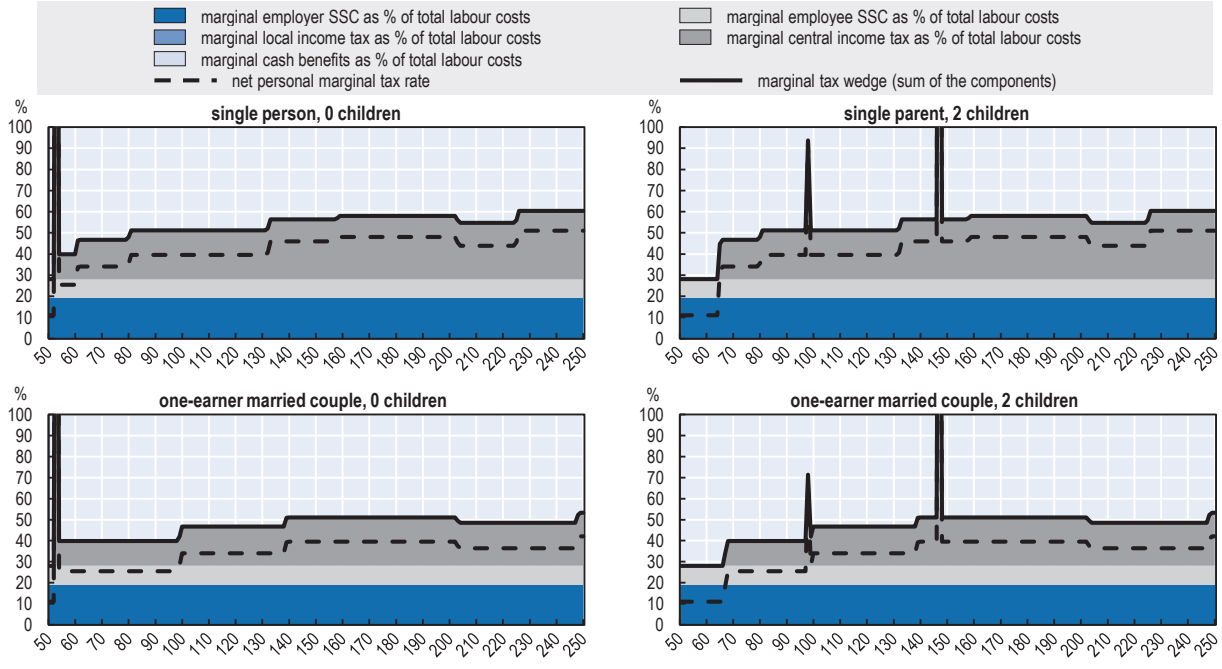
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Portugal 2018: marginal tax wedge decomposition

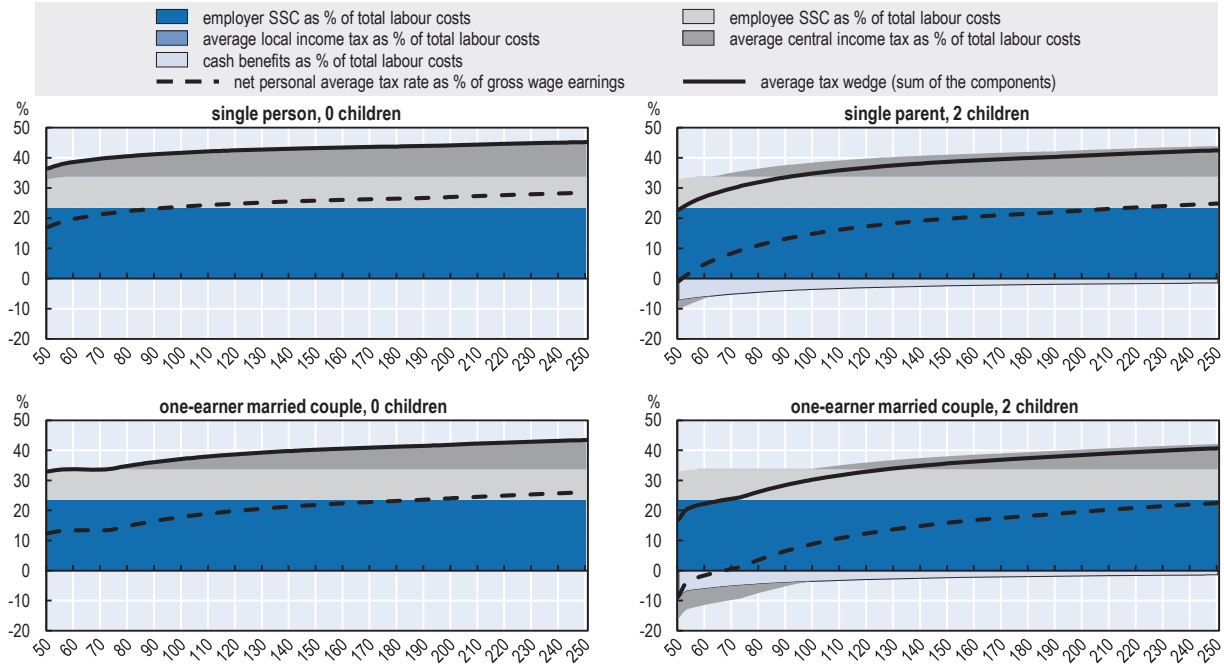
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924303

Slovak Republic 2018: average tax wedge decomposition

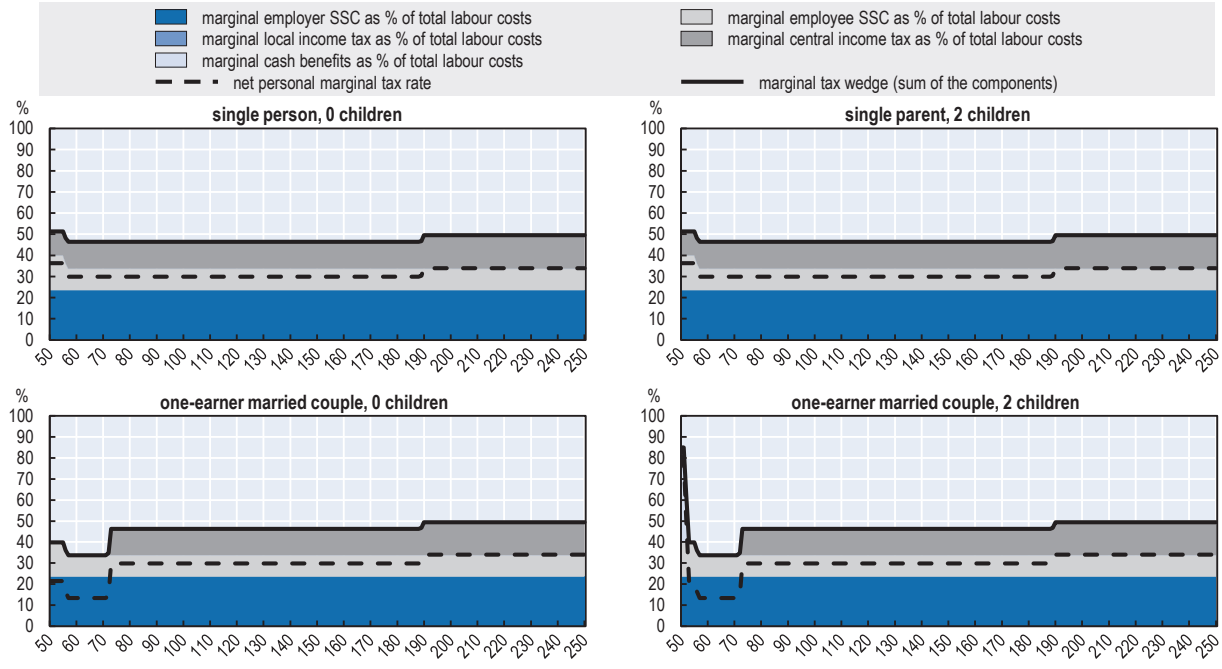
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924322

Slovak Republic 2018: marginal tax wedge decomposition

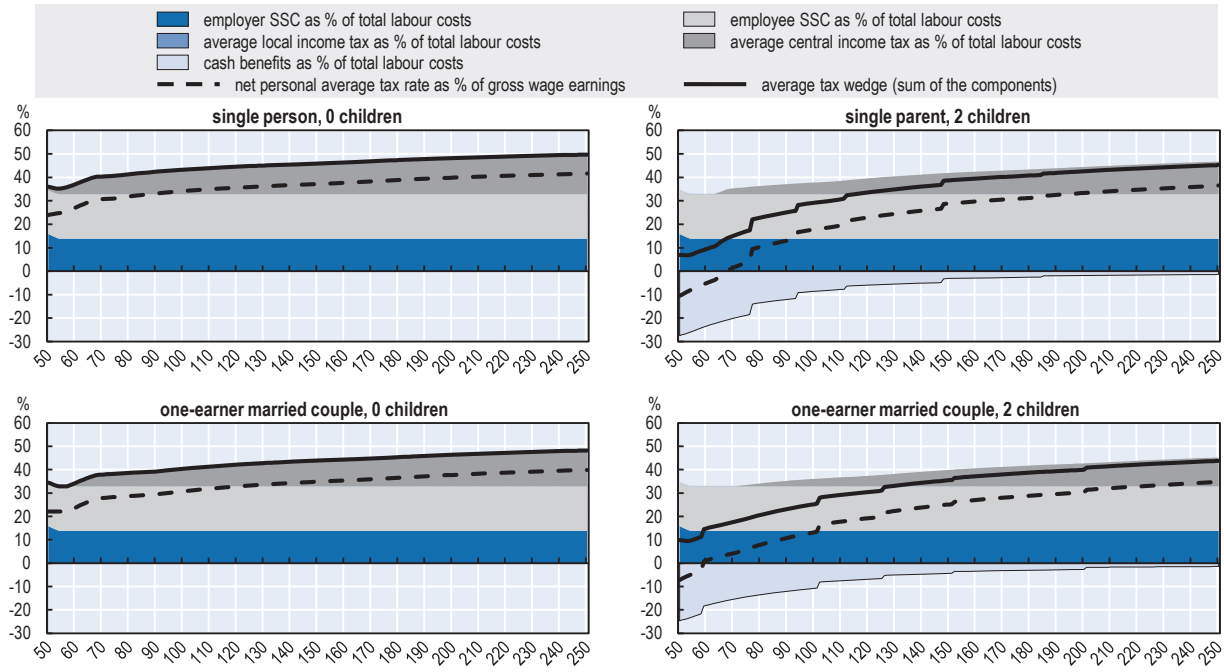
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924341

Slovenia 2018: average tax wedge decomposition

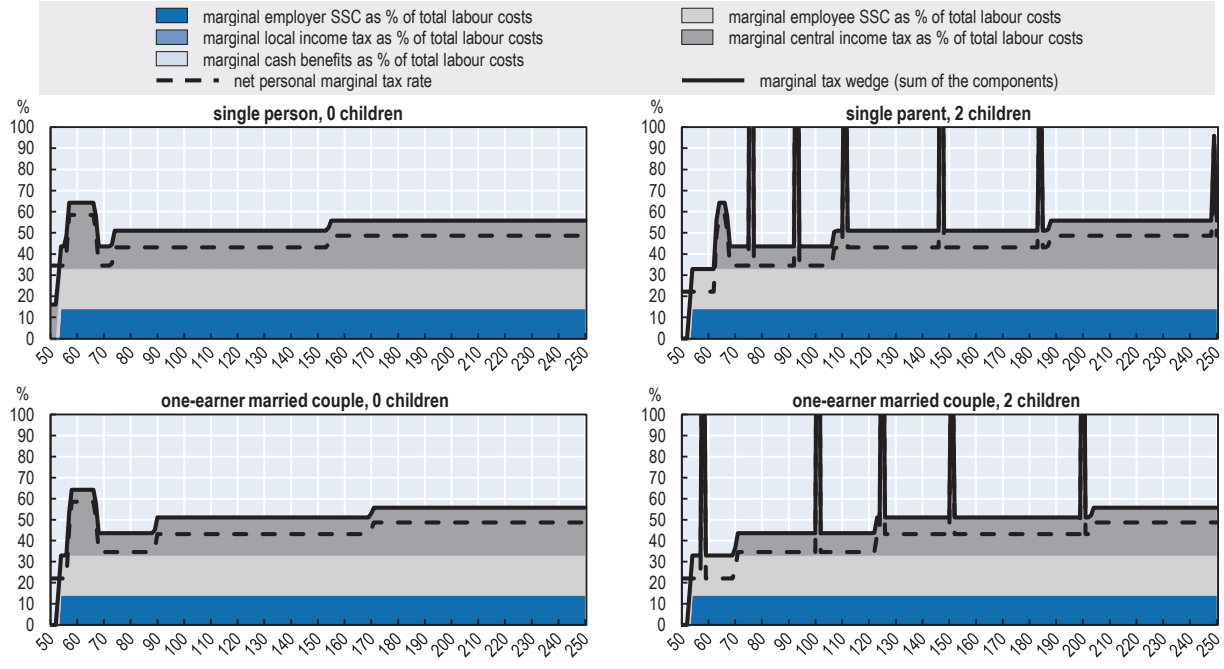
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924360

Slovenia 2018: marginal tax wedge decomposition

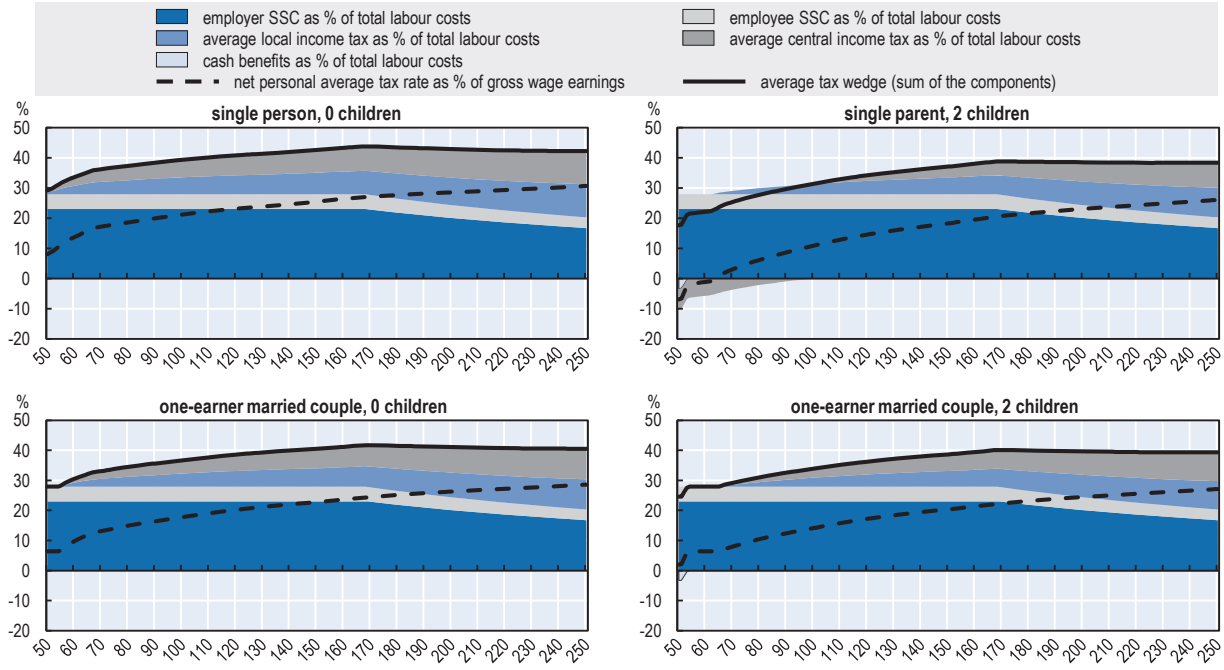
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924379

Spain 2018: average tax wedge decomposition

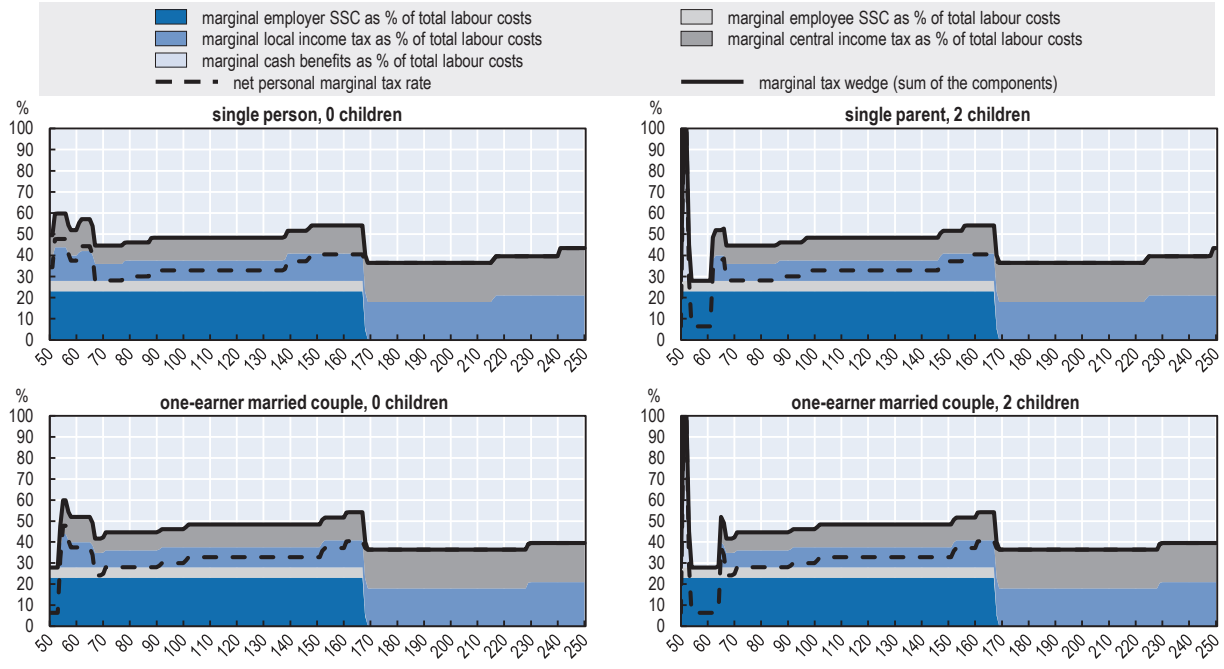
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924398

Spain 2018: marginal tax wedge decomposition

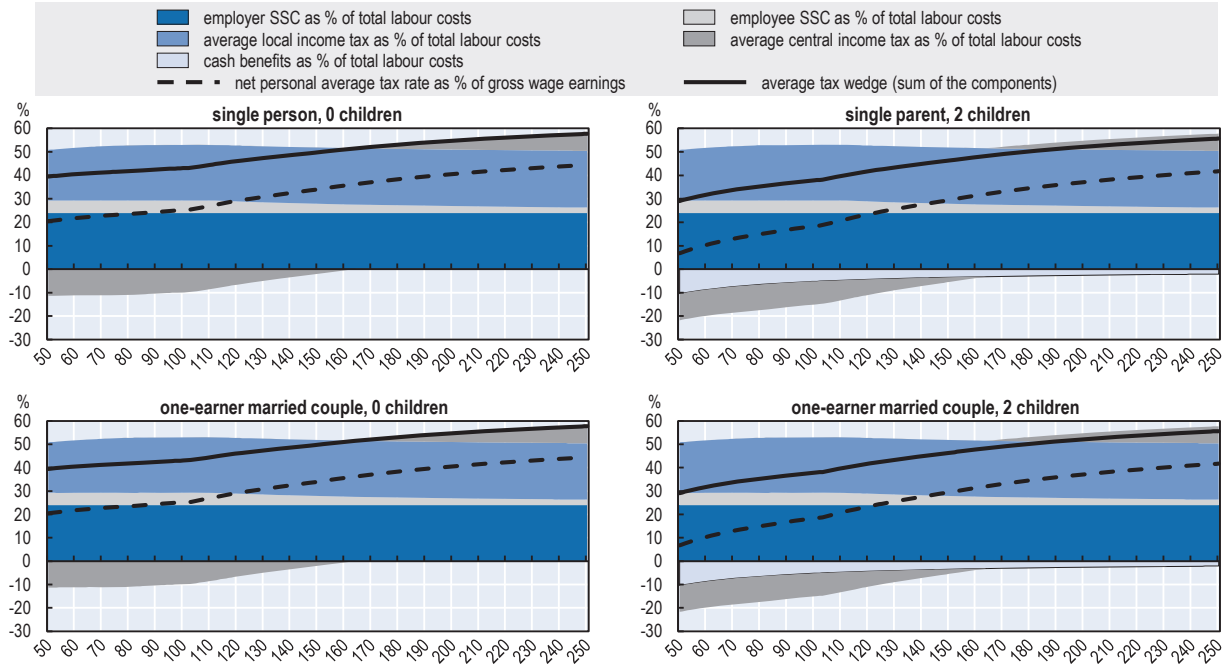
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924417

Sweden 2018: average tax wedge decomposition

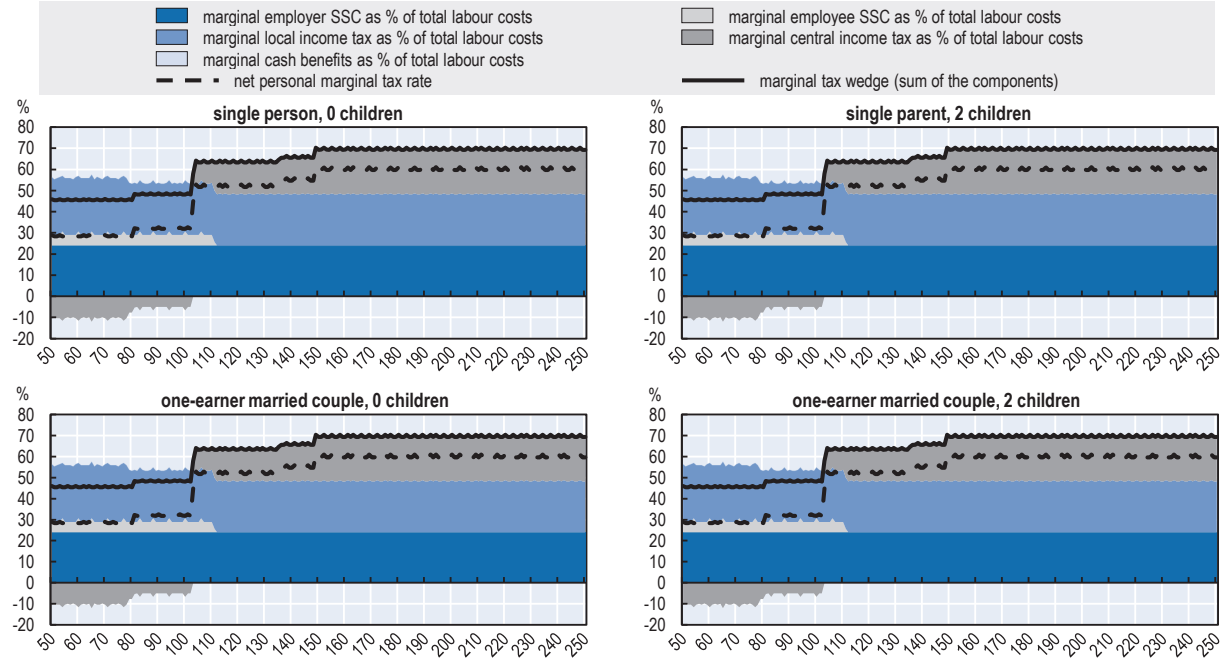
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924436

Sweden 2018: marginal tax wedge decomposition

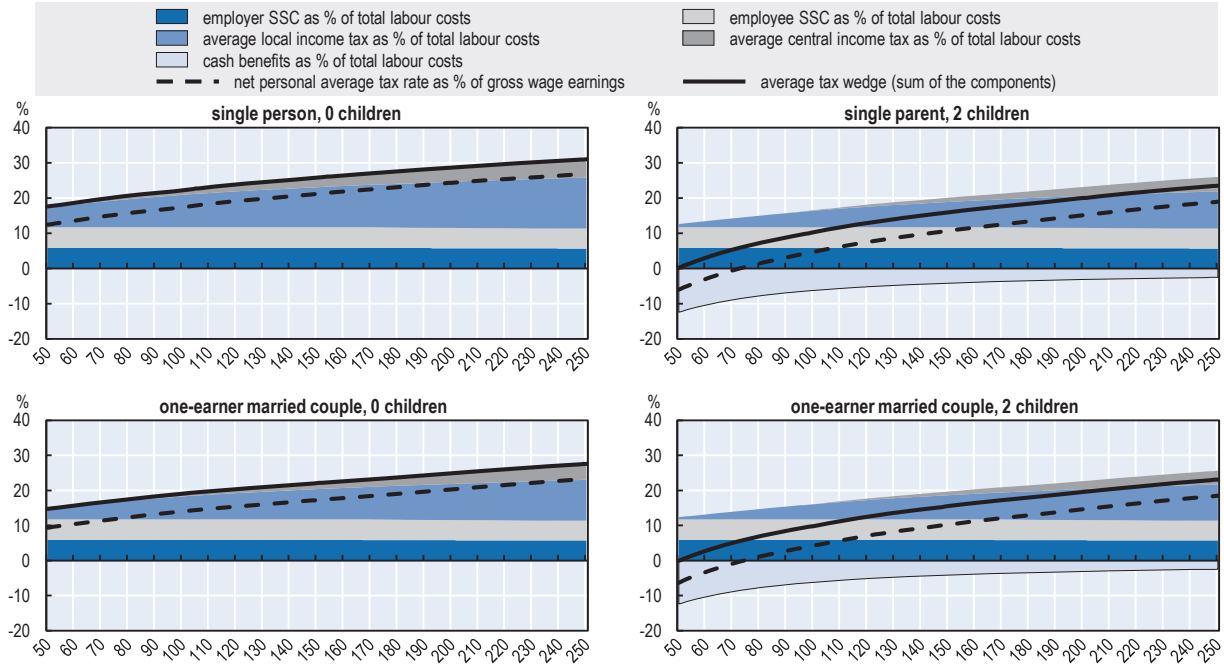
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924455

Switzerland 2018: average tax wedge decomposition

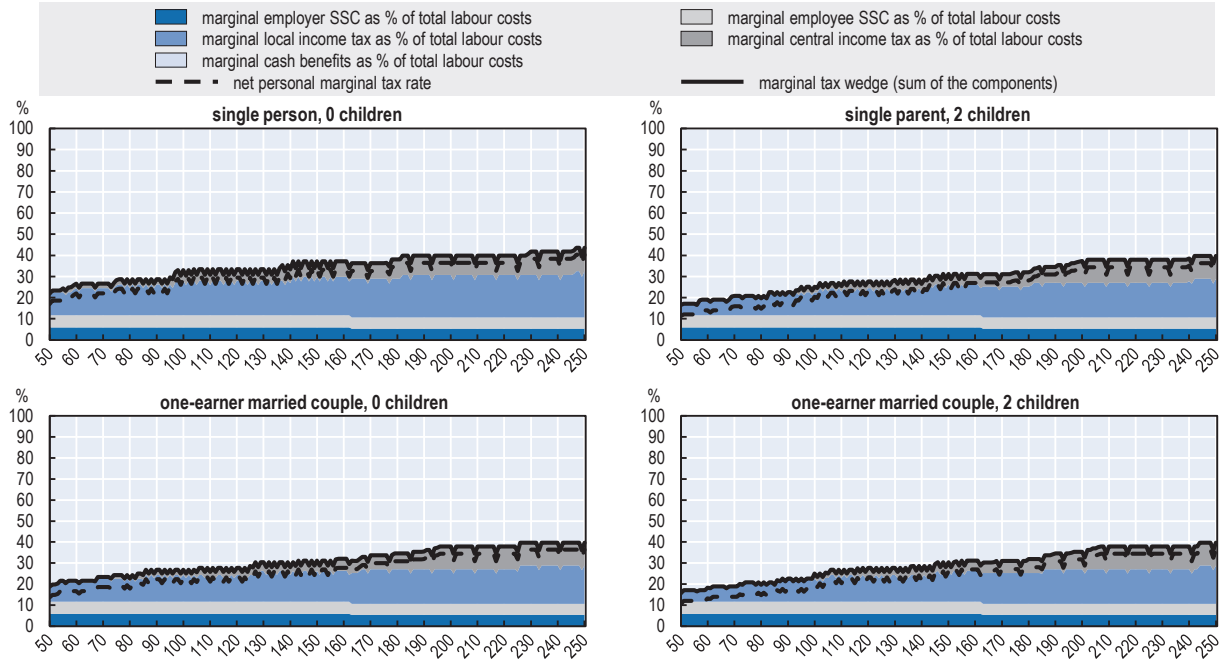
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924474

Switzerland 2018: marginal tax wedge decomposition

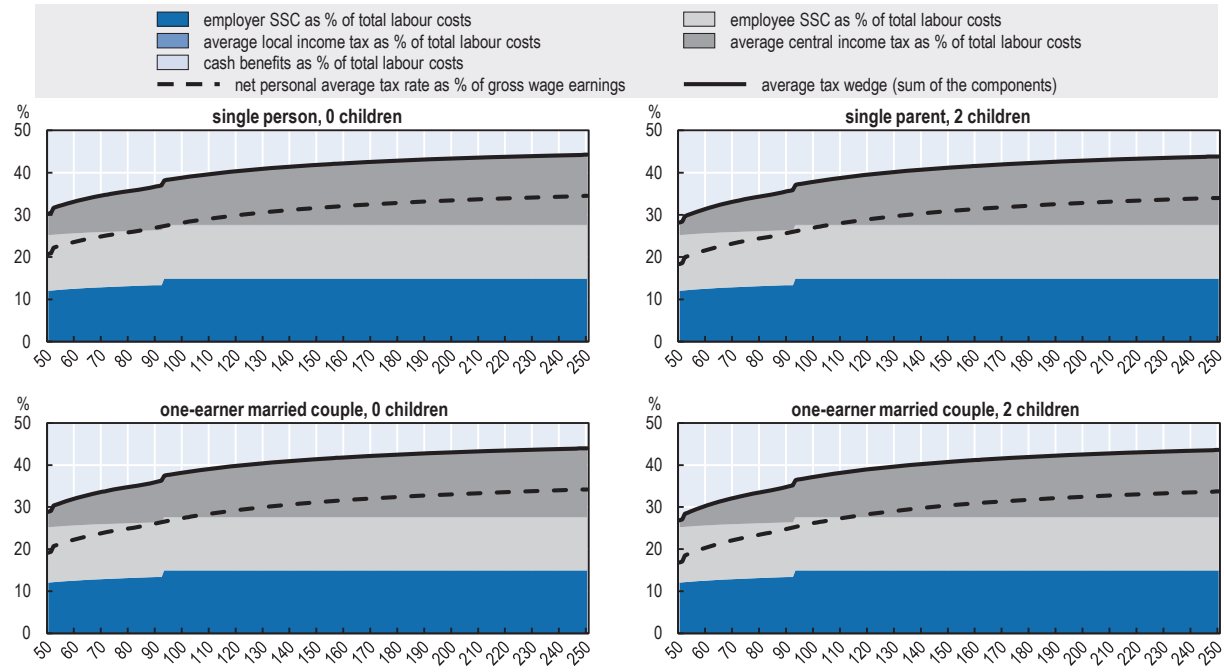
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924493

Turkey 2018: average tax wedge decomposition

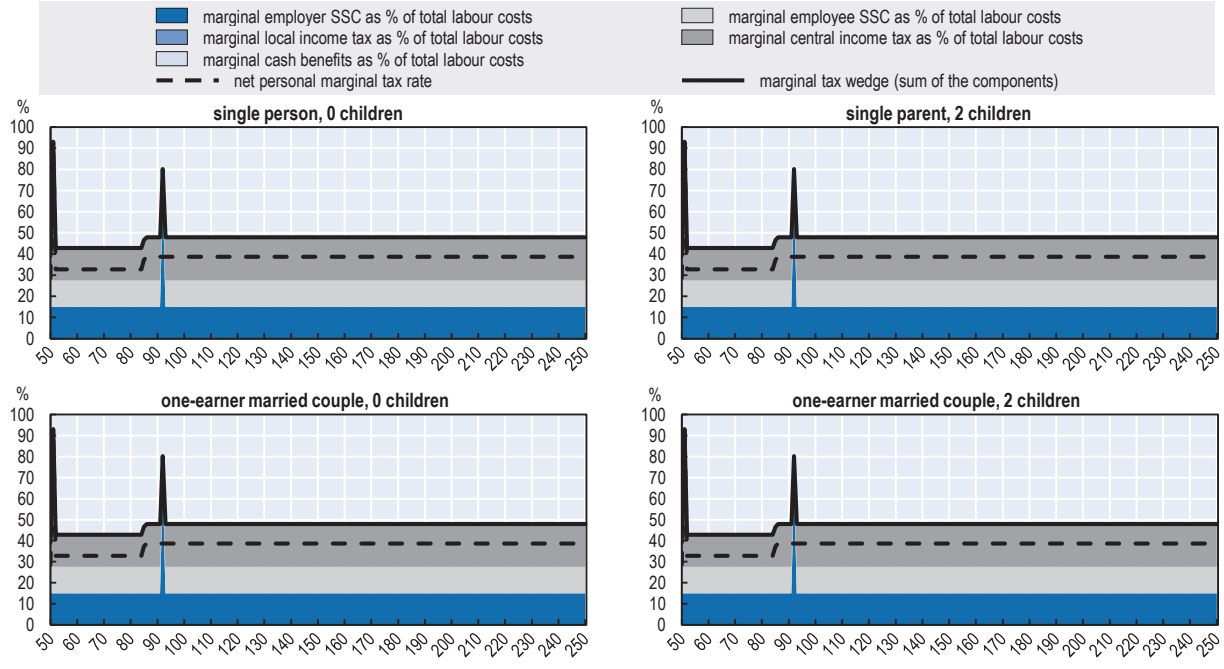
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924512

Turkey 2018: marginal tax wedge decomposition

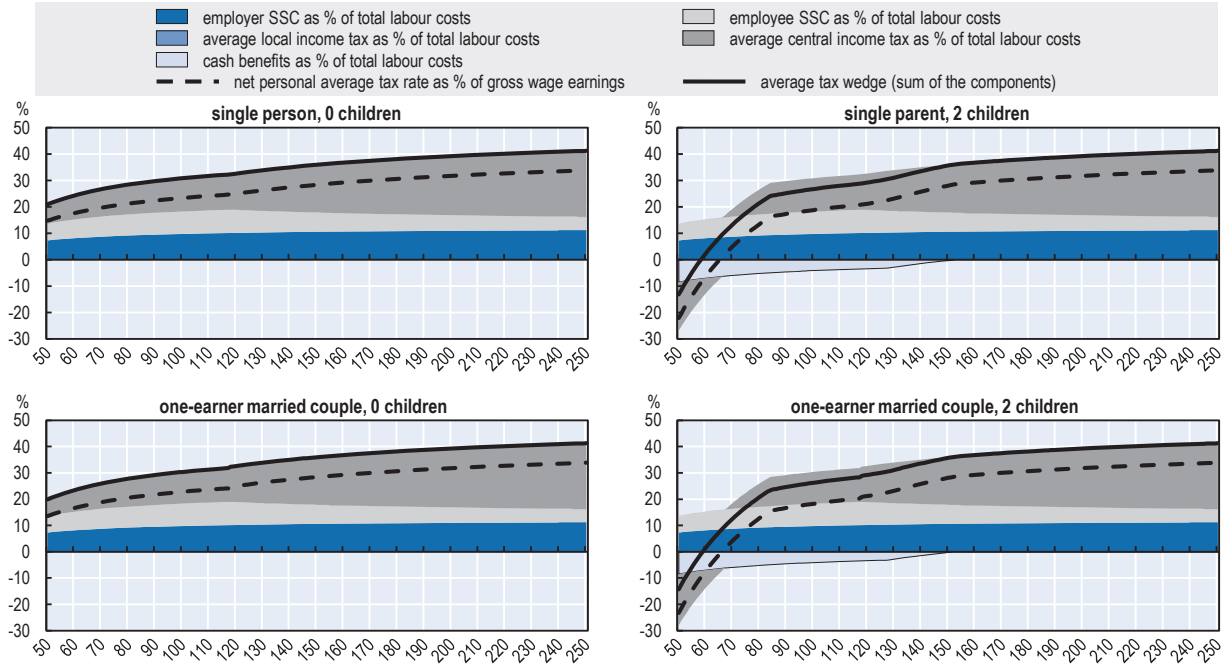
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924531

United Kingdom 2018: average tax wedge decomposition

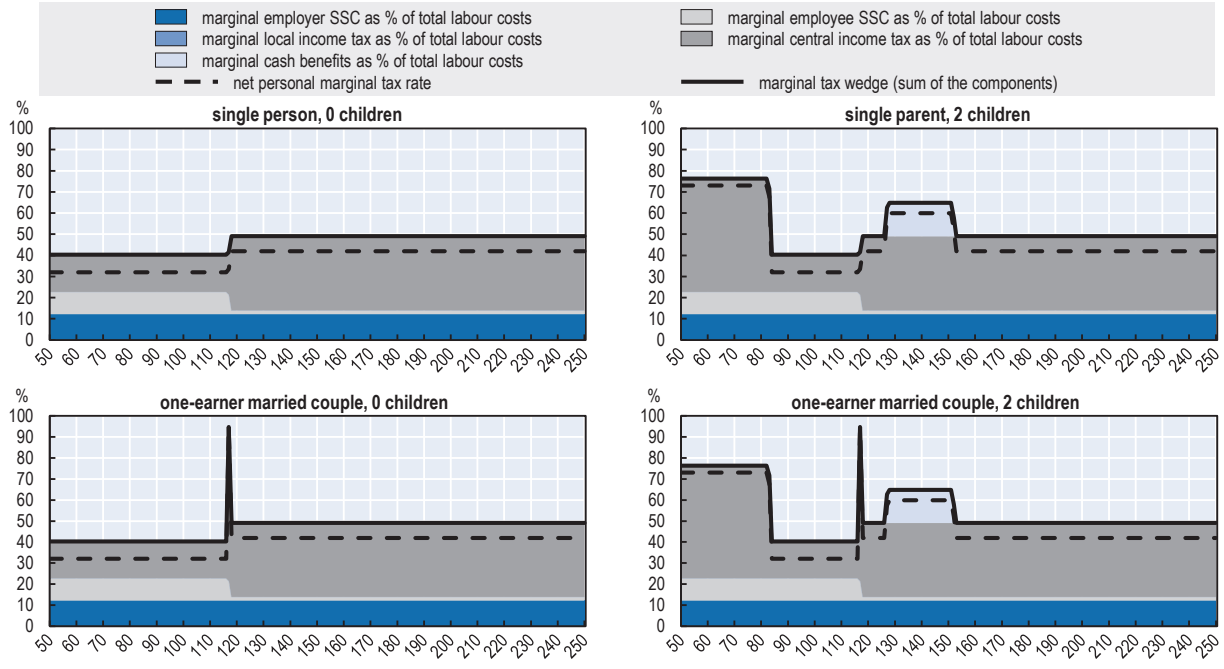
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924550

United Kingdom 2018: marginal tax wedge decomposition

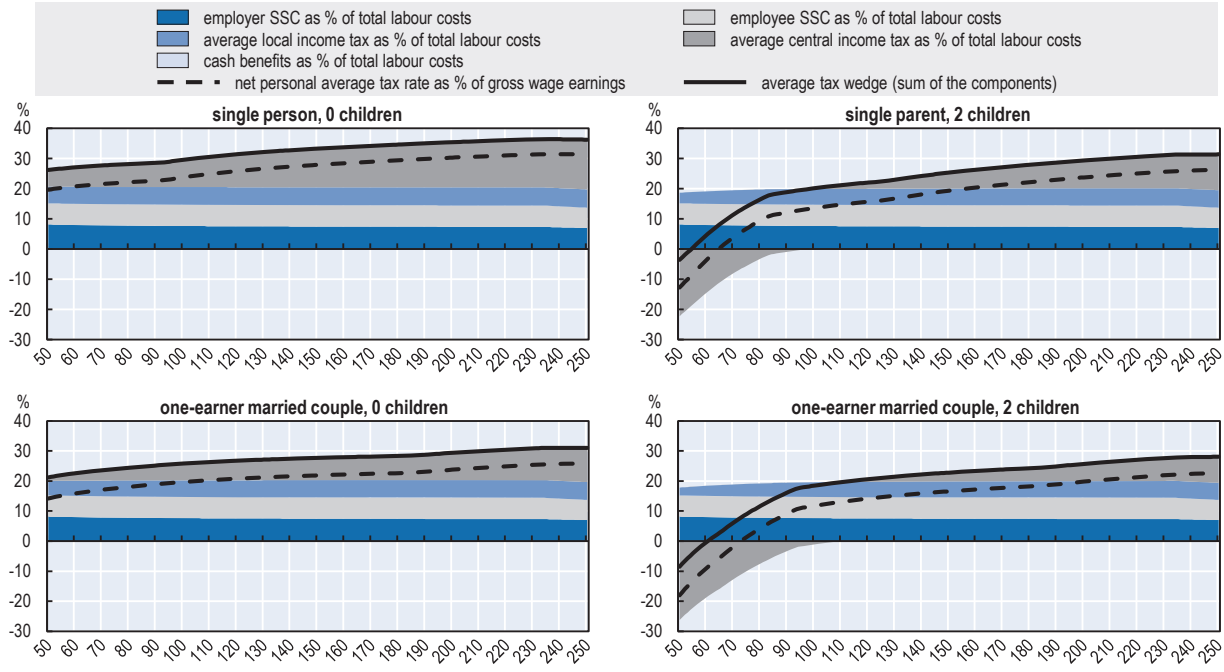
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924569

United States 2018: average tax wedge decomposition

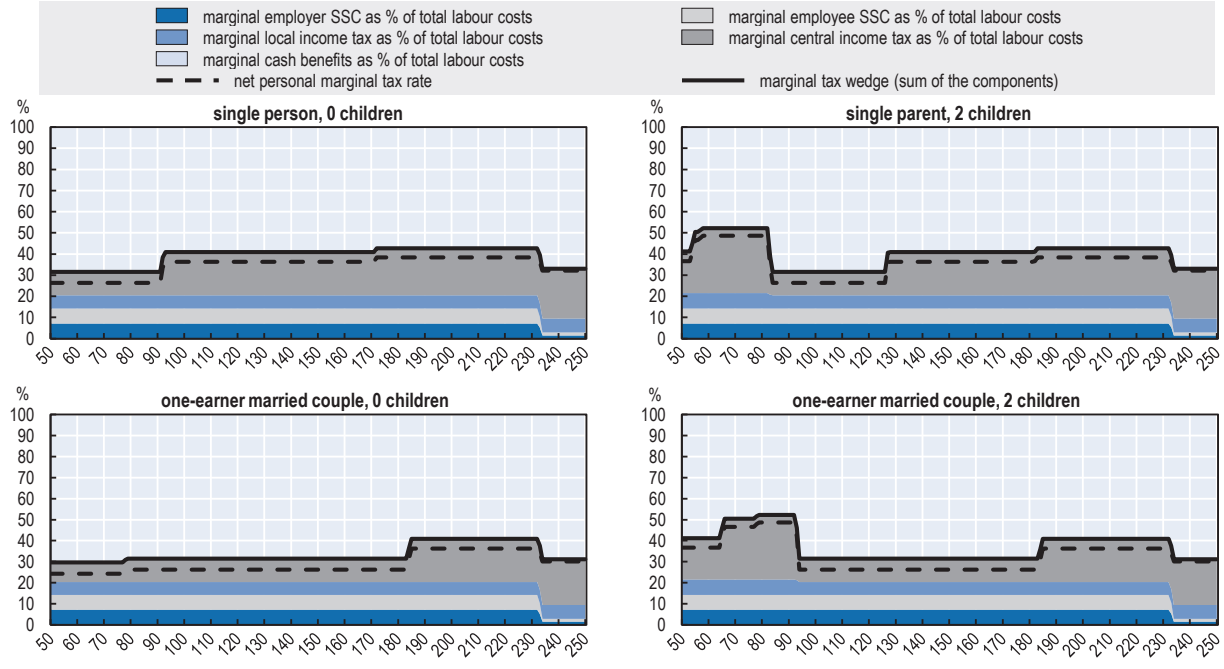
by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924588

United States 2018: marginal tax wedge decomposition

by level of gross earnings expressed as a % of the average wage



StatLink http://dx.doi.org/10.1787/888933924607

Chapter 5. 2017 tax burdens (and changes to 2018)

The chapter presents the results of tax burden measures on labour income for the eight model household types for 2017. The chapter includes Tables 5.1 to 5.13 that show a number of measures of the average tax burdens (tax wedge, personal tax rate, net personal tax rate, personal income tax rate and employee social security contribution rate) and the marginal rates (tax wedge and net personal tax rate). The results for two measures of tax progressivity are also considered: tax elasticity on gross earnings and labour costs.

The table formats are identical to Tables 3.1 to 3.13 which are discussed in Chapter 3 on tax burden results on labour income for 2018. This chapter compares the two sets of tables and analyses the changes in tax burden between 2017 and 2018.

The following commentary on the changes in tax burdens and marginal tax rates between 2017 and 2018 focuses on two of the eight household types – single employees, without children, at the average wage (column 2 of the tables) and one-earner married families, with two children, at the average wage (column 5). Comparisons with the columns 1, 3-4 and 6-8 of the tables give corresponding results for the six other household types. Generally, only those changes exceeding 1 percentage point for average effective rates and 5 percentage points for marginal effective rates are flagged in this chapter. Most of these are due to tax reforms or changes in the tax systems. Further detailed information on the countries' tax systems is given in the Part II of the Report that is entitled "Country details, 2018".

Table 5.1 presents the total tax wedge (described as personal income tax plus employee and employer's social security contributions less cash benefits) by household type as a percentage of 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 2018 as compared with 2017 were within plus or minus one percentage point.

Comparing column 2 in Tables 3.1 and 5.1, the OECD average tax wedge decreased by 0.16 percentage points from 36.22%[1] to 36.06% for a single average worker between 2017 and 2018. It fell by more than one percentage point in Belgium (1.1 percentage point), Estonia (2.5 percentage points), Hungary (1.1 percentage points) and the United States (2.2 percentage points). In Belgium and Hungary, the decreases in the tax wedge were mostly driven by lower employer social security contributions, in respect of which the total contribution rate was reduced from 32.19% to 27.14% in Belgium and from 22.0% to 19.5% in Hungary. During the same year, in Estonia, the basic tax allowance was increased and became income-tested, resulting in lower personal income taxes being payable. With regards to the decrease in the tax wedge in the United States, it resulted from the combined effect of a higher basic tax allowance and the reformed income tax schedule (i.e. lower marginal income tax rates). In contrast, there were no increases in the tax wedge of more than one percentage point for the single average worker across the OECD member countries.

For one-earner married couples (comparing column 5 of Tables 3.1 and 5.1) the OECD average tax wedge remained at 26.6% between 2017 and 2018, although changes of more than one percentage point were observed in eight countries: Belgium, Estonia, Greece, Hungary, Lithuania, New Zealand, Poland and the United States. The tax wedge increased by more than one percentage point in Poland (10.3 percentage points) only, because of reduced income-tested child benefit payments. The decreases in the tax wedge for the one-earner couple with two children in Belgium (1.1 percentage point), Estonia (2.4 percentage points), Hungary (1.1 percentage point) and the United States (2.4 percentage points) were largely due to changes noted in the previous paragraph. In addition, the decreases also resulted from increases in the cash benefit in Estonia, and from an increase in tax reliefs for dependent children for Hungary (i.e. increased child tax allowance for households with two children) and the United States (i.e. increased refundable and non-refundable portions of the child tax credit). The decreases were mostly driven by changes in cash benefits or tax provisions for dependent children in Greece (by 1.1 percentage point due to increased child benefits), Lithuania (by 2.5 percentage points due to the introduction of a non-means-tested universal child benefit in 2018) and New Zealand (by 4.5 percentage points due to the increased *Family Tax Credit* which is treated as a cash benefit in the report).

Table 5.2 shows the combined burden of personal income tax and employee social security contributions in the form of personal average tax rates as a percentage of gross wage earnings. For single persons on average wage, it decreased by more than one percentage point between 2017 and 2018 in Estonia (3.4 percentage points), Latvia (1.0 percentage point) and the United States (2.3 percentage points). In Latvia, a tax allowance was introduced and the flat tax rate changed to a progressive income tax schedule in 2018 (i.e. a lower marginal tax rate was applied at the average wage level). There were no increases of more than one percentage point in the personal average tax rates for single average workers. In contrast, the personal average tax rate increased by more than one percentage point for one-earner married couples with two children in the Czech Republic (1.1 percentage point) and Lithuania (6.5 percentage points). In the Czech Republic, the average wage increased faster than the sum of the tax credits for this household type, causing higher personal income tax in 2018. In Lithuania, the tax allowance for children was abolished in 2018 and replaced with a universal child benefit. The benefit is not considered in Table 5.2, but is included in the calculations for Table 5.3. The personal average tax rate decreased by more than one percentage point in Estonia (3.0 percentage points) and in the United States (2.6 percentage points) for the one-earner married couples with two children for the reasons given previously.

Table 5.3 provides the combined burden of personal income tax and employee social security contributions less the amount of cash benefits as a percentage of gross wage earnings. This is the measure of the net personal average tax rate. Comparing column 2 of Tables 3.3 and 5.3, for single persons on average wage, there was a change of more than one percentage point between 2017 and 2018 only in Latvia (-1.03 percentage points), Estonia (-3.4 percentage points) and the United States (-2.3 percentage points) as a result of lower personal income tax in 2018. Comparing column 5 of Tables 3.3 and 5.3, increases in the net personal average tax rate of one-earner married couples with two children exceeding one percentage point occurred in Canada (1.2 percentage points), Norway (1.01 percentage point), Poland (12.0 percentage points) and the Slovak Republic (1.2 percentage points). In Poland, the large increase in the net personal average rate resulted from lower cash benefit payments. In fact, the *Family 500 Plus programme* was paid for only one of the two children because the household's income exceeded the benefit income limit in 2018.

Table 5.4 presents information on personal income tax due as a percentage of gross wage earnings. Comparing column 2 of Tables 3.4 and 5.4, in most OECD member countries, the average personal income tax rates for single persons on average wage changed only slightly between 2017 and 2018 and the OECD average personal income tax rate decreased by 0.1 percentage point to 15.7%. The average personal income tax rate increased by more than one percentage point only in France (2.0 percentage points) as a result of an increase of 1.7 percentage points in a surtax (*Contribution Sociale Généralisée)* which increased in rate from 7.5% to 9.2%. In contrast, it decreased by more than one percentage point in Estonia (3.4 percentage points), Latvia (1.5 percentage points) and the United States (2.3 percentage points) due to income tax reforms (i.e. newly introduced or increased existing tax allowances and/or lower marginal income tax rates). Comparing column 5 of Tables 3.4 and 5.4, the OECD average personal income tax rate for the one-earner married couples with two children, which was 10.2% in 2017, increased by 0.2 percentage points in 2018. For that household type, there were increases of more than one percentage point in Czech Republic (1.1 percentage point), France (1.7 percentage points) and Lithuania (6.5 percentage points). In contrast, the average personal

income tax rates decreased by more than one percentage point in Estonia (3.0 percentage points) and the United States (2.6 percentage points).

Table 5.5 shows information on employee social security contributions as a percentage of gross wage earnings. Comparing columns 2 and 5 of Tables 3.5 and 5.5, there were no changes of more than one percentage point between 2017 and 2018 for either of these household types in most OECD member countries, the exception being France. In France, the employee social security contributions as percentage of gross wage earnings decreased by 2.4 percentage points for both household types as the contribution rates were reduced (i.e. a reduced unemployment contribution rate was applied from January to September 2018 and then abolished) or abolished (contributions for illness, pregnancy, disability and death) in 2018. The OECD average employee social security contribution rate remained unchanged at 9.76%[2] for the single average workers and slightly decreased by 0.04 percentage points to 9.72% for the one-earner married couples with two children during that period.

Table 5.6 shows the marginal tax wedge (rate of personal income tax plus employee and employer social security contributions and payroll taxes where applicable minus cash benefits) as percentage of labour costs, when the gross wage earnings of the principal earner rises by 1 currency unit in 2017. Comparing columns 2 and 5 respectively in Tables 3.6 and 5.6, changes between 2017 and 2018 in the marginal tax wedge were generally within the range of plus or minus 5 percentage points. There were changes of more than 5 percentage points in four OECD countries: Australia (-18.9 percentage points for the one-earner married couple with two children), Estonia (+8.3 percentage points for the two household types), Italy (+7.0 percentage points for the two household types) and Portugal (+6.9 percentage points for the one-earner married couple with two children). In Australia, the large decrease in the marginal tax wedge was due to the tapering of the cash benefit (*Family Tax Benefit Part A*) that did not occur in 2018 but did occur in 2017. As a result, no withdrawal effect of the cash benefit was captured in the marginal tax wedge for 2018, which was consequently lower than in 2017.

Table 5.7 presents the marginal rate of personal income tax plus employee social security contributions minus cash benefits (the net personal marginal tax rate) by household type and wage level, when the gross wage earnings of the principal earner rise by 1 currency unit in 2017. Comparing columns 2 and 5 respectively in Tables 3.7 and 5.7, the pattern of changes between 2017 and 2018 in the net personal marginal tax rates were similar to that for the marginal tax wedge discussed above. Changes outside the range of plus or minus 5 percentage points were in Australia (-20.0 percentage points for the one-earner married couple with two children), Estonia (+11.1 percentage points for the two household types), Italy (+9.2 percentage points for the two household types), Latvia (+5.7 for the two household types) and Portugal (+8.5 percentage points for the one-earner married couple with two children).

Table 5.8 shows the percentage increase in net income relative to the percentage increase in gross wages when the latter increases by 1 currency unit.[3] Table 5.9 provides the percentage increase in net income relative to the percentage increase in labour costs (i.e. gross wage earnings plus employer social security contributions and payroll taxes) when the latter rises by 1 currency unit.[4] The results shown in these two tables are directly dependent upon the marginal and average tax rates that have been discussed in the paragraphs above. Table 5.10 and Table 5.13 report background information on levels of labour costs plus gross and net wages in 2017.

Notes

[1] Tables 5.1 to 5.7 show figures rounded to the first decimal. The text may present figures rounding to two decimal points for accuracy purposes.

[2] Tables 5.1 to 5.7 show figures rounded to the first decimal. The text may present figures rounding to two decimal points for accuracy purposes.

[3] The reported elasticities in Table 5.8 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 5.7 and AETR is the average rate of income tax plus employee social security contributions less cash benefits reported in Table 5.3.

[4] The reported elasticities in Table 5.9 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 5.6 and AETR is the average rate of income tax plus employee and employer social security contributions less cash benefits reported in Table 5.1.

Table 5.1. Income tax plus employee and employer contributions less cash benefits, 2017

As % of labour costs, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	23.6	28.6	34.0	0.6	20.7	24.5	26.6	24.5
Austria	43.1	47.4	50.8	27.7	37.0	36.6	40.0	43.5
Belgium	47.3	53.8	59.6	33.4	38.4	38.5	46.3	45.0
Canada	25.7	30.6	32.0	-16.3	10.7	19.6	23.9	27.5
Chile	7.0	7.0	8.3	6.2	7.0	4.9	6.7	7.0
Czech Republic	40.8	43.4	45.5	22.5	25.9	31.7	35.0	40.9
Denmark	33.3	35.8	41.8	4.8	25.2	28.8	31.0	33.5
Estonia	38.0	39.0	39.9	22.8	29.0	32.2	33.9	38.1
Finland	36.6	42.7	48.9	26.0	38.1	35.2	37.4	38.7
France	42.8	47.6	54.4	24.6	39.4	36.9	42.2	42.1
Germany	45.4	49.6	51.5	31.4	34.3	39.0	42.6	45.4
Greece	36.7	40.8	46.4	32.5	39.0	38.3	39.0	39.4
Hungary	46.2	46.2	46.2	23.0	31.4	35.1	37.3	46.2
Iceland	29.9	33.1	38.1	20.1	22.4	28.5	31.8	29.8
Ireland	24.0	32.6	41.4	1.1	16.9	18.6	24.4	23.6
Israel[1]	15.1	22.1	31.3	1.6	19.5	16.4	15.8	18.3
Italy	40.7	47.7	53.8	25.2	38.6	38.3	41.4	42.6
Japan	31.0	32.5	35.0	25.0	27.3	28.6	29.5	31.7
Korea	19.3	22.5	25.0	17.3	20.4	19.9	20.1	21.1
Latvia	41.9	42.9	43.5	26.8	32.8	34.3	36.4	42.0
Lithuania	37.8	41.1	42.1	30.6	35.7	34.4	36.5	38.5
Luxembourg	30.2	37.8	45.3	6.6	16.6	20.4	25.8	29.0
Mexico	16.1	20.4	23.3	16.1	20.4	18.3	18.7	18.3
Netherlands	30.4	37.4	42.0	6.7	32.1	27.8	29.6	32.7
New Zealand	13.7	18.1	23.8	-13.5	6.4	13.5	16.9	16.7
Norway	32.9	35.9	41.7	22.1	31.5	30.5	32.6	33.2
Poland	35.0	35.7	36.2	-18.2	10.6	24.5	27.0	35.0
Portugal	36.6	41.4	46.7	22.0	28.8	30.2	36.3	36.5
Slovak Republic	39.2	41.6	43.5	28.5	29.6	32.2	36.3	37.7
Slovenia	40.0	42.9	46.3	12.6	24.4	34.3	35.1	43.2
Spain	35.8	39.3	43.7	24.3	33.7	35.4	36.2	36.4
Sweden	40.9	42.9	51.6	33.9	38.2	37.7	39.3	41.2
Switzerland	19.4	22.1	26.7	4.5	9.6	12.7	15.9	19.9
Turkey	33.5	39.0	42.5	32.0	37.4	34.7	36.3	35.4
United Kingdom	26.3	31.0	37.5	9.6	26.3	23.0	26.6	26.2
United States	29.2	31.8	36.5	13.0	20.9	24.6	26.5	29.2
Unweighted average								
OECD-Average	**32.4**	**36.2**	**40.5**	**16.3**	**26.6**	**28.3**	**31.0**	**33.1**
OECD-EU 23	**37.8**	**41.8**	**46.0**	**19.9**	**30.5**	**32.3**	**35.5**	**38.1**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933924873

Table 5.2. Income tax plus employee contributions, 2017

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	19.1	24.4	30.1	19.1	24.4	20.0	22.2	20.0
Austria	26.9	32.4	37.7	23.7	30.2	26.8	29.6	27.4
Belgium	33.3	40.6	48.3	27.9	29.0	30.0	36.2	31.8
Canada	18.7	22.8	26.2	10.4	18.0	19.5	21.2	19.5
Chile	7.0	7.0	8.3	7.0	7.0	7.0	7.0	7.0
Czech Republic	20.7	24.1	26.9	2.3	4.8	11.6	15.4	20.9
Denmark	33.6	36.0	41.8	32.1	32.0	33.9	35.1	33.9
Estonia	17.0	18.4	19.6	13.3	13.1	15.1	16.4	16.9
Finland	22.4	29.9	37.5	21.7	29.8	24.9	26.7	25.0
France	25.4	29.2	34.6	22.2	22.2	22.2	25.4	25.9
Germany	34.8	39.8	43.9	18.0	21.6	27.2	31.4	34.8
Greece	20.9	25.9	33.0	20.2	26.5	23.9	24.5	24.2
Hungary	33.5	33.5	33.5	19.1	23.9	26.2	27.7	33.5
Iceland	25.1	28.5	33.9	25.1	21.3	25.0	27.2	25.0
Ireland	15.8	25.3	35.1	10.4	15.3	15.8	20.7	15.8
Israel[1]	11.2	17.7	26.9	3.2	17.7	14.2	13.0	14.2
Italy	21.9	31.2	39.2	14.3	24.3	21.1	24.5	24.5
Japan	20.6	22.3	26.0	20.6	20.9	21.3	21.6	21.3
Korea	10.9	14.5	18.2	8.7	12.1	11.6	11.9	13.0
Latvia	28.2	29.4	30.2	15.0	20.6	21.6	23.7	28.2
Lithuania	18.4	22.7	24.0	9.0	15.6	14.0	16.7	19.3
Luxembourg	20.3	29.0	37.6	12.9	17.9	19.0	23.2	19.0
Mexico	4.6	11.1	15.6	4.6	11.1	6.8	8.5	6.8
Netherlands	22.5	30.3	37.7	14.4	28.5	22.5	23.9	25.1
New Zealand	13.7	18.1	23.8	15.0	18.1	16.7	16.9	16.7
Norway	24.2	27.6	34.2	21.0	26.6	24.5	26.2	24.5
Poland	24.3	25.1	25.7	16.1	19.6	21.0	22.2	24.3
Portugal	21.6	27.5	34.1	11.6	15.5	16.4	21.1	21.4
Slovak Republic	20.4	23.5	26.1	13.7	12.7	16.6	19.6	20.0
Slovenia	30.4	33.7	37.7	23.9	25.4	26.1	28.6	30.8
Spain	16.6	21.1	26.8	1.6	13.9	16.1	17.1	17.4
Sweden	22.4	25.0	36.5	22.4	25.0	22.8	23.9	22.8
Switzerland	14.3	17.2	22.2	8.6	10.7	12.3	14.6	14.9
Turkey	24.7	28.3	32.5	23.0	26.4	24.6	26.2	25.5
United Kingdom	19.3	23.5	29.9	8.0	22.9	19.2	21.8	19.2
United States	23.1	26.1	31.4	5.5	14.3	18.0	20.3	23.1
Unweighted average								
OECD-Average	**21.3**	**25.6**	**30.7**	**15.2**	**20.0**	**19.9**	**22.0**	**22.0**
OECD-EU 23	**23.9**	**28.6**	**33.8**	**16.3**	**21.3**	**21.5**	**24.1**	**24.4**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933924892

Table 5.3. Income tax plus employee contributions less cash benefits, 2017

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	19.1	24.4	30.1	-5.3	16.0	20.0	22.2	20.0
Austria	26.9	32.4	37.7	7.1	19.1	18.5	23.0	27.4
Belgium	33.3	40.6	48.3	15.7	20.9	23.8	31.3	31.8
Canada	17.5	22.8	26.2	-29.2	0.7	10.7	15.4	19.5
Chile	7.0	7.0	8.3	6.2	7.0	4.9	6.7	7.0
Czech Republic	20.7	24.1	26.9	-3.9	0.7	8.5	12.9	20.9
Denmark	33.3	35.8	41.8	4.8	25.2	28.8	31.0	33.5
Estonia	17.0	18.4	19.6	-3.2	5.0	9.1	11.6	16.9
Finland	22.4	29.9	37.5	9.4	24.3	20.7	23.4	25.0
France	25.4	29.2	34.6	1.7	18.2	19.2	23.0	25.9
Germany	34.8	39.8	43.9	18.0	21.6	27.2	31.4	34.8
Greece	20.9	25.9	33.0	15.6	23.7	22.8	23.7	24.2
Hungary	33.5	33.5	33.5	4.9	15.3	19.8	22.6	33.5
Iceland	25.1	28.5	33.9	14.7	17.2	23.6	27.2	25.0
Ireland	15.8	25.3	35.1	-9.5	7.9	10.3	16.2	15.8
Israel[1]	11.2	17.7	26.9	-2.9	15.0	12.1	11.4	14.2
Italy	21.9	31.2	39.2	1.6	19.2	18.8	22.9	24.5
Japan	20.6	22.3	26.0	13.6	16.2	17.8	18.8	21.3
Korea	10.9	14.5	18.2	8.7	12.1	11.6	11.9	13.0
Latvia	28.2	29.4	30.2	9.5	16.9	18.8	21.4	28.2
Lithuania	18.4	22.7	24.0	9.0	15.6	14.0	16.7	19.3
Luxembourg	20.3	29.0	37.6	-6.6	4.8	9.2	15.3	19.0
Mexico	4.6	11.1	15.6	4.6	11.1	6.8	8.5	6.8
Netherlands	22.5	30.3	37.7	-3.9	24.4	19.6	21.6	25.1
New Zealand	13.7	18.1	23.8	-13.5	6.4	13.5	16.9	16.7
Norway	24.2	27.6	34.2	12.0	22.6	21.5	23.8	24.5
Poland	24.3	25.1	25.7	-37.7	-4.1	12.1	15.0	24.3
Portugal	21.6	27.5	34.1	3.5	11.9	13.7	21.1	21.4
Slovak Republic	20.4	23.5	26.1	6.3	7.8	12.9	16.6	20.0
Slovenia	30.4	33.7	37.7	-1.5	12.3	20.1	24.6	30.8
Spain	16.6	21.1	26.8	1.6	13.9	16.1	17.1	17.4
Sweden	22.4	25.0	36.5	13.1	18.8	18.1	20.2	22.8
Switzerland	14.3	17.2	22.2	-1.4	4.0	7.3	10.6	14.9
Turkey	24.7	28.3	32.5	23.0	26.4	24.6	26.2	25.5
United Kingdom	19.3	23.5	29.9	1.0	18.3	15.7	19.0	19.2
United States	23.1	26.1	31.4	5.5	14.3	18.0	20.3	23.1
Unweighted average								
OECD-Average	**21.3**	**25.6**	**30.7**	**2.6**	**14.2**	**16.4**	**19.5**	**22.0**
OECD-EU 23	**23.9**	**28.6**	**33.8**	**2.5**	**14.8**	**17.3**	**21.0**	**24.4**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933924911

Table 5.4. Income tax, 2017

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	19.1	24.4	30.1	19.1	24.4	20.0	22.2	20.0
Austria	8.9	14.5	21.4	5.7	12.2	9.6	11.6	10.2
Belgium	19.4	26.6	34.3	14.0	15.0	19.2	22.2	21.1
Canada	11.8	15.4	21.4	3.5	10.6	12.5	14.0	12.5
Chile	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Czech Republic	9.7	13.1	15.9	-8.7	-6.2	0.6	4.4	9.9
Denmark	33.6	36.0	41.8	32.1	32.0	33.9	35.1	33.9
Estonia	15.4	16.8	18.0	11.7	11.5	13.5	14.8	15.3
Finland	13.1	20.6	28.2	12.4	20.5	15.6	17.4	15.6
France	11.0	14.8	21.0	7.9	7.9	7.9	11.1	11.6
Germany	14.1	19.0	27.5	-2.5	1.1	6.7	10.9	14.0
Greece	4.9	9.9	17.0	4.2	10.5	7.9	8.5	8.2
Hungary	15.0	15.0	15.0	0.6	5.4	7.7	9.2	15.0
Iceland	24.6	28.2	33.7	24.6	21.0	24.6	26.8	24.6
Ireland	11.8	21.3	31.1	6.4	11.3	12.8	16.7	12.8
Israel[1]	5.1	9.7	17.3	-2.9	9.7	7.3	5.8	7.3
Italy	12.5	21.7	29.6	4.8	14.8	11.6	15.1	15.0
Japan	6.2	7.9	12.8	6.2	6.5	6.9	7.2	6.9
Korea	2.5	6.1	11.1	0.3	3.7	3.2	3.5	4.6
Latvia	17.7	18.9	19.7	4.5	10.1	11.1	13.2	17.7
Lithuania	9.4	13.7	15.0	0.0	6.6	5.0	7.7	10.3
Luxembourg	8.1	16.7	25.2	0.7	5.6	6.8	10.9	6.8
Mexico	3.4	9.7	14.2	3.4	9.7	5.5	7.2	5.5
Netherlands	6.7	17.2	28.0	4.6	16.7	12.8	12.1	13.5
New Zealand	13.7	18.1	23.8	15.0	18.1	16.7	16.9	16.7
Norway	16.0	19.4	26.0	12.8	18.4	16.3	18.0	16.3
Poland	6.5	7.3	7.9	-1.7	1.8	3.2	4.3	6.5
Portugal	10.6	16.5	23.1	0.6	4.5	5.4	10.1	10.4
Slovak Republic	7.0	10.1	12.7	0.3	-0.7	4.2	6.2	7.6
Slovenia	8.3	11.6	15.6	1.8	3.3	4.0	6.5	8.7
Spain	10.3	14.7	20.5	-4.7	7.6	9.7	10.8	11.1
Sweden	15.4	18.0	31.7	15.4	18.0	15.8	16.9	15.8
Switzerland	8.1	11.0	16.0	2.3	4.5	6.1	8.4	8.7
Turkey	9.7	13.3	17.5	8.0	11.4	9.6	11.2	10.5
United Kingdom	11.1	14.0	22.5	-0.2	13.4	11.0	12.9	11.0
United States	15.5	18.4	23.7	-2.1	6.7	10.4	12.7	15.4
Unweighted average								
OECD-Average	**11.6**	**15.8**	**21.4**	**5.6**	**10.2**	**10.4**	**12.3**	**12.5**
OECD-EU 23	**12.2**	**16.9**	**22.7**	**4.8**	**9.7**	**10.3**	**12.5**	**13.1**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924930*

Table 5.5. Employee contributions, 2017

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Austria	18.0	18.0	16.3	18.0	18.0	17.2	18.0	17.2
Belgium	13.9	14.0	14.0	13.9	14.0	10.8	14.0	10.8
Canada	6.9	7.4	4.8	6.9	7.4	6.9	7.2	6.9
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Finland	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
France	14.4	14.4	13.6	14.4	14.4	14.4	14.4	14.4
Germany	20.8	20.8	16.4	20.5	20.5	20.5	20.5	20.8
Greece	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Hungary	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
Iceland	0.5	0.3	0.2	0.5	0.3	0.5	0.4	0.5
Ireland	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0
Israel[1]	6.0	8.0	9.6	6.0	8.0	6.9	7.2	6.9
Italy	9.5	9.5	9.6	9.5	9.5	9.5	9.5	9.5
Japan	14.4	14.4	13.2	14.4	14.4	14.4	14.4	14.4
Korea	8.4	8.4	7.1	8.4	8.4	8.4	8.4	8.4
Latvia	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Lithuania	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Luxembourg	12.2	12.3	12.4	12.2	12.3	12.2	12.3	12.2
Mexico	1.3	1.4	1.5	1.3	1.4	1.3	1.3	1.3
Netherlands	15.8	13.1	9.7	9.7	11.8	9.7	11.8	11.6
New Zealand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Norway	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
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	13.4	13.4	13.4	12.4	13.4	12.4
Slovenia	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
Spain	6.4	6.4	6.4	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	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Turkey	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
United Kingdom	8.2	9.5	7.5	8.2	9.5	8.2	9.0	8.2
United States	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Unweighted average								
OECD-Average	**9.8**	**9.8**	**9.3**	**9.6**	**9.8**	**9.5**	**9.7**	**9.5**
OECD-EU 23	**11.8**	**11.7**	**11.1**	**11.5**	**11.6**	**11.2**	**11.6**	**11.3**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933924949

Table 5.6. Marginal rate of income tax plus employee and employer contributions less cash benefits, 2017

As % of labour costs, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	39.6	38.2	42.4	58.5	57.1	38.2	38.2	38.2
Austria	55.8	59.7	41.0	55.8	59.7	59.7	59.7	59.7
Belgium	65.5	66.4	67.6	65.5	66.4	66.4	65.6	66.4
Canada	33.0	39.2	36.6	51.7	75.3	44.5	44.5	39.2
Chile	7.0	7.0	10.3	7.0	7.0	7.0	7.0	7.0
Czech Republic	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
Denmark	39.7	42.0	55.8	38.1	42.0	42.0	42.0	42.0
Estonia	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2
Finland	54.3	55.6	58.5	54.3	56.4	56.4	56.4	55.6
France	69.3	58.5	59.9	73.5	42.4	42.4	60.4	53.0
Germany	55.7	60.3	44.3	53.8	52.4	55.4	57.8	55.7
Greece	47.6	49.1	56.3	47.6	49.1	49.1	49.1	49.1
Hungary	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
Iceland	39.5	39.5	47.9	48.5	48.5	44.9	39.5	39.5
Ireland	35.9	54.0	56.7	74.4	54.0	54.0	54.0	54.0
Israel[1]	31.2	36.7	50.7	34.3	36.7	36.7	36.7	36.7
Italy	54.7	54.7	62.9	55.9	55.9	55.9	292.4	54.7
Japan	33.0	37.2	35.0	33.0	37.2	37.2	37.2	37.2
Korea	28.5	30.0	31.9	22.2	30.0	30.0	30.0	30.0
Latvia	45.0	45.0	44.2	45.0	45.0	45.0	45.0	45.0
Lithuania	47.8	47.8	42.1	30.6	47.8	47.8	47.8	47.8
Luxembourg	45.0	57.1	55.8	49.2	39.6	44.6	51.3	44.6
Mexico	17.5	25.2	28.4	17.5	25.2	25.2	25.2	25.2
Netherlands	51.6	51.6	52.2	52.1	57.3	51.6	51.6	51.6
New Zealand	17.5	30.0	33.0	40.0	52.5	52.5	30.0	30.0
Norway	42.1	42.1	52.8	42.1	42.1	42.1	42.1	42.1
Poland	37.0	37.0	37.0	96.9	37.0	37.0	37.0	37.0
Portugal	51.1	51.1	58.7	51.1	39.8	51.1	51.1	51.1
Slovak Republic	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4
Slovenia	43.6	51.0	55.7	43.6	43.6	43.6	43.6	51.0
Spain	44.6	48.3	54.1	44.6	46.1	48.3	48.3	48.3
Sweden	45.6	48.3	69.7	45.6	48.3	48.3	48.3	48.3
Switzerland	26.3	31.8	35.8	18.8	22.0	26.1	29.3	26.8
Turkey	42.8	47.8	47.8	42.8	47.8	47.8	47.8	47.8
United Kingdom	40.2	40.2	49.0	76.3	40.2	40.2	40.2	40.2
United States	34.3	43.6	43.6	55.1	34.3	34.3	34.3	34.3
Unweighted average								
OECD-Average	**41.8**	**44.7**	**47.2**	**47.4**	**45.0**	**44.1**	**50.7**	**43.7**
OECD-EU 23	**48.4**	**50.4**	**52.3**	**53.8**	**48.1**	**48.7**	**60.2**	**49.5**

Notes: ch = children

It is assumed that gross earnings of the principal earner in the household rise. The outcome may differ if the wage of the spouse goes up, especially if partners are taxed individually.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924968*

Table 5.7. Marginal rate of income tax plus employee contributions less cash benefits, 2017

As % of gross wage earnings, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	36.0	34.5	39.0	56.0	54.5	34.5	34.5	34.5
Austria	43.3	48.2	36.9	43.3	48.2	48.2	48.2	48.2
Belgium	54.3	55.6	59.1	54.3	55.6	55.6	54.5	55.6
Canada	25.3	33.6	33.9	46.1	73.0	39.3	39.3	33.6
Chile	7.0	7.0	10.3	7.0	7.0	7.0	7.0	7.0
Czech Republic	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
Denmark	39.7	42.0	55.8	38.1	42.0	42.0	42.0	42.0
Estonia	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
Finland	44.1	45.7	49.3	44.1	46.7	46.7	46.7	45.7
France	43.9	44.0	42.7	51.6	22.2	22.2	46.5	36.4
Germany	47.1	52.5	44.3	44.8	43.1	46.8	49.6	47.0
Greece	34.5	36.3	45.4	34.5	36.3	36.3	36.3	36.3
Hungary	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
Iceland	35.5	35.5	44.4	45.1	45.1	41.2	35.5	35.5
Ireland	29.0	49.0	52.0	71.6	49.0	49.0	49.0	49.0
Israel[1]	26.0	32.0	47.0	29.4	32.0	32.0	32.0	32.0
Italy	40.4	40.4	51.2	42.0	42.0	42.0	353.2	40.4
Japan	22.8	27.7	31.1	22.8	27.7	27.7	27.7	27.7
Korea	21.0	22.7	28.0	14.1	22.7	22.7	22.7	22.7
Latvia	32.0	32.0	31.1	32.0	32.0	32.0	32.0	32.0
Lithuania	31.5	31.5	24.0	9.0	31.5	31.5	31.5	31.5
Luxembourg	37.2	51.1	49.6	42.1	31.1	36.8	44.4	36.8
Mexico	12.1	19.5	22.9	12.1	19.5	19.5	19.5	19.5
Netherlands	46.2	46.2	52.2	46.7	52.5	46.2	46.2	46.2
New Zealand	17.5	30.0	33.0	40.0	52.5	52.5	30.0	30.0
Norway	34.6	34.6	46.7	34.6	34.6	34.6	34.6	34.6
Poland	26.7	26.7	26.7	96.3	26.7	26.7	26.7	26.7
Portugal	39.5	39.5	48.9	39.5	25.5	39.5	39.5	39.5
Slovak Republic	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Slovenia	34.6	43.1	48.6	34.6	34.6	34.6	34.6	43.1
Spain	28.1	32.9	40.4	28.1	30.0	32.9	32.9	32.9
Sweden	28.6	32.1	60.1	28.6	32.1	32.1	32.1	32.1
Switzerland	21.7	27.6	32.2	13.8	17.1	21.5	24.9	22.3
Turkey	32.8	38.7	38.7	32.8	38.7	38.7	38.7	38.7
United Kingdom	32.0	32.0	42.0	73.0	32.0	32.0	32.0	32.0
United States	29.3	39.3	39.3	51.6	29.3	29.3	29.3	29.3
Unweighted average								
OECD-Average	**31.9**	**35.5**	**39.5**	**38.2**	**35.6**	**34.7**	**43.6**	**34.3**
OECD-EU 23	**36.0**	**39.0**	**42.4**	**42.2**	**36.0**	**36.9**	**51.9**	**37.8**

Notes: ch = children

It is assumed that gross earnings of the principal earner in the household rise. The outcome may differ if the wage of the spouse goes up, especially if partners are taxed individually.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink *http://dx.doi.org/10.1787/888933924987*

Table 5.8. Percentage increase in net income relative to percentage increase in gross wages, 2017

After an increase of 1 currency unit in gross wages, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	0.79	0.87	0.87	0.42	0.54	0.82	0.84	0.82
Austria	0.78	0.77	1.01	0.61	0.64	0.64	0.67	0.71
Belgium	0.68	0.75	0.79	0.54	0.56	0.58	0.66	0.65
Canada	0.91	0.86	0.90	0.42	0.27	0.68	0.72	0.82
Chile	1.00	1.00	0.98	0.99	1.00	0.98	1.00	1.00
Czech Republic	0.87	0.91	0.94	0.66	0.69	0.75	0.79	0.87
Denmark	0.90	0.90	0.76	0.65	0.77	0.81	0.84	0.87
Estonia	0.95	0.96	0.98	0.76	0.83	0.87	0.89	0.95
Finland	0.72	0.78	0.81	0.62	0.70	0.67	0.70	0.72
France	0.75	0.79	0.88	0.49	0.95	0.96	0.70	0.86
Germany	0.81	0.79	0.99	0.67	0.72	0.73	0.74	0.81
Greece	0.83	0.86	0.81	0.78	0.83	0.82	0.83	0.84
Hungary	1.00	1.00	1.00	0.70	0.79	0.83	0.86	1.00
Iceland	0.86	0.90	0.84	0.64	0.66	0.77	0.89	0.86
Ireland	0.84	0.68	0.74	0.26	0.55	0.57	0.61	0.61
Israel[1]	0.83	0.83	0.73	0.69	0.80	0.77	0.77	0.79
Italy	0.76	0.87	0.80	0.59	0.72	0.71	-3.28	0.79
Japan	0.97	0.93	0.93	0.89	0.86	0.88	0.89	0.92
Korea	0.89	0.90	0.88	0.94	0.88	0.87	0.88	0.89
Latvia	0.95	0.96	0.99	0.75	0.82	0.84	0.87	0.95
Lithuania	0.84	0.89	1.00	1.00	0.81	0.80	0.82	0.85
Luxembourg	0.79	0.69	0.81	0.54	0.72	0.70	0.66	0.78
Mexico	0.92	0.91	0.91	0.92	0.91	0.86	0.88	0.86
Netherlands	0.69	0.77	0.77	0.51	0.63	0.67	0.69	0.72
New Zealand	0.96	0.86	0.88	0.53	0.51	0.55	0.84	0.84
Norway	0.86	0.90	0.81	0.74	0.84	0.83	0.86	0.87
Poland	0.97	0.98	0.99	0.03	0.70	0.83	0.86	0.97
Portugal	0.77	0.83	0.78	0.63	0.85	0.70	0.77	0.77
Slovak Republic	0.88	0.92	0.95	0.75	0.76	0.81	0.84	0.88
Slovenia	0.94	0.86	0.82	0.64	0.75	0.82	0.87	0.82
Spain	0.86	0.85	0.81	0.73	0.81	0.80	0.81	0.81
Sweden	0.92	0.91	0.63	0.82	0.84	0.83	0.85	0.88
Switzerland	0.91	0.88	0.87	0.85	0.86	0.85	0.84	0.91
Turkey	0.89	0.85	0.91	0.87	0.83	0.81	0.83	0.82
United Kingdom	0.84	0.89	0.83	0.27	0.83	0.81	0.84	0.84
United States	0.92	0.82	0.88	0.51	0.82	0.86	0.89	0.92
Unweighted average								
OECD-Average	**0.86**	**0.86**	**0.87**	**0.65**	**0.75**	**0.78**	**0.69**	**0.84**
OECD-EU 23	**0.84**	**0.85**	**0.86**	**0.61**	**0.75**	**0.76**	**0.60**	**0.82**

Notes: ch = children

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. The reported elasticities in Table 5.8 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 5.7 and AETR is the average rate plus employee social security contributions less cash benefits reported in Table 5.3.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

StatLink *http://dx.doi.org/10.1787/888933925006*

Table 5.9. Percentage increase in net income relative to percentage increase in gross labour cost, 2017

After an increase of 1 currency unit in gross labour cost, by household type and wage level

	Single no ch 67 (% AW)	Single no ch 100 (% AW)	Single no ch 167 (% AW)	Single 2 ch 67 (% AW)	Married 2 ch 100-0 (% AW)	Married 2 ch 100-33 (% AW)[2]	Married 2 ch 100-67 (% AW)[2]	Married no ch 100-33 (% AW)[2]
Australia	0.79	0.87	0.87	0.42	0.54	0.82	0.84	0.82
Austria	0.78	0.77	1.20	0.61	0.64	0.64	0.67	0.71
Belgium	0.66	0.73	0.80	0.52	0.55	0.55	0.64	0.61
Canada	0.90	0.88	0.93	0.42	0.28	0.69	0.73	0.84
Chile	1.00	1.00	0.98	0.99	1.00	0.98	1.00	1.00
Czech Republic	0.87	0.91	0.94	0.66	0.69	0.75	0.79	0.87
Denmark	0.90	0.90	0.76	0.65	0.77	0.81	0.84	0.87
Estonia	0.95	0.96	0.98	0.76	0.83	0.87	0.89	0.95
Finland	0.72	0.78	0.81	0.62	0.70	0.67	0.70	0.72
France	0.54	0.79	0.88	0.35	0.95	0.91	0.69	0.81
Germany	0.81	0.79	1.15	0.67	0.72	0.73	0.74	0.81
Greece	0.83	0.86	0.81	0.78	0.83	0.82	0.83	0.84
Hungary	1.00	1.00	1.00	0.70	0.79	0.83	0.86	1.00
Iceland	0.86	0.90	0.84	0.64	0.66	0.77	0.89	0.86
Ireland	0.84	0.68	0.74	0.26	0.55	0.57	0.61	0.60
Israel[1]	0.81	0.81	0.72	0.67	0.79	0.76	0.75	0.77
Italy	0.76	0.87	0.80	0.59	0.72	0.71	-3.28	0.79
Japan	0.97	0.93	1.00	0.89	0.86	0.88	0.89	0.92
Korea	0.89	0.90	0.91	0.94	0.88	0.87	0.88	0.89
Latvia	0.95	0.96	0.99	0.75	0.82	0.84	0.87	0.95
Lithuania	0.84	0.89	1.00	1.00	0.81	0.80	0.82	0.85
Luxembourg	0.79	0.69	0.81	0.54	0.72	0.70	0.66	0.78
Mexico	0.98	0.94	0.93	0.98	0.94	0.92	0.92	0.92
Netherlands	0.70	0.77	0.82	0.51	0.63	0.67	0.69	0.72
New Zealand	0.96	0.86	0.88	0.53	0.51	0.55	0.84	0.84
Norway	0.86	0.90	0.81	0.74	0.84	0.83	0.86	0.87
Poland	0.97	0.98	0.99	0.03	0.70	0.83	0.86	0.97
Portugal	0.77	0.83	0.78	0.63	0.85	0.70	0.77	0.77
Slovak Republic	0.88	0.92	0.95	0.75	0.76	0.79	0.84	0.86
Slovenia	0.94	0.86	0.82	0.64	0.75	0.86	0.87	0.86
Spain	0.86	0.85	0.81	0.73	0.81	0.80	0.81	0.81
Sweden	0.92	0.91	0.63	0.82	0.84	0.83	0.85	0.88
Switzerland	0.91	0.88	0.88	0.85	0.86	0.85	0.84	0.91
Turkey	0.86	0.85	0.91	0.84	0.83	0.80	0.82	0.81
United Kingdom	0.81	0.87	0.81	0.26	0.81	0.78	0.81	0.81
United States	0.93	0.83	0.89	0.52	0.83	0.87	0.89	0.93
Unweighted average								
OECD-Average	**0.86**	**0.86**	**0.88**	**0.65**	**0.75**	**0.78**	**0.69**	**0.84**
OECD-EU 23	**0.83**	**0.85**	**0.88**	**0.60**	**0.75**	**0.76**	**0.60**	**0.82**

Notes: ch = children

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. The reported elasticities in Table 5.9 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 5.6 and AETR is the average rate plus employee and employer social security contributions less cash benefits reported in Table 5.1.

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family. Assumes a rise in the labour costs associated with the principal earner in the household.

StatLink *http://dx.doi.org/10.1787/888933925025*

Table 5.10 Annual gross wage and net income, single person, 2017

In US dollars using PPP, by household type and wage level

	Single no ch 67 (% AW)		Single no ch 100 (% AW)		Single no ch 167 (% AW)		Single 2 ch 67 (% AW)	
	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes
Australia	38 655	31 283	57 694	43 641	96 348	67 335	38 655	40 713
Austria	39 496	28 890	58 949	39 831	98 445	61 333	39 496	36 675
Belgium	40 754	27 193	60 826	36 141	101 580	52 554	40 754	34 362
Canada	27 627	22 797	41 234	31 818	68 861	50 836	27 627	35 686
Chile	15 567	14 477	23 234	21 608	38 801	35 580	15 567	14 604
Czech Republic	19 015	15 084	28 381	21 537	47 397	34 639	19 015	19 748
Denmark	39 719	26 489	59 282	38 055	99 001	57 641	39 719	37 830
Estonia	18 742	15 560	27 973	22 826	46 715	37 580	18 742	19 347
Finland	33 035	25 629	49 305	34 553	82 340	51 432	33 035	29 918
France	33 345	24 877	49 769	35 238	83 115	54 344	33 345	32 781
Germany	43 620	28 421	65 105	39 199	108 725	60 970	43 620	35 761
Greece	23 815	18 844	35 545	26 323	59 360	39 785	23 815	20 106
Hungary	18 369	12 216	27 417	18 232	45 786	30 448	18 369	17 472
Iceland	42 615	31 907	63 605	45 454	106 220	70 237	42 615	36 363
Ireland	38 273	32 207	57 123	42 654	95 396	61 949	38 273	41 902
Israel[1]	26 393	23 449	39 393	32 416	65 787	48 074	26 393	27 172
Italy	29 594	23 100	44 170	30 410	73 765	44 820	29 594	29 109
Japan	33 642	26 722	50 213	39 033	83 855	62 079	33 642	29 064
Korea	35 475	31 606	52 948	45 284	88 424	72 337	35 475	32 394
Latvia	14 991	10 767	22 374	15 792	37 365	26 088	14 991	13 570
Lithuania	15 258	12 458	22 773	17 606	38 031	28 903	15 258	13 885
Luxembourg	45 293	36 093	67 601	47 987	112 894	70 453	45 293	48 285
Mexico	8 617	8 219	12 861	11 437	21 478	18 117	8 617	8 219
Netherlands	42 994	33 333	64 170	44 730	107 164	66 795	42 994	44 666
New Zealand	26 796	23 127	39 994	32 742	66 791	50 923	26 796	30 425
Norway	38 505	29 194	57 470	41 596	95 976	63 187	38 505	33 897
Poland	19 360	14 652	28 896	21 644	48 256	35 840	19 360	26 651
Portugal	20 777	16 296	31 010	22 487	51 788	34 137	20 777	20 051
Slovak Republic	15 876	12 636	23 696	18 121	39 572	29 258	15 876	14 874
Slovenia	21 929	15 268	32 731	21 695	54 660	34 068	21 929	22 259
Spain	27 741	23 136	41 404	32 669	69 145	50 593	27 741	27 296
Sweden	32 971	25 600	49 210	36 906	82 181	52 220	32 971	28 648
Switzerland	50 314	43 104	75 096	62 145	125 410	97 576	50 314	51 029
Turkey	20 404	15 358	30 454	21 832	50 859	34 338	20 404	15 707
United Kingdom	37 398	30 176	55 818	42 702	93 216	65 322	37 398	37 007
United States	35 762	27 494	53 376	39 445	89 138	61 152	35 762	33 793
Unweighted average								
OECD-Average	**29 798**	**23 268**	**44 475**	**32 661**	**74 273**	**50 360**	**29 798**	**28 924**
OECD-EU 23	**29 233**	**22 127**	**43 632**	**30 754**	**72 865**	**47 008**	**29 233**	**28 357**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.

StatLink *http://dx.doi.org/10.1787/888933925044*

Table 5.11. Annual gross wage and net income, married couple, 2017

In US dollars using PPP, by household type and wage level

	Married 2 ch 100-0 (% AW)		Married 2 ch 100-33 (% AW)[2]		Married 2 ch 100-67 (% AW)[2]		Married no ch 100-33 (% AW)[2]	
	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes	Total gross earnings before taxes	Net income after taxes
Australia	57 694	48 465	76 733	61 384	96 348	74 925	76 733	61 384
Austria	58 949	47 696	78 402	63 891	98 445	75 847	78 402	56 884
Belgium	60 826	48 136	80 899	61 613	101 580	69 743	80 899	55 146
Canada	41 234	40 947	54 842	48 977	68 861	58 273	54 842	44 174
Chile	23 234	21 608	30 902	29 393	38 801	36 212	30 902	28 738
Czech Republic	28 381	28 184	37 747	34 537	47 397	41 285	37 747	29 873
Denmark	59 282	44 343	78 845	56 144	99 001	68 262	78 845	52 427
Estonia	27 973	26 561	37 204	33 828	46 715	41 315	37 204	30 899
Finland	49 305	37 326	65 576	51 973	82 340	63 068	65 576	49 201
France	49 769	40 725	66 193	53 501	83 115	63 990	66 193	49 032
Germany	65 105	51 058	86 589	63 057	108 725	74 534	86 589	56 497
Greece	39 099	29 848	52 002	40 141	65 296	49 844	52 002	39 425
Hungary	27 417	23 224	36 465	29 241	45 786	35 440	36 465	24 249
Iceland	63 605	52 688	84 595	64 610	106 220	77 361	84 595	63 404
Ireland	57 123	52 584	75 974	68 186	95 396	79 912	75 974	63 967
Israel[1]	39 393	33 496	52 393	46 041	65 787	58 299	52 393	44 961
Italy	44 170	35 707	58 747	47 711	73 765	56 873	58 747	44 342
Japan	50 213	42 076	66 783	54 904	83 855	68 097	66 783	52 562
Korea	52 948	46 522	70 421	62 236	88 424	77 930	70 421	61 283
Latvia	22 374	18 595	29 758	24 162	37 365	29 362	29 758	21 358
Lithuania	22 773	19 211	30 288	26 049	38 031	31 669	30 288	24 444
Luxembourg	67 601	64 340	89 909	81 658	112 894	95 586	89 909	72 820
Mexico	12 861	11 437	17 148	15 978	21 435	19 619	17 148	15 978
Netherlands	64 170	48 485	85 346	68 592	107 164	84 001	85 346	63 926
New Zealand	39 994	37 424	53 193	46 009	66 791	55 515	53 193	44 297
Norway	57 470	44 507	76 436	60 010	95 976	73 102	76 436	57 699
Poland	28 896	30 089	38 431	33 790	48 256	40 994	38 431	29 091
Portugal	31 010	27 327	41 244	35 603	51 788	40 851	41 244	32 404
Slovak Republic	23 696	21 858	31 516	27 443	39 572	32 995	31 516	25 206
Slovenia	32 731	28 717	43 532	34 786	54 660	41 188	43 532	30 109
Spain	41 404	35 647	55 068	46 221	69 145	57 316	55 068	45 465
Sweden	49 210	39 955	65 450	53 601	82 181	65 554	65 450	50 553
Switzerland	75 096	72 076	99 878	92 612	125 410	112 072	99 878	85 013
Turkey	30 454	22 414	40 504	30 530	50 859	37 538	40 504	30 181
United Kingdom	55 818	45 630	74 238	62 568	93 216	75 473	74 238	59 973
United States	53 376	45 742	70 990	58 195	89 138	71 025	70 990	54 611
Unweighted average								
OECD-Average	**44 574**	**37 907**	**59 284**	**49 144**	**74 437**	**59 307**	**59 284**	**45 877**
OECD-EU 23	**43 786**	**36 750**	**58 236**	**47 752**	**73 123**	**57 178**	**58 236**	**43 795**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family.

StatLink http://dx.doi.org/10.1787/888933925063

Table 5.12. Annual labour costs and net income, single person, 2017

In US dollars using PPP, by household type and wage level

	Single no ch 67 (% AW)		Single no ch 100 (% AW)		Single no ch 167 (% AW)		Single 2 ch 67 (% AW)	
	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes
Australia	40 962	31 283	61 137	43 641	102 098	67 335	40 962	40 713
Austria	50 755	28 890	75 754	39 831	124 561	61 333	50 755	36 675
Belgium	51 627	27 193	78 160	36 141	130 176	52 554	51 627	34 362
Canada	30 677	22 797	45 849	31 818	74 812	50 836	30 677	35 686
Chile	15 567	14 477	23 234	21 608	38 801	35 580	15 567	14 604
Czech Republic	25 481	15 084	38 031	21 537	63 511	34 639	25 481	19 748
Denmark	39 719	26 489	59 282	38 055	99 001	57 641	39 719	37 830
Estonia	25 077	15 560	37 428	22 826	62 505	37 580	25 077	19 347
Finland	40 405	25 629	60 305	34 553	100 710	51 432	40 405	29 918
France	43 486	24 877	67 243	35 238	119 301	54 344	43 486	32 781
Germany	52 093	28 421	77 751	39 199	125 623	60 970	52 093	35 761
Greece	29 783	18 844	44 453	26 323	74 236	39 785	29 783	20 106
Hungary	22 686	12 216	33 860	18 232	56 546	30 448	22 686	17 472
Iceland	45 492	31 907	67 898	45 454	113 390	70 237	45 492	36 363
Ireland	42 387	32 207	63 264	42 654	105 651	61 949	42 387	41 902
Israel[1]	27 622	23 449	41 597	32 416	69 970	48 074	27 622	27 172
Italy	38 940	23 100	58 119	30 410	97 060	44 820	38 940	29 109
Japan	38 753	26 722	57 840	39 033	95 568	62 079	38 753	29 064
Korea	39 151	31 606	58 434	45 284	96 405	72 337	39 151	32 394
Latvia	18 536	10 767	27 661	15 792	46 189	26 088	18 536	13 570
Lithuania	20 018	12 458	29 878	17 606	49 896	28 903	20 018	13 885
Luxembourg	51 683	36 093	77 140	47 987	128 823	70 453	51 683	48 285
Mexico	9 800	8 219	14 362	11 437	23 636	18 117	9 800	8 219
Netherlands	47 884	33 333	71 410	44 730	115 193	66 795	47 884	44 666
New Zealand	26 796	23 127	39 994	32 742	66 791	50 923	26 796	30 425
Norway	43 511	29 194	64 942	41 596	108 452	63 187	43 511	33 897
Poland	22 539	14 652	33 640	21 644	56 179	35 840	22 539	26 651
Portugal	25 712	16 296	38 375	22 487	64 087	34 137	25 712	20 051
Slovak Republic	20 790	12 636	31 030	18 121	51 820	29 258	20 790	14 874
Slovenia	25 460	15 268	38 000	21 695	63 460	34 068	25 460	22 259
Spain	36 036	23 136	53 784	32 669	89 820	50 593	36 036	27 296
Sweden	43 330	25 600	64 672	36 906	108 002	52 220	43 330	28 648
Switzerland	53 446	43 104	79 771	62 145	133 210	97 576	53 446	51 029
Turkey	23 102	15 358	35 784	21 832	59 759	34 338	23 102	15 707
United Kingdom	40 929	30 176	61 890	42 702	104 449	65 322	40 929	37 007
United States	38 855	27 494	57 816	39 445	96 314	61 152	38 855	33 793
Unweighted average								
OECD-Average	**34 697**	**23 268**	**51 939**	**32 661**	**86 556**	**50 360**	**34 697**	**28 924**
OECD-EU 23	**35 450**	**22 127**	**53 093**	**30 754**	**88 556**	**47 008**	**35 450**	**28 357**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.

StatLink *http://dx.doi.org/10.1787/888933925082*

Table 5.13. Annual labour costs and net income, married couple, 2017

In US dollars using PPP, by household type and wage level

	Married 2 ch 100-0 (% AW)		Married 2 ch 100-33 (% AW)[2]		Married 2 ch 100-67 (% AW)[2]		Married no ch 100-33 (% AW)[2]	
	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes	Total gross labour costs before taxes	Net income after taxes
Australia	61 137	48 465	81 312	61 384	102 098	74 925	81 312	61 384
Austria	75 754	47 696	100 753	63 891	126 510	75 847	100 753	56 884
Belgium	78 160	48 136	100 217	61 613	129 788	69 743	100 217	55 146
Canada	45 849	40 947	60 889	48 977	76 526	58 273	60 889	44 174
Chile	23 234	21 608	30 902	29 393	38 801	36 212	30 902	28 738
Czech Republic	38 031	28 184	50 581	34 537	63 511	41 285	50 581	29 873
Denmark	59 282	44 343	78 845	56 144	99 001	68 262	78 845	52 427
Estonia	37 428	26 561	49 910	33 828	62 505	41 315	49 910	30 899
Finland	60 305	37 326	80 206	51 973	100 710	63 068	80 206	49 201
France	67 243	40 725	84 755	53 501	110 730	63 990	84 755	49 032
Germany	77 751	51 058	103 409	63 057	129 845	74 534	103 409	56 497
Greece	48 898	29 848	65 034	40 141	81 659	49 844	65 034	39 425
Hungary	33 860	23 224	45 034	29 241	56 546	35 440	45 034	24 249
Iceland	67 898	52 688	90 305	64 610	113 390	77 361	90 305	63 404
Ireland	63 264	52 584	83 717	68 186	105 651	79 912	83 717	63 967
Israel[1]	41 597	33 496	55 045	46 041	69 218	58 299	55 045	44 961
Italy	58 119	35 707	77 299	47 711	97 060	56 873	77 299	44 342
Japan	57 840	42 076	76 928	54 904	96 593	68 097	76 928	52 562
Korea	58 434	46 522	77 717	62 236	97 585	77 930	77 717	61 283
Latvia	27 661	18 595	36 795	24 162	46 197	29 362	36 795	21 358
Lithuania	29 878	19 211	39 738	26 049	49 896	31 669	39 738	24 444
Luxembourg	77 140	64 340	102 596	81 658	128 823	95 586	102 596	72 820
Mexico	14 362	11 437	19 550	15 978	24 117	19 619	19 550	15 978
Netherlands	71 410	48 485	95 035	68 592	119 295	84 001	95 035	63 926
New Zealand	39 994	37 424	53 193	46 009	66 791	55 515	53 193	44 297
Norway	64 942	44 507	86 372	60 010	108 452	73 102	86 372	57 699
Poland	33 640	30 089	44 741	33 790	56 179	40 994	44 741	29 091
Portugal	38 375	27 327	51 039	35 603	64 087	40 851	51 039	32 404
Slovak Republic	31 030	21 858	40 488	27 443	51 820	32 995	40 488	25 206
Slovenia	38 000	28 717	52 977	34 786	63 460	41 188	52 977	30 109
Spain	53 784	35 647	71 533	46 221	89 820	57 316	71 533	45 465
Sweden	64 672	39 955	86 014	53 601	108 002	65 554	86 014	50 553
Switzerland	79 771	72 076	106 095	92 612	133 217	112 072	106 095	85 013
Turkey	35 784	22 414	46 719	30 530	58 886	37 538	46 719	30 181
United Kingdom	61 890	45 630	81 222	62 568	102 819	75 473	81 222	59 973
United States	57 816	45 742	77 135	58 195	96 671	71 025	77 135	54 611
Unweighted average								
OECD-Average	**52 062**	**37 907**	**69 003**	**49 144**	**86 841**	**59 307**	**69 003**	**45 877**
OECD-EU 23	**53 286**	**36 750**	**70 519**	**47 752**	**88 866**	**57 178**	**70 519**	**43 795**

Notes: ch = children

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Two-earner family

StatLink *http://dx.doi.org/10.1787/888933925101*

Chapter 6. Evolution of the tax burden (2000-18)

The chapter presents the evolution of the tax burdens on labour income between 2000 and 2018. The chapter contains Tables 6.1 to 6.24 that are grouped by tax measures for the eight household types: Tables 6.1 to 6.8 containing the (average) tax wedge comprising income taxes plus employee and employer social security contributions (including any applicable payroll taxes) less cash benefits; Tables 6.9 to 6.16 providing the (average) burden of personal income taxes; and the Table 6.17 to 6.24 depicting the (average) burden of income taxes plus employee social security contributions less cash benefits (net personal average tax rates).

Historical trends

The evolution of the tax burden for the eight household types over the period 2000 to 2018 is presented in Tables 6.1 to 6.24 in the last section of this chapter titled "Tables showing income taxes, social security contributions and cash benefits". Each of the Tables 1 to 24 corresponds to a tax burden measure for a particular household type.

The discussion focuses on the main observable trends over the period and highlights selected important year-to-year changes[1].

Important trends

The OECD average tax wedge, the personal income tax burden and the net tax burden (personal income tax plus social security contributions less cash benefits) have all declined between 2000 and 2018 for each of the selected household types.

The reductions over the period in the OECD average tax wedge ranged from 1.3 percentage points (for single persons on average wage (AW) and the single worker earning 167% of the AW) to 4.1 percentage points (for single parents at 67% of the AW).

The decrease in the OECD average personal income tax burden ranged from 0.9 percentage points (for single persons on AW) to 2.3 percentage points (for single parents at 67% of the AW).

The OECD net personal average tax burden has also declined for all household types in the period considered. The reduction ranged from 0.8 percentage points (for single persons on AW) to 3.6 percentage points (for single parents at 67% of the AW).

Tax wedge

Focusing on the overall (average) tax wedge (Tables 6.1 to 6.8), there are fifteen OECD member countries with a reduction of more than 5 percentage points between 2000 and 2018 for at least one household type – Belgium, Canada, Denmark, Estonia, Finland, France, Hungary, Ireland, Israel, Lithuania, the Netherlands, New Zealand, Poland, Sweden and Turkey.

The largest decline was observed in Poland where the single parent benefited from a reduction in the tax wedge of 41.8 percentage points. In the latter country, the one-earner couple on the AW with children also experienced a large decrease in the tax wedge, by 12.4 percentage points. Reductions of more than 10 percentage points in the tax wedge for at least one household type were also observed in Canada, Hungary, Ireland, Lithuania, the Netherlands and New Zealand.

In Canada, the tax wedge decreased by 14.9 percentage points for the single parent at 67% of the AW and by 11.4 percentage points for the one-earner married couple on the AW with two children. In Hungary, there were reductions of more than 10 percentage points for five out of the eight household types. The largest decreases were for the single person earning 167% of the AW (14.1 percentage points) and the one-earner married couple, with two children, earning the AW (13.6 percentage points). In Ireland, the tax wedge decreased by 13.4 percentage points for the single parent on 67% of the AW. In Lithuania, there were decreases of more than 10 percentage points for the one-earner couple on the AW with children (12.5 percentage points) and the single parent on 67% of the AW (12.4 percentage points). In the Netherlands, the tax wedge decreased by 19.3

percentage points for the single parent on 67% of the AW and by 11.5 percentage points for the single person on 67% of the AW without children. In New Zealand, the single parent earning 67% of the AW benefited the most from the reduction in the tax wedge (17.5 percentage points). It also decreased by 11.6 percentage points for the one-earner married couple earning the AW with two children.

In contrast, between 2000 and 2018, there were increases in the tax wedge of more than 5 percentage points for at least one household type in seven countries – the Czech Republic, Iceland, Korea, Luxembourg, Mexico, Norway and Turkey. The largest increase was in Iceland where the tax wedge raised by 13.6 percentage points for the single parent on 67% of the AW and also by between 6 and around 9 percentage points for five other household types. In the Czech Republic, it increased by 8.8 percentage points for the single parent on 67% of the AW. In Mexico, seven of the household types experienced increases between 7 and around 8 percentage points. In Turkey, the single person earning 167% of the AW had the tax wedge increased by 7.5 percentage points. In Korea, there were increases between 5 and around 7 percentage points for five of the household types. In Norway, it increased by 6.0 percentage points for the single parent on 67% of the AW. In Luxembourg, the tax wedge raised by 5.3 percentage points for the one-earner couple on AW with children.

The tax wedge has decreased for all household types in fifteen of the OECD member countries (Belgium, Canada, Denmark, Estonia, Finland, Germany, Hungary, Ireland, Israel, Lithuania, New Zealand, Poland, Sweden, Switzerland and the United States) while it has increased across all household types in three countries (Korea, Luxembourg and Mexico).

Average personal income tax rate

Between 2000 and 2018, the average personal income tax burden (Tables 6.9 to 6.16) decreased for the eight household types in fifteen of the OECD member countries: Belgium, Canada, Estonia, Finland, Hungary, Israel, Latvia, Lithuania, New Zealand, Slovenia, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Among those countries, the most significant reductions affecting most of the household types are noted in Hungary where there were significant decreases of 15.3 percentage points for the single person earning 167% of the AW, 13.5 percentage points for the one-earner married couple earning the AW with children, and 10.3 percentage points for the single parent earning 67% of the AW with two children. For the latter household type, there was a reduction of 14.8 percentage points during the same period in Estonia where all the other household types also experienced reduced average personal income tax rates. For the other household types, they decreased by between 8.5 and 11.5 percentage points except for the single worker on 167% of the AW (3.9 percentage points). In Lithuania, the average personal income tax rates decreased by between 13.7 and 12.2 percentage points for most of the household types, the exception being the single parent on 67% of the AW. For the latter it decreased by 7.7 percentage points. In Sweden, seven out of the eight household types had decreases of around 9 percentage points except the single taxpayer earning 167% of the AW for whom the decrease was 4.3 percentage points. In Finland, it decreased by 6 to around 8 percentage points for all the household types. In Israel, the average income tax rate decreased by 6 to around 8 percentage points for all the household types except for the single parent at 67% of the AW who had a reduction of 3.4 percentage points. Other decreases of more than 5 percentage points were observed in the United Kingdom for the single parent at 67% of the AW (7.9 percentage points),

Belgium for two-earner couples with and without children (up to 6 percentage points) and Turkey for the single parent at 67% of the AW (5.4 percentage points).

At the other extreme, the average personal income tax rate increased across all the eight household types in eight OECD member countries: Austria, Denmark, France, Greece, Japan, Korea, Mexico and the Netherlands. In the Netherlands, there were increases of 12.3 percentage points for the one-earner married couple with two children and 7.9 percentage points for the single person on AW. In Mexico the increases were within a range of 5 to 9 percentage points over the eight household types. The average personal income tax rates increased by more than 5 percentage points in Denmark for the one-earner couple on AW with children (5.9 percentage points), the two-earner couples on 133% of the AW with or without children (both 5.4 percentage points) and the single person at 67% of average earnings without children (5.01 percentage points),.

There were twelve other OECD member countries with both reductions and increases in the average personal income tax among the household types: Australia, the Czech Republic, Germany, Iceland, Ireland, Italy, Luxembourg, Norway, Poland, Portugal, the Slovak Republic and Spain. Significant changes were observed in the Czech Republic where there were reductions of 10.1 percentage points for the single parent on 67% of the AW and 9.1 percentage points for the one-earner couple on AW with children, and in Iceland where there was an increase of 5.2 percentage points for the one-earner couple on the AW with children.

In contrast, in Chile the average income tax rates stayed constant for all the household types between 2000 and 2018.

Net personal average tax rate

The net personal average tax rate takes into account personal income taxes and employee social security contributions as well as cash benefits (Tables 6.17 to 6.24). It decreased between 2000 and 2018 for the eight household types in twelve OECD countries: Belgium, Canada, Denmark, Estonia, Ireland, Israel, Lithuania, New Zealand, Poland, Sweden, Switzerland and the United States. Among those countries, the most significant reductions were observed in Poland, where the net personal average tax rate fell by 48.4 percentage points for the single parent earning 67% of the AW and by 14.2 percentage points for the one-earner married couple on AW with two children. In New Zealand, the net personal average tax rate decreased by 17.5 percentage points for the single parent on 67% of the AW. In Lithuania, it decreased by between 6 and around 16 percentage points for all the household types. The highest decrease was observed for the one-earner couple on the AW with children (16.4 percentage points) and the single parent on 67% of the AW (16.3 percentage points). There were decreases of more than 10 percentage points also in Canada for the single parent on 67% of the AW (16.1 percentage points) and the one-earner couple on the AW with children (12.3 percentage points), in Ireland for the single parent on 67% of the AW (13.9 percentage points) and in Estonia for the two-earner couple on 133% of the AW with children (10.6 percentage points). In Sweden, seven out of the eight household types had reductions in net personal average tax rates exceeding 7 percentage points. It decreased the most for the two-earner couple on 133% of the AW without children (9.4 percentage points) and for the single person on 67% of the AW without children (9.2 percentage points). In Israel reductions ranging between 5 and 8 percentage points were observed for all but one household type, the exception being the single parent on 67% of the AW for whom the reduction was 0.6 percentage points. In Denmark, there were decreases for all household types and three of them saw decreases

of above 5 percentage points ranging from 5.8 (for the single person earning the AW without children) to 7.8 (for the single person earning 167% of the AW). In Belgium, the net personal average tax rate decreased by more than 6 percentage points for the two-earner couples on 133% of the AW with or without children (6.7 and 7.5 percentage points respectively).

In contrast, the net personal average tax rate increased across all household types in four OECD member countries: Austria, Korea, Mexico and the Slovak Republic. All of those countries experienced increases of more than 5 percentage points. The largest change was in the Slovak Republic where it increased by 10.6 percentage points for the single parent on 67% of the AW. In Mexico, the net personal average tax rates increased by between 7 and around 9 percentage points for all household types except the single person on 167% of the AW (4.8 percentage points). In Korea, the net personal average tax rate increased by 6.0 percentage points for the single person on the AW and by 5.3 percentage points for the single person on 167% of the AW. In Austria, the single parent experienced a rise of 5.7 percentage points in the net personal average tax rate.

There were twenty other OECD member countries with both reductions or increases in the net personal average tax rate among the household types: Australia, Chile, the Czech Republic, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Japan, Latvia, Luxembourg, the Netherlands, Norway, Portugal, Slovenia, Spain, Turkey and the United Kingdom. There were significant decreases in the Netherlands where the net average personal tax rate fell by 18.3 percentage points for the single parent on 67% of the AW and by 10.3 percentage points for the single person on 67% of the AW without children. In France, there was a reduction of 12.1 percentage points for the single parent on 67% of the AW. In Hungary, the net personal average tax rate decreased by 9.3 percentage points for the single person on 167% of the AW without children. Reductions of more than 5 percentage points were also observed for the single parent on 67% of the AW in the United Kingdom (5.6 percentage points) and Portugal (5.5 percentage points), for the single person on 67% of the AW without children in Finland (5.5 percentage points) as well as for the two-earner couple on 133% of the AW without children in Finland (5.4 percentage points). In contrast, there were significant increases in the net personal average tax rate in Iceland where it increased by 12.6 percentage points for the single parent on 67% of the AW and by between 5 and around 7 percentage points for five other household types. In the Czech Republic, it increased by 12.6 percentage points for the single parent on 67% of the AW and by 5.6 percentage points for the one-earner couple on the AW with children. In Norway, there was an increase of 6.6 percentage points for the single parent on 67% of the AW. In Turkey the net personal average tax rate increased by 5.5 percentage points for the single person earning 167% of the AW.

Progressivity

The degree of progressivity of the personal income tax system can be assessed by comparing the burden faced by single persons earning 67% of the AW with that faced by their counterparts earning 167% of the AW. Hence Table 6.9 is compared with Table 6.11. For all OECD countries (except Hungary) and for all years between 2000 and 2018 the higher paid worker always pays a higher percentage of income in personal income tax than the lower paid worker. In Hungary, the exceptions are that the levels of tax burden are the same for both workers from 2013 onwards. In Mexico, from 2000 to 2010, the personal income tax was negative for the single persons earning 67% of the AW due to non-wastable tax credits.

On average, the progressivity of the personal income taxes increased in OECD countries. On average (excluding Mexico), the single person earning 67% of the AW paid 55% of the tax burden of the person earning 167% of the AW in 2000 and 53% in 2018.

Comparing the situation in each OECD country, personal income taxes have become more progressive in nineteen countries. The most significant changes were in Estonia where the tax burdens on lower paid worker fell from 85% to 43%, in Lithuania where it fell from about 77% to 57% and in Sweden where it decreased from 68% to 48%.

Between 2000 and 2018, personal income taxes became slightly less progressive (using this measure) in fourteen OECD countries: Australia, Austria, Denmark, Greece, Hungary, Iceland, Korea, Mexico, the Netherlands, Poland, Portugal, the Slovak Republic, Spain and the United States. The most significant changes occurred in Hungary where the ratio rose from about 58% of the higher paid person in 2000 to 100% from 2013 onwards and in Iceland where it rose from 55% in 2000 to 74% in 2018. The tax burden ratio remained at the same level in Chile, Japan and the Czech Republic in 2000 and 2018.

Families

The results presented in Tables 6.21 and 6.18 can be used to compare the net tax burdens (personal income tax plus employee social security contributions less cash benefits) faced by a one-earner married couple earning the AW with two children, and the childless single person at the same income level. The OECD average tax savings for the married couple compared with the single person represented 10.7% of gross income in 2000 and 11.2% in 2018.

Between 2000 and 2018, the savings for the one-earner married couple increased in sixteen countries and declined in nineteen others. There were six countries where the tax savings have increased by more than 5 percentage points: in Poland increasing by 11.6 percentage points from 5.7% to 17.3% of gross income, in New Zealand increasing by 10.7 percentage points from 5.8% to 16.5% of gross income, in Canada increasing by 10.3 percentage points from 10.9% to 21.2% of gross income, in Lithuania increasing by 9.8 percentage points from 0% to 9.8% and in Portugal increasing by 5.7 percentage points from 8.8% to 14.5% of gross income. There were corresponding reductions of more than 5 percentage points in Norway where the tax savings decreased by 7.5 percentage points from 11.4% to 3.9% of gross income and in the Netherlands with a reduction in the tax savings by 5.6 percentage points from 11.2% to 5.6% of gross income.

Notes

[1] Tables 6.1 to 6.24 shows figures rounded to the first decimal. Due to rounding, changes in percentage points that are presented in the text may differ by one-tenth of a percentage point relative to those in the Tables.

Tables showing the income taxes, social security contributions and cash benefits

The evolution of the income taxes, social security contributions and cash benefits for the eight household types across the OECD over the period 2000 to 2018 is presented in Tables 6.1 to 6.24.

- Tables 6.1 to 6.8 containing the (average) tax wedge comprising income taxes plus employee and employer social security contributions (including any applicable payroll taxes) less cash benefits,
- Tables 6.9 to 6.16 providing the (average) burden of personal income taxes, and the
- Tables 6.17 to 6.24 depicting the (average) burden of income taxes plus employee social security contributions less cash benefits (net personal average tax rates).

Tables 6.25 and 6.26 show the average gross and net earnings of a single individual between 2000 and 2018 in US dollar using purchasing power parities of national currencies and in national currencies.

Table 6.1. Income tax plus employee and employer contributions less cash benefits, single persons at 67% of average wage

Tax burden as a % of labour costs, single persons without children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	25.9	22.0	20.7	21.7	21.9	22.4	23.1	23.4	23.6	24.1
Austria	43.2	44.5	43.9	44.2	44.6	44.8	45.1	43.0	43.1	43.3
Belgium	51.4	50.3	50.6	50.5	50.0	49.9	49.4	47.5	47.3	46.1
Canada	27.7	26.6	26.0	26.2	26.3	26.5	26.5	26.5	25.7	25.8
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	41.3	40.1	39.7	39.4	39.4	39.7	40.0	40.3	40.8	41.4
Denmark	37.4	35.4	33.7	33.8	33.3	33.1	33.4	33.4	33.3	33.2
Estonia	39.8	37.1	39.0	39.2	38.8	38.9	38.0	37.9	38.0	32.9
Finland	42.7	38.7	36.8	36.8	37.6	38.0	37.9	38.3	36.6	36.1
France	43.9	46.6	47.0	46.9	45.5	45.0	43.3	42.9	42.8	43.1
Germany	47.6	46.5	45.6	45.5	45.1	45.1	45.3	45.4	45.4	45.4
Greece	35.9	36.3	39.5	39.5	37.2	36.3	35.0	36.4	36.7	36.9
Hungary	51.4	46.8	45.2	47.9	49.0	49.0	49.0	48.2	46.2	45.0
Iceland	23.8	27.6	29.4	29.3	29.7	29.7	30.2	30.3	29.9	30.1
Ireland	27.5	20.8	24.0	24.3	25.2	25.3	24.9	24.3	24.0	24.2
Israel[1]	23.2	15.5	13.9	13.8	13.6	14.2	14.8	15.2	15.1	15.5
Italy	43.6	43.3	44.5	44.7	44.9	41.9	40.8	40.8	40.7	40.9
Japan	28.7	28.0	29.5	29.9	30.2	30.6	30.9	31.0	31.0	31.2
Korea	15.0	17.4	17.8	18.0	18.4	18.5	18.7	19.2	19.3	19.8
Latvia	41.7	39.5	43.2	43.3	42.8	42.1	41.7	41.8	41.9	38.7
Lithuania	43.0	40.2	38.9	39.2	39.5	39.0	39.3	39.0	37.8	37.1
Luxembourg	29.8	28.2	30.6	30.4	31.2	31.6	32.4	32.5	30.2	30.4
Mexico	7.6	11.0	13.2	13.6	14.4	14.7	15.0	15.3	16.1	16.1
Netherlands	42.3	34.1	33.5	33.3	32.7	31.8	32.0	30.4	30.4	30.8
New Zealand	18.6	18.0	13.0	13.1	13.3	13.4	13.5	13.6	13.7	13.8
Norway	35.1	34.2	34.3	34.2	34.1	33.8	33.7	33.2	32.9	32.8
Poland	37.0	33.6	33.4	34.7	34.8	34.9	35.0	34.9	35.0	35.1
Portugal	33.2	32.2	32.3	32.6	35.2	34.9	36.3	36.5	36.6	36.5
Slovak Republic	40.6	36.1	36.1	36.9	38.5	38.6	38.8	39.0	39.2	39.5
Slovenia	42.6	40.3	38.7	38.6	38.5	38.6	38.6	38.7	40.0	40.0
Spain	34.9	34.1	36.8	37.2	37.2	37.3	35.8	35.8	35.8	35.9
Sweden	48.6	42.6	40.7	40.8	40.9	40.5	40.6	40.8	40.9	41.0
Switzerland	20.2	19.1	19.5	19.4	19.4	19.2	19.1	19.3	19.4	19.5
Turkey[2]	39.1	36.1	34.5	34.6	34.9	35.8	35.9	32.9	33.5	34.2
United Kingdom	29.1	29.7	28.5	27.9	26.8	26.2	26.0	26.1	26.3	26.1
United States	29.0	27.4	27.8	27.8	29.4	29.5	29.2	29.2	29.2	27.6
Unweighted average										
OECD-Average	**34.2**	**32.4**	**32.5**	**32.7**	**32.8**	**32.7**	**32.7**	**32.5**	**32.4**	**32.1**
OECD-EU 23	**40.4**	**38.1**	**38.4**	**38.6**	**38.6**	**38.4**	**38.2**	**38.0**	**37.8**	**37.4**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925120*

Table 6.2. Income tax plus employee and employer contributions less cash benefits, single persons at 100% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	31.0	26.9	26.7	27.3	27.4	27.7	28.3	28.6	28.6	28.9
Austria	47.3	49.0	48.5	48.8	49.2	49.4	49.6	47.3	47.4	47.6
Belgium	57.1	55.9	56.1	56.0	55.7	55.6	55.3	53.9	53.8	52.7
Canada	32.9	31.3	30.6	30.8	31.0	31.6	31.5	31.4	30.6	30.7
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	42.6	43.4	42.6	42.5	42.4	42.6	42.8	43.0	43.4	43.7
Denmark	41.5	38.6	36.1	36.2	35.8	35.6	35.9	35.9	35.8	35.7
Estonia	41.3	38.4	40.3	40.4	39.9	40.0	39.0	39.0	39.0	36.5
Finland	47.5	43.8	42.3	42.5	43.1	43.6	43.5	44.1	42.7	42.3
France	50.4	49.8	50.0	50.1	48.8	48.4	48.4	48.0	47.6	47.6
Germany	52.9	51.3	49.7	49.7	49.3	49.3	49.4	49.5	49.6	49.5
Greece	38.8	41.5	43.0	42.9	41.3	40.4	39.1	40.5	40.8	40.9
Hungary	54.7	54.1	49.5	49.5	49.0	49.0	49.0	48.2	46.2	45.0
Iceland	28.8	30.9	34.1	33.8	34.1	33.9	34.3	33.9	33.1	33.2
Ireland	35.3	28.2	32.6	33.0	33.8	34.0	33.2	32.7	32.6	32.7
Israel[1]	29.6	22.9	20.8	20.4	20.4	21.1	21.8	22.3	22.1	22.4
Italy	47.1	46.6	47.6	47.7	47.8	47.8	47.8	47.8	47.7	47.9
Japan	29.8	29.5	30.8	31.3	31.6	32.0	32.3	32.4	32.5	32.6
Korea	16.4	20.0	20.5	21.0	21.5	21.7	22.0	22.3	22.5	23.0
Latvia	43.2	41.3	44.2	44.3	43.7	43.0	42.5	42.6	42.9	42.3
Lithuania	45.7	41.6	40.7	40.9	41.1	41.0	41.2	41.3	41.1	40.6
Luxembourg	35.8	34.7	37.3	37.1	38.2	38.6	39.5	39.6	37.8	38.2
Mexico	12.7	15.1	18.7	19.0	19.3	19.5	19.8	20.1	20.4	19.7
Netherlands	40.0	39.2	38.0	38.6	40.6	39.0	37.0	37.2	37.4	37.7
New Zealand	19.4	20.5	15.9	16.4	16.9	17.2	17.6	17.9	18.1	18.4
Norway	38.6	37.6	37.6	37.4	37.4	36.9	36.8	36.3	35.9	35.8
Poland	38.2	34.7	34.3	35.5	35.6	35.7	35.7	35.6	35.7	35.8
Portugal	37.3	36.9	38.0	37.6	41.4	41.2	42.1	41.6	41.4	40.7
Slovak Republic	41.9	38.8	38.8	39.6	41.1	41.3	41.4	41.5	41.6	41.7
Slovenia	46.3	42.9	42.6	42.5	42.4	42.5	42.6	42.7	42.9	43.3
Spain	38.6	38.0	40.0	40.6	40.7	40.7	39.4	39.4	39.3	39.4
Sweden	50.1	44.8	42.8	42.9	43.0	42.5	42.6	42.8	42.9	43.1
Switzerland	22.9	21.9	22.3	22.1	22.2	21.9	21.9	22.1	22.1	22.2
Turkey[2]	40.4	38.7	37.0	37.1	37.4	38.1	38.2	38.2	39.0	38.9
United Kingdom	32.6	32.8	32.5	32.1	31.4	31.0	30.8	30.9	31.0	30.9
United States	30.8	30.1	29.9	29.8	31.5	31.6	31.4	31.6	31.8	29.6
Unweighted average										
OECD-Average	**37.4**	**36.1**	**36.1**	**36.2**	**36.5**	**36.5**	**36.4**	**36.4**	**36.2**	**36.1**
OECD-EU 23	**43.8**	**42.0**	**42.1**	**42.2**	**42.4**	**42.3**	**42.1**	**42.0**	**41.8**	**41.6**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.3. Income tax plus employee and employer contributions less cash benefits, single persons at 167% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	38.8	32.7	32.2	33.1	33.2	33.4	34.0	34.1	34.0	34.3
Austria	50.4	51.8	51.5	51.4	51.9	52.0	52.1	50.7	50.8	50.9
Belgium	62.6	61.1	61.1	61.0	60.8	60.8	60.7	59.9	59.6	59.0
Canada	35.2	32.9	32.8	32.9	33.1	33.3	33.3	32.7	32.0	32.1
Chile	8.3	7.7	8.1	8.2	8.1	8.1	8.2	8.3	8.3	8.3
Czech Republic	44.8	46.1	45.0	44.9	44.9	45.0	45.1	45.2	45.5	45.7
Denmark	49.3	48.0	43.2	43.4	42.6	41.9	42.1	42.0	41.8	41.5
Estonia	42.5	39.5	41.3	41.4	40.8	40.9	39.9	39.9	39.9	41.2
Finland	53.2	49.5	48.3	48.5	48.9	49.4	49.4	50.1	48.9	48.6
France	52.5	53.4	53.8	54.0	54.1	54.3	54.3	54.4	54.4	54.1
Germany	56.2	53.1	51.3	51.2	51.2	51.3	51.3	51.3	51.5	51.3
Greece	44.9	46.4	48.2	48.1	48.9	48.2	45.6	46.1	46.4	46.6
Hungary	59.2	59.1	51.6	50.7	49.0	49.0	49.0	48.2	46.2	45.0
Iceland	39.6	33.6	38.4	38.3	38.6	38.4	38.6	38.5	38.1	38.0
Ireland	42.2	36.8	42.3	42.5	43.0	43.1	42.3	41.5	41.4	41.5
Israel[1]	38.1	32.2	29.2	28.6	29.2	30.0	30.8	31.4	31.3	31.8
Italy	51.1	51.8	53.0	53.2	53.3	53.6	54.2	54.1	53.8	54.0
Japan	31.6	32.5	33.8	34.2	34.5	34.7	34.9	35.0	35.0	35.1
Korea	20.5	22.6	22.2	22.6	23.0	23.5	24.2	24.6	25.0	25.4
Latvia	44.4	42.8	45.0	45.0	44.4	43.8	43.2	43.3	43.5	42.6
Lithuania	47.9	42.7	42.0	42.1	42.1	42.1	42.1	42.1	42.1	42.1
Luxembourg	44.1	41.7	44.6	44.2	45.3	45.5	46.2	46.3	45.3	45.5
Mexico	19.5	20.6	21.6	22.0	22.2	22.6	22.8	23.1	23.3	22.7
Netherlands	44.9	42.5	41.8	42.4	42.1	50.4	42.2	42.0	42.0	42.2
New Zealand	24.2	26.3	22.0	22.4	22.8	23.1	23.3	23.6	23.8	24.0
Norway	45.2	43.2	43.2	43.1	43.0	42.5	42.5	42.0	41.7	41.6
Poland	39.1	36.0	35.0	36.2	36.2	36.3	36.3	36.2	36.2	36.3
Portugal	42.3	42.6	44.6	43.6	47.7	47.4	48.1	47.1	46.7	46.0
Slovak Republic	45.2	40.7	40.8	41.6	43.3	43.4	43.4	43.5	43.5	43.6
Slovenia	51.0	48.3	47.7	47.5	46.1	46.4	46.5	46.1	46.3	46.7
Spain	41.0	41.4	42.5	43.5	44.3	45.0	43.8	43.8	43.7	43.8
Sweden	55.7	52.8	50.9	50.7	50.8	50.6	50.7	51.5	51.6	51.8
Switzerland	27.4	26.4	26.8	26.7	26.8	26.4	26.4	26.7	26.7	26.9
Turkey[2]	35.0	41.1	40.0	40.2	40.6	41.5	41.8	42.1	42.5	42.5
United Kingdom	35.8	37.5	37.9	37.8	37.6	37.3	37.3	37.5	37.5	37.3
United States	37.1	35.5	34.7	34.6	36.3	36.4	36.3	36.4	36.5	34.1
Unweighted average										
OECD-Average	**41.7**	**40.4**	**40.2**	**40.3**	**40.6**	**40.9**	**40.6**	**40.6**	**40.5**	**40.4**
OECD-EU 23	**47.9**	**46.3**	**46.2**	**46.3**	**46.5**	**46.9**	**46.3**	**46.2**	**46.0**	**46.0**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925158*

Table 6.4. Income tax plus employee and employer contributions less cash benefits, single parent at 67% of average wage

Tax burden as a % of labour costs, single parent with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	4.0	-4.9	-5.7	-3.2	-2.6	-1.8	-1.4	-1.1	0.6	1.9
Austria	25.2	28.4	27.2	28.0	28.8	29.2	29.6	27.4	27.7	28.1
Belgium	36.4	35.9	37.0	36.9	36.2	36.1	35.6	33.5	33.4	32.2
Canada	-0.4	-6.2	-7.2	-6.8	-6.1	-4.7	-15.4	-15.2	-16.3	-15.2
Chile	5.9	6.1	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Czech Republic	12.7	15.1	25.4	24.2	24.1	24.8	24.7	21.8	22.5	21.4
Denmark	11.5	10.5	8.6	8.5	7.9	5.8	6.3	6.2	4.8	4.9
Estonia	18.5	18.7	25.2	26.3	26.6	27.4	21.7	21.8	22.8	18.0
Finland	28.3	26.9	25.7	25.6	26.8	27.3	27.2	27.9	26.0	25.8
France	34.5	38.6	38.9	38.8	37.1	36.6	35.7	24.5	24.6	25.2
Germany	31.8	33.2	31.0	31.3	31.0	31.3	30.9	31.2	31.4	31.5
Greece	35.3	35.3	38.5	38.4	33.7	32.8	31.3	32.1	32.5	30.7
Hungary	34.0	29.9	20.2	23.0	25.5	26.4	27.2	25.5	23.0	21.9
Iceland	5.9	14.9	19.0	17.0	19.0	19.1	20.5	21.0	20.1	19.5
Ireland	16.6	-2.4	-3.9	-2.5	-0.6	0.0	0.1	0.1	1.1	3.1
Israel[1]	3.3	2.5	0.8	0.5	1.2	2.9	2.9	0.9	1.6	2.4
Italy	29.5	26.4	29.0	29.4	29.0	26.2	25.3	25.2	25.2	25.9
Japan	26.3	21.9	19.8	23.5	23.8	24.3	24.7	24.9	25.0	25.2
Korea	14.4	16.6	17.1	17.3	17.5	16.9	17.0	17.0	17.3	17.6
Latvia	24.0	27.0	29.5	30.1	29.9	25.5	25.0	25.4	26.8	23.8
Lithuania	38.4	33.3	30.5	31.1	31.9	31.0	31.7	29.3	30.6	26.0
Luxembourg	4.4	2.2	4.6	5.1	6.6	7.6	9.0	9.3	6.6	7.4
Mexico	7.6	11.0	13.2	13.6	14.4	14.7	15.0	15.3	16.1	16.1
Netherlands	26.4	13.8	12.1	11.7	11.8	11.3	10.2	7.0	6.7	7.1
New Zealand	-3.0	-17.3	-18.3	-18.2	-16.9	-15.8	-14.4	-14.6	-13.5	-20.5
Norway	16.4	20.6	21.6	21.7	22.0	22.0	22.3	22.0	22.1	22.4
Poland	29.8	28.4	28.4	29.6	29.6	26.9	23.9	-16.3	-18.2	-12.0
Portugal	26.6	22.8	22.3	23.1	25.5	25.0	25.4	21.7	22.0	22.1
Slovak Republic	25.3	24.2	23.6	24.5	26.4	26.9	27.3	27.9	28.5	29.3
Slovenia	13.4	13.7	12.8	13.0	13.1	9.9	10.1	10.5	12.6	13.7
Spain	28.6	28.4	29.9	30.3	30.4	30.6	24.2	24.2	24.3	24.5
Sweden	39.9	34.1	32.6	32.9	33.2	33.0	33.2	33.6	33.9	33.3
Switzerland	6.5	3.1	4.9	5.0	4.7	4.1	4.1	4.5	4.5	4.7
Turkey[2]	39.1	34.8	33.1	33.2	33.6	34.4	34.6	31.3	32.0	32.7
United Kingdom	15.3	11.6	7.1	6.7	5.7	4.6	5.3	7.3	9.6	10.4
United States	10.7	7.6	8.9	9.8	11.3	12.0	11.7	12.2	13.0	9.6
Unweighted average										
OECD-Average	**20.1**	**18.0**	**18.0**	**18.5**	**18.8**	**18.6**	**18.0**	**16.2**	**16.3**	**16.0**
OECD-EU 23	**25.5**	**23.3**	**23.3**	**23.7**	**23.9**	**23.3**	**22.7**	**19.9**	**19.9**	**19.8**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.5. Income tax plus employee and employer contributions less cash benefits, married couple at 100% of average wage

Tax burden as a % of labour costs, one-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	23.4	14.9	15.2	16.8	16.9	17.4	17.8	18.0	20.7	21.5
Austria	35.2	38.2	37.3	37.9	38.6	38.9	39.2	36.8	37.0	37.4
Belgium	42.6	40.6	41.4	41.3	40.7	40.6	40.3	38.5	38.4	37.3
Canada	23.1	18.9	18.0	18.2	18.6	19.3	11.0	11.6	10.7	11.7
Chile	6.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	22.0	20.8	26.8	26.1	26.1	26.7	26.8	25.1	25.9	25.5
Denmark	28.2	27.0	25.3	25.5	25.1	24.9	25.3	25.2	25.2	25.2
Estonia	32.8	26.8	31.8	32.4	32.4	32.9	28.6	28.5	29.0	26.6
Finland	40.3	38.4	37.2	37.3	38.1	38.6	38.9	39.6	38.1	37.8
France	41.3	42.5	43.0	43.1	41.1	40.5	40.5	40.0	39.4	39.4
Germany	35.3	35.1	33.8	34.0	33.6	33.8	34.0	34.2	34.3	34.4
Greece	40.5	41.8	43.5	43.4	40.6	39.7	37.7	38.6	39.0	37.9
Hungary	43.9	43.9	33.0	34.2	34.2	34.8	35.3	33.8	31.4	30.3
Iceland	13.1	18.4	21.3	19.6	21.3	21.8	23.2	23.3	22.4	21.5
Ireland	20.4	10.8	15.9	16.7	18.2	18.5	17.7	16.9	16.9	17.3
Israel[1]	25.5	20.0	17.1	16.6	17.0	18.7	19.2	19.6	19.5	19.9
Italy	39.3	36.6	38.5	38.8	38.4	38.5	38.6	38.6	38.6	39.1
Japan	26.4	24.0	23.1	25.7	26.0	26.5	27.0	27.2	27.3	27.4
Korea	15.7	17.8	18.0	18.5	19.1	19.4	19.8	20.1	20.4	21.0
Latvia	31.4	33.0	35.0	35.4	35.1	31.9	31.4	31.6	32.8	32.3
Lithuania	45.7	37.3	35.0	35.5	36.0	35.6	36.1	37.8	35.7	33.2
Luxembourg	11.7	11.2	15.1	15.1	16.0	16.5	17.5	17.7	16.6	17.0
Mexico	12.7	15.1	18.7	19.0	19.3	19.5	19.8	20.1	20.4	19.7
Netherlands	29.9	30.3	31.1	32.1	34.5	33.0	31.4	31.9	32.1	32.6
New Zealand	13.6	0.7	-1.1	0.6	2.4	3.8	4.9	5.5	6.4	1.9
Norway	28.4	30.8	31.2	31.1	31.2	32.0	32.1	31.7	31.5	32.4
Poland	33.3	28.4	28.4	29.6	29.9	30.3	30.6	14.4	10.6	20.9
Portugal	30.2	26.3	27.3	27.9	30.2	29.8	30.8	28.6	28.8	29.0
Slovak Republic	30.8	25.3	24.9	25.8	27.6	28.1	28.5	29.0	29.6	30.3
Slovenia	25.0	23.1	23.2	23.2	23.2	23.5	23.6	23.9	24.4	25.2
Spain	32.3	32.0	34.3	34.7	34.8	34.9	33.7	33.7	33.7	33.9
Sweden	44.3	39.2	37.4	37.6	37.9	37.4	37.7	38.0	38.2	37.9
Switzerland	11.7	9.2	10.2	10.1	9.8	9.3	9.3	9.6	9.6	9.8
Turkey[2]	40.4	37.2	35.5	35.6	35.8	36.6	36.7	36.6	37.4	37.2
United Kingdom	27.8	26.9	26.4	27.5	26.8	26.4	25.8	26.0	26.3	26.2
United States	21.2	17.1	18.5	18.6	20.3	20.6	20.4	20.6	20.9	18.5
Unweighted average										
OECD-Average	**28.5**	**26.3**	**26.6**	**27.0**	**27.3**	**27.4**	**27.2**	**26.7**	**26.6**	**26.6**
OECD-EU 23	**33.2**	**31.1**	**31.5**	**32.0**	**32.1**	**32.0**	**31.7**	**30.8**	**30.5**	**30.7**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.6. Income tax plus employee and employer contributions less cash benefits, married couple with two children, at 100% and 33% of average wage

Tax burden as a % of labour costs, two-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	24.6	19.1	17.9	18.8	19.9	20.9	22.7	24.3	24.5	24.8
Austria	36.3	38.7	37.4	37.8	38.3	38.5	38.5	36.5	36.6	36.8
Belgium	44.3	41.6	42.4	42.4	41.9	41.7	41.3	38.7	38.5	37.2
Canada	26.9	23.9	23.4	23.6	24.0	24.2	19.9	20.4	19.6	19.9
Chile	5.4	5.6	5.1	5.1	5.0	5.0	5.0	4.9	4.9	4.8
Czech Republic	31.0	30.5	33.2	32.6	32.5	32.9	32.8	31.4	31.7	31.3
Denmark	32.3	30.7	29.0	29.2	28.7	28.5	28.8	28.8	28.8	28.8
Estonia	35.6	30.4	34.5	35.0	34.8	35.2	31.7	31.7	32.2	28.4
Finland	39.3	36.4	35.0	34.9	35.6	36.1	35.9	36.5	35.2	34.8
France	40.5	39.4	40.7	41.0	39.4	37.5	37.8	37.5	36.9	36.9
Germany	41.2	40.3	38.6	38.8	38.4	38.6	38.7	38.9	39.0	39.0
Greece	39.0	40.0	41.9	41.9	39.9	38.9	37.1	38.0	38.3	37.5
Hungary	44.8	42.8	34.4	35.4	36.2	38.3	38.7	37.4	35.1	33.9
Iceland	20.2	24.6	27.7	26.9	28.0	28.3	29.2	29.2	28.5	28.2
Ireland	23.6	13.1	17.7	18.3	19.4	19.6	18.9	18.5	18.6	19.0
Israel[1]	21.7	16.8	13.5	13.0	13.2	15.8	16.1	16.5	16.4	16.7
Italy	41.1	38.6	40.2	40.5	40.3	38.9	38.4	38.3	38.3	38.6
Japan	27.7	25.2	25.1	27.2	27.5	28.0	28.4	28.6	28.6	28.2
Korea	15.3	17.6	18.0	18.6	19.0	19.2	19.5	19.7	19.9	20.4
Latvia	32.8	33.2	36.3	36.6	36.3	33.7	33.3	33.5	34.3	31.7
Lithuania	42.9	37.0	37.7	38.0	38.4	37.7	38.0	36.6	34.4	35.8
Luxembourg	15.8	15.8	19.3	19.3	20.3	20.9	21.9	22.0	20.4	20.8
Mexico	9.8	13.1	16.3	16.7	17.0	17.3	17.6	18.0	18.3	17.9
Netherlands	34.3	30.2	29.5	29.6	31.7	30.1	28.5	27.7	27.8	28.2
New Zealand	18.5	9.2	7.0	8.6	10.0	11.1	12.0	12.8	13.5	10.8
Norway	30.8	31.6	32.0	31.8	31.7	31.3	31.3	30.8	30.5	30.4
Poland	34.6	29.0	29.7	31.1	31.3	31.7	31.9	25.8	24.5	24.6
Portugal	30.6	28.4	28.4	28.9	31.2	30.8	31.2	30.0	30.2	30.2
Slovak Republic	35.1	30.1	29.4	30.3	33.0	33.4	31.7	32.0	32.2	33.8
Slovenia	33.7	30.7	30.6	30.6	30.5	33.9	34.1	34.1	34.3	34.9
Spain	35.0	34.4	35.9	36.4	36.4	36.5	35.5	35.5	35.4	35.5
Sweden	44.7	38.8	36.9	37.1	37.4	36.9	37.1	37.5	37.7	37.5
Switzerland	14.6	12.4	13.2	13.1	12.9	12.3	12.3	12.7	12.7	12.9
Turkey[2]	39.7	36.2	34.4	34.4	34.7	35.4	35.5	33.8	34.7	34.9
United Kingdom	25.5	25.2	24.8	24.4	23.3	22.6	22.4	22.7	23.0	22.9
United States	25.0	21.0	22.6	22.7	24.3	24.6	24.3	24.4	24.6	22.0
Unweighted average										
OECD-Average	**30.4**	**28.1**	**28.3**	**28.6**	**29.0**	**29.1**	**28.8**	**28.5**	**28.3**	**28.1**
OECD-EU 23	**35.4**	**32.8**	**33.2**	**33.5**	**33.7**	**33.6**	**33.2**	**32.6**	**32.3**	**32.1**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925215*

Table 6.7. Income tax plus employee and employer contributions less cash benefits, married couple at 100% and 67% of average wage

Tax burden as a % of labour costs, two-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	26.7	23.0	24.3	25.0	25.2	25.5	26.2	26.5	26.6	27.0
Austria	39.0	41.6	40.7	41.2	41.7	42.0	42.2	39.9	40.0	40.3
Belgium	50.9	48.5	49.1	49.0	48.5	48.4	48.1	46.4	46.3	45.1
Canada	29.7	27.3	26.7	26.9	27.2	27.3	24.3	24.7	23.9	24.1
Chile	6.6	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Czech Republic	36.3	34.5	35.5	35.1	35.1	35.5	35.5	34.5	35.0	34.8
Denmark	35.8	33.0	31.3	31.4	31.0	30.8	31.1	31.1	31.0	31.0
Estonia	37.4	32.6	36.2	36.6	36.3	36.6	33.7	33.6	33.9	30.3
Finland	41.3	38.5	37.0	37.1	37.9	38.4	38.4	39.0	37.4	37.1
France	43.3	45.1	45.4	45.5	44.1	43.6	43.0	42.5	42.2	42.4
Germany	45.4	44.2	42.3	42.4	42.0	42.2	42.3	42.5	42.6	42.6
Greece	39.2	40.6	42.4	42.4	40.3	39.4	37.7	38.7	39.0	38.4
Hungary	47.0	45.1	37.9	39.6	40.1	40.5	40.8	39.6	37.3	36.2
Iceland	25.4	28.2	31.6	30.9	31.8	32.1	32.7	32.5	31.8	31.9
Ireland	29.3	18.4	23.5	24.1	25.4	25.7	24.8	24.3	24.4	24.7
Israel[1]	21.6	16.0	14.1	13.8	14.1	15.1	15.5	15.8	15.8	16.1
Italy	44.2	41.7	43.0	43.2	43.1	41.9	41.5	41.5	41.4	41.7
Japan	28.2	26.2	26.4	28.2	28.5	28.9	29.3	29.4	29.5	29.6
Korea	15.5	17.8	18.2	18.6	19.1	19.3	19.6	20.0	20.1	20.7
Latvia	35.5	35.6	38.3	38.6	38.2	36.0	35.5	35.7	36.4	34.9
Lithuania	44.6	38.5	39.0	39.3	39.5	39.0	39.3	38.3	36.5	36.3
Luxembourg	21.4	21.2	24.6	24.7	25.9	26.5	27.5	27.7	25.8	26.3
Mexico	10.6	13.4	16.5	16.8	17.3	17.6	17.9	18.2	18.7	18.2
Netherlands	38.1	33.6	31.8	31.9	33.0	31.7	30.6	29.5	29.6	29.9
New Zealand	19.0	15.7	13.2	14.7	15.9	16.3	16.5	16.7	16.9	17.1
Norway	33.0	33.5	33.7	33.7	33.7	33.4	33.4	32.9	32.6	32.5
Poland	35.8	30.6	31.0	32.3	32.5	32.8	33.0	28.0	27.0	27.1
Portugal	33.0	32.2	34.3	34.5	37.0	36.7	35.7	36.1	36.3	35.5
Slovak Republic	36.9	33.0	32.7	33.6	35.2	35.5	35.7	36.0	36.3	36.7
Slovenia	37.1	34.9	34.1	34.3	34.4	34.5	34.6	34.4	35.1	35.4
Spain	35.4	34.6	37.0	37.5	37.6	37.6	36.3	36.3	36.2	36.3
Sweden	46.0	40.5	38.7	38.8	39.1	38.7	38.8	39.1	39.3	39.1
Switzerland	17.7	15.7	16.3	16.3	16.0	15.5	15.4	15.8	15.9	16.1
Turkey[2]	39.9	37.1	35.4	35.6	35.8	36.6	36.7	35.5	36.3	36.4
United Kingdom	28.4	28.6	28.1	27.7	26.8	26.3	26.2	26.4	26.6	26.5
United States	26.9	23.7	24.6	24.7	26.3	26.6	26.3	26.4	26.5	23.9
Unweighted average										
OECD-Average	**32.8**	**30.9**	**31.2**	**31.5**	**31.7**	**31.7**	**31.5**	**31.2**	**31.0**	**30.8**
OECD-EU 23	**38.3**	**36.0**	**36.3**	**36.6**	**36.7**	**36.5**	**36.2**	**35.7**	**35.5**	**35.2**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925234*

Table 6.8. Income tax plus employee and employer contributions less cash benefits, married couple at 100% and 33% of average wage

Tax burden as a % of labour costs, two-earner married couple without children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	27.4	23.5	22.9	23.5	23.2	23.5	24.2	24.4	24.5	24.8
Austria	44.7	45.7	44.8	45.1	45.3	45.5	45.5	43.5	43.5	43.7
Belgium	51.2	48.3	48.7	48.7	48.2	48.1	47.6	45.2	45.0	43.7
Canada	30.0	28.1	27.5	27.6	27.9	28.4	28.4	28.2	27.5	27.6
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	41.3	41.4	40.4	40.3	40.2	40.4	40.5	40.7	40.9	41.3
Denmark	37.4	35.5	33.8	33.9	33.5	33.3	33.6	33.6	33.5	33.4
Estonia	39.8	37.0	39.0	39.2	38.8	38.9	38.0	37.9	38.1	34.2
Finland	44.7	40.5	38.9	38.8	39.4	39.9	39.6	40.0	38.7	38.2
France	45.3	46.0	46.2	46.4	44.9	44.4	43.7	42.7	42.1	42.2
Germany	47.5	46.4	45.5	45.5	45.1	45.1	45.2	45.3	45.4	45.3
Greece	38.7	40.5	42.1	42.1	40.7	39.7	38.0	39.1	39.4	39.5
Hungary	52.7	50.4	46.8	47.4	47.7	49.0	49.0	48.2	46.2	45.0
Iceland	23.7	27.6	29.6	29.4	29.9	29.9	30.4	30.4	29.8	30.0
Ireland	26.1	19.4	23.2	23.6	24.3	24.5	24.0	23.6	23.6	23.9
Israel[1]	24.8	19.0	17.3	17.0	17.0	17.6	18.1	18.5	18.3	18.6
Italy	44.0	43.2	44.4	44.6	44.8	43.3	42.8	42.7	42.6	42.9
Japan	29.1	28.6	30.0	30.4	30.7	31.1	31.5	31.6	31.7	31.3
Korea	15.8	19.0	19.6	20.0	20.4	20.5	20.8	21.0	21.1	21.6
Latvia	41.7	39.5	43.2	43.3	42.8	42.0	41.6	41.8	42.0	39.2
Lithuania	42.9	40.2	39.0	39.3	39.5	39.2	39.4	39.3	38.5	39.4
Luxembourg	27.4	26.6	29.1	28.8	29.6	29.9	30.7	30.8	29.0	29.3
Mexico	9.8	13.1	16.3	16.7	17.0	17.3	17.6	18.0	18.3	17.9
Netherlands	38.0	34.7	34.1	34.5	36.5	34.8	33.1	32.7	32.7	33.1
New Zealand	18.5	19.1	14.8	15.2	15.7	16.0	16.2	16.5	16.7	17.0
Norway	36.0	35.1	35.1	34.8	34.7	34.2	34.1	33.5	33.2	33.0
Poland	37.0	33.6	33.4	34.7	34.7	34.9	35.0	34.9	35.0	35.1
Portugal	33.8	32.1	32.2	32.6	35.0	34.7	36.2	36.4	36.5	36.4
Slovak Republic	40.7	36.0	35.7	36.6	39.1	39.3	37.6	37.7	37.7	39.0
Slovenia	44.5	40.4	40.2	40.1	40.0	42.9	43.0	43.0	43.2	43.6
Spain	36.1	35.5	37.0	37.5	37.5	37.5	36.5	36.5	36.4	36.5
Sweden	49.1	43.0	41.0	41.1	41.3	40.7	40.9	41.1	41.2	41.4
Switzerland	20.8	19.6	20.1	19.9	20.0	19.7	19.7	19.8	19.9	20.0
Turkey[2]	39.7	36.8	35.1	35.1	35.4	36.1	36.2	34.6	35.4	35.7
United Kingdom	29.1	29.6	28.4	27.8	26.7	26.1	25.9	26.0	26.2	26.0
United States	29.5	27.4	27.8	27.7	29.3	29.5	29.1	29.2	29.2	27.5
Unweighted average										
OECD-Average	**34.6**	**33.0**	**33.1**	**33.2**	**33.4**	**33.5**	**33.4**	**33.2**	**33.1**	**32.9**
OECD-EU 23	**40.6**	**38.5**	**38.6**	**38.8**	**38.9**	**38.9**	**38.6**	**38.4**	**38.1**	**37.9**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.9. Income tax, single persons at 67% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	21.1	17.3	16.0	17.1	17.3	17.7	18.5	18.8	19.1	19.6
Austria	7.6	10.4	9.5	9.9	10.4	10.7	11.1	8.5	8.9	9.3
Belgium	22.8	22.2	22.6	22.5	22.1	22.0	21.5	19.5	19.4	18.2
Canada	15.0	12.4	11.6	11.6	11.6	11.8	11.8	11.7	11.8	11.9
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic	8.3	6.7	8.2	7.8	7.8	8.2	8.5	8.9	9.7	10.4
Denmark	28.4	35.4	34.2	34.3	33.8	33.6	33.8	33.7	33.6	33.5
Estonia	19.9	15.5	15.2	15.5	16.0	16.2	15.5	15.3	15.4	8.6
Finland	20.9	17.8	15.5	14.9	15.9	15.8	15.8	15.0	13.1	12.6
France	12.5	12.2	12.4	12.6	12.6	12.6	11.6	10.9	11.0	13.0
Germany	16.3	15.4	13.9	14.2	14.1	14.2	14.2	14.2	14.1	14.1
Greece	2.1	2.4	6.1	5.7	3.5	3.8	3.5	4.8	4.9	5.1
Hungary	17.6	11.1	12.1	16.0	16.0	16.0	16.0	15.0	15.0	15.0
Iceland	20.0	23.1	22.6	23.1	23.7	23.8	24.5	24.7	24.6	24.9
Ireland	15.8	9.2	12.8	13.0	13.2	13.3	12.8	12.1	11.8	11.9
Israel[1]	12.1	5.7	4.4	4.4	4.2	4.7	5.0	5.3	5.1	5.4
Italy	15.2	15.6	17.2	17.5	17.7	13.8	12.3	12.4	12.5	12.8
Japan	5.1	6.3	6.1	6.1	6.1	6.1	6.2	6.2	6.2	6.2
Korea	0.8	1.7	1.4	1.5	1.8	1.7	2.0	2.4	2.5	3.0
Latvia	17.0	15.9	18.5	18.6	18.0	17.9	17.4	17.5	17.7	12.8
Lithuania	22.2	18.6	10.9	11.3	11.6	10.9	11.4	11.0	9.4	8.5
Luxembourg	10.3	8.2	7.8	8.2	9.3	9.7	10.0	10.2	8.1	8.4
Mexico	-5.7	-2.5	0.0	0.4	1.4	1.8	2.1	2.4	3.4	3.2
Netherlands	5.3	5.2	5.3	5.2	5.6	5.2	7.2	6.3	6.7	6.8
New Zealand	18.6	18.0	13.0	13.1	13.3	13.4	13.5	13.6	13.7	13.8
Norway	19.0	18.0	17.9	17.8	17.8	17.0	16.9	16.3	16.0	15.8
Poland	5.3	6.0	5.8	5.9	6.0	6.2	6.3	6.4	6.5	6.7
Portugal	6.4	5.1	5.2	5.6	8.8	8.4	10.2	10.4	10.6	10.4
Slovak Republic	6.0	5.9	5.9	5.9	5.9	6.1	6.3	6.6	7.0	7.5
Slovenia	10.2	8.0	6.7	6.6	6.5	6.6	6.6	6.7	8.3	8.2
Spain	8.6	7.9	11.5	12.0	12.1	12.2	10.3	10.3	10.3	10.4
Sweden	24.7	17.0	15.1	15.2	15.3	14.8	15.0	15.3	15.4	15.5
Switzerland	8.4	8.2	8.2	8.1	8.2	7.9	7.8	8.1	8.1	8.2
Turkey[2]	13.2	8.2	8.7	8.8	9.2	9.5	9.7	9.3	9.7	9.6
United Kingdom	15.1	14.6	13.5	13.1	12.0	11.5	11.2	11.1	11.1	11.0
United States	15.0	15.1	15.2	15.3	15.1	15.2	15.2	15.3	15.5	13.7
Unweighted average										
OECD-Average	**12.8**	**11.6**	**11.4**	**11.6**	**11.8**	**11.7**	**11.7**	**11.6**	**11.6**	**11.3**
OECD-EU 23	**13.8**	**12.4**	**12.4**	**12.7**	**12.8**	**12.6**	**12.5**	**12.3**	**12.2**	**11.8**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925272*

Table 6.10. Income tax, single persons at 100% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	26.6	22.5	22.3	23.0	23.1	23.4	24.1	24.3	24.4	24.6
Austria	12.9	16.2	15.5	15.9	16.3	16.6	17.0	14.1	14.5	14.8
Belgium	29.0	28.5	28.8	28.7	28.4	28.4	28.0	26.8	26.6	25.9
Canada	19.2	16.1	15.2	15.2	15.3	15.7	15.6	15.4	15.4	15.7
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic	10.0	11.1	12.1	11.9	11.9	12.1	12.4	12.6	13.1	13.6
Denmark	32.5	38.6	36.4	36.5	36.1	36.0	36.1	36.1	36.0	35.8
Estonia	21.9	17.3	16.9	17.1	17.5	17.6	16.8	16.8	16.8	13.4
Finland	26.9	24.2	22.2	21.8	22.5	22.6	22.6	22.0	20.6	20.2
France	15.7	14.1	14.2	14.4	14.5	14.6	14.7	14.8	14.8	16.8
Germany	22.7	21.2	18.9	19.1	19.1	19.1	19.2	19.1	19.0	19.1
Greece	5.8	9.1	10.5	10.1	8.7	8.9	8.7	9.9	9.9	10.1
Hungary	23.2	21.3	17.6	16.6	16.0	16.0	16.0	15.0	15.0	15.0
Iceland	25.3	26.8	27.9	28.2	28.6	28.5	29.0	28.7	28.2	28.4
Ireland	24.1	17.1	22.0	22.5	22.7	22.9	22.0	21.4	21.3	21.4
Israel[1]	18.0	11.2	9.1	8.7	8.6	9.1	9.6	10.0	9.7	10.0
Italy	19.9	20.0	21.3	21.5	21.6	21.5	21.6	21.6	21.7	21.9
Japan	6.4	8.0	7.6	7.6	7.6	7.7	7.8	7.9	7.9	7.9
Korea	2.2	4.6	4.4	4.9	5.2	5.3	5.6	5.9	6.1	6.4
Latvia	18.9	18.2	19.7	19.8	19.1	19.1	18.4	18.5	18.9	17.4
Lithuania	25.8	20.4	13.3	13.5	13.7	13.6	13.9	14.0	13.7	13.1
Luxembourg	17.0	15.3	15.3	15.8	17.2	17.7	18.0	18.2	16.7	17.2
Mexico	1.0	3.8	7.9	8.2	8.5	8.8	9.1	9.4	9.7	8.9
Netherlands	9.6	15.5	16.4	16.7	16.2	15.3	17.1	16.6	17.2	17.5
New Zealand	19.4	20.5	15.9	16.4	16.9	17.2	17.6	17.9	18.1	18.4
Norway	22.9	21.8	21.6	21.4	21.4	20.5	20.4	19.8	19.4	19.3
Poland	6.6	7.2	6.8	6.9	6.9	7.1	7.1	7.2	7.3	7.4
Portugal	11.4	11.0	12.3	11.8	16.5	16.2	17.4	16.7	16.5	15.6
Slovak Republic	7.8	9.4	9.4	9.4	9.4	9.5	9.7	9.9	10.1	10.5
Slovenia	13.5	11.0	11.3	11.1	11.0	11.1	11.2	11.4	11.6	12.0
Spain	13.5	12.9	15.7	16.5	16.6	16.6	14.9	14.9	14.7	14.9
Sweden	26.7	19.9	17.9	17.9	18.1	17.4	17.6	17.9	18.0	18.2
Switzerland	11.3	11.1	11.2	11.0	11.1	10.7	10.7	11.0	11.0	11.2
Turkey[2]	14.7	11.3	11.6	11.8	12.0	12.3	12.4	12.4	13.3	13.2
United Kingdom	17.4	16.4	15.6	15.4	14.6	14.3	14.1	14.1	14.0	14.0
United States	17.3	17.7	18.0	18.0	17.8	18.0	18.0	18.2	18.4	16.1
Unweighted average										
OECD-Average	**16.6**	**15.9**	**15.6**	**15.7**	**15.9**	**15.9**	**16.0**	**15.8**	**15.8**	**15.7**
OECD-EU 23	**18.0**	**17.2**	**17.0**	**17.0**	**17.2**	**17.1**	**17.2**	**16.9**	**16.9**	**16.8**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.11. Income tax, single persons at 167% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	34.9	28.7	28.2	29.2	29.2	29.4	30.1	30.2	30.1	30.4
Austria	20.4	23.1	22.5	22.8	23.0	23.2	23.4	21.2	21.4	21.6
Belgium	36.0	35.3	35.5	35.5	35.2	35.2	35.1	34.5	34.3	33.9
Canada	25.6	22.3	21.8	21.8	21.8	22.2	22.1	21.3	21.4	21.6
Chile	1.3	0.7	1.1	1.2	1.1	1.1	1.2	1.3	1.3	1.3
Czech Republic	13.0	14.8	15.3	15.2	15.2	15.3	15.5	15.6	15.9	16.2
Denmark	40.3	48.0	43.2	43.4	42.6	41.9	42.1	42.0	41.8	41.5
Estonia	23.6	18.7	18.3	18.4	18.7	18.8	18.0	17.9	18.0	19.7
Finland	34.0	31.2	29.4	29.0	29.6	29.7	29.7	29.4	28.2	27.8
France	21.2	20.2	20.5	20.7	20.8	20.8	20.9	20.9	21.0	22.9
Germany	31.7	29.2	27.5	27.7	27.6	27.6	27.8	27.7	27.5	27.6
Greece	13.6	15.4	17.2	16.8	18.4	18.7	16.8	17.0	17.0	17.2
Hungary	30.3	28.2	20.3	18.1	16.0	16.0	16.0	15.0	15.0	15.0
Iceland	36.6	29.8	32.7	33.2	33.6	33.5	33.8	33.8	33.7	33.6
Ireland	32.9	27.5	32.4	32.7	32.9	33.0	32.1	31.2	31.1	31.1
Israel[1]	26.3	19.2	16.0	15.4	15.7	16.4	17.0	17.5	17.3	17.8
Italy	25.3	26.8	28.3	28.5	28.7	29.2	29.9	29.9	29.6	29.8
Japan	10.6	12.8	12.0	12.2	12.1	12.4	12.6	12.8	12.8	12.9
Korea	6.7	9.3	8.5	8.8	9.2	9.6	10.3	10.8	11.1	11.7
Latvia	20.4	20.0	20.7	20.8	20.0	20.0	19.3	19.4	19.7	17.8
Lithuania	28.7	21.8	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Luxembourg	26.2	23.1	23.6	23.9	25.2	25.5	25.7	25.8	25.2	25.5
Mexico	8.0	11.2	12.3	12.7	13.0	13.3	13.6	13.9	14.2	13.4
Netherlands	25.4	27.9	28.6	29.0	28.1	28.5	28.9	27.6	28.0	28.2
New Zealand	24.2	26.3	22.0	22.4	22.8	23.1	23.3	23.6	23.8	24.0
Norway	30.4	28.1	28.0	27.8	27.8	26.9	26.8	26.3	26.0	25.8
Poland	7.7	8.8	7.6	7.7	7.7	7.8	7.8	7.8	7.9	8.0
Portugal	17.6	18.0	20.4	19.2	24.2	23.9	24.7	23.5	23.1	22.2
Slovak Republic	12.4	12.3	12.3	12.3	12.2	12.3	12.4	12.5	12.7	12.9
Slovenia	19.1	16.7	17.2	17.0	15.4	15.6	15.8	15.3	15.6	16.0
Spain	18.5	18.6	21.0	22.5	22.5	22.5	21.1	20.9	20.5	20.7
Sweden	36.3	32.8	30.8	30.5	30.6	30.4	30.4	31.5	31.7	32.0
Switzerland	16.2	16.0	16.1	16.0	16.1	15.7	15.6	16.0	16.0	16.1
Turkey[2]	18.0	14.2	15.1	15.3	15.9	16.3	16.6	17.0	17.5	17.4
United Kingdom	23.1	23.2	22.4	22.6	22.6	22.3	22.4	22.6	22.5	22.3
United States	24.3	23.3	23.5	23.5	23.4	23.4	23.5	23.6	23.7	21.1
Unweighted average										
OECD-Average	**22.8**	**21.8**	**21.3**	**21.4**	**21.5**	**21.6**	**21.6**	**21.4**	**21.4**	**21.4**
OECD-EU 23	**24.2**	**23.5**	**23.1**	**23.0**	**23.1**	**23.2**	**23.1**	**22.8**	**22.7**	**22.8**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925310*

Table 6.12. Income tax, single parent at 67% of average wage

Tax burden as a % of gross wage earnings, single parent with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	15.5	17.3	14.3	15.4	17.3	17.7	18.5	18.8	19.1	19.6
Austria	5.8	7.7	6.4	6.9	7.5	7.8	8.3	5.3	5.7	6.2
Belgium	16.7	16.8	17.3	17.2	16.6	16.5	16.0	14.0	14.0	12.8
Canada	6.6	1.4	1.1	1.1	1.2	1.5	3.5	3.4	3.5	3.7
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic	2.3	-5.0	-3.6	-5.4	-5.4	-4.7	-5.1	-9.2	-8.7	-7.8
Denmark	28.4	35.4	34.2	34.3	33.8	32.0	32.2	32.2	32.1	31.9
Estonia	19.9	4.7	10.0	10.6	11.3	11.8	11.2	11.4	11.7	5.1
Finland	20.9	17.8	15.5	14.9	15.9	15.8	15.2	14.3	12.4	12.6
France	7.1	7.4	7.5	7.6	7.6	7.6	7.9	7.9	7.9	9.5
Germany	-2.6	-0.2	-3.2	-2.6	-2.5	-2.1	-2.7	-2.5	-2.5	-2.1
Greece	1.3	1.2	4.7	4.3	3.5	3.8	3.5	4.1	4.2	4.4
Hungary	10.3	11.1	0.0	3.4	3.8	4.3	4.7	1.6	0.6	0.0
Iceland	20.0	23.1	22.6	23.1	23.7	23.8	24.5	24.7	24.6	24.9
Ireland	9.0	2.8	6.9	7.3	7.5	7.6	7.2	6.6	6.4	6.7
Israel[1]	1.1	0.0	0.0	0.0	0.0	0.0	0.0	-3.4	-2.9	-2.3
Italy	10.0	8.0	10.2	10.6	9.8	6.0	4.6	4.7	4.8	5.3
Japan	2.4	3.1	4.1	6.1	6.1	6.1	6.2	6.2	6.2	6.2
Korea	0.1	0.9	0.7	0.8	0.7	0.0	0.0	0.0	0.3	0.5
Latvia	5.4	6.4	6.8	7.3	6.9	1.9	3.2	3.3	4.5	0.8
Lithuania	16.2	16.8	7.6	8.0	8.6	7.1	7.6	4.1	0.0	8.5
Luxembourg	0.0	3.1	0.3	0.9	2.2	2.8	3.3	3.6	0.7	1.3
Mexico	-5.7	-2.5	0.0	0.4	1.4	1.8	2.1	2.4	3.4	3.2
Netherlands	3.0	3.5	3.5	3.2	3.3	2.9	5.7	4.4	4.6	4.7
New Zealand	18.6	18.0	14.5	14.6	14.8	14.8	14.9	15.0	15.0	15.1
Norway	13.3	14.4	14.2	14.0	14.0	13.4	13.4	12.9	12.8	12.8
Poland	2.5	0.0	0.0	0.0	0.0	-3.1	-2.7	-2.3	-1.7	-1.0
Portugal	3.4	0.8	0.6	1.2	3.9	3.5	3.8	0.2	0.6	0.7
Slovak Republic	3.3	-1.7	-1.6	-1.7	-1.7	-1.3	-0.9	-0.4	0.3	1.1
Slovenia	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.1	1.8	2.0
Spain	0.4	0.4	2.6	3.1	3.3	3.5	-4.8	-4.8	-4.7	-4.4
Sweden	24.7	17.0	15.1	15.2	15.3	14.8	15.0	15.3	15.4	15.5
Switzerland	4.0	3.4	3.2	2.8	2.4	2.2	2.2	2.3	2.3	2.4
Turkey[2]	13.2	6.6	7.0	7.2	7.6	8.0	8.2	7.5	8.0	7.9
United Kingdom	8.6	2.0	-2.3	-2.6	-3.7	-4.5	-3.9	-2.3	-0.2	0.7
United States	-5.0	-5.5	-5.4	-4.4	-4.5	-4.0	-3.8	-3.1	-2.1	-5.8
Unweighted average										
OECD-Average	**7.9**	**6.6**	**6.0**	**6.2**	**6.4**	**6.1**	**6.1**	**5.5**	**5.6**	**5.6**
OECD-EU 23	**8.7**	**6.8**	**6.0**	**6.2**	**6.4**	**5.8**	**5.6**	**4.9**	**4.8**	**5.0**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.13. Income tax, married couple at 100% of average wage

Tax burden as a % of gross wage earnings, one-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	25.6	22.5	21.1	21.8	23.1	23.4	24.1	24.3	24.4	24.6
Austria	11.7	14.4	13.3	13.8	14.3	14.6	15.0	11.9	12.2	12.6
Belgium	18.9	17.3	17.8	17.7	17.2	17.1	16.7	15.1	15.0	14.4
Canada	15.0	9.8	8.6	8.7	8.8	8.8	10.0	10.5	10.6	11.0
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic	4.0	-5.8	-4.2	-5.2	-5.2	-4.5	-4.5	-7.0	-6.2	-5.1
Denmark	25.9	33.4	32.4	32.5	32.2	32.0	32.2	32.1	32.0	31.8
Estonia	17.9	6.4	9.9	10.5	11.3	11.8	11.2	11.2	11.5	8.4
Finland	26.9	24.2	22.2	21.8	22.5	22.6	22.5	21.9	20.5	20.2
France	7.3	7.9	8.4	8.5	7.9	7.9	7.9	7.9	7.9	9.5
Germany	1.5	2.1	0.1	0.6	0.7	0.9	1.0	1.1	1.1	1.3
Greece	8.0	9.5	11.1	10.7	10.5	10.7	9.7	10.4	10.5	10.6
Hungary	18.4	21.3	8.5	8.2	7.8	8.1	8.4	6.0	5.4	4.9
Iceland	16.1	19.3	18.5	19.1	19.9	20.1	21.0	21.2	21.0	21.3
Ireland	11.1	7.1	11.6	12.2	12.6	12.9	12.3	11.5	11.3	11.5
Israel[1]	18.0	11.2	9.1	8.7	8.6	9.1	9.6	10.0	9.7	10.0
Italy	15.6	12.8	14.7	15.0	14.5	14.6	14.7	14.7	14.8	15.2
Japan	2.5	4.3	4.9	6.2	6.1	6.3	6.4	6.5	6.5	6.5
Korea	1.5	2.2	1.7	2.1	2.5	2.7	3.1	3.5	3.7	4.2
Latvia	11.1	11.8	11.9	12.3	11.7	8.4	8.9	9.0	10.1	9.3
Lithuania	25.8	19.7	11.0	11.3	11.7	11.0	11.4	9.4	6.6	13.1
Luxembourg	2.3	5.3	4.9	5.2	5.9	6.2	6.4	6.5	5.6	5.9
Mexico	1.0	3.8	7.9	8.2	8.5	8.8	9.1	9.4	9.7	8.9
Netherlands	4.8	15.1	16.2	16.5	15.7	14.9	16.5	16.1	16.7	17.1
New Zealand	19.4	20.5	15.9	16.4	16.9	17.2	17.6	17.9	18.1	18.4
Norway	18.1	19.3	19.1	18.9	18.9	19.3	19.2	18.7	18.4	19.3
Poland	4.8	0.0	0.0	0.0	0.3	0.8	1.1	1.3	1.8	2.2
Portugal	6.2	3.2	3.4	3.9	6.3	6.1	7.4	4.4	4.5	4.7
Slovak Republic	4.8	-2.8	-2.7	-2.7	-2.8	-2.3	-1.9	-1.4	-0.7	0.2
Slovenia	4.8	2.6	3.0	2.8	2.7	2.8	2.9	3.0	3.3	3.7
Spain	5.2	5.2	8.3	8.9	9.0	9.1	7.6	7.6	7.6	7.8
Sweden	26.7	19.9	17.9	17.9	18.1	17.4	17.6	17.9	18.0	18.2
Switzerland	6.2	5.8	5.3	4.9	4.5	4.3	4.3	4.5	4.5	4.6
Turkey[2]	14.7	9.5	9.8	9.9	10.2	10.5	10.6	10.4	11.4	11.2
United Kingdom	17.4	14.7	14.0	15.4	14.6	14.3	13.5	13.5	13.4	13.4
United States	6.8	5.0	5.6	5.8	5.7	5.9	6.1	6.3	6.7	4.1
Unweighted average										
OECD-Average	**11.8**	**10.5**	**10.0**	**10.2**	**10.4**	**10.4**	**10.5**	**10.2**	**10.2**	**10.4**
OECD-EU 23	**12.2**	**10.7**	**10.2**	**10.3**	**10.4**	**10.3**	**10.4**	**9.7**	**9.7**	**10.0**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.14. Income tax, married couple with two children, at 100% and 33% of average wage

Tax burden as a % of gross wage earnings, two-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	22.0	18.9	17.4	18.1	18.7	19.0	19.7	19.9	20.0	20.3
Austria	9.4	12.0	11.1	11.4	11.7	12.0	12.1	9.4	9.6	10.0
Belgium	24.0	22.6	22.8	22.6	22.1	21.9	21.4	19.3	19.2	18.0
Canada	16.3	12.0	11.2	11.2	11.3	11.1	12.1	12.4	12.5	12.8
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic	5.2	2.5	3.2	2.3	2.2	2.6	2.4	0.4	0.6	1.2
Denmark	28.4	35.5	34.3	34.4	34.1	33.9	34.0	34.0	33.9	33.7
Estonia	19.9	10.0	12.5	13.0	13.6	13.9	13.3	13.3	13.5	8.4
Finland	23.4	20.2	18.2	17.4	18.2	18.2	17.8	16.9	15.6	15.2
France	8.9	6.3	7.9	8.3	8.3	6.6	7.9	7.9	7.9	9.7
Germany	8.6	8.2	5.9	6.3	6.4	6.6	6.7	6.7	6.7	6.9
Greece	6.0	7.1	9.1	8.8	7.9	8.1	7.3	7.8	7.9	8.0
Hungary	15.8	16.1	7.3	10.1	9.9	10.1	10.3	8.3	7.7	7.4
Iceland	19.9	23.0	22.8	23.2	23.8	24.0	24.7	24.8	24.6	24.8
Ireland	15.2	8.6	12.8	13.3	13.6	13.9	13.2	12.8	12.8	13.1
Israel[1]	13.5	8.4	5.8	5.4	5.0	6.9	7.2	7.5	7.3	7.5
Italy	14.2	12.0	13.9	14.2	14.0	12.1	11.4	11.5	11.6	12.0
Japan	3.9	5.0	5.6	6.7	6.6	6.8	6.8	6.9	6.9	6.3
Korea	1.1	2.0	1.7	2.2	2.5	2.5	2.8	3.0	3.2	3.6
Latvia	11.1	11.1	12.6	12.9	12.4	9.8	10.2	10.4	11.1	7.4
Lithuania	22.1	18.0	9.4	9.7	10.1	9.2	9.7	7.9	5.0	9.9
Luxembourg	3.8	6.4	6.0	6.4	7.4	7.8	8.1	8.3	6.8	7.1
Mexico	-4.0	-0.4	3.2	3.6	4.0	4.4	4.7	5.1	5.5	5.0
Netherlands	7.8	11.8	12.4	12.6	12.4	11.6	13.0	12.4	12.8	13.1
New Zealand	18.5	19.1	14.8	15.2	15.7	16.0	16.2	16.5	16.7	17.0
Norway	19.1	19.0	18.8	18.5	18.4	17.4	17.3	16.7	16.3	16.1
Poland	5.3	0.7	1.4	1.7	2.0	2.4	2.6	2.8	3.2	3.5
Portugal	5.7	3.4	3.3	3.9	6.5	6.2	6.6	5.1	5.4	5.4
Slovak Republic	4.6	2.0	1.6	1.7	2.9	3.3	3.7	3.9	4.2	4.7
Slovenia	6.8	3.6	3.8	3.7	3.7	3.7	3.8	3.9	4.0	4.2
Spain	8.7	8.2	10.4	11.0	11.1	11.1	9.8	9.8	9.7	9.9
Sweden	25.3	17.5	15.5	15.6	15.8	15.1	15.3	15.6	15.8	16.0
Switzerland	7.6	7.2	6.8	6.5	6.2	5.8	5.8	6.1	6.1	6.2
Turkey[2]	14.0	8.2	8.5	8.6	8.9	9.1	9.3	8.8	9.6	9.4
United Kingdom	15.1	13.3	13.4	13.0	11.9	11.4	11.1	11.1	11.0	10.9
United States	10.5	9.1	9.6	9.7	9.6	9.8	9.9	10.1	10.4	7.7
Unweighted average										
OECD-Average	**12.2**	**10.8**	**10.4**	**10.6**	**10.8**	**10.7**	**10.8**	**10.5**	**10.4**	**10.3**
OECD-EU 23	**12.8**	**11.2**	**10.8**	**11.1**	**11.2**	**10.9**	**10.9**	**10.4**	**10.3**	**10.2**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.15. Income tax, married couple at 100% and 67% of average wage

Tax burden as a % of gross wage earnings, two-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	23.8	20.4	19.7	20.6	20.8	21.1	21.8	22.1	22.2	22.6
Austria	10.8	13.9	12.8	13.2	13.6	14.0	14.3	11.3	11.6	12.0
Belgium	26.4	24.5	24.9	24.7	24.4	24.3	23.9	22.4	22.2	21.3
Canada	17.5	13.8	12.9	12.9	13.0	12.8	13.6	13.9	14.0	14.2
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic	6.8	4.6	5.6	5.0	4.9	5.4	5.4	3.9	4.4	5.0
Denmark	30.8	36.8	35.5	35.6	35.2	35.0	35.2	35.2	35.1	34.9
Estonia	21.1	12.2	14.1	14.5	15.0	15.3	14.6	14.6	14.8	10.1
Finland	24.5	21.6	19.5	19.0	19.9	19.9	19.7	19.0	17.4	17.1
France	10.8	11.0	11.2	11.4	11.5	11.5	11.3	10.9	11.1	13.1
Germany	13.8	12.9	10.3	10.7	10.7	10.9	11.0	11.0	10.9	11.1
Greece	6.3	8.0	9.8	9.4	8.3	8.5	7.8	8.5	8.5	8.7
Hungary	18.0	17.2	10.0	11.3	11.1	11.3	11.5	9.6	9.2	8.9
Iceland	23.2	25.3	25.8	26.1	26.6	26.6	27.2	27.1	26.8	27.0
Ireland	19.7	11.9	16.8	17.4	17.7	18.0	17.1	16.7	16.7	16.8
Israel[1]	12.5	6.7	5.5	5.2	5.1	5.5	5.7	6.0	5.8	6.0
Italy	16.8	15.4	17.0	17.3	17.0	15.5	14.9	15.0	15.1	15.4
Japan	4.5	5.7	6.2	7.0	7.0	7.1	7.1	7.2	7.2	7.2
Korea	1.3	2.2	1.9	2.2	2.5	2.6	2.9	3.2	3.5	3.9
Latvia	13.5	13.5	14.5	14.8	14.2	12.2	12.3	12.4	13.2	10.7
Lithuania	24.3	19.2	11.0	11.3	11.7	11.0	11.4	10.0	7.7	11.3
Luxembourg	8.2	10.0	9.8	10.3	11.6	12.1	12.4	12.6	10.9	11.3
Mexico	-1.7	1.3	4.7	5.1	5.6	6.0	6.3	6.6	7.2	6.6
Netherlands	7.9	11.2	11.8	11.9	11.5	10.8	12.5	11.7	12.1	12.3
New Zealand	19.0	19.5	15.3	15.7	16.0	16.3	16.5	16.7	16.9	17.1
Norway	20.6	20.3	20.1	19.9	20.0	19.1	19.0	18.4	18.0	17.9
Poland	6.1	2.6	2.9	3.2	3.4	3.7	3.9	4.1	4.3	4.6
Portugal	8.1	7.2	7.7	7.9	11.0	10.7	9.5	9.9	10.1	9.2
Slovak Republic	5.8	4.9	5.0	5.0	4.9	5.2	5.5	5.8	6.2	6.7
Slovenia	8.1	6.1	5.7	5.6	5.5	5.6	5.7	5.8	6.5	6.7
Spain	9.3	8.5	11.8	12.5	12.6	12.7	10.9	10.9	10.8	10.9
Sweden	25.9	18.7	16.8	16.8	17.0	16.4	16.5	16.8	16.9	17.1
Switzerland	9.8	9.4	9.0	8.8	8.5	8.1	8.1	8.4	8.4	8.6
Turkey[2]	14.1	9.4	9.8	9.9	10.2	10.5	10.7	10.5	11.2	11.0
United Kingdom	16.5	15.4	14.7	14.4	13.6	13.2	12.9	12.9	12.9	12.8
United States	12.8	11.7	12.0	12.2	12.1	12.2	12.3	12.4	12.7	9.9
Unweighted average										
OECD-Average	**13.8**	**12.6**	**12.3**	**12.5**	**12.6**	**12.5**	**12.5**	**12.3**	**12.3**	**12.2**
OECD-EU 23	**14.8**	**13.4**	**13.0**	**13.2**	**13.3**	**13.2**	**13.0**	**12.6**	**12.5**	**12.5**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925386*

Table 6.16. Income tax, married couple at 100% and 33% of average wage

Tax burden as a % of gross wage earnings, two-earner married couple without children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	22.8	18.9	18.3	18.9	18.7	19.0	19.7	19.9	20.0	20.3
Austria	9.4	12.0	11.4	11.7	12.1	12.3	12.4	10.0	10.2	10.6
Belgium	25.9	24.4	24.6	24.5	24.0	23.8	23.3	21.2	21.1	19.9
Canada	16.3	13.1	12.2	12.2	12.3	12.8	12.6	12.4	12.5	12.8
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic	8.3	8.4	9.1	8.9	8.9	9.1	9.3	9.5	9.9	10.4
Denmark	28.4	35.5	34.3	34.4	34.1	33.9	34.0	34.0	33.9	33.7
Estonia	19.9	15.4	15.1	15.5	15.9	16.2	15.4	15.3	15.3	10.1
Finland	23.4	20.2	18.2	17.4	18.2	18.2	18.0	17.1	15.6	15.2
France	11.9	12.1	12.3	12.5	12.5	12.6	12.3	11.5	11.6	13.5
Germany	16.2	15.3	13.8	14.1	14.0	14.1	14.1	14.1	14.0	14.1
Greece	5.7	7.8	9.4	9.1	7.9	8.1	7.3	8.2	8.2	8.3
Hungary	19.4	16.1	14.1	16.5	16.0	16.0	16.0	15.0	15.0	15.0
Iceland	19.9	23.0	22.8	23.2	23.8	24.0	24.7	24.8	24.6	24.8
Ireland	15.2	8.6	12.8	13.3	13.6	13.9	13.2	12.8	12.8	13.1
Israel[1]	13.5	8.4	6.8	6.6	6.4	6.9	7.2	7.5	7.3	7.5
Italy	15.7	15.5	17.1	17.3	17.6	15.6	14.9	15.0	15.0	15.4
Japan	5.6	7.1	6.6	6.7	6.6	6.8	6.8	6.9	6.9	6.3
Korea	1.7	3.4	3.4	3.7	4.0	4.0	4.2	4.4	4.6	4.9
Latvia	16.9	15.9	18.5	18.6	18.0	17.8	17.3	17.5	17.7	13.5
Lithuania	22.1	18.6	11.1	11.3	11.7	11.2	11.5	11.3	10.3	9.9
Luxembourg	7.7	6.4	6.0	6.4	7.4	7.8	8.1	8.3	6.8	7.1
Mexico	-4.0	-0.4	3.2	3.6	4.0	4.4	4.7	5.1	5.5	5.0
Netherlands	7.8	11.9	12.5	12.8	12.8	11.9	13.6	13.0	13.5	13.7
New Zealand	18.5	19.1	14.8	15.2	15.7	16.0	16.2	16.5	16.7	17.0
Norway	20.1	19.0	18.8	18.5	18.4	17.4	17.3	16.7	16.3	16.1
Poland	5.3	6.0	5.8	5.9	6.0	6.2	6.2	6.3	6.5	6.6
Portugal	7.1	5.0	5.1	5.5	8.6	8.2	10.1	10.3	10.4	10.3
Slovak Republic	6.2	5.9	5.5	5.5	6.7	7.0	7.3	7.4	7.6	7.9
Slovenia	11.9	8.2	8.5	8.4	8.3	8.4	8.4	8.5	8.7	9.0
Spain	10.1	9.7	11.8	12.4	12.5	12.5	11.2	11.2	11.1	11.2
Sweden	25.3	17.5	15.5	15.6	15.8	15.1	15.3	15.6	15.8	16.0
Switzerland	9.1	8.7	8.9	8.6	8.7	8.4	8.4	8.6	8.7	8.8
Turkey[2]	14.0	9.1	9.3	9.4	9.7	9.9	10.0	9.7	10.5	10.3
United Kingdom	15.1	14.6	13.4	13.0	11.9	11.4	11.1	11.1	11.0	10.9
United States	15.5	15.1	15.2	15.2	15.1	15.2	15.2	15.3	15.4	13.7
Unweighted average										
OECD-Average	**13.6**	**12.7**	**12.4**	**12.6**	**12.7**	**12.7**	**12.7**	**12.6**	**12.5**	**12.3**
OECD-EU 23	**14.6**	**13.5**	**13.3**	**13.5**	**13.7**	**13.5**	**13.5**	**13.2**	**13.1**	**12.8**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.17. Income tax plus employee contributions less cash benefits, single persons at 67% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	21.1	17.3	16.0	17.1	17.3	17.7	18.5	18.8	19.1	19.6
Austria	25.6	28.5	27.6	28.0	28.5	28.8	29.2	26.5	26.9	27.2
Belgium	35.8	36.1	36.5	36.4	36.0	35.9	35.4	33.4	33.3	32.1
Canada	19.5	18.2	17.4	17.5	17.6	17.8	17.7	17.7	17.5	17.6
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	20.8	19.2	19.2	18.8	18.8	19.2	19.5	19.9	20.7	21.4
Denmark	37.4	35.4	33.7	33.8	33.3	33.1	33.4	33.4	33.3	33.2
Estonia	19.9	16.1	18.0	18.3	18.0	18.2	17.1	16.9	17.0	10.2
Finland	27.8	23.9	22.6	22.4	23.4	23.7	24.0	23.6	22.4	22.4
France	25.9	25.9	26.1	26.3	26.4	26.7	25.8	25.2	25.4	24.9
Germany	36.8	36.1	34.8	34.9	34.6	34.6	34.7	34.8	34.8	34.8
Greece	18.0	18.4	22.3	22.2	20.0	19.8	19.0	20.6	20.9	21.1
Hungary	30.1	28.1	29.6	34.5	34.5	34.5	34.5	33.5	33.5	33.5
Iceland	20.2	23.8	23.3	23.8	24.3	24.4	25.0	25.2	25.1	25.4
Ireland	18.8	12.3	15.8	16.1	17.2	17.3	16.8	16.1	15.8	15.9
Israel[1]	19.4	11.8	10.3	10.2	10.0	10.5	11.0	11.3	11.2	11.5
Italy	24.4	25.1	26.7	27.0	27.2	23.3	21.8	21.9	21.9	22.3
Japan	18.4	18.5	19.5	19.8	20.0	20.2	20.4	20.5	20.6	20.6
Korea	7.5	9.3	9.5	9.7	10.0	10.1	10.3	10.8	10.9	11.5
Latvia	26.0	24.9	29.5	29.6	29.0	28.4	27.9	28.0	28.2	23.8
Lithuania	25.2	21.6	19.9	20.3	20.6	19.9	20.4	20.0	18.4	17.5
Luxembourg	21.8	20.2	20.8	20.4	21.5	22.0	22.7	22.9	20.3	20.7
Mexico	-4.4	-1.2	1.3	1.7	2.6	3.0	3.3	3.7	4.6	4.4
Netherlands	32.9	27.7	27.1	26.6	26.1	24.5	24.7	22.5	22.5	22.7
New Zealand	18.6	18.0	13.0	13.1	13.3	13.4	13.5	13.6	13.7	13.8
Norway	26.8	25.8	25.7	25.6	25.6	25.2	25.1	24.5	24.2	24.0
Poland	26.5	23.8	23.6	23.7	23.8	24.0	24.1	24.2	24.3	24.5
Portugal	17.4	16.1	16.2	16.6	19.8	19.4	21.2	21.4	21.6	21.4
Slovak Republic	18.0	19.3	19.3	19.3	19.3	19.5	19.7	20.0	20.4	20.9
Slovenia	32.3	30.1	28.8	28.7	28.6	28.7	28.7	28.8	30.4	30.3
Spain	15.0	14.2	17.9	18.4	18.5	18.5	16.7	16.7	16.6	16.8
Sweden	31.7	23.9	22.1	22.2	22.4	21.8	22.0	22.3	22.4	22.5
Switzerland	14.9	14.2	14.5	14.3	14.4	14.1	14.1	14.3	14.3	14.4
Turkey[2]	27.2	23.2	23.7	23.8	24.2	24.5	24.7	24.3	24.7	24.6
United Kingdom	22.8	22.9	21.7	21.2	20.0	19.4	19.2	19.3	19.3	19.2
United States	22.6	20.7	20.9	20.9	22.8	22.9	22.9	23.0	23.1	21.4
Unweighted average										
OECD-Average	**22.5**	**21.0**	**21.2**	**21.4**	**21.6**	**21.4**	**21.4**	**21.3**	**21.3**	**21.0**
OECD-EU 23	**25.7**	**23.9**	**24.3**	**24.6**	**24.7**	**24.4**	**24.3**	**24.0**	**23.9**	**23.4**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925424*

Table 6.18. Income tax plus employee contributions less cash benefits, single persons at 100% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	26.6	22.5	22.3	23.0	23.1	23.4	24.1	24.3	24.4	24.6
Austria	31.0	34.3	33.6	33.9	34.4	34.7	35.0	32.1	32.4	32.8
Belgium	43.0	42.5	42.8	42.7	42.4	42.4	42.0	40.7	40.6	39.8
Canada	25.1	23.4	22.5	22.6	22.7	23.4	23.3	23.0	22.8	23.0
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	22.5	23.6	23.1	22.9	22.9	23.1	23.4	23.6	24.1	24.6
Denmark	41.5	38.6	36.1	36.2	35.8	35.6	35.9	35.9	35.8	35.7
Estonia	21.9	17.9	19.7	19.9	19.5	19.6	18.4	18.4	18.4	15.0
Finland	33.9	30.4	29.4	29.4	30.1	30.6	30.9	30.8	29.9	30.0
France	29.2	27.8	27.9	28.1	28.3	28.6	28.9	29.1	29.2	28.7
Germany	43.2	41.8	39.8	39.8	39.5	39.5	39.7	39.8	39.8	39.7
Greece	21.7	25.1	26.7	26.6	25.2	24.9	24.2	25.7	25.9	26.1
Hungary	35.7	38.3	35.1	35.1	34.5	34.5	34.5	33.5	33.5	33.5
Iceland	25.4	27.2	28.4	28.7	29.1	28.9	29.4	29.0	28.5	28.7
Ireland	27.5	20.4	25.4	25.8	26.7	26.9	26.0	25.4	25.3	25.4
Israel[1]	26.1	19.3	17.0	16.6	16.4	17.0	17.5	17.9	17.7	18.1
Italy	29.0	29.5	30.8	31.0	31.1	31.0	31.1	31.1	31.2	31.4
Japan	19.7	20.2	21.0	21.3	21.5	21.8	22.1	22.2	22.3	22.3
Korea	8.9	12.1	12.5	13.0	13.5	13.6	14.0	14.3	14.5	14.9
Latvia	27.9	27.2	30.7	30.8	30.1	29.6	28.9	29.0	29.4	28.4
Lithuania	28.8	23.4	22.3	22.5	22.7	22.6	22.9	23.0	22.7	22.1
Luxembourg	28.7	27.4	28.4	28.1	29.5	30.0	30.8	31.0	29.0	29.5
Mexico	2.5	5.2	9.2	9.6	9.8	10.1	10.4	10.8	11.1	10.2
Netherlands	33.6	32.8	31.7	32.0	34.8	32.4	30.3	30.2	30.3	30.5
New Zealand	19.4	20.5	15.9	16.4	16.9	17.2	17.6	17.9	18.1	18.4
Norway	30.7	29.6	29.4	29.2	29.2	28.7	28.6	28.0	27.6	27.5
Poland	27.8	25.0	24.6	24.7	24.8	24.9	24.9	25.0	25.1	25.2
Portugal	22.4	22.0	23.3	22.8	27.5	27.2	28.4	27.7	27.5	26.6
Slovak Republic	19.8	22.8	22.8	22.8	22.8	22.9	23.1	23.3	23.5	23.9
Slovenia	35.6	33.1	33.4	33.2	33.1	33.2	33.3	33.5	33.7	34.1
Spain	19.8	19.3	22.0	22.9	22.9	23.0	21.3	21.3	21.1	21.3
Sweden	33.7	26.9	24.8	24.9	25.1	24.4	24.6	24.9	25.0	25.2
Switzerland	17.8	17.1	17.4	17.2	17.3	17.0	17.0	17.2	17.2	17.4
Turkey[2]	28.7	26.3	26.6	26.8	27.0	27.3	27.4	27.4	28.3	28.2
United Kingdom	25.8	25.6	25.1	24.7	24.0	23.6	23.4	23.5	23.5	23.4
United States	24.9	23.9	23.6	23.6	25.5	25.6	25.6	25.8	26.1	23.8
Unweighted average										
OECD-Average	**26.3**	**25.3**	**25.3**	**25.4**	**25.7**	**25.7**	**25.7**	**25.6**	**25.6**	**25.5**
OECD-EU 23	**29.7**	**28.5**	**28.7**	**28.7**	**29.0**	**28.9**	**28.8**	**28.6**	**28.6**	**28.4**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925443*

Table 6.19. Income tax plus employee contributions less cash benefits, single persons at 167% of average wage

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

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	34.9	28.7	28.2	29.2	29.2	29.4	30.1	30.2	30.1	30.4
Austria	36.3	39.0	38.5	38.6	39.0	39.2	39.4	37.5	37.7	38.0
Belgium	50.1	49.3	49.6	49.5	49.2	49.2	49.1	48.5	48.3	47.9
Canada	29.3	27.0	26.7	26.7	26.8	27.1	27.0	26.3	26.2	26.3
Chile	8.3	7.7	8.1	8.2	8.1	8.1	8.2	8.3	8.3	8.3
Czech Republic	25.5	27.3	26.3	26.2	26.2	26.3	26.5	26.6	26.9	27.2
Denmark	49.3	48.0	43.2	43.4	42.6	41.9	42.1	42.0	41.8	41.5
Estonia	23.6	19.3	21.1	21.2	20.7	20.8	19.6	19.5	19.6	21.3
Finland	41.1	37.4	36.6	36.7	37.3	37.8	38.1	38.2	37.5	37.6
France	33.1	33.2	33.6	33.8	33.9	34.2	34.4	34.5	34.6	34.1
Germany	48.8	45.7	43.8	43.8	43.7	43.8	43.8	43.9	43.9	43.8
Greece	29.5	31.4	33.4	33.3	34.9	34.7	32.3	32.7	33.0	33.2
Hungary	42.8	45.2	37.8	36.6	34.5	34.5	34.5	33.5	33.5	33.5
Iceland	36.7	30.1	33.0	33.5	33.9	33.8	34.0	34.0	33.9	33.8
Ireland	35.6	30.0	36.0	36.3	36.9	37.0	36.1	35.2	35.1	35.1
Israel[1]	35.0	28.8	25.6	24.9	25.2	26.0	26.5	27.1	26.9	27.5
Italy	34.5	36.4	37.9	38.1	38.3	38.8	39.5	39.5	39.2	39.4
Japan	22.6	24.2	24.8	25.1	25.3	25.6	25.9	25.9	26.0	26.0
Korea	13.4	15.8	15.3	15.7	16.2	16.6	17.3	17.8	18.2	18.7
Latvia	29.4	29.0	31.7	31.8	31.0	30.5	29.8	29.9	30.2	28.8
Lithuania	31.7	24.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Luxembourg	37.9	35.3	36.8	36.3	37.6	37.9	38.6	38.7	37.6	37.9
Mexico	10.1	12.7	13.8	14.1	14.4	14.8	15.1	15.4	15.6	14.9
Netherlands	40.6	38.5	37.8	38.2	38.4	46.8	38.2	37.7	37.7	37.8
New Zealand	24.2	26.3	22.0	22.4	22.8	23.1	23.3	23.6	23.8	24.0
Norway	38.2	35.9	35.8	35.6	35.6	35.1	35.0	34.5	34.2	34.0
Poland	28.9	26.6	25.4	25.5	25.5	25.6	25.6	25.7	25.7	25.8
Portugal	28.6	29.0	31.4	30.2	35.2	34.9	35.7	34.5	34.1	33.2
Slovak Republic	24.4	25.4	25.4	25.5	25.6	25.7	25.8	25.9	26.1	26.3
Slovenia	41.2	38.8	39.3	39.1	37.5	37.7	37.9	37.4	37.7	38.1
Spain	24.4	24.6	26.8	28.3	28.5	28.7	27.3	27.2	26.8	27.0
Sweden	41.1	37.5	35.5	35.3	35.4	35.1	35.2	36.2	36.5	36.7
Switzerland	22.7	22.0	22.2	22.2	22.3	21.9	21.8	22.2	22.2	22.4
Turkey[2]	26.9	29.2	30.1	30.3	30.9	31.3	31.6	32.0	32.5	32.4
United Kingdom	28.8	30.3	30.4	30.4	30.1	29.8	29.8	29.9	29.9	29.8
United States	31.9	30.1	29.1	29.2	31.0	31.1	31.1	31.2	31.4	28.8
Unweighted average										
OECD-Average	**31.7**	**30.6**	**30.5**	**30.5**	**30.8**	**31.1**	**30.8**	**30.8**	**30.7**	**30.7**
OECD-EU 23	**35.1**	**34.0**	**34.0**	**34.0**	**34.2**	**34.6**	**34.0**	**33.9**	**33.8**	**33.8**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925462*

Table 6.20. Income tax plus employee contributions less cash benefits, single parent at 67% of average wage

Tax burden as a % of gross wage earnings, single parent with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	-2.1	-11.2	-12.0	-9.3	-8.6	-7.9	-7.5	-7.2	-5.3	-3.9
Austria	2.0	7.7	6.0	7.0	8.1	8.6	9.3	6.4	7.1	7.8
Belgium	16.1	17.7	19.1	19.0	18.4	18.3	17.8	15.7	15.7	14.5
Canada	-11.8	-18.3	-19.6	-19.3	-18.7	-17.1	-29.2	-29.0	-29.2	-27.9
Chile	5.9	6.1	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Czech Republic	-17.9	-14.6	0.0	-1.6	-1.7	-0.8	-0.9	-4.7	-3.9	-5.3
Denmark	11.5	10.5	8.6	8.5	7.9	5.8	6.3	6.2	4.8	4.9
Estonia	-8.5	-8.4	-0.5	0.9	1.6	2.7	-4.8	-4.6	-3.2	-9.8
Finland	9.7	9.4	9.0	8.7	10.1	10.5	10.9	10.7	9.4	9.9
France	13.5	14.8	14.8	15.0	15.1	15.4	15.9	1.0	1.7	1.4
Germany	17.9	20.2	17.4	17.9	17.7	18.1	17.5	17.9	18.0	18.2
Greece	17.2	17.2	20.9	20.8	15.5	15.3	14.5	15.3	15.6	13.3
Hungary	5.0	5.4	-2.5	3.2	4.2	5.4	6.5	4.3	4.9	5.5
Iceland	1.4	10.4	12.0	10.5	12.8	12.9	14.5	15.2	14.7	14.0
Ireland	6.6	-13.5	-15.1	-13.5	-11.4	-10.7	-10.7	-10.7	-9.5	-7.4
Israel[1]	-1.5	-1.7	-3.4	-3.6	-3.0	-1.3	-1.5	-3.7	-2.9	-2.1
Italy	5.5	2.9	6.3	6.8	6.2	2.5	1.3	1.4	1.6	2.5
Japan	15.7	11.7	8.4	12.5	12.6	13.0	13.4	13.6	13.6	13.7
Korea	6.8	8.5	8.7	8.9	9.0	8.3	8.4	8.4	8.7	9.0
Latvia	3.5	9.4	12.5	13.2	13.0	7.8	7.3	7.8	9.5	5.4
Lithuania	19.2	12.5	8.8	9.6	10.6	9.5	10.3	7.3	9.0	2.9
Luxembourg	-6.4	-8.8	-8.8	-8.4	-6.5	-5.4	-4.1	-3.5	-6.6	-5.5
Mexico	-4.4	-1.2	1.3	1.7	2.6	3.0	3.3	3.7	4.6	4.4
Netherlands	14.5	5.4	3.8	2.8	3.2	1.7	0.6	-3.5	-3.9	-3.7
New Zealand	-3.0	-17.3	-18.3	-18.2	-16.9	-15.8	-14.4	-14.6	-13.5	-20.5
Norway	5.7	10.4	11.4	11.5	11.9	11.9	12.3	11.9	12.0	12.3
Poland	18.0	17.8	17.8	17.8	17.8	14.7	11.2	-35.4	-37.7	-30.4
Portugal	9.1	4.5	3.8	4.9	7.8	7.2	7.6	3.1	3.5	3.6
Slovak Republic	-3.1	4.4	3.5	3.5	3.4	4.1	4.6	5.4	6.3	7.5
Slovenia	-2.0	-1.2	-1.3	-1.0	-0.8	-4.6	-4.4	-3.9	-1.5	-0.2
Spain	6.8	6.8	8.9	9.5	9.6	9.8	1.5	1.5	1.6	2.0
Sweden	20.1	12.8	11.4	11.8	12.2	11.9	12.2	12.8	13.1	12.3
Switzerland	0.3	-2.7	-1.0	-0.9	-1.3	-1.9	-1.9	-1.5	-1.4	-1.2
Turkey[2]	27.2	21.6	22.0	22.2	22.6	23.0	23.2	22.5	23.0	22.9
United Kingdom	7.7	3.0	-1.8	-2.0	-3.1	-4.1	-3.4	-1.4	1.0	2.0
United States	2.6	-1.0	0.2	1.3	3.1	3.7	3.9	4.5	5.5	1.9
Unweighted average										
OECD-Average	**5.8**	**4.2**	**4.4**	**4.9**	**5.3**	**5.0**	**4.4**	**2.2**	**2.6**	**2.2**
OECD-EU 23	**7.2**	**5.9**	**6.2**	**6.7**	**6.9**	**6.2**	**5.5**	**2.1**	**2.5**	**2.2**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925481*

Table 6.21. Income tax plus employee contributions less cash benefits, married couple at 100% of average wage

Tax burden as a % of gross wage earnings, one-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	18.4	9.8	10.1	11.9	12.0	12.4	12.9	13.1	16.0	16.9
Austria	15.1	20.3	19.0	19.8	20.7	21.1	21.6	18.6	19.1	19.6
Belgium	23.7	22.6	23.7	23.6	23.0	22.9	22.6	20.9	20.9	20.3
Canada	14.2	9.6	8.4	8.5	8.8	9.6	0.2	0.9	0.7	1.8
Chile	6.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	-5.3	-6.9	1.9	1.0	0.9	1.8	1.9	-0.4	0.7	0.2
Denmark	28.2	27.0	25.3	25.5	25.1	24.9	25.3	25.2	25.2	25.2
Estonia	10.6	2.5	8.3	9.1	9.4	10.0	4.5	4.3	5.0	1.8
Finland	24.8	23.6	23.1	23.0	23.9	24.4	25.2	25.2	24.3	24.5
France	16.1	17.4	17.8	18.0	17.5	17.7	17.9	18.1	18.2	17.5
Germany	22.0	22.5	20.8	21.1	20.9	21.1	21.2	21.5	21.6	21.7
Greece	23.9	25.5	27.3	27.2	24.2	24.0	22.4	23.4	23.7	22.3
Hungary	20.5	24.6	14.0	15.4	15.4	16.2	16.9	15.0	15.3	15.6
Iceland	8.9	14.0	14.5	13.3	15.2	15.8	17.5	17.7	17.2	16.2
Ireland	10.9	1.2	6.9	7.7	9.4	9.7	8.9	8.0	7.9	8.3
Israel[1]	21.8	16.2	13.2	12.6	12.9	14.5	14.8	15.1	15.0	15.4
Italy	18.6	16.3	18.8	19.1	18.6	18.8	19.0	19.0	19.2	19.9
Japan	15.8	14.0	12.2	15.0	15.1	15.6	16.0	16.2	16.2	16.3
Korea	8.2	9.8	9.8	10.3	10.8	11.1	11.5	11.9	12.1	12.7
Latvia	12.8	16.8	19.3	19.8	19.4	15.8	15.2	15.5	16.9	16.0
Lithuania	28.8	17.8	14.8	15.4	16.0	15.5	16.1	18.4	15.6	12.4
Luxembourg	1.9	1.3	3.1	3.0	4.1	4.8	5.7	6.0	4.8	5.4
Mexico	2.5	5.2	9.2	9.6	9.8	10.1	10.4	10.8	11.1	10.2
Netherlands	22.4	23.0	24.0	24.8	28.1	25.9	24.1	24.3	24.4	24.8
New Zealand	13.6	0.7	-1.1	0.6	2.4	3.8	4.9	5.5	6.4	1.9
Norway	19.3	21.9	22.2	22.1	22.3	23.2	23.2	22.8	22.6	23.6
Poland	22.1	17.8	17.8	17.8	18.1	18.6	18.9	0.3	-4.1	7.9
Portugal	13.6	8.8	10.1	10.8	13.7	13.1	14.3	11.7	11.9	12.1
Slovak Republic	4.4	5.8	5.2	5.1	5.0	5.6	6.2	6.9	7.8	8.9
Slovenia	10.1	9.9	10.8	10.8	10.8	11.2	11.3	11.7	12.3	13.2
Spain	11.5	11.5	14.7	15.2	15.3	15.4	13.9	13.9	13.9	14.1
Sweden	26.0	19.4	17.7	17.9	18.3	17.8	18.1	18.5	18.8	18.3
Switzerland	5.9	3.7	4.6	4.5	4.2	3.6	3.6	4.0	4.0	4.2
Turkey[2]	28.7	24.5	24.8	24.9	25.2	25.5	25.6	25.4	26.4	26.2
United Kingdom	20.6	19.0	18.3	19.7	19.0	18.5	17.8	18.0	18.3	18.2
United States	14.4	9.8	11.2	11.4	13.3	13.6	13.7	13.9	14.3	11.7
Unweighted average										
OECD-Average	**15.6**	**13.7**	**14.1**	**14.5**	**14.9**	**15.0**	**14.7**	**14.1**	**14.2**	**14.2**
OECD-EU 23	**16.7**	**15.1**	**15.8**	**16.1**	**16.4**	**16.3**	**16.0**	**15.0**	**14.8**	**15.1**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.22. Income tax plus employee contributions less cash benefits, married couple with two children, at 100% and 33% of average wage

Tax burden as a % of gross wage earnings, two-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	19.8	14.2	13.0	13.9	15.1	16.1	18.1	19.8	20.0	20.3
Austria	16.5	20.9	19.1	19.7	20.3	20.6	20.8	18.1	18.5	19.0
Belgium	29.3	26.8	27.5	27.4	26.8	26.6	26.1	23.9	23.8	22.6
Canada	18.6	15.3	14.5	14.7	15.0	15.2	10.3	10.9	10.7	11.2
Chile	5.4	5.6	5.1	5.1	5.0	5.0	5.0	4.9	4.9	4.8
Czech Republic	6.9	6.2	10.5	9.6	9.6	10.1	10.0	8.1	8.5	7.9
Denmark	32.3	30.7	29.0	29.2	28.7	28.5	28.8	28.8	28.8	28.8
Estonia	14.4	7.2	12.0	12.6	12.7	13.1	8.7	8.5	9.1	3.8
Finland	23.5	21.2	20.4	20.1	20.9	21.4	21.6	21.3	20.7	20.9
France	18.8	16.8	18.4	18.8	19.0	17.5	19.0	19.1	19.2	18.6
Germany	29.1	28.6	26.5	26.8	26.5	26.7	26.9	27.1	27.2	27.2
Greece	21.9	23.1	25.3	25.3	23.4	23.0	21.7	22.6	22.8	21.8
Hungary	20.5	22.8	15.8	20.2	20.2	20.7	21.2	19.6	19.8	20.1
Iceland	16.4	20.6	21.4	21.2	22.4	22.9	23.9	24.0	23.6	23.4
Ireland	15.1	4.2	9.3	9.9	11.2	11.4	10.7	10.2	10.3	10.7
Israel[1]	17.8	13.1	9.7	9.2	9.2	11.8	12.0	12.2	12.1	12.5
Italy	21.0	18.9	21.0	21.4	21.1	19.3	18.6	18.7	18.8	19.2
Japan	17.3	15.4	14.5	16.7	16.8	17.3	17.6	17.7	17.8	17.3
Korea	7.8	9.6	9.8	10.3	10.7	10.8	11.1	11.4	11.6	12.1
Latvia	14.6	17.1	20.9	21.3	20.9	18.0	17.5	17.8	18.8	15.2
Lithuania	25.1	17.4	18.4	18.7	19.1	18.2	18.7	16.9	14.0	14.0
Luxembourg	6.3	6.3	7.9	7.8	9.1	9.7	10.7	11.0	9.2	9.7
Mexico	-2.6	1.0	4.5	4.9	5.3	5.7	6.1	6.5	6.8	6.3
Netherlands	26.6	23.3	22.7	22.5	25.0	22.6	20.9	19.6	19.6	19.8
New Zealand	18.5	9.2	7.0	8.6	10.0	11.1	12.0	12.8	13.5	10.8
Norway	21.9	22.8	23.0	22.8	22.8	22.3	22.4	21.8	21.5	21.4
Poland	23.6	18.5	19.3	19.5	19.8	20.2	20.5	13.6	12.1	12.2
Portugal	14.1	11.4	11.4	12.1	14.8	14.4	14.8	13.4	13.7	13.7
Slovak Republic	10.4	11.7	10.9	10.9	12.1	12.6	12.1	12.4	12.9	13.5
Slovenia	21.2	18.9	19.4	19.4	19.3	19.5	19.6	19.8	20.1	20.6
Spain	15.1	14.6	16.8	17.4	17.4	17.5	16.2	16.2	16.1	16.2
Sweden	26.5	18.9	17.1	17.3	17.7	17.1	17.4	17.8	18.1	17.8
Switzerland	9.0	7.1	7.8	7.7	7.4	6.9	6.8	7.2	7.3	7.5
Turkey[2]	28.0	23.2	23.5	23.6	23.9	24.1	24.3	23.8	24.6	24.4
United Kingdom	18.8	17.9	17.7	17.3	16.2	15.5	15.3	15.5	15.7	15.6
United States	18.2	13.6	15.2	15.4	17.3	17.5	17.6	17.7	18.0	15.4
Unweighted average										
OECD-Average	**18.0**	**16.0**	**16.3**	**16.6**	**17.0**	**17.0**	**16.8**	**16.4**	**16.4**	**16.0**
OECD-EU 23	**19.6**	**17.5**	**18.1**	**18.5**	**18.8**	**18.5**	**18.2**	**17.4**	**17.3**	**16.9**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925519*

Table 6.23. Income tax plus employee contributions less cash benefits, married couple at 100% and 67% of average wage

Tax burden as a % of gross wage earnings, two-earner married couple with two children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	22.0	18.3	19.7	20.6	20.8	21.1	21.8	22.1	22.2	22.6
Austria	20.1	24.7	23.4	24.0	24.7	25.1	25.5	22.5	23.0	23.4
Belgium	35.0	33.3	34.1	33.9	33.5	33.5	33.1	31.5	31.3	30.4
Canada	21.6	18.9	18.2	18.3	18.5	18.6	15.1	15.6	15.4	15.7
Chile	6.6	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Czech Republic	14.0	11.6	13.6	13.1	13.0	13.5	13.6	12.3	12.9	12.6
Denmark	35.8	33.0	31.3	31.4	31.0	30.8	31.1	31.1	31.0	31.0
Estonia	16.8	10.1	14.3	14.8	14.7	15.1	11.2	11.1	11.6	6.8
Finland	26.0	23.7	22.9	22.8	23.7	24.2	24.6	24.4	23.4	23.7
France	21.4	22.1	22.4	22.6	22.8	23.1	23.0	22.8	23.0	22.6
Germany	34.3	33.3	30.9	31.1	30.9	31.1	31.2	31.4	31.4	31.5
Greece	22.2	24.0	26.0	25.9	23.9	23.7	22.4	23.4	23.7	23.0
Hungary	24.3	26.0	20.2	23.1	23.1	23.5	23.9	22.4	22.6	22.8
Iceland	21.9	24.3	25.7	25.6	26.5	26.9	27.6	27.5	27.2	27.3
Ireland	20.8	9.7	15.3	15.9	17.4	17.7	16.7	16.2	16.2	16.5
Israel[1]	17.7	12.2	10.3	9.9	10.0	11.0	11.2	11.5	11.4	11.7
Italy	25.1	22.9	24.8	25.0	24.8	23.3	22.8	22.8	22.9	23.3
Japan	17.9	16.5	16.0	17.8	17.9	18.3	18.6	18.8	18.8	18.9
Korea	8.0	9.8	9.9	10.4	10.8	11.0	11.3	11.7	11.9	12.4
Latvia	18.1	20.0	23.4	23.7	23.3	20.8	20.3	20.5	21.4	19.2
Lithuania	27.3	19.3	20.0	20.3	20.7	20.0	20.4	19.0	16.7	16.4
Luxembourg	12.6	12.4	14.0	13.9	15.5	16.1	17.1	17.4	15.3	16.0
Mexico	-0.3	2.6	6.1	6.4	6.9	7.3	7.6	7.9	8.5	7.9
Netherlands	30.1	26.8	25.0	24.7	26.4	24.4	23.2	21.6	21.6	21.8
New Zealand	19.0	15.7	13.2	14.7	15.9	16.3	16.5	16.7	16.9	17.1
Norway	24.4	24.9	25.1	25.0	25.1	24.7	24.7	24.1	23.8	23.7
Poland	25.0	20.4	20.8	21.0	21.2	21.5	21.7	16.2	15.0	15.2
Portugal	17.0	16.2	18.7	18.9	22.0	21.7	20.5	20.9	21.1	20.2
Slovak Republic	12.9	15.4	15.1	15.1	15.0	15.4	15.7	16.1	16.6	17.3
Slovenia	25.1	23.7	23.5	23.7	23.8	24.0	24.1	23.8	24.6	25.0
Spain	15.6	14.9	18.2	18.9	18.9	19.0	17.2	17.2	17.1	17.3
Sweden	28.3	21.2	19.5	19.6	19.9	19.4	19.6	20.0	20.2	20.0
Switzerland	12.3	10.6	11.1	11.0	10.8	10.2	10.2	10.6	10.6	10.9
Turkey[2]	28.1	24.4	24.8	24.9	25.2	25.5	25.7	25.5	26.2	26.0
United Kingdom	21.5	21.3	20.6	20.3	19.4	18.9	18.7	18.9	19.0	19.0
United States	20.5	16.8	17.7	17.8	19.7	19.9	20.0	20.1	20.3	17.6
Unweighted average										
OECD-Average	**20.8**	**19.1**	**19.5**	**19.8**	**20.1**	**20.1**	**19.9**	**19.5**	**19.5**	**19.3**
OECD-EU 23	**23.0**	**21.1**	**21.6**	**21.9**	**22.2**	**22.0**	**21.6**	**21.0**	**21.0**	**20.6**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925538*

Table 6.24. Income tax plus employee contributions less cash benefits, married couple at 100% and 33% of average wage

Tax burden as a % of gross wage earnings, two-earner married couple without children

	2000	2008	2011	2012	2013	2014	2015	2016	2017	2018
Australia	22.8	18.9	18.3	18.9	18.7	19.0	19.7	19.9	20.0	20.3
Austria	27.5	30.0	28.8	29.0	29.4	29.6	29.7	27.2	27.4	27.8
Belgium	38.1	35.2	35.4	35.3	34.8	34.6	34.1	31.9	31.8	30.6
Canada	22.0	19.9	19.1	19.1	19.3	19.9	19.8	19.6	19.5	19.7
Chile	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Czech Republic	20.8	20.9	20.1	19.9	19.9	20.1	20.3	20.5	20.9	21.4
Denmark	37.4	35.5	33.8	33.9	33.5	33.3	33.6	33.6	33.5	33.4
Estonia	19.9	16.0	17.9	18.3	17.9	18.2	17.0	16.9	16.9	11.7
Finland	30.4	26.3	25.2	24.8	25.6	26.0	26.0	25.7	25.0	25.0
France	25.3	25.8	26.0	26.2	26.3	26.6	26.5	25.8	25.9	25.5
Germany	36.7	36.0	34.7	34.8	34.5	34.5	34.6	34.7	34.8	34.7
Greece	21.6	23.8	25.6	25.6	24.4	24.1	22.8	24.0	24.2	24.3
Hungary	31.9	33.1	31.6	35.0	34.5	34.5	34.5	33.5	33.5	33.5
Iceland	20.1	23.7	23.5	23.9	24.5	24.6	25.2	25.3	25.0	25.3
Ireland	17.8	11.2	15.3	15.9	16.6	16.9	16.2	15.8	15.8	16.1
Israel[1]	21.1	15.4	13.7	13.4	13.2	13.7	14.0	14.4	14.2	14.5
Italy	24.9	25.0	26.6	26.8	27.1	25.1	24.4	24.5	24.5	24.9
Japan	18.9	19.3	20.1	20.4	20.5	20.9	21.1	21.3	21.3	20.8
Korea	8.4	11.0	11.4	11.9	12.3	12.3	12.6	12.8	13.0	13.4
Latvia	25.9	24.9	29.5	29.6	29.0	28.3	27.8	28.0	28.2	24.5
Lithuania	25.1	21.6	20.1	20.3	20.7	20.2	20.5	20.3	19.3	18.9
Luxembourg	19.2	18.4	19.1	18.6	19.6	20.0	20.8	21.0	19.0	19.4
Mexico	-2.6	1.0	4.5	4.9	5.3	5.7	6.1	6.5	6.8	6.3
Netherlands	30.8	28.3	27.7	27.9	30.2	27.7	26.0	25.1	25.1	25.3
New Zealand	18.5	19.1	14.8	15.2	15.7	16.0	16.2	16.5	16.7	17.0
Norway	27.9	26.8	26.6	26.3	26.2	25.6	25.5	24.9	24.5	24.3
Poland	26.4	23.8	23.6	23.7	23.8	24.0	24.1	24.2	24.3	24.5
Portugal	18.1	16.0	16.1	16.5	19.6	19.2	21.1	21.3	21.4	21.3
Slovak Republic	18.2	19.3	18.9	18.9	20.1	20.4	19.7	19.8	20.0	20.3
Slovenia	34.0	30.3	30.6	30.5	30.4	30.5	30.5	30.6	30.8	31.1
Spain	16.5	16.1	18.1	18.8	18.8	18.9	17.6	17.6	17.4	17.6
Sweden	32.3	24.5	22.5	22.6	22.8	22.1	22.3	22.6	22.8	23.0
Switzerland	15.6	14.8	15.1	14.9	15.0	14.7	14.7	14.9	14.9	15.0
Turkey[2]	28.0	24.1	24.3	24.4	24.7	24.9	25.0	24.7	25.5	25.3
United Kingdom	22.7	22.9	21.6	21.1	19.9	19.3	19.1	19.2	19.2	19.1
United States	23.1	20.6	20.9	20.9	22.7	22.8	22.8	22.9	23.1	21.3
Unweighted average										
OECD-Average	**23.1**	**21.8**	**21.9**	**22.1**	**22.3**	**22.2**	**22.2**	**22.1**	**22.0**	**21.8**
OECD-EU 23	**26.2**	**24.6**	**24.7**	**25.0**	**25.2**	**25.0**	**24.8**	**24.5**	**24.4**	**24.1**

Notes:

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

StatLink *http://dx.doi.org/10.1787/888933925557*

Table 6.25. Annual average gross and net wage earnings, single individual no children, 2000-18

In US dollars using PPP

	2000		2008		2011		2012		2013		2014		2015		2016		2017		2018	
	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net
Australia	31 517	23 134	40 783	31 587	46 261	35 957	48 085	37 048	53 606	41 221	54 671	41 903	54 760	41 580	56 532	42 790	57 694	43 641	59 806	45 066
Austria	32 763	22 618	43 606	28 665	47 743	31 725	50 032	33 052	52 617	34 527	53 598	35 009	54 985	35 718	57 100	38 767	58 949	39 831	60 737	40 813
Belgium	35 160	20 039	46 944	26 998	53 655	30 676	55 813	31 975	57 305	33 007	58 048	33 461	58 114	33 701	58 625	34 744	60 826	36 141	62 378	37 535
Canada	29 358	21 988	34 701	26 596	36 581	28 348	37 586	29 106	39 212	30 316	40 502	31 044	40 359	30 974	40 816	31 411	41 234	31 818	42 730	32 895
Chile	12 878	11 977	16 510	15 354	18 717	17 407	20 100	18 693	21 197	19 713	21 453	19 951	21 672	20 155	22 060	20 516	23 234	21 608	23 941	22 264
Czech Republic	11 229	8 704	19 592	14 960	22 126	17 016	22 748	17 542	23 611	18 211	24 452	18 803	24 788	19 000	25 954	19 822	28 381	21 537	30 712	23 151
Denmark	32 491	19 022	45 228	27 777	51 759	33 083	51 817	33 082	53 497	34 348	54 253	34 921	55 262	35 427	56 217	36 050	59 282	38 055	61 827	39 780
Estonia	8 383	6 544	18 429	15 136	20 266	16 271	21 118	16 913	22 457	18 081	23 417	18 818	24 272	19 795	26 312	21 477	27 973	22 826	29 636	25 190
Finland	26 791	17 714	40 972	28 534	44 811	31 648	45 584	32 193	46 884	32 754	47 072	32 673	47 678	32 968	48 694	33 706	49 305	34 553	50 542	35 399
France	28 715	20 342	38 078	27 498	42 180	30 399	42 808	30 770	45 113	32 365	46 108	32 912	46 551	33 109	47 749	33 875	49 769	35 238	51 504	36 712
Germany	36 476	20 718	49 976	29 061	54 898	33 076	56 399	33 953	57 952	35 069	59 784	36 143	60 547	36 522	62 840	37 836	65 105	39 199	67 254	40 547
Greece	23 084	18 065	33 688	25 234	33 553	24 590	34 044	24 979	33 426	25 008	34 888	26 198	34 214	25 935	34 434	25 583	35 545	26 323	36 806	27 189
Hungary	9 869	6 343	17 832	11 010	21 290	13 817	22 608	14 665	23 482	15 381	23 594	15 454	23 942	15 682	24 836	16 516	27 417	18 232	29 768	19 796
Iceland	32 011	23 868	47 570	34 607	41 642	29 825	44 682	31 875	48 605	34 484	51 794	36 819	54 024	38 166	58 438	41 466	63 605	45 454	66 505	47 410
Ireland	30 646	22 203	45 295	36 033	50 252	37 510	51 705	38 345	53 034	38 855	52 943	38 684	54 043	39 966	55 201	41 167	57 123	42 654	59 930	44 709
Israel[1]	27 797	20 541	30 832	24 889	31 790	26 371	32 500	27 093	33 510	28 023	34 197	28 381	35 607	29 372	37 533	30 798	39 393	32 416	41 825	34 264
Italy	26 762	18 989	34 254	24 139	38 055	26 340	39 372	27 186	40 666	28 017	41 029	28 298	41 368	28 506	42 893	29 548	44 170	30 410	45 291	31 062
Japan	32 234	25 870	42 654	34 021	44 869	35 433	46 928	36 912	47 734	37 460	48 252	37 712	49 144	38 280	50 063	38 936	50 213	39 033	51 849	40 266
Korea	26 564	24 187	42 837	37 635	43 081	37 703	45 400	39 487	46 433	40 175	47 516	41 031	50 047	43 057	51 754	44 371	52 948	45 284	56 488	48 045
Latvia	6 419	4 629	12 990	9 459	15 310	10 605	15 599	10 791	16 560	11 571	17 871	12 590	19 275	13 699	20 506	14 551	22 374	15 792	23 949	17 149
Lithuania	7 056	5 027	15 011	11 500	15 377	11 952	16 061	12 450	17 385	13 432	18 337	14 198	19 346	14 923	20 960	16 145	22 773	17 606	24 711	19 247
Luxembourg	37 537	26 777	52 267	37 950	55 988	40 082	57 313	41 194	59 905	42 214	62 117	43 481	63 401	43 848	64 768	44 674	67 601	47 987	68 735	48 456
Mexico	7 964	7 767	10 943	10 376	11 910	10 808	12 117	10 959	12 547	11 312	12 833	11 532	12 918	11 569	12 868	11 485	12 861	11 437	13 081	11 743
Netherlands	35 827	23 782	50 893	34 180	55 363	37 811	56 610	38 492	60 075	39 142	59 792	40 400	61 179	42 669	61 864	43 171	64 170	44 730	65 227	45 364
New Zealand	24 195	19 509	29 866	23 740	33 242	27 967	34 285	28 667	36 815	30 598	37 990	31 438	38 029	31 351	39 224	32 206	39 994	32 742	41 502	33 851
Norway	32 843	22 761	50 073	35 253	54 067	38 175	55 829	39 524	58 131	41 151	57 971	41 332	56 169	40 124	55 248	39 796	57 470	41 596	57 161	41 459
Poland	12 582	9 083	18 299	13 717	21 500	16 208	22 384	16 857	23 638	17 786	25 189	18 922	26 145	19 623	26 995	20 246	28 896	21 644	31 476	23 544
Portugal	16 522	12 813	24 493	19 111	26 013	19 958	28 147	21 735	30 247	21 944	29 959	21 818	29 780	21 319	30 451	22 013	31 010	22 487	31 866	23 381
Slovak Republic	9 776	7 844	16 411	12 668	18 940	14 621	19 444	15 011	20 363	15 729	21 471	16 550	21 694	16 688	22 670	17 395	23 696	18 121	25 147	19 148
Slovenia	16 893	10 886	24 880	16 657	27 842	18 539	28 903	19 294	29 934	20 027	30 357	20 264	30 400	20 268	31 138	20 720	32 731	21 695	34 231	22 553
Spain	23 411	18 765	32 033	25 853	35 729	27 854	37 259	28 742	38 569	29 730	39 542	30 451	39 839	31 366	40 349	31 773	41 404	32 669	42 535	33 492
Sweden	28 766	19 064	40 149	29 342	42 549	31 977	44 826	33 664	46 317	34 689	46 772	35 367	46 781	35 281	47 198	35 453	49 210	36 906	51 219	38 326
Switzerland	40 763	33 499	55 650	46 117	61 303	50 608	65 996	54 617	68 846	56 902	67 735	56 230	70 061	58 171	72 595	60 099	75 096	62 145	77 370	63 909
Turkey[2]	19 692	14 034	16 947	12 488	20 398	14 964	21 545	15 781	23 053	16 824	24 886	18 104	26 839	19 494	29 893	21 693	30 454	21 832	30 073	21 603
United Kingdom	35 358	26 232	47 574	35 402	48 273	36 171	49 690	37 400	50 468	38 373	50 283	38 423	51 964	39 794	53 107	40 646	55 818	42 702	57 095	43 733
United States	33 129	24 877	43 196	32 857	46 895	35 811	47 746	36 460	48 774	36 359	50 099	37 274	50 963	37 900	51 945	38 531	53 376	39 445	54 951	41 889
OECD Average	24 541	17 784	34 207	25 178	37 062	27 258	38 419	28 236	40 055	29 300	40 855	29 905	41 560	30 444	42 773	31 388	44 475	32 661	46 107	33 915

1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Table 6.26. Annual average gross and net wage earnings, single individual no children, 2000-18 (national currency)

	2000		2008		2011		2012		2013		2014		2015		2016		2017		2018	
	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net	gross	net
Australia	41 322	30 332	60 321	46 720	69 903	54 334	74 057	57 059	77 574	59 652	79 409	60 863	80 720	61 292	82 039	62 097	83 336	63 038	85 778	64 638
Austria	29 732	20 526	37 258	24 492	39 693	26 376	40 708	26 893	41 940	27 521	42 814	27 965	43 911	28 524	45 073	30 602	46 002	31 083	47 120	31 663
Belgium	31 644	18 035	40 698	23 405	44 636	25 520	45 886	26 288	46 197	26 609	46 451	26 776	46 479	26 954	46 528	27 574	47 527	28 239	48 455	29 157
Canada	36 038	26 992	42 834	32 830	45 357	35 148	46 780	36 226	47 996	37 106	49 832	38 195	50 368	38 655	50 822	39 111	51 626	39 837	53 350	41 071
Chile	3 690 623	3 432 280	5 619 936	5 226 540	6 513 881	6 057 909	6 979 141	6 490 601	7 412 107	6 893 260	7 877 707	7 326 268	8 481 551	7 887 842	8 975 815	8 347 507	9 348 496	8 694 101	9 669 058	8 991 462
Czech Republic	160 922	124 729	272 651	208 198	295 273	227 083	302 500	233 263	301 868	232 827	310 620	238 857	320 624	245 750	332 424	253 880	355 633	269 871	383 304	288 936
Denmark	281 700	164 922	359 300	220 667	386 457	247 013	391 951	250 237	393 463	252 625	397 600	255 926	403 600	258 738	406 600	260 743	412 045	264 509	421 547	271 227
Estonia	3 931	3 068	10 045	8 250	10 368	8 324	11 004	8 813	11 732	9 446	12 338	9 915	13 045	10 638	14 033	11 455	14 992	12 233	16 103	13 687
Finland	26 362	17 431	37 372	26 026	40 243	28 422	41 413	29 247	42 447	29 654	42 704	29 641	43 268	29 918	43 783	30 306	43 245	30 306	43 984	30 806
France	26 712	18 923	33 580	24 250	35 489	25 576	36 143	25 979	36 616	26 269	37 235	26 578	37 635	26 768	37 946	26 920	38 600	27 329	39 436	28 110
Germany	34 400	19 539	41 000	23 842	43 300	26 088	44 400	26 730	44 900	27 171	45 970	27 791	47 100	28 411	48 300	29 082	49 100	29 563	50 546	30 474
Greece	15 459	12 098	23 849	17 864	23 929	17 537	23 309	17 103	21 101	15 787	21 322	16 011	20 833	15 792	20 678	15 363	20 841	15 434	21 214	15 671
Hungary	1 086 240	698 166	2 336 124	1 442 307	2 645 712	1 717 097	2 840 112	1 842 297	2 934 744	1 922 257	3 053 364	1 999 953	3 172 680	2 078 105	3 343 284	2 223 284	3 730 608	2 480 854	4 138 492	2 752 097
Iceland	2 712 000	2 022 102	5 448 000	3 963 490	5 628 000	4 030 857	6 120 000	4 365 845	6 660 000	4 725 047	7 176 000	5 101 256	7 668 000	5 417 104	8 292 000	5 883 699	8 760 000	6 260 099	9 152 462	6 524 564
Ireland	28 924	20 956	42 779	34 031	41 785	31 190	42 557	31 561	43 022	31 520	43 363	31 683	43 746	32 351	44 720	33 350	45 500	33 974	46 774	34 895
Israel[1]	95 664	70 691	119 233	96 250	125 405	104 026	128 550	107 163	128 664	107 597	134 748	111 832	139 728	115 260	143 604	117 837	147 912	121 713	153 221	125 524
Italy	21 550	15 291	26 845	18 918	28 872	19 984	29 440	20 328	29 983	20 657	30 347	20 931	30 550	21 052	30 619	21 093	30 755	21 174	31 292	21 462
Japan	4 987 116	4 002 481	4 983 948	3 975 163	4 821 385	3 807 417	4 893 341	3 848 998	4 835 595	3 794 828	4 972 455	3 886 313	5 083 906	3 960 010	5 138 692	3 996 545	5 145 307	3 999 772	5 188 742	4 029 561
Korea	19 849 729	18 073 190	33 658 172	29 570 496	36 816 740	32 220 027	38 811 570	33 756 834	40 353 852	34 915 409	41 428 224	35 774 131	42 908 652	36 915 462	44 640 408	38 272 378	45 853 704	39 216 217	48 166 599	40 968 007
Latvia	2 316	1 670	7 476	5 444	7 632	5 286	7 896	5 463	8 268	5 777	8 892	6 264	9 588	6 815	10 140	7 195	10 980	7 750	11 881	8 508
Lithuania	3 187	2 270	7 398	5 667	6 949	5 401	7 270	5 636	7 707	5 955	8 116	6 284	8 623	6 652	9 370	7 217	10 216	7 898	11 121	8 662
Luxembourg	35 875	25 591	47 043	34 156	50 674	36 278	51 971	37 354	53 630	37 792	54 920	38 443	55 858	38 631	56 448	38 936	58 238	41 340	59 497	41 944
Mexico	48 607	47 400	81 740	77 504	91 386	82 933	95 224	86 121	98 922	89 190	103 246	92 777	107 551	96 320	111 754	99 737	116 276	103 401	122 208	109 711
Netherlands	31 901	21 176	43 146	28 977	46 287	31 612	46 670	31 733	47 950	31 242	48 360	32 676	49 540	34 552	50 120	34 976	50 730	35 362	51 567	35 863
New Zealand	34 923	28 159	44 521	35 389	49 395	41 557	51 278	42 875	53 234	44 244	54 733	45 293	56 110	46 257	57 649	47 334	58 824	48 157	60 360	49 232
Norway	298 385	206 788	443 613	312 312	491 072	346 730	504 535	357 183	524 887	371 568	537 881	383 500	557 749	398 425	566 279	407 905	578 745	418 882	596 477	432 621
Poland	23 061	16 649	33 711	25 270	38 731	29 198	40 205	30 278	41 652	31 339	44 513	33 437	46 136	34 628	47 708	35 780	50 573	37 881	54 191	40 534
Portugal	10 922	8 470	15 581	12 158	16 208	12 435	17 040	13 158	17 653	12 807	17 343	12 630	17 415	12 467	17 716	12 807	17 998	13 051	18 343	13 458
Slovak Republic	5 048	4 050	8 820	6 808	9 592	7 404	9 810	7 574	10 001	7 725	10 422	8 034	10 661	8 201	10 975	8 421	11 419	8 733	12 131	9 237
Slovenia	8 894	5 732	15 769	10 557	17 373	11 568	17 538	11 707	17 673	11 824	17 948	11 981	18 092	12 062	18 338	12 202	18 839	12 487	19 671	12 961
Spain	17 319	13 882	23 252	18 765	25 515	19 892	25 894	19 975	26 027	20 062	26 191	20 169	26 475	20 845	26 449	20 828	26 550	20 949	26 923	21 199
Sweden	263 581	174 686	352 470	257 589	376 309	282 810	387 960	291 356	398 220	298 247	408 188	308 651	414 105	312 312	424 963	319 215	435 821	326 852	453 539	339 369
Switzerland	72 910	59 918	83 088	68 856	85 671	70 724	89 364	73 955	90 359	74 683	86 820	72 073	86 558	71 868	89 160	73 812	89 599	74 146	90 908	75 092
Turkey[2]	5 545	3 952	14 913	10 989	19 708	14 458	21 973	16 094	24 674	18 007	27 487	19 996	31 191	22 654	37 357	27 109	41 843	29 996	46 921	33 705
United Kingdom	24 910	18 481	33 382	24 841	34 083	25 538	34 864	26 241	35 088	26 678	35 120	26 836	35 978	27 552	37 102	28 397	38 575	29 511	39 328	30 124
United States	33 129	24 877	43 196	32 857	46 895	35 811	47 746	36 460	48 774	36 359	50 099	37 274	50 963	37 900	51 945	38 531	53 376	39 445	54 951	41 889

Note: The annual average gross wage earnings in euro area countries are expressed in euros for all years.
1. Information on data for Israel: http://oe.cd/israel-disclaimer.
2. Wage figures are based on the old definition of average worker (ISIC D, rev3.) for years 2000 to 2006.

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Part II. Country details, 2018

This part of the publication provides the individual country details for 2018 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-six 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 rates (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
(2017-18 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 public 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 2018

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**	57 471	85 778	143 249	57 471
	Principal Gross wage earnings	57 471	85 778	143 249	57 471
	Spouse Gross wage earnings	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				
	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)**	57 471	85 778	143 249	57 471
5.	**Central government income tax liability (exclusive of tax credits)**				
	Income tax	10 225	19 425	40 634	10 225
	Medicare Levy	1 149	1 716	2 865	1 149
	Temporary Budget Repair Levy	0	0	0	0
	Total	11 375	21 140	43 499	11 375
6.	**Tax credits**				
	Basic credit	138	0	0	138
	Married or head of family	0	0	0	0
	Children				
	Other				
	Total	138	0	0	138
7.	**Central government income tax finally paid (5-6)**	11 237	21 140	43 499	11 237
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**	0	0	0	0
10.	**Total payments to general government (7 + 8 + 9)**	11 237	21 140	43 499	11 237
11.	**Cash transfers from general government**				
	For head of family	0	0	0	0
	For two children	0	0	0	13 479
	Total	0	0	0	13 479
12.	**Take-home pay (1-10+11)**	46 235	64 638	99 750	59 714
13.	**Employers' payroll tax**	3 430	5 119	8 549	3 430
14.	**Average rates**				
	Income tax	19.6%	24.6%	30.4%	19.6%
	Employees' social security contributions	0.0%	0.0%	0.0%	0.0%
	Total payments less cash transfers	19.6%	24.6%	30.4%	-3.9%
	Total tax wedge including employer payroll taxes	24.1%	28.9%	34.3%	1.9%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	36.0%	34.5%	39.0%	56.0%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	39.6%	38.2%	42.4%	58.5%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Australia 2018

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**	85 778	114 085	143 249	114 085
	Principal Gross wage earnings	85 778	85 778	85 778	85 778
	Spouse Gross wage earnings	0	28 307	57 471	28 307
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)**	85 778	114 085	143 249	114 085
5.	**Central government income tax liability (exclusive of tax credits)**				
	Income tax	19 425	21 345	29 650	21 345
	Medicare Levy	1 716	2 282	2 865	2 282
	Temporary Budget Repair Levy	0	0	0	0
	Total	21 140	23 627	32 515	23 627
6.	**Tax credits**				
	Basic credit	0	445	138	445
	Married or head of family	0	0	0	0
	Children				
	Other				
	Total	0	445	138	445
7.	**Central government income tax finally paid (5-6)**	21 140	23 182	32 377	23 182
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**	0	0	0	0
10.	**Total payments to general government (7 + 8 + 9)**	21 140	23 182	32 377	23 182
11.	**Cash transfers from general government**				
	For head of family	0	0	0	0
	For two children	6 673	0	0	0
	Total	6 673	0	0	0
12.	**Take-home pay (1-10+11)**	71 310	90 903	110 872	90 903
13.	**Employers' payroll tax**	5 119	6 808	8 549	6 808
14.	**Average rates**				
	Income tax	24.6%	20.3%	22.6%	20.3%
	Employees' social security contributions	0.0%	0.0%	0.0%	0.0%
	Total payments less cash transfers	16.9%	20.3%	22.6%	20.3%
	Total tax wedge including employer payroll taxes	21.5%	24.8%	27.0%	24.8%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	34.5%	34.5%	34.5%	34.5%
	Total payments less cash transfers: Spouse	30.8%	21.0%	36.0%	21.0%
	Total tax wedge: Principal earner	38.2%	38.2%	38.2%	38.2%
	Total tax wedge: Spouse	34.7%	25.4%	39.6%	25.4%

The national currency is the Australian dollar (AUD). For the 2017-2018 income tax year AUD 1.34 was equal to USD 1. The average worker earned AUD 85 778 in 2017-2018.

1. Personal income tax system

1.1. Federal 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 18 200 by resident taxpayers is subject to tax at a zero rate.
- Standard marital status reliefs: No relief available.
- Relief(s) for children: See Section 4.2 for more detail on transfers related to dependent children.
- Relief for social security contributions and other taxes: No such contributions are levied.
- Reliefs for low-income earners: A tax offset worth a maximum of AUD 445 is available for low-income earners called the Low Income Tax Offset. Taxpayers whose taxable income was less than AUD 37 000 in 2017-2018 are eligible to receive the full amount of the offset. The offset is reduced by AUD 0.015 for every AUD 1 by which a taxpayer's taxable income exceeds AUD 37 000 and is no longer available once a taxpayer's taxable income exceeds AUD 66 667.
- Relief for mature age workers: No relief available.
- Relief for recipients of certain social security benefits: The Beneficiary Tax Offset is available for those who receive certain taxable social security benefits called 'rebatable benefits'. It ensures that a person who receives a rebatable benefit does not pay any tax on that income. The amount of the Beneficiary Tax Offset available to an individual is determined by the total amount of the rebatable benefit(s) they receive in an income year.
- Relief for taxpayers who maintain a dependant who is genuinely unable to work: A taxpayer who maintains a dependant who is genuinely unable to work due to invalidity or carer obligations may be eligible for the Dependent (Invalid and Carer) Tax Offset. This tax offset is worth a maximum of AUD 2 666 in 2017-2018. To qualify for the offset, the combined adjusted taxable income of the taxpayer and their spouse (where one exists) should not exceed AUD 100 000 in 2017-2018. The amount of offset that may be received is reduced by AUD 1 for every AUD 4 by which the dependant's adjusted taxable income exceeds AUD 282 and is no longer available once the dependant's adjusted taxable income exceeds AUD 10 946.
- There are also tax rebates for taxpayers in receipt of a taxable Australian Government pension, as well as Australians who are of Age Pension age and who meet all of the Age Pension eligibility criteria except the income and/or asset tests. The Seniors and Pensioners Tax Offset is worth up to AUD 2 230 for a single taxpayer, up to AUD 1 602 for each member of a senior couple not

separated by illness and AUD 2 040 for each member of a senior couple separated by illness. The offset is withdrawn at the rate of AUD 0.125 for every AUD 1 that a recipient's income exceeds their effective tax-free threshold. For a single taxpayer, this means that the offset is withdrawn from AUD 32 279 and is no longer available once income reaches AUD 50 119. For members of a couple not separated by illness, the offset is withdrawn from a combined income of AUD 57948 and is no longer available once combined income reaches AUD 83 580.

- Other: No other standard relief available.

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

- Relief for superannuation: Contributions to a low-income spouse's superannuation attract an 18% rebate up to a maximum rebate of AUD 540. In 2017-2018, the Low Income Superannuation Tax Offset matches AUD 0.15 for each AUD 1 of concessional contributions from at least AUD 10 up to AUD 500 a year for eligible individuals with annual incomes up to AUD 37 000. In addition in 2017-18, eligible individuals with incomes not exceeding AUD 51 813 can make non-concessional contributions and receive a co-contribution of 50%, up to a maximum of AUD 500.
- Relief for private health insurance: For the 2017-2018 income year, there are different rebate amounts depending on age and income. For individuals below 65 years without dependants and with annual income for surcharge purposes below AUD 90 000 the rebate is 25.934% from 1 July 2017 to 31 March 2018 and 25.415% until 30 June 2018 of the cost of cover for eligible private health care. For families (couples and individuals with at least one dependent child) below 65 years with annual income for surcharge purposes below AUD 180 000, the rebate is 25.934% from 1 July 2017 to 31 March 2018 and 25.415% until 30 June 2018 of the cost of cover for eligible private health care. The threshold is increased by AUD 1 500 for each dependent child after the first.

The rebate percentages are reduced for individuals and families with annual incomes above these amounts. The rebate percentages are also higher for individuals and families aged 65 years or more.

- Relief for medical expenses: In 2017-2018, there is an offset for annual net out-of-pocket medical expenses. Eligibility for the offset is based on annual income. This offset is being phased out, so for the 2017-2018 income year, it is only available to individuals who have medical expenses relating to disability aids, attendant care or aged care. Single taxpayers with an adjusted taxable income (ATI) of AUD 90 000 or less, and families with ATI below AUD 180 000 (plus AUD 1 500 for each additional dependent child after the first), are able to claim 20% of medical expenses over AUD 2 333. Single taxpayers and families with incomes above these respective amounts are able to claim 10% of medical expenses over AUD 5 503.
- 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	18 200	NIL
18 201	37 000	NIL + 19c for each AUD in excess of AUD 18 200
37 001	87 000	AUD 3 572 + 32.50c for each AUD in excess of AUD 37 000
87 001	180 000	AUD 19 822 + 37c for each AUD in excess of AUD 87 000
180 001 and over		AUD 54 232+ 45c for each AUD in excess of AUD 180 000

To nominally contribute towards the cost of basic medical and hospital care a Medicare Levy is imposed on the taxable incomes of resident taxpayers. In 2017-2018, the levy applied at the rate of 2.0% of the taxable income of an individual.

Certain thresholds are applied before the levy is imposed. In 2017-2018, an individual taxpayer was not liable for the levy where their taxable income did not exceed AUD 21 980. A taxpayer in a couple or sole parent family who is not receiving Parenting Payment, (see section 4.2), does not pay the levy if the taxable family income does not exceed AUD 37 089. The threshold is increased by AUD 3 406 for each dependent child. Where an individual's taxable income exceeds AUD 21 980, or a family's income exceeds AUD 37 089 (plus AUD 3 406 for each dependent child), the levy shades in at a rate of 10% of the excess of taxable income over the threshold, until the levy is equal to 2.0% of the individual's or family's taxable income.

For 2017-2018, individual senior Australians of Age Pension age were not liable to pay the levy where their taxable income did not exceed AUD 34 758. Where taxable income exceeded AUD 34 758 but did not exceed AUD 43 447, the levy liability was equal to 10% of the excess of taxable income over AUD 34 758. Pensioner families (including couples and sole parents on Parenting Payment) and senior Australian families of Age Pension age, did not become liable to pay any Medicare levy until their combined income in 2017-2018 exceeded AUD 48 385 (plus AUD 3 406 for each dependent child).

Individual taxpayers who had income for surcharge purposes greater than AUD 90 000 in 2017-2018 (or if a couple had a combined income greater than AUD 180 000) but who did not have a complying private health insurance policy, were liable for the Medicare levy surcharge, which is applied as a flat rate on their taxable income. The surcharge rates are 1%, 1.25% and 1.5% depending on the taxpayer's taxable income above these thresholds. However, affected taxpayers typically purchase a complying policy, as the cost of such a policy is generally less than the surcharge. The surcharge is therefore 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). In 2017-2018 the Superannuation Guarantee required employers to pay 9.5% on top of employees' gross ordinary time earnings to an approved superannuation fund, provided they earn more than AUD 450 per month (they may also choose to make contributions for workers earning less than this threshold). This threshold is not indexed. There is also a limit to the Superannuation 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 2017-2018 tax year this threshold was AUD 52 760 per quarter. The Superannuation Guarantee rate will remain at 9.5% until 2020 21, then increase by 0.5 percentage points each year until it reaches 12% in 2025-26.

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 employers are legislatively required to make contributions to approved superannuation funds legislated, superannuation funds are private, although subject to regulation. Employers' contributions are generally made to individual accounts and form part of employees' personal superannuation assets. Some defined benefit schemes for public sector employees and private defined benefit schemes also exist. The employee may take superannuation benefits as either a lump sum payment or pension on retirement. Accordingly, superannuation contributions are reflected in the Non-Tax Compulsory Payment calculations.

3. Other taxes

3.1. Pay-roll tax

Australian State Governments levy pay-roll taxes on wages, cash or in kind, provided by larger employers to their employees. The rates of pay-roll tax, thresholds and deductions differ between States. In New South Wales, the State with the largest population, the pay-roll tax rate in 2017-18 was 5.45% for employers with total Australian wages in excess of AUD 750 000. Employers are 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 750 000. The exempt amount is reduced based on the proportion of the employer's New South Wales pay roll to its total Australian pay roll.

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

- Family Tax Benefit (FTB) Part A is paid to a parent, guardian or an approved care organisation to help families meet the costs of raising children. For 2017-2018, the base rate of FTB(A) is payable where the combined 'adjusted' taxable income of parents does not exceed AUD 94 316. 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 1 529.35 for a dependent child aged under 15 and for dependent full time students aged 16 to 19. A higher FTB(A) benefit is available for lower income earners, and the value of this benefit is dependent on the age and number of children. For 2017-2018 families may receive a maximum payment of AUD 4 766.90 for each child aged under 13 years and AUD 6 201.35 for each child aged 13 to 15 years and for each child aged 16–19 in full time secondary school. For 2017-18 an end of year supplement of AUD 737.30 per child is available for families with a combined taxable income of less than AUD 80 000. For 2017-2018, the higher benefit tapers out at the rate of AUD 0.20 for each dollar of income over AUD 52 706 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 between 5 and 12 years of age.
- Family Tax Benefit Part B (FTB(B)) is targeted at single income couple and sole parent families. Eligibility for FTB(B) is contingent upon having a FTB child under the age of 16 or a qualifying dependent full-time student up to of the end of the calendar year they turn 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 100 000 or less for the financial year for the family to be eligible. A secondary earner income threshold is also applied to the parent earning the lower amount. For 2017-2018, this threshold is AUD 5 548, 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 2017-2018, the maximum payment is AUD 3 190.10 if the youngest dependent child is aged between 5 and 15 (or up to the end of the calendar year they turn 18 years if the dependent child is a full-time student), and AUD 4 412.85 if there is a child under 5 years. The attached calculations assume each dependant is between 5 and 12 years of age.
- Recipients of the Family Tax Benefit may elect to receive the benefit in fortnightly instalments or as an end of year lump sum payment.
- A Newborn Supplement and Newborn Upfront Payment may be paid to families for each baby born from 1 March 2014. To be eligible families will need to be eligible for Family Tax Benefit Part A and not be accessing Parental Leave Pay for that child. For multiple births, Parental Leave Pay may be payable for one child and Newborn Supplement for the other child or children. The total value of the Newborn Supplement and Newborn Upfront Payment in 2017-2018 is up to AUD 2 158.89 for the first child (and all multiple births) and up to AUD 1 080.54 for subsequent children. This supplement and upfront payment replace the previous Baby Bonus.
- On 1 January 2011, Australia's first Paid Parental Leave scheme commenced. The scheme provides two government-funded payments: Parental Leave Pay and Dad and Partner Pay. Parental Leave Pay (PLP) provides the primary carer of a child with 18 weeks' pay at the national minimum wage (AUD 695 per week before tax

in 2017-2018), in the year following the child's birth or adoption. The primary carer must have worked for at least 10 of the 13 months prior to the birth or adoption and for at least 330 hours in that 10-month period with no more than an eight-week gap between two working days. The primary carer's adjusted taxable income must be AUD 150 000 or less in the financial year prior to the date of claim or date of birth or adoption, whichever is earlier. PLP and Newborn Supplement cannot be paid for the same child. A person cannot claim FTB(B) or the dependent spouse, child housekeeper and housekeeper tax offsets while they are receiving PLP.

- Dad and Partner Pay (DAPP) provides the father or partner of the primary carer of a child with two weeks' pay at the national minimum wage (AUD 695 per week before tax in 2017-18), in the year following the child's birth or adoption. The father or partner must have worked for at least 10 of the 13 months prior to the birth or adoption and for at least 330 hours in that 10-month period with no more than an eight-week gap between two working days. The father or partner's adjusted taxable income must be AUD 150 000 or less in the financial year prior to the date of claim or date of birth or adoption, whichever is earlier. DAPP and PLP may be paid for the same child.
- Child Care Benefit (CCB) is a means-tested payment that assists families with the cost of approved childcare. In 2017-18 CCB is payable to eligible families with incomes up to AUD 156 914 for one child in care, with the income limit rising for each additional child in care. Families with annual incomes under AUD 45 114receive the maximum rate of CCB, which is AUD 4.30 per hour for a non-school child in care. CCB is payable for a maximum of 50 hours per week. To receive more than 24 hours of CCB per week both parents must be participating in work, training or study activities for at least 15 hours per week. The attached calculations assume no childcare usage.
- Child Care Rebate (CCR) is an additional payment aimed at promoting workforce participation. CCR is not means tested. It pays 50% of out-of-pocket childcare expenses (after any CCB), up to an annual cap of AUD 7 613 per child in 2017-18. Families have to participate in work; training or study related commitments at some time during a week or have an exemption. No minimum number of hours is required.
- Parenting Payment is a taxable payment payable to partnered and sole parents for low income families with a qualifying child under six and eight years of age respectively. In 2017-2018 the maximum annual amount of Parenting Payment (Partnered) (PP(P)) was AUD 12 812.80. Only one parent in a couple can be entitled to PP(P). The maximum annual amount of Parenting Payment (Single) (PP(S)) was AUD 19 623.5. 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 2 704 up to AUD 6 604 and reduces at a rate of AUD 0.60 per AUD 1 for income over AUD 6 604. Under the PP(P) income test, a spouse receives a reduced Parenting Payment, tapering at a rate of AUD 0.60, when the higher earning partner's income exceeds AUD 25 674. If the spouse has little or no income (less than AUD 2 704 per annum), he or she would not receive any Parenting Payment when the higher earning partner's income exceeds AUD 45 296. PP(S) reduces by AUD 0.40 for each AUD 1 of income above AUD 4 903.60 plus AUD 639.60 for each child other than the first. The attached calculations assume dependants are aged six and seven.

- The Newstart allowance is a taxable payment payable to single persons and partnered individuals who are unemployed. It is also payable to a member of a couple if their youngest child is aged six years or more and to single parents if their youngest child is aged eight years or more. It is conditional on recipients fulfilling a personal Job Plan, which typically involves taking part in activities such as job seeking and training. In 2017-2018 the Newstart allowance for singles without dependants was AUD 14 048.84 and for partnered individuals was AUD 12 684.88. These payments taper out at a rate of AUD 0.50 per AUD 1 for incomes between AUD 2 704 and AUD 6 604, and reduce at a rate of AUD 0.60 per AUD for incomes over AUD 6 604. The Newstart allowance for partnered individuals reduces by AUD 0.60 for each AUD 1 of their partner's income above AUD 24 856 (taking into account the Energy Supplement). For single principal carers with dependent child(ren), it reduces at a rate of AUD 0.40 per AUD 1 for incomes over AUD 2 704.
- A non-taxable supplementary payment called Pharmaceutical Allowance (PA) is payable to eligible persons; for example, persons who receive the PP(S). PA is added to the maximum basic rate of PP(S) before a person's PP(S) entitlement is calculated. Anyone with a PP(S) entitlement, after PA has been added, receives the full amount of PA. For 2017-2018, the payment is AUD 161.20.
- A Telephone Allowance is available on a quarterly basis to eligible individuals, including individuals who receive PP(S) or PA if their PP(S) entitlement is reduced to 0. The basic rate of the Telephone Allowance is AUD 114.74 for 2017-2018, with a higher rate of AUD 170.58 available for recipients of Disability Support Pension who are under the age of 21 and where a home internet service is connected in the individual's or partner's name. The attached calculations assume the standard rate is applicable.

4.3. Other transfers

Single Income Family Supplement

- The Single Income Family Supplement (SIFS) is a non-taxable payment for households with one main income earner. This payment has been phased out, with grandfathering commenced 1 July 2017.
- The SIFS phases in at a rate of AUD 0.025 for every AUD 1 above AUD 68 000 until it reaches AUD 300. Once the main earner's income exceeds AUD 120 000 the SIFS reduces by AUD 0.01 for every AUD 1. If there is a secondary earner, every AUD of their income above AUD 16 000, reduces the SIFS by AUD 0.15.

Income Support Bonus

- The Income Support Bonus ceased as of 31 December 2016.

Energy assistance payment

- Recipients of eligible pensions (Age Pension, Parenting Payment Single and Disability Support Pension) received a one off payment of AUD 75 for singles and AUD 62.50 for couples (each). The one-off energy assistance payment is no longer available to new recipients.

5. Recent changes in the tax/benefit system

In 2017-18, the following changes to the benefits system commenced:

- Payment of the Single Income Family Supplement ceased for new claimants from 1 July 2017.
- Cease payment of FTB Energy Supplement amounts for new claimants from 20 September 2016 on 20 March 2017.

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 now conducted on a biannual basis (it was previously conducted on a quarterly basis up to the June 2012 quarter) and is based on a representative sample of employers in each industry. As a result of this change in frequency, average weekly earnings for the 2017-2018 income tax year have been calculated as the average of the two biannual figures (November 2017 and May 2018 (released in August 2018)).

In August 2009, the Australian Bureau of Statistics (ABS) redesigned the survey and replaced the industry classification based on the 1993 edition of the Australian and New Zealand Standard Industrial Classification (ANZSIC), which had been in use since 1994, with the 2006 edition of ANZSIC. The 2006 edition of ANZSIC was developed to provide a more contemporary industrial classification system, taking into account issues such as changes in the structure and composition of the economy, changing user demands and compatibility with major international classification standards. Accordingly, the average wage figure for 2010 and later years is inconsistent with that provided for previous years.

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 of private households;
- 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;

- persons paid solely by commission without a retainer; and
- employees paid under the Parental Leave Pay Scheme.

The sample for the AWE survey, like most ABS business surveys, is selected from the ABS Business Register which is primarily based on registrations with 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.

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. 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.

In 2014-15, around 95 per cent of the employers' estimated superannuation guarantee obligations were paid to employees.

2018 Parameter values

Average earnings/yr	Ave_earn	85 778	
Low Income Tax Offset	low_inc_cr	445	
	low_inc_lim	37 000	
	low_inc_redn	0.015	
Tax schedule	tax_sch	0.000	18 200
		0.190	37 000
		0.325	87 000
		0.370	180 000
		0.450	
Medicare levy	medic_rate	0.02	
exemption limits	sing_lim	21 980	
married	m_lim	37 089	
sing parent receiving PPS	SAPTO_lim	48 385	
+ per child	ch_lim	3 406	
shading-in rate	shade_rate	0.1	
Part A FTB max	FTB_A_max	4 766.9	
Part A FTB basic	FTB_A_base	1 529.35	
part A income limit 1	FTB_A_lim1	52 706	
part A income limit 2	FTB_A_lim2	94 316	
reduction rate 1	FTB_A_taper1	0.2	
reduction rate 2	FTB_A_taper2	0.3	
Part A FTB Energy Supplement (ES) max	FTB_A_CES_max	91.25	
Part A FTB ES basic	FTB_A_CES_basic	36.5	
Part A FTB max end of year supplement	FTB_A_supp	737 3	
Part A FTB max end of year supplement threshold	FTB_A_supp_lim	80 000	
Part B FTB	FTB_B	3 190.1	
part B partner income limit	FTB_B_lim	5 548	
reduction rate	FTB_B_taper	0.2	
Income limit (primary earner)	FTB_B_lim_p	100 000	
Part B FTB ES no child <5 years old	FTB_B_CES_5	51.1	
Single Income Family Supplement max rate	SIFS_max	300	
Single Income Family Supplement phase-in threshold	SIFS_in_lim_pr	68 000	
Single Income Family Supplement taper in Rate - primary earner	SIFS_in_taper_pr	0.025	
Single Income Family Supplement phase-out threshold (primary earner)	SIFS_out_lim_pr	120 000	
Single Income Family Supplement taper out rate (primary earner)	SIFS_out_taper_pr	0.01	
Single Income Family Supplement phase out threshold (secondary earner)	SIFS_out_lim_sec	16 000	
Single income family supplement phase out taper - secondary earner	SIFS_out_taper_sec	0.15	
Parenting payment single	PPS	19 623.5	
reduction rate	PPS_taper	0.4	
income limit	PPS_lim	4 903.6	
additional limit per child	PPS_ch_lim	639.6	
Parenting payment single Energy Supplement (ES)	PPS_CES	312	
Pharmaceutical allowance	PA	161.2	
State pay-roll tax rate (NSW)	Pay_roll_rate	0.0545	
Additional parameters			
Newstart allowance single rate	NSAS	14 048.83	
Newstart allowance single ES	NSAS_CES	228.80	
Newstart allowance partnered rate	NSAP	12 685	
Newstart allowance partnered ES	NSAP_CES	205.40	
reduction rate 1	NSA_taper1	0.5	

reduction rate 2	NSA_taper2	0.6
income limit 1	NSA_lim1	2 704
income limit 2	NSA_lim2	6 604
Senior Australian and Pensioner Tax Offset	SAPTO	2 230
Senior Australian and Pensioner Tax Offset single threshold	SAPTO_thresh	32 279
Senior Australian and Pensioner Tax Offset taper rate	SAPTO_taper	0.125
Telephone allowance	Tele_A	114.74

2018 Tax Equations

The equations for the Australian system in 2018 are mostly repeated for each individual of a married couple. However, the spouse credit is relevant only to the calculation for the principal earner and the calculation of the 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. In addition, the affixes "_princ" and "_spouse" indicate the value for the principal and spouse respectively. Where the calculation for one earner takes into account variables for the other earner, the affix "_oth" is used. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
2.	Allowances	tax_al	B	0
3.	Credits in taxable income:			
	Credits in taxable income of principal	taxbl_cr_princ	P	IF(AND(Children>0,Married=0),Taper(PPS,earn_princ,PPS_lim+PPS_ch_lim*(Children-1),PPS_taper),IF(AND(Children=0,Married=0),taper2(NSAS,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2),IF(Married>0,taper3(NSAP,earn_princ,earn_spouse,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2,0),,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(Married>0,taper3(NSAP,earn_spouse,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2, NSAP_CES),0)))
4.	CG taxable income	tax_inc	B	earn+taxbl_cr
5.	CG tax before credits			
	Medicare Levy	med_levy	B	medicare(tax_inc,sing_lim,m_lim,SAPTO_lim,ch_lim,shade_rate,medic_rate,Married,tax_inc_oth,Children)
	Tax liability	liab	P	Tax(tax_inc, tax_sch)
6.	Tax credits :			
	Low income credit	low_cr	B	Taper(low_inc_cr,tax_inc,low_inc_lim,low_inc_redn)
	Senior Australian and Pensioner Tax Offset	sap_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(SAPTO,tax_inc,SAPTO_thresh,SAPTO_taper),0)
	Beneficiary tax offset	ben_cr	B	IF(AND(taxbl_cr>0, NOT(AND(Children>0, Married=0))), Tax(taxbl_cr, tax_sch), 0)
	Total	tax_cr	B	low_cr+sap_cr+ben_cr
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:			

	Line in country table and intermediate steps	Variable name	Range	Equation
	Family Tax Benefit (Part A)	ftbA	P	IF(PA>0,((FTB_A_max+FTB_A_CES_max+IF(princ_earn+spouse_earn<FTB_A_supp_lim,FTB_A_supp,0))*Children+IF(Children>2,(Children-2)*FTB_A_large,0)),MAX(((FTB_A_max+FTB_A_CES_max+IF(princ_earn+spouse_earn<FTB_A_supp_lim,FTB_A_supp,0))*Children-Positive((princ_earn+taxbl_cr+spouse_earn+taxbl_cr_spouse)-FTB_A_lim1)*FTB_A_taper1),Positive((FTB_A_base+FTB_A_CES_basic)*Children-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+FTB_B_CES_5, 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+PPS_CES,earn_princ, PPS_lim+PPS_ch_lim*(Children-1),PPS_taper)>0,PA,0)
	Energy Supplement	CES	J	IF(AND(Children>0,Married=0,Taper(PPS+PPS_CES,earn_princ,PPS_lim+PPS_ch_lim*(Children-1),PPS_taper)>0), MAX(0,Taper(PPS+PPS_CES,earn_princ,PPS_lim+PPS_ch_lim*(Children-1),PPS_taper)-Taper(PPS, earn_princ,PPS_lim+PPS_ch_lim*(Children-1),PPS_taper)),IF(AND(Children>0,Married=0,Taper(PPS+PPS_CES,earn_princ,PPS_lim+PPS_ch_lim*(Children-1),PPS_taper)=0),0,IF(AND(Children=0,Married=0,taper2(NSAS+NSAS_CES,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2)>0),taper2(NSAS+NSAS_CES,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1, NSA_taper2)-taper2(NSAS,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2),IF(AND(Married>0,taper3(NSAP,earn_spouse,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2,NSAP_CES)>0),taper3(NSAP,earn_spouse,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2,NSAP_CES)-taper3(NSAP,earn_spouse,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2,NSAP_CES-NSAP_CES)))))+IF(AND(Married>0, ,taper2(NSAP+NSAP_CES,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2)>0), max(0, taper2(NSAP+NSAP_CES,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2)-taper2(NSAP,earn_princ,NSA_lim1,NSA_lim2,NSA_taper1,NSA_taper2)),0)
	Single Income Family Supplement	SIFS	J	sifs(tax_inc_princ,tax_inc_spouse,ftbA+ftbB,SIFS_max,SIFS_in_lim_pr, SIFS_in_taper_pr,SIFS_out_lim_pr,SIFS_out_taper_pr,SIFS_out_lim_sec,SIFS_out_taper_sec)
	Telephone Allowance	TeleA	P	IF(Married=0,IF(Children>0,IF(Taper(PPS+PA+PPS_CES,earn_princ,PPS_lim+PPS_ch_lim*(Children-1),PPS_taper)>0,Tele_A,0),0),0)
		cash_trans	J	ftbA+ftbB+taxbl_cr_princ+PA+taxbl_cr_spouse+Tele_A +CEA=CES+SKB+SIFS
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 2018

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**		31 570	47 120	78 690	31 570
2.	**Standard tax allowances**					
	Basic allowance		60	60	60	60
	Married or head of family					
	Dependent children		0	0	0	880
	Deduction for social security contributions and income taxes		5 675	8 471	12 911	5 675
	Work-related expenses		132	132	132	132
	Other		0	0	0	0
		Total	5 867	8 663	13 103	6 747
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		25 703	38 457	65 587	24 823
5.	**Central government income tax liability (exclusive of tax credits)**		3 325	7 386	17 375	3 017
6.	**Tax credits**					
	Basic credit		0	0	0	0
	Married or head of family		0	0	0	669
	Children					
	Other		400	400	400	400
		Total	400	400	400	1 069
7.	**Central government income tax finally paid (5-6)**		2 925	6 986	16 975	1 948
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		5 675	8 471	12 911	5 675
	Taxable income					
		Total	5 675	8 471	12 911	5 675
10.	**Total payments to general government (7 + 8 + 9)**		8 600	15 457	29 886	7 623
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	5 168
		Total	0	0	0	5 168
12.	**Take-home pay (1-10+11)**		22 970	31 663	48 804	29 115
13.	**Employer's wage dependent contributions and taxes**					
	Employer's compulsory social security contributions		6 759	10 088	15 376	6 759
	payroll taxes		2 178	3 251	5 430	2 178
		Total	8 937	13 339	20 805	8 937
14.	**Average rates**					
	Income tax		9.3%	14.8%	21.6%	6.2%
	Employees' social security contributions		18.0%	18.0%	16.4%	18.0%
	Total payments less cash transfers		27.2%	32.8%	38.0%	7.8%
	Total tax wedge including employer's social security contributions		43.3%	47.6%	50.9%	28.1%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		43.3%	48.2%	36.9%	43.3%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		55.8%	59.6%	40.9%	55.8%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Austria 2018

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**	47 120	62 669	78 690	62 669
2.	**Standard tax allowances**				
	Basic allowance	60	120	120	120
	Married or head of family				
	Dependent children	880	880	1 200	0
	Deduction for social security contributions and income taxes	8 471	10 800	14 146	10 800
	Work-related expenses	132	264	264	264
	Other	0	0	0	0
	Total	9 543	12 064	15 730	11 184
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	37 577	50 606	62 960	51 486
5.	**Central government income tax liability (exclusive of tax credits)**	7 017	7 047	10 249	7 417
6.	**Tax credits**				
	Basic credit	0	0	0	0
	Married or head of family	669	0	0	0
	Children				
	Other	400	800	800	800
	Total	1 069	800	800	800
7.	**Central government income tax finally paid (5 - 6)**	5 948	6 247	9 449	6 617
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	8 471	10 800	14 146	10 800
	Taxable income				
	Total	8 471	10 800	14 146	10 800
10.	**Total payments to general government (7 + 8 + 9)**	14 418	17 047	23 595	17 416
11.	**Cash transfers from general government**				
	For head of family				
	For two children	5 168	5 168	5 168	0
	Total	5 168	5 168	5 168	0
12.	**Take-home pay (1-10+11)**	37 869	50 791	60 263	45 253
13.	**Employer's wage dependent contributions and taxes**				
	Employer's compulsory social security contributions	10 088	13 417	16 846	13 417
	Payroll taxes	3 251	4 324	5 430	4 324
	Total	13 339	17 741	22 276	17 741
14.	**Average rates**				
	Income tax	12.6%	10.0%	12.0%	10.6%
	Employees' social security contributions	18.0%	17.2%	18.0%	17.2%
	Total payments less cash transfers	19.6%	19.0%	23.4%	27.8%
	Total tax wedge including employer's social security contributions	37.4%	36.8%	40.3%	43.7%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	48.2%	48.2%	48.2%	48.2%
	Total payments less cash transfers: Spouse	16.9%	33.2%	43.3%	33.2%
	Total tax wedge: Principal earner	59.6%	59.6%	59.6%	59.6%
	Total tax wedge: Spouse	35.2%	47.9%	55.8%	47.9%

The Austrian currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year, the average worker in Austria earned EUR 47 120 (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 tax allowance of at least EUR 132 is available to all employees.
- Tax allowance for special expenses of at least EUR 60.
- Social security contributions and connected contributions (see Section 2).
- Child allowance of EUR 440 per child for one parent or EUR 300 per child for eachparent. . Parents can choose between these opportunities.

1.1.2.2. Non-standard tax reliefs

- Mainly work related expenses (‘Werbungskosten’).
- Traffic relief depending on the distance between home and working place as well as the availability of public transport.

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

		Public transport	
		Available	Not available
more than	2 km	0	372
more than	20 km	696	1 476
more than	40 km	1 356	2 568
more than	60 km	2 016	3 672

- Tax-free wage 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, while other supplements are tax free up to EUR 360 (EUR 540 for night work) per month:
- Tax allowances for contributions to state-approved churches up to EUR 400 per year and for donations up to 10% of income for research and humanitarian purposes, environmental protection, fire brigades, civil protection, etc.

1.1.3. Rate Schedule

Since 2016 the tax schedule is:

Income (EUR) up to	Marginal rate %
11 000	0
18 000	25
31 000	35
60 000	42
90 000	48
1 000 000	50
Above	55 *)

* The top marginal tax rate of 55% applies only until 2020.

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) or EUR 83 333. Otherwise, the tax amount is calculated according to the following formula:

Income from Christmas and leave bonus (EUR) up to	Marginal rate %
2 000	0
2 345	30
25 000	6
50 000	27
83 333	35.75
Above	50/55

If income for Christmas and leave bonus exceeds EUR 83 333, the exceeding amount is added to current income and taxed accordingly (MTR of 50% or 55%, see above).

1.1.4. Tax credits

The following tax credits exist:

- Traffic (commuting) tax credit of EUR 400. If the overall income tax liability of current income is negative, a refund of social security contributions applies. The refund amounts to the absolute value of the negative result of the tax calculation for current income, limited to 50% of overall social security contributions paid, respectively EUR 400. For commuters with a traffic allowance (see 1.1.2.2.) the maximum amount is EUR 500.
- Additional traffic tax credit in case of entitlement to traffic relief according to the distance between home address and working place (see 1.1.2.2.). In this case, employees are entitled to an additional traffic tax credit of EUR 2 per km distance from home to working place.
- Sole earner and single parent tax credit for families with children. The sole earner credit is not given when a spouse's income exceeds EUR 6 000. This tax credit is EUR 494 for one child and increases by EUR 175 for the second child and by EUR 220 for the third and every additional child. This tax credit is non-wastable and can be paid as a negative income tax (in addition to the refund of social security contributions in respect of the traffic tax credit).
- Child tax credit of EUR 700.8 (58.40 per month) per child. This tax credit is paid together with child allowances and is not connected with an income tax

assessment. Therefore, it is treated as a transfer in this Report (similar treatment as in Revenue Statistics).

- A tax credit for retired persons which amounts to EUR 764 for single earners with income up to EUR 19 930 if the spouse's income does not exceed EUR 2 200. Otherwise, the tax credit is EUR 400. The tax credit is linearly reduced to 0 for incomes between EUR 17 000 (EUR 19 930 for sole earners) and EUR 25 000. If the income tax liability is negative, a refund of social security contributions applies. The refund is limited to 50% of total social security contributions paid, respectively to EUR 110.

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	Employee (2)	Employer (3)
Health insurance	5130	10260	3.87	3.78
Unemployment insurance	5130	10260	(4)	3.00
Pension insurance	5130	10260	10.25	12.55
Accident insurance	5130	10260	--	1.30
Contribution to the labour chamber	5130	(1)	0.50	--
Contribution for the promotion of residential building	5130	(1)	0.50	0.50
Addition to secure wage payments in the case of bankruptcy	5130	10260	--	0.35

Notes:
1. No contribution 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 contributions for the promotion of residential buildings is included in Taxes on payroll (3000).
2. There is an income threshold for employee contributions of EUR 438.05 per month.
3. A new program has been introduced on 1 January 2004 for severance payments. Employers are required to pay 1.53% of gross wages for employees whose employment started after 1 January 2003. of if the employer and employee opt to participate in the new program. This contribution is seen as a non-tax compulsory wage-related payment.
4. Employees' unemployment insurance rate is lower for small incomes. In 2018 (weighted mean), it is zero for monthly earnings up to EUR 1 514.5, 1% up to EUR1 652, 2% up to EUR 1 822 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 (3.9%) and the Community Tax (3%). The wage-dependent part of the contribution to the Austrian Economic Chamber (listed under heading 1000, taxes on profits, Revenue Statistics), which is levied, together with the contributions to the Family Burden Equalisation Fund, at different rates depending upon the Länder Chamber (average rate is approximately 0.4%), is not taken into account. The contribution for the promotion of residential buildings (listed under heading 3000, taxes on payroll, Revenue Statistics) is included in the social security contributions shown

above and 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. Transfers related to marital status

No recurrent payments.

3.2. Transfers for dependent children

A family allowance is granted for each child. The monthly payment is EUR 114.00 for the first child, EUR 128.20 for the second, EUR 152.00 for the third and is further increased for each additional child. It rises by EUR 7.90 for children above 3 years of age, EUR 27.50 for children above 10 years of age and by EUR 51.10 for students (above 19 years of age). The taxing wages calculations only consider households with 2 children aged between 6 and 11 inclusive.

Parents are entitled to a childcare transfer, introduced in 2002. The flexibility of the childcare transfer was again increased significantly. The entitled parent can choose the period of payments between 365 and 851 days (if they split up parental leave: 456 and 1,063 days) resulting in a transfer of EUR 14.53 (in case of 851/1,063 days) to EUR 33.88 per day (in case of 365/456 days). Also, instead of fixed amounts the parents can opt for 80% of the last net-earning, limited to EUR 66 per day (14 months; 12 plus 2). Additionally, parents receive a bonus of EUR 1 000 if the period of transfer payments is split at least at a ratio of 40:60 between parents.

The child tax credit (EUR 58.40 per month, see § 1.14) is paid together with the family allowance and therefore treated as a transfer.

There is a supplement to the family allowance of EUR 20.00 per month for the third and every additional child if the family's taxable income (i.e. the sum of the tax base for the progressive income tax schedule) in the preceding year did not exceed EUR 55 000. This supplement is paid on application after a tax assessment of the very year.

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

4. Main Changes in Tax/Benefit Systems Since 2004

In 2004, the first step of a comprehensive tax reform came into force. The general tax credit was increased from EUR 887 to EUR 1 264 and the phasing-out rules were considerably simplified and harmonized for all groups of taxpayers.

The tax reform in 2005 brought a new income tax schedule. Apart from the top rate of 50% for incomes exceeding EUR 51 000, it shows the average tax rate for two amounts of income. The tax amounts for incomes between these values have to be calculated by linear interpolation. The formulas that have to be applied are defined in the tax law. The tax reform included some measures which were made retrospective for 2004. These measures are an increase of the sole earner and the single parent tax credit depending on the number of children (together with a higher income limit for the spouse of a single earner) and an increase of traffic reliefs by about 15%. The maximum deductible amount for church contributions was increased as well. In 2006, the traffic reliefs were raised again by about 10%.

In 2007, the traffic allowance was increased by 10% (effective from 1st July). Additionally, the maximum negative tax for employees with traffic allowances was raised from EUR 110 to EUR 240 (for 2008 and 2009). In 2008, the family allowance for the third child and all subsequent children was increased. Furthermore, the unemployment insurance contribution of low-earning employees was reduced (effective from 1st July).Also in 2008, for monthly earnings up to EUR 1 100 the rate was set to zero, for earnings below EUR 1 200 the contribution was set to 1%, below EUR 1 350 2% and above it was set to the current rate of 3%. Since 2008, these income limits have been raised according to the increase 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 the 13th child allowance was introduced.

The tax reform 2009 (effective from the 1st of January) brought an increase of the zero bracket (from EUR 10 000 to EUR 11 000), a reduction of the marginal income tax rates (except the top rate), an upward shift of the top rate bracket (from EUR 51 000 to EUR 60 000) and several measures for families with children: child 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 child tax credit.

Starting in 2013 a progressive rate schedule is applied to Christmas and leave bonus instead of a flat rate regime of 6% (see 1.1.3.)

The tax reform 2016 decreased all marginal tax rates significantly, notably the marginal tax rate of the first tax bracket, which was reduced by 11.5 percentage points from 36.5% to 25%. Limited to the years 2016 to 2020 the top marginal tax rate is temporarily increased by 5% points to 55%. These 55% apply to those parts of income exceeding EUR 1 million a year.

The tax credit for employees was increased from EUR 345 to EUR 400. The non-wastable tax credit (reimbursement of social security contributions) for low earnings was extended. For employees the non-wastable tax credit was increased to a maximum of 50% of social security contributions up to a ceiling of EUR 400 a year. For commuters eligible for the commuter tax allowance the maximum amount of the non-wastable tax credit is EUR 500. This system of a non-wastable tax credit was extended to pensioners too, limited to EUR 110.

Besides the already existing broad financial support for families (payable tax credit and transfers as well as deductibility of cost for childcare) the tax reform 2016 increased the tax allowance for children from EUR 220 to EUR 440 per child. If both parents claim for this tax allowance, it increases to EUR 600 (two times EUR 300).

Tax expenditures (tax allowances) for private insurances (e.g. health and pension insurances) and mortgages were abolished for new contracts beginning with 2016. For existing contracts these tax allowances are maintained for a transitional period of five years.

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.

2018 Parameter values

Average earnings/yr	Ave_earn	47 120	Secretariat estimate
Non current income as %	non_cur_pc	14.286%	
Tax schedule for nci	nci_sch	0	2 000
		0.3	2 345
		0.06	25 000
		0.27	50 000
Maximum non-current income tax base	nci_base_max	0.3575	83 333
Work related	work_rel	132	
Allowance f."Special expenses"	Basic_al	60	
Children allowance for 2 earning parents	Child_al_2	300	
Children allowance for sole earner/parent	Child_al_1	440	
Positve tax threshold	pos_tax_th	12600	
Tax free inc.	tax_free	0%	
Basic tax credit	basic_cr		
Employee's tax credit	wage_cr	0	
Max. neg. employee's tax credit	neg_wage_cr	400	
Max. neg. employee's tax credit rate	neg_wage_cr_rate	50%	
Traffic (commuting) tax credit	traffic_cr	400	
Sole earner's (parent's) tax credit	sole_cr	0	
Children suppl.to SETC: 1st child	dsole1_cr	494	
2nd child	dsole2_cr	175	
3rd+ child	dsole3_cr	220	
Spouse income not more than	sole_lim0	0	
Spouse with children	sole_lim1	6 000	
Income tax schedule	Tax_sch	0	11 000
		0.25	18 000
		0.35	31 000
		0.42	60 000
		0.48	90 000
		0.50	1 000 000
		0.55	
Ceiling f. soc. security contributions	SSC_ceil	5 130	
lower limit	SSC_low	438.05	
Employees' contr. rates	health_rate	3.87%	
	unemp_rate	0.00%	1 514.5
		1.00%	1 652.0
		2.00%	1 822.0
		3.00%	
	pension_rate	10.25%	
sum without unempl. and others	empl_14	14.12%	
	others_rate	1.00%	
Employers' contr.rates	health_empr	3.78%	
	unemp_empr	3.00%	
	pension_empr	12.55%	
	accident_empr	1.30%	
	payinsur_empr	0.35%	
sum without others	empr_14	20.98%	
	others_empr	0.50%	
Payroll taxes	payroll_rate	6.90%	
Child benefit: 1st child	CB_1	1 368.0	
2nd child	CB_2	1 538.4	

suppl.>3years	CB03sppl	94.8
suppl.>10years	CB10sppl	330.0
suppl >19years	CB19sppl	613.2
5<suppl<17	CB5to17	100
Child tax credit	child_cr_1	700.8

2018 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 parents. 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 child 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)	percent	0, 33%, 67%, 1 or 167% in Taxing Wages output tables (but model can be applied to all earnings levels)
4	number of children	child	0 or 2 in Taxing Wages output tables
5	Gross earnings	earn	=Ave_earn*percent
6	Current income	cearn	=(1-non_cur_pc)*earn
7	Basic allowance	allow	=(earn>14*SSC_low)*Basic_al
8	SSC on curr.inc.	SSCc	='(empl_14+unemp(earn,unemp_rate)+others_rate)*' MIN(12*SSC_ceil;cearn)*(cearn>12*SSC_low)
9	Work related expenses	work_rel	=(earn>14*SSC_low)*work_rel
10	Tax-free income	taxfrinc	=tax_free*earn
11	Child allowance	Child_al_princ Child_al_spouse	IF(cearn_spouse-allow_spouse-SSCc_spouse-work_rel_spouse-taxfrinc_spouse-12600<0,Child_al_1, Child_al_2)*child IF(Child_al_princ='child*Child_al_2,' Child_al_2, 0)*Child
12	Tax base for schedule	ctbase	='(cearn-allow-Child_al_princ-' SSCc-work_rel-taxfrinc)+max(0;ncearn-SSCnc-nci_base_max)
13	Gross tax on current income	gtaxcur	=Tax(ctbase;tax_sch)
14	Basic tax credit	btaxcr	=0
15	Married or head of family	headcr	=(earn_sp<IF(child>0;sole_lim1;sole_lim0))*(sole_cr+(child>0)*dsole1_cr+(child>1)*dsole2_cr+(child>2)*(child-2)*dsole3_cr
16	Other	othcr	=(earn>14*SSC_low)*(wage_cr+traffic_cr)
17	Interm. tax on current income	itcur	=gtaxcur-btaxcr-headcr-othcr
18	Net tax on current	ntaxcur	=max(gtaxcur-btaxcr-other;-neg_wage_cr_rate*SSC;-neg-wage_cr)-child>0)-headcr

Bn	Variable income	code for docn equations	Excel-Function
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	=min(ncearn-SSCnc;nci_base_max)
22	Tax schedule	nci_sch	=min(ncearn-SSCnc;nci_base_max)
23	Taxable income	taxinc	=ctbase+ncearn_adj1
24	Tax liability excl. tax credits	inctax_ex	=gtaxcur+taxnc
25	Income tax finally paid	inctax	=ntaxcur+taxnc
26	Employee's SSC	SSC	=SSCc+SSCnc
27	Employer's SSC	SSCf	='IF(earn'/14>=SSC_low;((empr_14+others_empr)*MINA(12*SSC_ceil;cearn)+empr_14*MINA(2*SSC_ceil;ncearn));earn*accident_empr)
28	Pay-roll taxes	payroll	=payroll_rate*earn
29	Cash transfers	cash	=IF(Children=0,0,IF(Children=2,CB_1+CB_2+Children*CB10sppl+Children*(child_cr_1+CB5to17)))
30	Take-home pay		=earn-inctax-SSC+cash
31	Wage cost		=earn+SSCf+payroll

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

Belgium

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Belgium 2018

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**	32 465	48 455	80 920	32 465
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	4 243	6 333	10 576	4 243
	Work-related expenses	4 720	4 720	4 720	4 720
	Other				
	Total	8 963	11 053	15 296	8 963
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	23 502	37 402	65 624	23 502
5.	**Central government income tax liability (exclusive of tax credits)**	7 513	13 768	27 766	7 513
6.	**Tax credits**				
	Basic credit	0	0	0	0
	Married or head of family	1 933	1 933	1 858	2 328
	Children	0	0	0	1 266
	Other				
	Total	1 933	1 933	1 858	3 593
7.	**Central government income tax finally paid (5-6)**	4 188	8 882	19 443	2 942
8.	**State and local taxes**	1 720	3 648	7 986	1 208
9.	**Employees' compulsory social security contributions**				
	Gross earnings	4 243	6 333	10 576	4 243
	Taxable income	255	435	731	255
	Total	4 498	6 769	11 308	4 498
10.	**Total payments to general government (7 + 8 + 9)**	10 406	19 299	38 736	8 648
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	3 927
	Total	0	0	0	3 927
12.	**Take-home pay (1-10+11)**	22 059	29 157	42 184	27 744
13.	**Employer's compulsory social security contributions**	8 435	13 151	21 962	8 435
14.	**Average rates**				
	Income tax	18.2%	25.9%	33.9%	12.8%
	Employees' social security contributions	13.9%	14.0%	14.0%	13.9%
	Total payments less cash transfers	32.1%	39.8%	47.9%	14.5%
	Total tax wedge including employer's social security contributions	46.1%	52.7%	59.0%	32.2%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	55.6%	55.6%	59.1%	55.6%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	68.3%	65.1%	67.8%	68.3%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Belgium 2018

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**	48 455	64 446	80 920	64 446
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	6 333	6 333	10 576	6 333
	Work-related expenses	4 720	9 440	9 440	9 440
	Other				
	Total	11 053	15 773	20 016	15 773
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	37 402	48 672	60 904	48 672
5.	**Central government income tax liability (exclusive of tax credits)**	11 626	16 586	21 281	16 586
6.	**Tax credits**				
	Basic credit	0	665	0	665
	Married or head of family	3 865	3 865	3 865	3 865
	Children	1 149	1 149	1 149	0
	Other				
	Total	5 014	5 678	5 014	4 530
7.	**Central government income tax finally paid (5-6)**	4 962	8 019	12 207	8 881
8.	**State and local taxes**	2 038	3 567	5 014	3 921
9.	**Employees' compulsory social security contributions**				
	Gross earnings	6 333	6 333	10 576	6 333
	Taxable income	435	582	731	582
	Total	6 769	6 915	11 308	6 915
10.	**Total payments to general government (7 + 8 + 9)**	13 769	18 501	28 529	19 717
11.	**Cash transfers from general government**				
	For head of family				
	For two children	3 927	3 927	3 927	0
	Total	3 927	3 927	3 927	0
12.	**Take-home pay (1-10+11)**	38 613	49 871	56 318	44 728
13.	**Employer's compulsory social security contributions**	13 151	15 006	21 586	15 006
14.	**Average rates**				
	Income tax	14.4%	18.0%	21.3%	19.9%
	Employees' social security contributions	14.0%	10.7%	14.0%	10.7%
	Total payments less cash transfers	20.3%	22.6%	30.4%	30.6%
	Total tax wedge including employer's social security contributions	37.3%	37.2%	45.1%	43.7%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	55.6%	55.6%	54.5%	55.6%
	Total payments less cash transfers: Spouse	29.6%	27.8%	54.5%	27.8%
	Total tax wedge: Principal earner	65.1%	65.1%	64.2%	65.1%
	Total tax wedge: Spouse	36.9%	48.4%	67.5%	48.4%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 48 455 (Secretariat estimate).

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.

1.1.1.1. Schedule

Taxable income (EUR)	Marginal rate (%)
0—12 990	25
12 990—22 290	40
22 290—39 660	45
39 660—and above	50

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 are entitled to a standard deduction for work-related expenses; this is equal to 30% of gross income (less social insurance contributions) and may not exceed EUR 4 720 per spouse.

For self-employed professionals:

Self-employed professionals are entitled to a standard deduction for work-related expenses. This deduction may under no circumstances exceed EUR 4 150 per spouse.

Gross earnings less social insurance contributions (EUR)	Rate (%)
Below 6 000	28.70
Between 6 000 and 11 910	10
Between 11 910 and 19 830	5
Above 19 830	3

Paid company directors are also entitled to a standard deduction for work-related expenses; this is equal to 3% of gross income (less social insurance contributions) and may not exceed EUR 2 490 per spouse.

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

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

1.1.2.3. Non-earning spouse allowance (quotient conjugal)

A notional amount of income can be transferred between spouses if one of them earns no more than 30% of the couple's combined earned income. In this case, the amount transferred is limited to 30% 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 10 710.

1.1.2.4. Exempt income

The base amount is:

Taxable income (S)	Fixed amount	Variable amount
0–45 750	7 730	0
45 750–46 050	7 430	45 750–S
46 050 and up	7 430	0

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

- 1 child: 1 580
- 2 children: 4 060
- 3 children: 9 110
- 4 children: 14 730
- > 4 children: 5 620 per additional child

Dependent child exemptions in excess of available income give rise to a reimbursable tax credit. This reimbursable tax credit is calculated at the marginal rate for the spouse with the highest income and capped at EUR 450 per dependent child.

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

- Other dependants: 1 580
- Handicapped / handicapped spouse: 1 580
- Other handicapped dependants: 1 580
- Widow(er) with dependent child(ren): 1 580
- Single father or mother: 1 580

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

Basic exemption plus any additional exemption (EUR)	Marginal rate (%)
0—9 120	25
9 120—12 990	30
12 990—21 640	40
21 640—39 660	45
39 660—and above	50

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

1.2. Regional and local government taxes

With the implementation of the sixth state reform, the Flemish Region, the Walloon Region and the Brussels-Capital Region have been delegated several important competences with regard to the individual income tax. As a result of this reform, as from 1 July 2014, the regional competences are:

- the possibility to levy surcharges on the federal PIT (the supplementary regional tax on the personal income tax). The surcharge may be proportional or vary with income but there are limits to ensure that the tax remains progressive);
- to grant (on the result of the surcharges) tax discounts;
- to grant tax reductions, tax increases and tax credits;
- to regulate exclusively some tax reductions.

Under the new tax model, the assumed federal income tax amount must first be calculated. The taxable base is reduced by the exempt income (see 1.1.2.4.), the tax credits for pensions, unemployment, sickness and other social benefits and the tax credit for income taxed abroad. Additionally, it is reduced by the tax due on passive income for which the Federal State remains exclusively competent.

The remaining PIT liability is than split between the central government and the Brussels-Capital Region according to a ratio of (1/(1-0.24957))*(0.995-(1-0.24957))

Subsequently, the Regions are allowed to levy a proportional surcharge on this reduced federal income tax. This surcharge may, within certain limits and given the matters for which the Regions are competent, vary per tax bracket. The actual rate is set at 32.591% (Brussels-Capital rate).

The starting point for the calculation of the municipal (and agglomeration) surcharges is the individual income tax ("impôt total", i.e. the sum of federal PIT and regional PIT), before taking into account the surcharge resulting from insufficient prepayments, the foreign tax credit, federal and regional reimbursable tax credits (among others for children and for low-income workers), prepayments and withholding taxes. The rate of this local surtax is set by each municipality, and there is no upper limit. The additional surcharge of 1% levied in the Brussels-Capital Region, in addition to the municipal surcharge, is abolished as from income year 2016.

The calculation of the regional and local surtax for the average worker study assumes that the worker lives in the Region of Brussels-Capital. The weighted average local surtax of the 19 municipalities which form the Brussels-Capital Region is 6.4%.

1.3. Tax credits

Refundable tax credit for low-income workers

A refundable tax credit is intended for low-income workers and company managers (subject to the employees' social security system) entitled to the employment bonus.

The refundable tax credit amounts to 28.03% as of 1st January 2016 of the "employment bonus" which is actually granted on remunerations earned during the taxable period. It cannot exceed EUR 670 per taxable period.

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) :

The schedule applicable as from 01.01.2018 is as follows:

2018	Employee	Employer	Total
Unemployment	0.87	3.16	4.03
Health insurance indemnities	1.15	2.35	3.5
Health care	3.55	3.8	7.35
Placement services		0.05	0.05
Family allowances		7	7
Pensions	7.50	8.86	16.36
Child care		0.05	0.05
Work-related illnesses		1.01	1.01
Work-related accidents		0.32	0.32
Education leave		0.05	0.05
Business closures		0.30	0.30
Wage restraint		5.23	5.23
Tax shift 2017		-5.04	-5.04
Total	13.07	27.14	40.21

The schedule applicable as from 01.07.2018 is as follows:

2018	Employee	Employer	Total
Unemployment	0.87	3.16	4.03
Health insurance indemnities	1.15	2.35	3.5
Health care	3.55	3.8	7.35
Placement services		0.05	0.05
Family allowances		7	7
Pensions	7.50	8.86	16.36
Child care		0.05	0.05
Work-related illnesses		1.00	1.00
Work-related accidents		0.32	0.32
Education leave		0.05	0.05
Business closures		0.30	0.30
Wage restraint		5.23	5.23
Tax shift 2017		-5.04	-5.04
Total	13.07	27.13	40.20

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

b) Reduction of employer contributions

The schedule applicable as from 01.10.2018 is as follows:

Gross annual earnings (S) in EUR	Fixed amount	Variable amount
0–36 108.00	0	0.128 (36 108–S)
36 108 and up	0	0

The schedule applicable as from 01.01.2018 is as follows:

Gross annual earnings (S) in EUR	Fixed amount	Variable amount
0–35 400.00	0	0.128 (35 400–S)
35 400 and up	0	0

c) Reduction of individual social security contributions

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

The schedule applicable as from 01.09.2018 is as follows:

Gross annual salary (S) in EUR	Reduction in Euros
0 < S < 19 699.44	2 419.44
19 699.44 < S < 30 728.04	Min (2 419.44, (2 419.44–0.2193 (S–19 699.44))
S > 30 728.04	0

The schedule applicable as from 01.06.2017 is as follows:

Gross annual salary (S) in EUR	Reduction in Euros
0 < S < 19 313.64	2 372.04
19 313.64 < S < 30 125.64	Min (2 372.04, (2 372.04–0.2193 (S–19 313.64))
S > 30 125.64	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 18 592.02	0	0
from 18 592.02 to 21 070.96	0	9
from 21 070.96 to 60 161.85	223.10	1.3
60 161.85 and above	731.29	0

e) Work accidents

All employers are required to insure their employees against accidents that occur in the workplace or while travelling to or from the workplace. The insurance is written by a private company. The usual premiums are approximately 1% of gross pay for office workers and 3.3% for labourers. The premiums are based on capped gross wages: in 2011 these premiums apply to gross wages (including holiday pay and extra-legal remunerations) with a minimum of EUR 6 068 and a maximum of EUR 37 546 (EUR 5 949 and EUR 36 810 respectively in 2010). Higher rates apply in certain industries in which risks are greater. The premium rate for construction workers, for example, varies between 7% and 8%.

2.2. Deductions according to family status or gender

None.

3. Universal cash transfers

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

	<5 years	5–6 years	7–10 years	11–12 years	12–16 years	17–18 years	>18 years
1st child	1 155.45	1 179.38	1 377.02	1 394.70	1 498.06	1 518.87	1 564.79
2nd child	2 120.29	2 144.22	2 538.38	2 556.06	2 764.22	2 785.03	2 948.55
3rd child	3 155.41	3 179.34	3 573.50	3 591.18	3 799.34	3 820.15	3 983.67

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 since 2016

None.

5. Memorandum Items

5.1. Identification of AW and valuation of earnings

The Average Wage is based on an annual survey conducted by the Statbel division of the Ministry of Economy. The survey is limited to enterprises with at least 10 employees. A two step approach is applied: first the participating employers are selected, then the surveyed employees (sampling ratio of 5% to 7%). All employees are covered by the survey but the estimate of the Average Wage is restricted to data of full time employees only. The reference period is October but survey data is combined with social insurance registers to obtain annual earnings. If applicable, the earnings of full time employees not employed during the entire year, are uplifted proportionally to obtain annual estimates. Annual earnings include bonuses, vacation and overtime pay, but no fringe benefits.

2018 Parameter values

	Ave_earn	48 455	Secretariat estimate		
Work-related expenses	work_rel_max	4 720			
	work_rel_sch	0	0		
		0	0		
		0.3			
Tax credits (exempt income)	single_cr	7 430			
	Married_cr	7 430			
	Supp_cr_base	300			
	supp_cr_thrsh1	45 750			
One child	child_cr1	1 580			
Two children	child_cr2	4 060			
Single parents	s_parent_cr	1 580			
Maximum Child Credit Payment	child_cr_max	450			
Basic Credit	basic_cr_base	0			
	basic_cr_thrsh1	5 210			
	basic_cr_thrsh2	6 960			
	basic_cr_thrsh3	17 400			
	basic_cr_thrsh4	22 600			
Basic exemption plus any additional exemption schedule		Ex_rate1			
	Ex_sch	0.25	9 120		
		0.30	12 990		
		0.40	21 640		
		0.45	39 660		
		0.50			
Income tax schedule		tax_rate1			
	tax_sch	0.00	0		
		0.25	12 990		
		0.40	22 290		
		0.45	39 660		
		0.50			
	quote_max	10 710			
	quote_rate	0.3			
Regional tax	red_rate	0.24957			
	reg_tax_rate	0.32591			
Local tax	local_rate	0.064			
	add_local_rate	0.00			
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	2 387.84	0
	(annual)	19 442.24	19 442.24	2 387.84	0.2194
		30 326.44	19 442.24	2 387.84	0.2194
		30 326.44	0	0	0
		99 999 999	0		0
Special annual contribution	SSC_special	0.000	18 592.02		
		0.090	21 070.96		
		0.013	60 161.85		

		0.000			
Employer contributions	SSC_empr_rt	0.27135			
	SSC_empr_red	0	0	0.1280	35 577.00
		35 577.00	0	0	0
		35 577.00	0	0	0
		9 999 999	0		0
Structural reduction on the withholding tax on wages	PrP_redn	0.000			
Low-income credit	LIC_rate	0.2803			
	LIC_max	670.00			
Child benefit (age 7-10)	CB_1	1 394.70			
second child (age 7-10)	CB_2	2 538.38			
third child (age 7-10)	CB_3	3 573.50			

2018 Tax equations

The equations for the Belgian system in 2018 are mostly calculated on an individual basis. However, central government tax for a married couple is calculated on two bases and the lower value is used. One of the bases takes account of the combined income of the couple. Also, tax credits may be used against the tax liability of the secondary earner if the principal earner is unable to use them.

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

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
2.	Allowances:	tax_al	B	MIN(work_rel_max, Tax(earn-SSC, work_rel_sch))+SSC
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc_int	B	earn-tax_al
	Quote part	Q	J	IF(married, Positive(MIN(tax_inc_int_total*quote_rate, quote_max)-tax_inc_int_spouse), 0)
	CG adjusted taxable income - principal	tax_inc_adj_princ	P	Positive(tax_inc_int_princ – Q)
	CG adjusted taxable income - spouse	tax_inc_adj_spouse	S	Positive(tax_inc_int_spouse + Q)
5.	CG tax before credits	CG_tax_excl	J	Tax(tax_inc_adj, tax_sch)
6.	Calculation of credits			
	Child exemption amount	child_ex_inc	P	(children=1)*child_cr1+(children=2)*child_cr2
	Family exemption amount	fam_ex_inc	B	IF(Married,married_cr,single_cr+(Children>0)*s_parent_cr)+IF(tax_inc_adj<=0,0,IF(tax_inc_adj<=supp_cr_thrsh1,supp_cr_base,MAX(0,supp_cr_base+supp_cr_thrsh1-tax_inc_adj)))
	Initial exempt income - principal	ex_inc_int_princ	P	child_ex_inc+fam_ex_inc_princ
	Initial exempt income - spouse	ex_inc_int_spouse	S	fam_ex_inc_spouse
	Transferable amount	ex_inc_tran	J	married*IF(ex_inc_int_princ<tax_inc_adj_princ, MIN(MAX((ex_inc_int_spouse-tax_inc_adj_spouse), 0), tax_inc_adj_princ-ex_inc_int_princ), -(MIN(MAX((ex_inc_int_princ-tax_inc_adj_princ), 0), MAX(0, tax_inc_adj_spouse-ex_inc_int_spouse))))
	Final exempt income - principal	ex_inc_fin_princ	P	ex_inc_int_princ+ex_inc_tran
	Final exempt income - spouse	ex_inc_fin_spouse	S	ex_inc_int_spouse-ex_inc_tran
	Tax credits	tax_credits	J	Tax(ex_inc_fin, Ex_sch)
	Basic Credit	basic_cr	B	basic_cr_base*IF(tax_inc<='basic_cr_thrsh1,' 0, IF(tax_inc<='basic_cr_thrsh2,' (tax_inc-basic_cr_thrsh1)/(basic_cr_thrsh2-basic_cr_thrsh1), IF(tax_inc<='basic_cr_thrsh3,' 1, IF(tax_inc<='basic_cr_thrsh4,' (basic_cr_thrsh4-tax_inc)/(basic_cr_thrsh4-basic_cr_thrsh3), 0))))+IF(tax_inc='0;0;MIN(LIC_rate*(MIN(VLOOKUP(' earn,

	Line in country table and intermediate steps	Variable name	Range	Equation
				SSC_redn,3), VLOOKUP(earn, SSC_redn, 3)-VLOOKUP(earn, SSC_redn, 4)*(earn-VLOOKUP(earn, SSC_redn, 2))))));LIC_max))
7.	CG tax			
	Tax prior to non-wasteable credits	CG_tax_init	B	Positive(CG_tax_incl-tax_credits) *(1-red_rate)
	Non-wasteable child credit	child_credit_nw	J	MIN(Tax(MIN((children=1)*child_cr1+(children='2)*Parameters!child_cr2),' (positive(ex_inc_int-tax_inc_int), tax_sch), children*child_cr_max)
	Final CG tax	CG_tax_final	J	CG_tax_init-basic_cr_total-child_credit_nw
8.	State and local taxes			
	Regional tax	regional_tax	B	CG_tax_init*reg_tax_rate
	Local tax	local_tax	J	(local_rate+add_local_rate)*(CG_tax_init+regional_tax)
9.	Employees' soc security	SSC	B	Positive((earn)*SSC_rt-MIN(VLOOKUP(earn, SSC_redn,3), VLOOKUP(earn, SSC_redn, 3)-VLOOKUP(earn, SSC_redn, 4)*(earn-VLOOKUP(earn, SSC_redn, 2))))
		SSC_special	J	positive(Tax(tax_inc_total, SSC_special)
		SSC_total		SSC+SSC_special
11.	Cash transfers	cash_trans	J	(Children>0)*CB_1+(Children>1)*CB_2
13.	Employer's soc security	empr_sch	B	Positive(earn*(SSC_empr_rt- PrP_redn)-(VLOOKUP(earn, SSC_empr_redn, 2)-VLOOKUP(earn, SSC_empr_redn, 3)*(earn-VLOOKUP(earn, SSC_empr_redn, 1))))

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

Canada

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Canada 2018

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**	35 745	53 350	89 095	35 745
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)**	35 745	53 350	89 095	35 745
5.	**Central government income tax liability (exclusive of tax credits)**	5 362	8 373	15 701	5 362
6.	**Tax credits**				
	Basic credit	1 951	1 951	1 951	1 951
	Married or head of family	0	0	0	1 771
	Other(CPP & EI)	328	499	518	328
	Total	2 279	2 449	2 468	4 050
7.	**Central government income tax finally paid (5-6)**	3 083	5 924	13 233	1 311
8.	**State and local taxes**	1 172	2 429	5 981	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	2 189	3 326	3 452	2 189
	Taxable income (Provincial Health Care Levy)	300	600	750	300
	Total	2 489	3 926	4 202	2 489
10.	**Total payments to general government (7 + 8 + 9)**	6 744	12 279	23 416	3 801
11.	**Cash transfers from general government**				
	For head of family	441	0	0	495
	For two children	0	0	0	13 293
	Total	441	0	0	13 788
12.	**Take-home pay (1-10+11)**	29 442	41 071	65 679	45 731
13.	**Employer's compulsory social security contributions**	3 939	5 926	7 564	3 939
14.	**Average rates**				
	Income tax	11.9%	15.7%	21.6%	3.7%
	Employees' social security contributions	7.0%	7.4%	4.7%	7.0%
	Total payments less cash transfers	17.6%	23.0%	26.3%	-27.9%
	Total tax wedge including employer's social security contributions	25.8%	30.7%	32.1%	-15.2%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	25.3%	33.6%	33.9%	46.1%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	33.0%	39.2%	36.6%	51.7%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Canada 2018

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**	53 350	70 956	89 095	70 956
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)**	53 350	70 956	89 095	70 956
5.	**Central government income tax liability (exclusive of tax credits)**	8 373	11 014	13 735	11 014
6.	**Tax credits**				
	Basic credit	1 951	3 901	3 901	3 901
	Married or head of family	1 771	0	0	0
	Other(CPP & EI)	499	647	827	647
	Total	4 221	4 549	4 728	4 549
7.	**Central government income tax finally paid (5-6)**	4 153	6 466	9 007	6 466
8.	**State and local taxes**	1 725	2 584	3 601	2 584
9.	**Employees' compulsory social security contributions**				
	Gross earnings	3 326	4 316	5 515	4 316
	Taxable income (Provincial Health Care Levy)	600	600	900	600
	Total	3 926	4 916	6 415	4 916
10.	**Total payments to general government (7 + 8 + 9)**	9 803	13 966	19 023	13 966
11.	**Cash transfers from general government**				
	For head of family	0	0	0	0
	For two children	8 817	6 051	5 017	0
	Total	8 817	6 051	5 017	0
12.	**Take-home pay (1-10+11)**	52 364	63 041	75 088	56 990
13.	**Employer's compulsory social security contributions**	5 926	7 778	9 865	7 778
14.	**Average rates**				
	Income tax	11.0%	12.8%	14.2%	12.8%
	Employees' social security contributions	7.4%	6.9%	7.2%	6.9%
	Total payments less cash transfers	1.8%	11.2%	15.7%	19.7%
	Total tax wedge including employer's social security contributions	11.7%	19.9%	24.1%	27.6%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	73.0%	39.3%	39.3%	33.6%
	Total payments less cash transfers: Spouse	39.4%	35.8%	31.0%	30.1%
	Total tax wedge: Principal earner	75.3%	44.4%	44.4%	39.2%
	Total tax wedge: Spouse	45.1%	42.4%	38.1%	37.3%

The national currency is the Canadian dollar (CAD). In 2018, CAD 1.30 was equal to USD 1. In that year, the average worker earned CAD 53 350 (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 1 771.35.
- Credit for Spouse or Eligible Dependant: A taxpayer supporting a spouse or other eligible dependant receives a tax credit of CAD 1 771.35 which is reduced by 15 cents for each dollar of the dependant's income.
- Social security contributions: Taxpayers are entitled to claim 15% of their contributions to the Canada or Quebec Pension Plans (to a maximum credit of CAD 2 593.80 for the Canada Pension Plan and to a maximum credit of CAD 2 829.60 for the Quebec Pension Plan) and their Employment Insurance premiums (to a maximum credit of CAD 858.22 outside Quebec; the Employment Insurance premium rate is lower for Quebec residents, who also pay into the Quebec Parental Insurance Plan; the maximum combined credit for a Quebec resident is CAD 1 077.62.
- Working Income Tax Benefit (WITB): The WITB provides a non-wastable tax credit equal to 25% of each dollar of earned income in excess of CAD 3 000 to a maximum credit of CAD 1 059 for single individuals without dependents and CAD 1 922 for families (couples and single parents). The credit is reduced by 15% of net family income in excess of CAD 12 016 for single individuals and CAD 16 593 for families. This is the default national design; provinces may choose to propose jurisdiction-specific changes to this design, subject to certain principles.
- Canada Employment Tax Credit: A tax credit of up to CAD 179.25 on employment income.

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

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

- Medical expenses credit: Taxpayers are entitled to a 15% tax credit for an amount of eligible medical expenses that exceeds the lesser of 3% of net income or CAD 2 302.
- Charitable donations credit: The credit is 15% on the first CAD 200 of eligible charitable donations and 29% on eligible donations in excess of CAD 200, with the exception of donors with taxable income exceeding CAD 205 842, who may claim a 33% tax credit on the portion of total annual donations over CAD 200

made from taxable income greater than CAD 205 842. Eligible donations are those made to registered charities, to a maximum of 75% 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. Employee contributions required to fund the actuarial benefit liabilities under a defined benefit registered pension plan are permitted (annual benefit accruals are limited to a maximum of 2 per cent of earnings up to a dollar amount of CAD 2 944). Employee contributions to a defined contribution registered pension plan are limited to 18% of earned income up to a maximum of CAD 26 500.
- Registered retirement savings plan (RRSP) premiums: Individuals can deduct their contributions to an RRSP up to a limit of 18% of the previous year's earned income, to a maximum of CAD 26 230 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% of the previous year's earned income to a maximum of CAD 26 230, 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.
- Childcare expenses: A portion of childcare 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 8 000 for each child who is under age seven, and CAD 5 000 per child between seven and sixteen years of age (or older if has a mental or physical impairment, but not eligible for the Disability Tax Credit). The amount for a child who is eligible for Disability Tax Credit is CAD 11 000.

1.1.3. Tax schedule

2018 Federal Income Tax Rates

Taxable Income (CAD)	Rate (%)
0—46 605	15
46 605—93 208	20.5
93 208—144 489	26
144 489—205 842	29
205 842 and over	33

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 broadly 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 42 960	5.05
CAD 42 960 to CAD 85 923	9.15
CAD 85 923 to CAD 150 000	11.16
CAD 150 000 to CAD 220 000	12.16
Over CAD 220 000	13.16

Surtax

Provincial tax after accounting for wastable credits	Surtax Rate
Amounts Exceeding CAD 4 638	20% of the excess amount
Amounts Exceeding CAD 5 936	36% of the excess amount

Wastable tax credits

- A basic tax credit of CAD 522.88.
- A maximum credit of CAD 444 for a dependant spouse or eligible dependant that is withdrawn as the income of the spouse or eligible dependant exceeds CAD 879 and is completely withdrawn when the income of the spouse is at least CAD 9 700.
- 5.05% 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 239 plus CAD 442 for each dependent child under the age of 19. Where someone has a spouse, only the spouse with the higher net income can claim the dependent child tax reduction. If this amount is greater or equal to the liable provincial tax, then no tax is due. If the amount is less than the liable tax, then the actual tax reduction is equal to twice the initial entitlement amount less the liable tax (if this calculation is zero or negative, the reduction is equal to zero).

2. Compulsory Social Security Contributions to Schemes Operated Within the Government Sector

2.1. Employees' contributions

2.1.1. Pensions

Generally, all employees are eligible for coverage under the Canada Pension Plan (Québec Pension Plan in the province of Québec). For 2018, all employees are required to contribute to the Canada Pension Plan at a rate of 4.95% of income up to a maximum contribution of CAD 2 593.80 (the contribution rate is 5.400% of income for the Québec Pension Plan up to a maximum contribution of CAD 2 829.60). Income subject to contributions is earnings (wages and salaries) less a CAD 3 500 basic exemption. The maximum contribution of CAD 2 593.80 is reached at an earnings level of CAD 55 900 i.e. (CAD 55 900 - CAD 3 500) x 0.0495 = CAD 2 593.80. For employees, each contribution to the CPP or QPP gives rise to a tax credit equal to 15% 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 § 2.2.1).

Self employed persons must also contribute to the Canada Pension Plan (Québec Pension Plan in the province of Québec) on their own behalf. However, the self-employed are required to contribute at the combined employer/employee rate of 9.90% of earnings up to a maximum of CAD 5 187.60 (10.80% of earnings up to a maximum of CAD 5 659.20 in Quebec). The self-employed can deduct the employer portion of their contribution from income, equal to 50% of the total contribution or CAD 2 593.80 (2 829.60 in Quebec). The remaining 50%, representing the employee portion, is then claimed as a tax credit at 15%.

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 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 20 000 are exempt. The premium is phased in with a number of different rates to a maximum of CAD 900 for taxable income levels greater than CAD 200 600. The following table provides further details on the structure that is applicable in 2018.

The Ontario Health Premium		
Taxable Income	Fixed Component (CAD)	Variable Component
0—CAD 20 000	0	
CAD 20 000—CAD 25 000	0	6% of the taxable income in excess of CAD 20 000
CAD 25 000—CAD 36 000	300	
CAD 36 000—CAD 38 500	300	6% of the taxable income in excess of CAD 36 000
CAD 38 500—CAD 48 000	450	
CAD 48 000—CAD 48 600	450	25% of the taxable income in excess of CAD 48 000
CAD 48 600—CAD 72 000	600	
CAD 72 000—CAD 72 600	600	25% of the amount of taxable income in excess of CAD 72 600
CAD 72 600—CAD 200 000	750	
CAD 200 000—CAD 200 600	750	25% of the amount of taxable income in excess of CAD 200 000
Over CAD 200 600	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 to 700 hours, depending on region and the unemployment rate at the time the claim for benefits starts). For 2018, employees outside Quebec are required to contribute at the rate of 1.66% of insurable earnings. Insurable earnings are earnings (wages and salaries) up to a maximum of CAD 51 700 per year. The maximum employee contribution is therefore CAD 858.22 per year. Employment insurance contributions give rise to a tax credit equal to 15% of the amount contributed. Employers are also required to contribute to the plan. (See Section 2.23)

Quebec residents contribute to Employment Insurance at a rate of 1.30%; the same earnings ceiling applies. They also contribute to the Quebec Parental Insurance Plan at a rate of 0.548% of insurable earnings; maximum insurance earnings for 2018 are CAD 74 000. For a Quebec resident, the maximum employee contribution (Employment Insurance plus Quebec Parental Insurance Plan) is CAD 1 077.62.

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% of earnings (less the CAD 3 500 earnings exemption) to a maximum of CAD 2 593.80. For the Quebec Pension Plan, the contribution rate is 5.40% of earnings, to a maximum of CAD 2 829.60.

2.2.2. Sickness

There is no national sickness benefit plan administered by the federal government. However, all provinces have provincially administered health care insurance plans. Three provinces levy a special tax on employer payrolls to finance health services (Québec and Ontario) or health services and education (Manitoba). These payroll taxes are deductible

from the employer's income subject to tax. In the case of the province of Ontario, employers pay a Employer Health Tax on the value of their payroll, tax rates varying from 0.98% on Ontario payroll less than CAD 200 000, up to 1.95% for payroll that exceeds CAD 400 000. Certain employers are eligible for a higher exemption of CAD 450 000.

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, 2.28% of insurable earnings (outside Quebec). 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 broadly corresponding to industry Sectors B-N inclusive pay, on average, 2.28% of the wages paid to each employee to a maximum of CAD 90 300.

3. Universal Cash Transfers

3.1. Transfers related to marital status

None.

3.2. Transfers for dependent children

3.2.1. Federal

Children's benefits are provided through the Canada Child Benefit (CCB). In the autumn of 2017, the Government announced that the CCB benefit amounts and income thresholds will be indexed to inflation starting with payments in July 2018. Entitlement to the CCB for the July 2019 to June 2020 benefit year is based on 2018 adjusted family net income. The CCB provides a maximum benefit of CAD 6 606 per child under age six and CAD 5 574 per child for those aged six through seventeen. On the portion of adjusted family net income between CAD 30 968 and CAD 67 097, the benefit is phased out at a rate of 7% for a one-child family, 13.5% for a two-child family, 19% for a three-child family and 23% for larger families. Where adjusted family net income exceeds CAD 67 097, remaining benefits are phased out at rates of 3.2% for a one-child family, 5.7% for a two-child family, 8% for a three-child family and 9.5% for larger families, on the portion of income above CAD 67 097.

The Goods and Services Tax Credit provides a relief of CAD 289 for each adult 19 years of age or older and CAD 152 for each dependent child under the age of 19. Single tax filers without children and with an employment income higher than CAD 9 366 receive an additional CAD 152 that is phased in at a rate of 2%. Single tax filers with children receive an additional CAD 152 that is not subject to phase-in. The credit received for the

first dependent child of a single parent is also increased from CAD 152 to CAD 289. The total amount is reduced at a rate of five percent of net family income over CAD 37 604. The amount is paid directly to families.[2]

3.2.2. Provincial

For each child under eighteen, qualifying families can receive up to CAD 1 427 from the Ontario Child Benefit (OCB). The benefit is withdrawn at a rate of 8% of family income that exceeds CAD 21 780.

Ontario has a Sales Tax Credit that provides a relief of up to CAD 306 for each adult and each child. It is reduced by 4% of adjusted family net income over CAD 23 549 for single people and over CAD 29 436 for families. The amount is paid directly to families.

4. Main changes in the Tax/Benefit system since 2009

5. Memorandum Items

5.1. Identification of an Average Worker

The earnings data refer to production workers in the industries B to N. 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.

[2] The payments that relate to income from the 2018 tax year are payable between July 2019 and June 2020. The amounts shown in this Report assume indexation of 2.1% for the 2018 tax year (and 2019-20 benefit year); the actual indexation parameter will be announced in December 2018.

2018 Parameter values

Average earnings/yr	Ave_earn	53 350	Secretariat estimate
Tax credits	Basic_cred	1 771.35	
Spouse	Spouse_cred	1 771.35	
withdrawal rate	Sp_crd_wth	0.15	
Threshold	Sp_crd_thrsh	0	
Canada Employment Tax Credit	Empl_crd	179.25	
Canada Child Benefit amount per child under 6	ccb_credit1	6 606	
Canada Child Benefit amount per child aged 6-17	ccb_credit2	5 574	
First threshold	ccb_crd_thrsh1	30 968	
Second threshold	ccb_crd_thrsh2	67 097	
Frist reduction rate – 1 child	ccb_1st_redn1	0.070	
Frist reduction rate – 2 children	ccb_1st_redn2	0.135	
Frist reduction rate – 3 children	ccb_1st_redn3	0.190	
Frist reduction rate – 4+ children	ccb_1st_redn4	0.230	
Second reduction rate – 1 child	ccb_2nd_redn1	0.032	
Second reduction rate – 2 children	ccb_2nd_redn2	0.057	
Second reduction rate – 3 children	ccb_2nd_redn3	0.080	
Second reduction rate – 4+ children	ccb_2nd_redn4	0.095	
Working Income Tax Benefit	WITB_phzin_thrsh	3 000	
WITB–Phase-in Rate	WITB_phzn_rt	0.25	
WITB–Maximum Credit (per Adult/Equiv.)	WITB_max	1 059	
WITB–Addl. Maximum Credit (Fam.)	WITB_max_fam	863	
WITB–Reduction Rate	WITB_phzout_rt	0.15	
WITB–Threshold	WITB_phzout_thrsh	12 016	
WITB–Addl. Threshold (Fam.)	WITB_phzn_thrsh_fam	4 577	
Federal tax schedule	Fed_sch	0.15	46 605
		0.205	93 208
		0.26	144 489
		0.29	205 842
		0.33	
Canada pension plan rate	CPP_rate	0.0495	
exemption	CPP_ex	3 500	
max contrib.	CPP_max	2 593.80	
Unemployment ins.rate	Unemp_rate	0.0166	
max contrib.	Unemp_max	858.22	
tax credit rate	Unemp_crd_rate	0.15	
employer contrib. mult.	Unemp_emplr	1.4	
GST adult credit	GST_crd_ad	289	
child credit	GST_crd_ch	152	
threshold	GST_crd_thrsh	37 604	
reduction rate	GST_crd_redn	0.05	
single supplement	GST_crd_sgsp	152	
single supplement eligibility threshold	GST_sgsp_thrsh	9 366	
single supplement phase-in rate	GST_sgsp_rate	0.02	
Province: Ontario			
Tax Credits	P_basic_crd	522.88	
Spouse	P_spouse_crd	444.00	
withdrawal rate	P_sp_crd_wd	0.0505	
threshold	P_sp_crd_thr	879	
Unemployment tax credit rate	P_unem_tc_rt	0.0505	

Surtax rate 1	P_sur_rt1	0.20		
threshold	P_sur_thr1	4 638		
rate 2	P_sur_rt2	0.36		
threshold	P_sur_thr2	5 936		
Tax reduction	P_tax_red	239		
amount per dependent	P_tr_chld	442		
Provincial tax schedule	Prov_sch	0.0505	42 960	
		0.0915	85 923	
		0.1116	150 000	
		0.1216	220 000	
		0.1316		
Ontario Child Benefit				
amount per child	P_ch_amt	1 427		
threshold	P_ch_thresh	21 780		
reduction rate	P_ch_redn_rate	0.08		
Sales tax credits				
sales tax credit adult	P_sales_cred	306		
sales tax credit child	P_salcr_chd	306		
threshold	P_ps_thresh	23 549		
threshold seniors/families	P_ps_thr_sen	29 426		
reduction rate	P_ps_red_rt	0.04		
Ontario Health Premium	P_hlth_sch	20 000	0	0
		25 000	0.06	0
		36 000	0	300
		38 500	0.06	300
		48 000	0	450
		48 600	0.25	450
		72 000	0	600
		72 600	0.25	600
		200 000	0	750
		200 600	0.25	750
maximum	P_hlth_max	900		
Employer Health Tax	emp_healthtax	0.0195		
Employer Workers Compensation Levy	emp_workcomp	0.0228		
Employer Workers Compensation Levy Ceiling	emp_workcomp_ceil	90 300		

2018 Tax equations

The equations for the Canadian system are mostly repeated for each individual of a married couple. However, 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. In addition, 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		
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	P	Basic_cred + Empl_crd
			S	(earn_spouse>0)*Empl_crd+IF(AND(Married=1,earn_spouse>0),Basic_cred,0)+IF(AND(Married=0,tax_inc_spouse>0),Basic_cred-Taper(Spouse_cred,tax_inc_spouse,Sp_crd_thrsh,Sp_crd_wth),0)
	Spouse credit	spouse_cr	P	IF(OR(Married='1,Children>0),Taper(Spouse_cred,' tax_inc_spouse, Sp_crd_thrsh,Sp_crd_wth), 0)
	Unemployment insurance	unemp_cr	B	Unemp_crd_rate*SSC
	Total (wastable) tax credits	tax_cr	B	basic_cr+spouse_cr+unemp_cr
	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)))), IF(Children>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)))), MAX(0,MIN(WITB_max,(WITB_phzn_rt*MAX(0,earn_total-WITB_phzin_thrsh)))-MAX(0,WITB_phzout_rt*MAX(0,earn_total-WITB_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	P	P_basic_crd+P_unem_tc_rt*SSC_princ+IF(AND(Married='0,' Children>0), P_spouse_crd, Married*Taper(P_spouse_crd, earn_spouse, P_sp_crd_thr, P_sp_crd_wd))
			S	=(earn_spouse>0)*(P_unem_tc_rt*SSC_spouse)+OR(Married=1,Children>0)*P_basic_crd
	Provincial surtax	Prov_surtax	B	P_sur_rt1*Positive(Prov_tax_sch-Prov_tax_cred-

	Line in country table and intermediate steps	Variable name	Range	Equation
				P_sur_thr1)+P_sur_rt2*Positive(Prov_tax_sch-Prov_tax_cred-P_sur_thr2)
	Provincial tax reduction	Prov_tax_redn	B	MAX(2*(P_tax_red+Children*P_tr_chld)-(Prov_tax_sch-Prov_tax_cred+Prov_surtax), 0)
	Provincial sales tax credit	Prov_tax_stcred	P	Taper(IF(Married='1,' 2, 1)*P_sales_cred+Children*P_salcr_chd, earn_total, IF(Married+Children='0,' P_ps_thresh,P_ps_thr_sen),P_ps_red_rt)
	Liable provincial tax	Prov_tax	B	Positive(Prov_tax_sch-Prov_tax_cred+Prov_surtax-Prov_tax_redn)
9.	Employees' soc security:			
	Canada Pension Plan	CPP	B	MIN(CPP_rate*Positive((earn-CPP_ex), CPP_max)
	Unemployment insurance	Unemp	B	MIN(Unemp_rate*earn, Unemp_max)
	State health premium	Prov_health	B	MIN(Hstep(tax_inc, P_hlth_sch), P_hlth_max)
	Total Employees'soc security	SSC	B	CPP+Unemp+Prov_health
11.	Cash transfers (nonwastable)			
	Canada Child Benefit	CCB	P	Taper(Taper(Children*ccb_credit2,MINA(earn_total, ccb_crd_thrsh2), ccb_crd_thrsh1, IF(children='1,' ccb_1st _redn1, IF(children='2,' ccb_1st _redn2, IF(children='3,' ccb_1st _redn3, IF(children>3, ccb_1st _redn4, 0))))), earn_total, ccb_crd_thrsh2, IF(children='1,' ccb_2nd _redn1, IF(children='2,' ccb_2nd _redn2, IF(children='3,' ccb_2nd _redn3, IF(children>3, ccb_2nd _redn4, 0)))))
	GST Credit - Total	GST_cr	P	Taper((GST_crd_ad+(Married=1)*(GST_crd_ad+Children*GST_crd_ch)+(Married=0)*(Children>0)*(GST_crd_ad+GST_crd_sgsp+Positive(Children-1)*GST_crd_ch)+(Married=0)*(Children='0)*Positive(MIN(GST_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_total-GST_sgsp_thrsh)*GST_sgsp_rate))), earn_total, GST_crd_thrsh, GST_crd_redn)
	GST Credit - Child	GST_cr_child	P	GST_cr-GST_cr_adult
	Ontario child benefit	Prov_child_ben	P	Taper(Children*P_ch_amt,earn_total,P_ch_thresh,P_ch_redn_rate)
	Ontario sales tax credit	Prov_sales_cr	P	Taper(IF(Married=1,2,1)*P_sales_cred+Children*P_salcr_chd,earn_total,IF(Married+Children='0,' P_ps_thresh,P_ps_thr_sen),P_ps_red_rt)
	Total Cash Transfers	Cash_tran	P	CCB+GST_cr+Prov_child_ben+ Prov_sales_cr
13.	Employer's soc security			
	Canada Pension Plan	CPP_empr	B	CPP
	Unemployment insurance	Unemp_empr	B	Unemp*Unemp_emplr
	Ontario Employers Health Tax	Health_empr	B	earn*emp_healthtax
	Ontario Workers Compensation	Comp_empr	B	MIN(earn, emp_workcomp_ceil)*emp_workcomp
	Total Employer's soc security	SSC_empr	B	CPP_empr+Unemp_empr+Health_empr+Comp_empr

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

Chile

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Chile 2018

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**		6 478 269	9 669 058	16 147 327	6 478 269
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		453 479	676 834	1 130 313	453 479
	Work-related expenses					
	Other		763 788	1 139 982	1 903 770	763 788
		Total	1 217 267	1 816 816	3 034 083	1 217 267
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		5 261 002	7 852 242	13 113 244	5 261 002
5.	**Central government income tax liability (exclusive of tax credits)**		0	762	211 202	0
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children		0	0	0	242 579
	Other					
		Total	0	0	0	242 579
7.	**Central government income tax finally paid (5-6)**		0	762	211 202	0
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		453 479	676 834	1 130 313	453 479
	Taxable income					
		Total	453 479	676 834	1 130 313	453 479
10.	**Total payments to general government (7 + 8 + 9)**		453 479	677 596	1 341 515	453 479
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	53 928
		Total	0	0	0	53 928
12.	**Take-home pay (1-10+11)**		6 024 790	8 991 462	14 805 812	6 078 718
13.	**Employer's compulsory social security contributions**		0	0	0	0
14.	**Average rates**					
	Income tax		0.0%	0.0%	1.3%	0.0%
	Employees' social security contributions		7.0%	7.0%	7.0%	7.0%
	Total payments less cash transfers		7.0%	7.0%	8.3%	6.2%
	Total tax wedge including employer's social security contributions		7.0%	7.0%	8.3%	6.2%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		7.0%	10.2%	10.2%	7.0%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		7.0%	10.2%	10.2%	7.0%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Chile 2018

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**		9 669 058	12 859 847	16 147 327	12 859 847
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		676 834	900 189	1 130 313	900 189
	Work-related expenses					
	Other		1 139 982	1 516 176	1 903 770	1 516 176
		Total	1 816 816	2 416 365	3 034 083	2 416 365
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		7 852 242	10 443 482	13 113 244	10 443 482
5.	**Central government income tax liability (exclusive of tax credits)**		762	762	762	762
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children		242 579	242 579	242 579	0
	Other					
		Total	242 579	242 579	242 579	0
7.	**Central government income tax finally paid (5-6)**		0	0	0	762
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		676 834	900 189	1 130 313	900 189
	Taxable income					
		Total	676 834	900 189	1 130 313	900 189
10.	**Total payments to general government (7 + 8 + 9)**		676 834	900 189	1 130 313	900 952
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	278 688	53 928	0
		Total	0	278 688	53 928	0
12.	**Take-home pay (1-10+11)**		8 992 224	12 238 346	15 070 942	11 958 896
13.	**Employer's compulsory social security contributions**		0	0	0	0
14.	**Average rates**					
	Income tax		0.0%	0.0%	0.0%	0.0%
	Employees' social security contributions		7.0%	7.0%	7.0%	7.0%
	Total payments less cash transfers		7.0%	4.8%	6.7%	7.0%
	Total tax wedge including employer's social security contributions		7.0%	4.8%	6.7%	7.0%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		7.0%	7.0%	7.0%	10.2%
	Total payments less cash transfers: Spouse		-1.7%	7.0%	7.0%	7.0%
	Total tax wedge: Principal earner		7.0%	7.0%	7.0%	10.2%
	Total tax wedge: Spouse		-1.7%	7.0%	7.0%	7.0%

Chile's national currency is the peso (CLP). For 2018, the average exchange rate was CLP 641.90 to USD 1. That same year, the average worker in Chile earned 9 669 058 CLP (country estimate).

Taxes allowances and tax thresholds for the personal income tax system and upper earnings limits for social security contributions are determined using and expressed in CPI-indexed units. As of December 31, 2018, the following currency values applied to these units:

Major revenue items	Unit	CLP	USD
Social security contributions	Unidad de Fomento[1] (UF)	27 565.79	42.94
Monthly tax thresholds	Unidad Tributaria Mensual (UTM)	48 353	75.33
Annual tax thresholds	Unidad Tributaria Anual (UTA)	580 236	903.94

Note:
1. This amount is subject to daily adjustment in line with the CPI and is compared with monthly earnings in the assessment of social security contributions

1. Personal income tax system

1.1. Central/federal government income taxes

1.1.1. Tax unit

Each family member declares and pays taxes separately.

1.1.2. Tax allowances and credits

1.1.2.1. Standard tax reliefs

- Education tax credit: Parents with children attending preschool, primary, special or secondary education, with a total annual taxable income (both parents) of up to CLP 21 832 106 (UF 792), are entitled to a tax credit of CLP 121 289 (UF 4.4) per child, for expenses related to education. Children shall have a minimal school attendance of 85% and the school must be recognized by the State. This tax credit can be claimed by both parents, or only by one of them.
- Relief for social security contributions: Employee's compulsory social insurance contributions are deductible for income tax purposes regardless of whether they are paid to government or private health insurers. (See section 2.1 below).

1.1.2.2. Main non-standard tax reliefs

- Voluntary contributions and APV (Voluntary Pension Fund Savings): Voluntary contributions to pension funds and voluntary pension savings fund (APV) may be deducted from taxable income, with an annual upper limit of CLP 16 539 474 (UF 600.)
- Mortgage Interest: Taxpayers whose annual income falls below CLP 52 221 240 (UTA 90) may deduct from their taxable income 100% of interest paid within a year for mortgage loans. This percentage is reduced in the case of taxpayers with higher incomes up to CLP 87 035 400 (UTA 150). This relief cannot be granted along-side the DFL2 Housing Mortgage Loan Payments benefit, and cannot exceed CLP 4 641 888(UTA 8) per annum.

1.1.3. Tax schedule

Tax rates are applied on monthly income and these taxes are retained and paid by employers. In order to estimate taxes, tax rates are applied on an annual basis, on the annual average income (starting of January 1st 2017, the maximum marginal tax rate was diminished from 40% to 35%, and the number of tax brackets was reduced from eight to seven):

Taxable income (UTA)	Taxable income (CLP thousands)	Tax rates
0–13.5	0 – 7 833	exempt
13.5–30	7 833 – 17 407	4%
30–50	17 407 – 29 012	8%
50–70	29 012 – 40 617	13.5%
70–90	40 617 – 52 221	23%
90–120	52 221 – 69 628	30.4%
120 and over	69 628 and over	35%

As of 1 January 2017, the President of the Republic, Ministers, Undersecretaries, Senators and Deputies have tax thresholds and rates applicable specifically to their income, if it is higher than UTA 150:

Taxable income (UTA)	Taxable income (CLP thousands)	Tax rates
0–13.5	0 – 7 833	exempt
13.5–30	7 833 – 17 407	4%
30–50	17 407 – 29 012	8%
50–70	29 012 – 40 617	13.5%
70–90	40 617 – 52 221	23%
90–120	52 221 – 69 628	30.4%
120 – 150	69 628 – 87 035	35%
150 and over	87 0350 and over	40%

1.2. State and local income taxes

No taxes apply to income at state or local government level.

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

2.1. Employees' contributions

Employees have mandatorily to contribute 7% of their income to a health insurance plan subject to an upper earnings limit of CLP 25 552 065 (UF 78.3). They are free to choose whether to pay into a government-managed plan or alternatively to a private insurer (Isapres). [3] The public insurance is based on a joint system that, in general, operates on an equal basis for all its beneficiaries, irrespective of the risk and the amount of the individual contribution. Its financing is partly covered by the contributions and partly by way of a government subsidy. Premiums paid to the plans offered by Isapres are based on the contributors' individual risk and these plans are exclusively financed with the

[3] Enrolment in the private health system during 2016 amounted to 18.7% of all beneficiaries.

employees' contributions. Public insurance contributions are included in the modelling as the majority of employees pay into plans managed by the government sector.

Employee social security contributions in respect of pensions and unemployment are not classified as taxes in this report; though they are included in modelling as deductions for income tax.

- The mandatory contributions to pension funds and unemployment insurance plans are not classified as taxes, since the payments are made to private institutions. In 1980, the public social security system was replaced with a privately managed individual capitalisation system. This system is obligatory to all employees who have joined the labour force since 1983 and free-lance workers since 2012, and of a voluntary nature to all contributing to the former system. The contributions to the old government operated pension fund system are not included in the modelling because they relate to a minority of employees and the system will eventually disappear once the contributions and related benefit payments to those individuals remaining in it have ceased.
- The modelling allows that the contributions to pension funds and unemployment insurance managed by private institutions are deducted from gross income. In the case of their pension funds, these payments amount to 10% of their gross income, with an upper earnings limit of CLP 25 552 065 (UF 78.3). Added to that is an amount that varies depending on the managing company that covers the management of each pension fund account.[4] The monthly unemployment insurance premium is 0.6% of the employee's gross income, with an upper earnings limit of CLP 38 344 414 (UF 117.5). Employees do not pay the monthly unemployment insurance premium when they have a fixed-term contract or after 11 years of labour relationship.
- There are also mandatory contributions to managed funds by members of the police force and the army which are classified as taxes but are not included in the modelling as they relate to a minority of the overall workforce.
- If the employee has a high risk job, that person has to make an additional contribution of 2% (heavy work) or 1% (less heavy work) of the gross income with an upper earnings limit of CLP 25 552 065 (UF 78.3), to the pension fund account.

The pension and unemployment contributions are not included in the Taxing Wages calculations, as they are not considered as taxes in the report. However, information on "non-tax compulsory payments" as well as "compulsory payment indicators" is included in the OECD Tax Database, which is accessible at www.oecd.org/ctp/tax-database.htm.

2.2. Employers' contributions

There are five categories of employer social security contribution, none of which are classified as tax revenues in this report.

- Employers make mandatory payments of 0.93%[5] of their employees' gross income for an occupational accident and disease insurance policy subject to an

[4] Average cost in 2018 was 1.19% of gross income.

[5] As of January 1st 2018, until December 31st 2018, the percentage is 0.93%. During 2019 and 2020 the rate will be diminished gradually reaching a final value of 0.90% on 1 January 2020.

upper earnings limit. For the majority of employees the payments are made to employers' associations of labour security which are private non-profit institutions. Those remaining are made to the Social Security Regularisation Unit (ISL). Although this latter organisation is controlled by the government, the funds are invested on the private institutions market. The employers also pay an additional contribution which depends on the activity and risk associated to the enterprise (it cannot exceed 3.4% of the employees' gross earnings). This additional contribution could be reduced, down to 0%, depending on the safety measures the employer implements in the enterprise. If health and safety conditions at work are not satisfactory, this additional contribution could be applied with a surcharge of up to 100%.

- As of April 1st, 2017, employers shall make a mandatory contribution based on employees' gross income to a fund which will finance insurance coverage for working parents of children aged 1 to 15, or ages 1-18, whichever applies, that have a serious health condition, so that the parents can take a leave of absence from their work in order to accompany and take care of them; therefore, during this period the parents shall have the right to assistance financed by said fund (in Spanish, "Fondo SANNA") that will replace, in total or partially, their monthly earnings. During 2018 the rate is 0.015% (in 2019 the rate will be 0.02%, reaching a final value of 0.03% in force as of January 1, 2020). The collection of this contribution is initially delegated to the ISL and to the employers' association of labour security.
- Employers make payments of 2.4% of each employee's income (0.8% after 11 years of labour relationship and 3% for fixed-term contracts) with an upper earnings limit of CLP 38 344 414 (UF 117.5) to finance unemployment insurance. These funds are managed privately.
- Employers are required to pay a disability insurance of 1.53% [6] of the employees' gross income, with an upper earnings limit of CLP 25 552 065. (UF 78.3), collected by the pension fund manager, and managed by an insurance company.
- If the employee has a high risk job, the employer has to pay 2% (heavy work) or 1% (less heavy work) of the employee's gross income, with an upper earnings limit of CLP 25 552 065 (UF 78.3), to the pension fund account.

3. Universal cash transfers

3.1. Marital status-related transfers

No such transfers are paid.

3.2. Transfers related to dependent children

The "Family Allowance" is paid on a monthly basis to any employee making social security contributions who has dependent children. The definition of dependants[7] includes:

[6] Valid percentage from 1 July 2018 to 30 June 2020.

[7] If the dependant's income is equal or higher than half the minimum wage, for more than three months in the calendar year, the dependant is not eligible to receive the family allowance.

- Adopted children as well as those born to the parents;
- Children up to the age of 18 or 24 years provided they are single and are regular students in an elementary, secondary, technical, specialised or higher education establishment
- The amount of the payment depends on the number of dependent children and the beneficiary's level of income according to the table below. The modelling assumes that the benefit is assessed on the spouse with the lower earning level where both spouses are working.

2018 Transfer by Dependant	
Annual Income Range (CLP)	Annual Payment (CLP)
0–3 550 854	139 344
3 550 854– 5 186 400	85 296
5 186 400– 8 089 026	26 964
and over	0

4. Memorandum items

4.1. Identification of an average worker

- The source of information is a survey conducted by the National Statistics Institute (INE) to determine the Salary and Labour Cost Index. This nationwide survey is carried out on a monthly sample and gathers information on salaries and labour costs. It applies to companies with at least 5-worker payrolls grouped in accordance with ISIC4.CL 2012,[8] covering workers in industry sectors B to R.[9]
- The average gross earning was obtained by multiplying the average hourly wage by the average number of hours worked. It covers both full and part-time workers.

4.2. Employers' contribution to private health and pension schemes

- In Chile, very few employers make any contributions towards health schemes for their employees, and the relevant information is not available.

[8] ISIC4.CL 2012 is a Chilean classifier of economic activities, based on ISIC Rev.4.

[9] O (8422) "Defense Activities" and O (8423) "Public order and safety activities" are not included.

2018 Parameter values

Average earnings/yr	Ave_earn	9 669 058	Country estimate
Allowances	Basic_al	0	
Income tax	Tax_sch	0	7 833 186
		0.04	17 407 080
		0.080	29 011 800
		0.135	40 616 520
		0.23	52 221 240
		0.304	69 628 320
		0.35	
Education tax credit	edu_tax_cre	121 289	
	edu_tax_cre_lim	21 832 106	
Employees SSC	SSC_sch	0.07	25 552 065
Upper threshold		0	
Family allowance	CTR_child	0	139 344
Child element		3 550 854	85 296
		5 186 400	26 964
		8 089 026	0

2018 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. In addition, the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
2.	Allowances:	Tax_al	B	Min(Basic_al,earn)
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	Positive(earn-tax_al)
5.	CG tax before credits	CG_tax_excl	B	Tax(tax_inc, tax_sch)
6.	Tax credits :	tax_cr	P	IF(taxinc_princ+taxinc_spouse<='edu_tax_cre_lim,IF(taxinc_spouse' =0,edu_tax_cre*Children,edu_tax_cre*Children*0.5),0)
			S	IF(AND(taxinc_princ+taxinc_spouse<=edu_tax_cre_lim,taxinc_spouse>0),edu_tax_cre*Children*0.5,0)
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	Tax(earn, SSC_sch)
11.	Family allowance	cash_trans	P/S	IF(Children='0,0,' IF(earn_spouse>0, VLOOKUP (earn_spouse, CTR_child) , VLOOKUP (earn_princ, CTR_child)) * children)
13.	Employer's soc security	SSC_empr		0

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

Czech Republic

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Czech Republic 2018

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**		256 814	383 304	640 118	256 814
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 + 13)**		344 130	513 627	857 758	344 130
5.	**Central government income tax liability (exclusive of tax credits)**		51 620	77 044	128 664	51 620
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children					
	Other		24 840	24 840	24 840	71 648
		Total	24 840	24 840	24 840	71 648
7.	**Central government income tax finally paid (5-6)**		26 780	52 204	103 824	- 20 028
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		28 250	42 163	70 413	28 250
	Taxable income					
		Total	28 250	42 163	70 413	28 250
10.	**Total payments to general government (7 + 8 + 9)**		55 029	94 368	174 237	8 221
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	21 840
		Total	0	0	0	21 840
12.	**Take-home pay (1-10+11)**		201 785	288 936	465 881	270 433
13.	**Employer's compulsory social security contributions**		87 317	130 323	217 640	87 317
14.	**Average rates**					
	Income tax		10.4%	13.6%	16.2%	-7.8%
	Employees' social security contributions		11.0%	11.0%	11.0%	11.0%
	Total payments less cash transfers		21.4%	24.6%	27.2%	-5.3%
	Total tax wedge including employer's social security contributions		41.4%	43.7%	45.7%	21.4%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		31.1%	31.1%	31.1%	31.1%
	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%	48.6%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Czech Republic 2018

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**	383 304	509 794	640 118	509 794
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 + 13)**	513 627	683 124	857 758	683 124
5.	**Central government income tax liability (exclusive of tax credits)**	77 044	102 469	128 664	102 469
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children				
	Other	96 488	71 648	71 648	24 840
	Total	96 488	71 648	71 648	24 840
7.	**Central government income tax finally paid (5-6)**	- 19 444	5 981	32 176	52 789
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	42 163	56 077	70 413	56 077
	Taxable income				
	Total	42 163	56 077	70 413	56 077
10.	**Total payments to general government (7 + 8 + 9)**	22 720	62 058	102 589	108 866
11.	**Cash transfers from general government**				
	For head of family				
	For two children	21 840	21 840	21 840	0
	Total	21 840	21 840	21 840	0
12.	**Take-home pay (1-10+11)**	382 424	469 576	559 369	400 928
13.	**Employer's compulsory social security contributions**	130 323	173 330	217 640	173 330
14.	**Average rates**				
	Income tax	-5.1%	1.2%	5.0%	10.4%
	Employees' social security contributions	11.0%	11.0%	11.0%	11.0%
	Total payments less cash transfers	0.2%	7.9%	12.6%	21.4%
	Total tax wedge including employer's social security contributions	25.5%	31.3%	34.8%	41.3%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	31.1%	31.1%	31.1%	31.1%
	Total payments less cash transfers: Spouse	31.1%	31.1%	31.1%	31.1%
	Total tax wedge: Principal earner	48.6%	48.6%	48.6%	48.6%
	Total tax wedge: Spouse	48.6%	48.6%	48.6%	48.6%

The national currency is the Czech koruna (CZK). In 2018, CZK 21.73 was equal to USD 1. In that year, the average worker earned) CZK 383 304 (Secretariat estimate).

1. Personal Income Tax System

1.1. Central government income taxes

1.1.1. Tax unit

- The tax unit is the individual.

1.1.2. Tax allowances and tax credits

1.1.2.1. Standard reliefs

- Relief for social and health security contributions. Employees' social security contributions (see Section 2.1.) are not deductible for income tax purposes.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Charitable donations allowance: A tax allowance of up to 10% 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% of taxable income or CZK 1 000. A similar procedure shall apply for gratuitous performance to finance the removal of the consequences of a natural disaster occurring in the territory of an EU Member State, Norway or Iceland. The total deduction may not exceed 15% of the tax base. As gratuitous performance for healthcare purposes, the value of one blood donation from an unpaid donor is valued at a sum of CZK 2 000 and the value of an organ donation from a living donor is valued at a sum of CZK 20 000.
- Interest payments: Taxpayers may claim an allowance of up to CZK 300 000 for mortgage interest payments or other interest payments related to the purchase or the improvement of their house. The total sum of interest by which the tax base is reduced on all credits of payers in the same jointly managed household must not exceed CZK 300 000.
- Supplementary pension scheme contributions: In a period of taxation, the tax base may be reduced by a contribution, in the maximum total amount of CZK 12 000, paid by a taxpayer to their supplementary pension insurance with a State contribution under a contract on supplementary pension insurance with a State contribution entered into between the payer and a pension company; the sum that may be deducted in this manner equals the total amount of contributions paid by the payer for their supplementary pension insurance with a State contribution in the period of taxation, reduced by CZK 12 000.
- Private life insurance premiums: Taxpayers may claim an allowance of up to CZK 12 000 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%. The tax base, reduced by the non-taxable part of the tax base (see 1.1.2.2. - Main non-standard tax reliefs), rounded down to whole hundreds of CZK is subject to tax at the rate of 15%. After that, tax credits (see 1.1.2.4.) can be used to directly reduce a person´s tax liability.

1.1.2.4. Tax credits

- Credit of CZK 24 840 per taxpayer.
- Credit of CZK 24 840 per spouse (husband or wife) living with a taxpayer in a common household provided that the spouse's own income does not exceed CZK 68 000 in the taxable period.
- Credit of CZK 15 204 for first child, credit of CZK 19 404 for second child, credit of CZK 24 204 for third and each additional child (irrespective of the child's own income) living with a taxpayer in a common household on the territory of a Member State of the EU, Norway or Iceland, if the child satisfies one or more of the following criteria (in force since July 1, however, with retroactive effect from January 1):
  - age below 18 year of age,
  - age below 26 year of age and receiving full-time education,
  - age below 26 year of age and physically or mentally disabled provided that the child is not in receipt of a state disability payment

  If the child is a "ZTP-P" card holder (the child with a certain type of disabilities), the tax credit is doubled. The taxpayer can claim the tax credit in the form of tax reliefs or tax bonuses or their combination.
- Credit of CZK 2 520 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 5 040 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 16 140 if the taxpayer is a "ZTP-P" card holder.
- Credit of CZK 4 020 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).
- The annual tax credit for placing a child into a preschool child care institution in the amount of the expenditure proven to be incurred for attending the preschool, up to the amount of the minimum wage for each placed child (for the year 2018: MW CZK 12 200)

The non-standard tax reliefs and special solidarity surcharge of 7% for income from employment and entrepreneurship exceeding 48 times the average salary within the calendar year are not included in the tax equations underlying the Taxing Wages results.

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

The maximum annual earnings used to calculate social security contributions are 48 times the national average monthly wage. The maximum ceiling for social security contributions is CZK 1 296 288 for the year 2016. The maximum ceiling for health insurance has not existed since 2013.

2.1. Employees' contributions

Compulsory contributions of 11% of gross wages and salaries are paid by all employees into government-operated schemes. The total is made up as follows (in %):

Health insurance	4.5
Social insurance	6.5

2.2. Employers' contributions

The total contribution for employers is 34% of gross earnings.

The contribution consists of the health insurance contribution (9% of gross wages and salaries) and social insurance (25%).

3. Universal Cash Transfers

3.1. Transfers related to marital status

None.

3.2. Transfers for dependent children

Non-taxable child allowances are the basic income-tested benefit provided to a dependent child with the objective to contribute to the coverage of costs incurred in his upbringing and sustenance. Entitlement to the child allowance is bound with certain income criteria. The central government pays this allowance in respect of each dependent child based on the family income level and provided that family's income does not exceed 2.7 times the relevant family's living minimum (LM) and simultaneously fulfils the minimum income condition of CZK 3410/monthly/one of parents.. Family income includes the earnings of both parents net of income tax and the employees' social security and health insurance contributions. Child allowances are provided at three levels depending on the age of the child and are paid as follows:

Family Income	up to 2.7 LM
Age of child	Total payment CZK per month
below 6 year of age	800
6–15 years	910
15–26 years	1000

The monthly family's LM for the AW-type family with children can be calculated by summing the following amounts (in CZK):

Living minimum	
Basic personal requirement	
Single	3 410
First person in household	3 140
Second and other persons who are not a dependent child	2 830
Child aged below 6	1 740
Child aged between 6 and 15	2 140
Child aged between 15 and 26	2 450
Household expenses	
One person household	3 410
Two person household	5 970
Three person household	7 710
Four person household	9 850
Five person household	12 300

The LM is required by law. In case that family income (income of persons assessed together) don't achieve the amount of family's LM can be put in a request for state social support (housing benefit, family benefits, social assistance and other). The system applies the solidarity principle between the high-income families and low-income families, as well as between the childless families and those with children.

The term "social allowance" was abolished from 1 January 2012. However, this fact has no effect on the tax-benefit system for low-income families. The system of personalized payment was simplified and extended. For examples, in case of loss of income (social allowance) some people may put in a request for increase care allowance up to CZK 2 000. This allowance is addressed for recipients who are dependent children below 18 years of age and parent of dependent children below 18 years of age if the income of the family is under 2.0 family's living minimum. Protection in the housing sector is also addressed in the context of state social support system (housing allowances-benefit) and the system of assistance in material need as additional housing. Also foster care benefits create a separate benefit system; since 1 January 2013 they have ceased to be a component of the state social support system. These allowances (housing, care and foster care) are not included in the Taxing Wages models.

3.3. Additional transfers

Additional allowances (means-tested benefits in material need) are paid by the central government to low income families in adverse social and financial situation. The amount transferred is derived from the LM and varies according to total family income including family allowances and own efforts, opportunities and needs are taken into account. This allowance is not included in the computation.

4. Main Changes in Tax/Benefit Systems since 2018

In 2018, there were two changes that have a significant effect on the current calculation of Taxing Wages.

List of main changes that have impact on the current computation of TW:

- The tax credit can be applied in the amount of the expenditure prove to be incurred for attending the preschool, up to the amount of the minimum wage for each child (CZK 12 200 for the year 2018). The tax authority only verifies the name of a preschool childcare institution on the list approved by the MEYS. The age of the child does not effect on the entitlement to the tax credit for pre-school children. The children in preschool institutions are normally between 2 and 5 years old, but Postponement of Scholl Attendance is possible. Introduction of this relief is a part of the Act on provision of childcare in a child society and also the Act on Maternal, Basic, High, Higher Professional, and other Education (see chapter 1.1.2.4.)
- Tax credit on first child has increased based on the Amendment (CZK 15 204) – see chapter 1.1.2.4.

5. Memorandum Items

5.1. Identification of AW and valuation of earnings

The Ministry of Finance estimates the average earnings of the AW based on the data supplied by the Czech Statistical Office. The calculation of the average earnings AW is made by CZ-NACE division, which is compatible with ISIC classifications Ver. 4.

5.2. Employers' contributions to private pension, health and related schemes

There are supplementary private pension schemes only, but employers 'contributions vary. Relevant information is not available.

2018 Parameter values

	Ave_earn	383 304	Secreteriat estimate
Income tax rate	tax_rate	0.15	
Social security – social insurance	SSs_rate	0.065	
Social security – health insurance	SSh_rate	0.045	
Employers	SSC_empr_rate	0.34	
Child Tax credit - first child	child_cr_1	15 204	
- second child	child_cr_2	19 404	
- third child	child_cr_3	24 204	
Tax credit for individuals	tax_cr_base	24 840	
Tax credit for spouse	tax_cr_spo	24 840	
Tax credit for spouse income ceiling	Tax_cr_spo_inc_ceil	68 000	
Living minimum (LM)			
	basic_adult	3 410	
	basic_household	5 970	
	basic_child	2 140	
	house_exp	1	3 410
		2	5 970
		3	7 710
		4	9 850
		5	12 300
Cash transfers	transf_1	910	
Social security, social insurance - ceiling	soc_sec_si_ceil	1 438 992	
Minimum Wage	tax_cr_preschool	12 200	

2018 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. In addition, the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

		Variable name	Range	Equation
1.	Earnings	earn	B	
2.	CG taxable income	tax_inc_princ	B	Earn+(earn*SSC_empr_rate)
3.	CG tax before credits			
	CG tax before credits principal	CG_tax_excl_princ	B	Tax(tax_inc_princ, tax_rate)
4.	Tax credits:			
	Tax credit for children	tax_cr_ch	P	If (number of children>3; (number of children - 3)*child_cr_3+child_cr_1+child_cr_2+child_cr_3; If (number of children>2;child_cr_1 +child_cr_2 + child_cr_3; If (number of children>1;child_cr_1+child_cr_2; If (number of children=0;0)))))
	Tax preschool credit	Tax_cr_preschool	B	tax_cr_preschool*positive(children-1)
	Basic tax credit	tax_cr_bas	B	tax_cr_bas
	Tax credit for spouse	tax_cr_spouse	P	Married*tax_cr_spo
5.	CG tax			
	CG tax principal	CG_tax_princ	B	Max(CG_tax_excl_princ - tax_cr_bas_princ - tax_cr_spo-tax_cr-preschool , 0) - tax_cr_ch
6.	State and local taxes	local_tax	B	0
7.	Employees' social security	SSs SSh	B B	MIN(earn,soc_sec_si__ceil)*SSs_rate earn*SSh_rate
8.	Cash transfers			
	Net family income	net_inc	J	earn_total-CG_tax_total-SSC_total
9.	Living minimum (monthly)	LM	J	(1-Married)*basic_adult+Married*basic_household +Children*basic_child+ VLOOKUP((1+Married+Children), house_exp, 2, FALSE)
10.	Total cash transfers	cash_trans	J	Children*IF(net_inc<='(2.7)*LM*12,' transf_1*12)
11.	Employer's social security	SSs_empr SSh_empr	B B	MIN(earn,soc_sec_sir_ceil)*SSs_empr_rate earn*SSh_empr_rate

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

Denmark

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Denmark 2018

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**		282 437	421 547	703 984	282 437
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes		22 595	33 724	56 319	22 595
	Work-related expenses		0	0	0	0
	Other					
		Total	22 595	33 724	56 319	22 595
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
	Earnings tax credit deduction		26 831	34 300	34 300	43 778
		Total	- 26 831	- 34 300	- 34 300	- 43 778
4.	**Central government taxable income (1 - 2 + 3)**		233 010	353 524	613 365	216 064
5.	**Central government income tax liability (exclusive of tax credits)**		31 250	46 700	100 504	31 081
6.	**Tax credits**					
	Basic credit		5 943	5 943	5 943	5 943
	Married or head of family					
	Children					
	Other					
		Total	5 943	5 943	5 943	5 943
7.	**Central government income tax finally paid (5-6)**		47 903	74 481	150 880	47 733
8.	**State and local taxes**		46 584	76 604	141 331	42 363
9.	**Employees' compulsory social security contributions**					
	Gross earnings		0	0	0	0
	Taxable income					
		Total	0	0	0	0
10.	**Total payments to general government (7 + 8 + 9)**		94 487	151 085	292 211	90 096
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	75 204
	Green check		765	765	0	1 115
		Total	765	765	0	76 319
12.	**Take-home pay (1-10+11)**		188 715	271 227	411 773	268 659
13.	**Employer's compulsory social security contributions**		0	0	0	0
14.	**Average rates**					
	Income tax		33.5%	35.8%	41.5%	31.9%
	Employees' social security contributions		0.0%	0.0%	0.0%	0.0%
	Total payments less cash transfers		33.2%	35.7%	41.5%	4.9%
	Total tax wedge including employer's social security contributions		33.2%	35.7%	41.5%	4.9%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		39.6%	42.1%	55.9%	38.1%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		39.6%	42.1%	55.9%	38.1%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Denmark 2018

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**		421 547	560 658	703 984	560 658
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes		33 724	44 853	56 319	44 853
	Work-related expenses		0	0	0	0
	Other					
		Total	33 724	44 853	56 319	44 853
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
	Earnings tax credit deduction		34 300	34 300	34 300	34 300
		Total	- 34 300	- 34 300	- 34 300	- 34 300
4.	**Central government taxable income (1 - 2 + 3)**		353 524	468 290	586 534	468 290
5.	**Central government income tax liability (exclusive of tax credits)**		46 700	62 092	77 950	62 092
6.	**Tax credits**					
	Basic credit		17 102	11 522	11 885	11 522
	Married or head of family					
	Children					
	Other					
		Total	17 102	11 522	11 885	11 522
7.	**Central government income tax finally paid (5-6)**		68 901	95 422	122 384	95 422
8.	**State and local taxes**		65 146	93 734	123 188	93 734
9.	**Employees' compulsory social security contributions**					
	Gross earnings		0	0	0	0
	Taxable income					
		Total	0	0	0	0
10.	**Total payments to general government (7 + 8 + 9)**		134 047	189 156	245 573	189 156
11.	**Cash transfers from general government**					
	For head of family					
	For two children		25 500	25 500	25 500	0
	Green check		2 160	2 160	1 880	1 810
		Total	27 660	27 660	27 380	1 810
12.	**Take-home pay (1-10+11)**		315 160	399 162	485 792	373 312
13.	**Employer's compulsory social security contributions**		0	0	0	0
14.	**Average rates**					
	Income tax		31.8%	33.7%	34.9%	33.7%
	Employees' social security contributions		0.0%	0.0%	0.0%	0.0%
	Total payments less cash transfers		25.2%	28.8%	31.0%	33.4%
	Total tax wedge including employer's social security contributions		25.2%	28.8%	31.0%	33.4%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		42.1%	42.1%	42.1%	42.1%
	Total payments less cash transfers: Spouse		39.6%	39.6%	39.6%	39.6%
	Total tax wedge: Principal earner		42.1%	42.1%	42.1%	42.1%
	Total tax wedge: Spouse		39.6%	39.6%	39.6%	39.6%

The national currency is the Kroner (DKK). In 2018, DKK 6.31 was equal to USD 1. In that year, the average worker earned DKK 421 547 (Secretariat estimate), which is calculated on the background of the extrapolated average worker income with the expected 2018 growth rate of wages on 2.3061%

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. and with fully deductibility of Labour Market Contributions.
- 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.

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.

The tax credit scheme allows the taxpayer to deduct 9.5% of earned income to a maximum of DKK 34 300 in order to calculate taxable income. Single parents get an extra employment allowance of 6.0% in 2018 with a maximum allowance of DKK 21 200. The effective value of the credit is equal to the average municipality tax (24.91%) plus the 1.0% health care tax rate that is paid to the state (25.91% on average) multiplied by the value of the deduction.

From 2018, the taxpayer with an income (plus pension payments) of at least DKK 187 500 receives a job allowance of 2.50% on taxable income. The maximum allowance of DKK 1.400 is achieved at an income of DKK 243.500 and the effective value of the credit is equal to about DKK 360 (25.91% x DKK 1.400 = DKK 360).

1.1.2. Main non-standard tax reliefs applicable to an AW

- Interest payments are fully deductible from capital income.
- The non-standard deduction for wage and salary earners: The actual costs that are made in order to acquire income are deductible from taxable income. The main items are:
  - Contributions to trade unions;

  - Transportation costs: Up to 24 km. per day: no deduction. 25–120 km.: DKK 1.94 per km. Above 120 km.: DKK 0.97 per km. as a standard, but transport from municipalities placed in the outskirts of the country gives a credit of DKK 1.94 also above 120 km;
  - Other costs above DKK 6 100.
- 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. From 2013 onwards, contributions/premiums paid to private pension saving plans with sum payments are no longer deductible.
- 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 15 900);
  - 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	11.13% of DKK 46 000 = DKK 5 120
For central government health care tax	1.00% of DKK 46 000 = DKK 460
For municipal income tax	24.91% of DKK 46 000 = DKK 11 459

Special personal allowance for an individual younger than 18: DKK 34 500.

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

Individuals pay an 8% Labour Market Contribution levied on the gross wage or other income from work before the deduction of any allowance.

Before 2008, the revenue was earmarked for certain social security expenditures through the Labour market Fund, but this system was abolished from 2008, and the tax enters the budget in the same way as any other income taxes. From 2011, the last links regarding social security of the tax were removed making all taxpayers working in Denmark pay the labour market contribution. The labour market contribution is thus treated as a PIT in Taxing Wages from 2008.

Low tax bracket to the central government is assessed on the aggregate of personal income and positive net capital income at the rate of 11.13%.

From 2010 and onwards the medium tax bracket was abolished.

Top tax bracket to the central government is assessed on the excess of DKK 498 900 of the aggregate of personal income and positive net capital income in excess of

DKK 43 800 at the rate of 15%. If a married individual cannot utilise the total allowance of DKK 498 900, the unutilised part is not transferred to the spouse.

If the marginal tax rate including local tax exceeds 52.02%, the top tax bracket rate is reduced by the difference between the marginal tax rate and 52.02%.

1.2.2. Health care tax

Central government levies an additional health care tax of 1%. 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. The rates vary across jurisdictions.

1.3.2. Tax base

The tax base is taxable income (see Section 1). Tax credit varies with tax rates. The average amount is given below.

1.3.3. Tax rates

- Lowest rate: 22.5% (municipalities);
- Highest rate: 27.8% (municipalities);
- Average rate: 24.91% (municipalities);

The average rate is used in this study. It is applied to the tax base less personal allowances (see Section 1.1).

2. Compulsory Social Security Contributions to Schemes Operated Within the Government Sector

2.1. Employees' contributions

Employees make a contribution of DKK 11 727 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 4 128) while the other part consists of a voluntary contribution to an early retirement scheme (DKK 6 024). In addition an administration fee of DKK 1 575 on average is added.

Contributions to unemployment funds are not mandatory. Nevertheless, these payments have up until the implementation of ESA 2010 and the major revision of the Danish national accounts in the autumn 2014 been defined as social security contributions and classified as taxes in the Danish national accounts because there is no direct link between what members pay to the schemes and what they receive and the funds are subsidized by the state. The contributions to the unemployment funds and the church tax are no longer classified as taxes in the Danish national accounts.

3. Universal Cash Transfers

The transfers for each dependent child are as follows:

Age group	Quarterly amount (DKK) for each child
0–2	4 506
3–6	3 567
7–17	2 808

The transfer is reduced when the tax base of the top-bracket tax of a parent exceeds DKK 765 800. There are additional special amounts for single parents: the transfer for each dependent child is DKK 5 652 per year and a yearly transfer of DKK 5 760 regardless of the number of children. In addition, there is a state transfer of DKK 16 320 per year for each dependent child in case an 'absent parent' does not contribute (this amount) to the family. This transfer is included in this Report's calculations for single parents.

Individuals older than 18 years receive a 'green check' of DKK 765; this amount is increased with DKK 175 per child for up to two children. Only one partner in a married couple receives the increased 'green check' for children. The 'green check' is nominally fixed and is phased out at a rate of 7.5% for income above DKK 397 000. If the yearly income of the individuals is lower than DKK 232 000 the individuals receive an 'additional green check' of DKK 280.

4. Main Changes in Tax/Benefit Systems

From 2000 to 2002, the low tax bracket rate has been reduced from 7% to 5.5%. 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 has been reduced by 0.36% from 2004 to 2010 as a compensation for increases in local income taxes from 33.31% in 2004 to 33.66% in 2011.

In the spring of 2003, the government agreed with one of the opposition parties to implement a tax package. The aim of this package was to decrease the level of labour taxation in Denmark, and thereby to reduce the distortions in the labour market and to improve the incentives to work. The package contained two main elements: an increase of the threshold for the medium tax bracket of nearly DKK 50 000 and the introduction of a tax credit scheme whereby the taxpayer can deduct 2.5% of earned income to a maximum of DKK 7 500 (in 2007) in the calculation of taxable income.

Before 2004, a compulsory contribution of 1% of employees' gross earnings was paid to an individual Labour Market Supplementary Pension Scheme established for the employee – this contribution is not considered as a social security contribution but rather as savings being made by the individual. However, from 2004 to 2010, this contribution was suspended and finally abolished and the deposits paid out as of April 2010.

In September 2007, the tax cuts from the 2003-package was extended. The threshold for the medium tax bracket was to be raised with DKK 57 900 in 2009 to meet with the top tax bracket threshold. The deductible tax credit was increased to 4.0% of earned income in 2008 and to 4.25% in 2009; thus raising the maximum to 12 300 in 2008 and to 13 600 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 (31.63% on average in 2013) multiplied by the value of the deduction.

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 22.1% in 2006 to 24.577% in 2007. Since then, there has been a further increase in the average municipal tax to 24.907% in 2013. The county tax has been replaced by a new health care tax of 8% which is levied by central government. The health care tax rate is decreased to 6% in 2013. The levels of taxation have thus been reduced from three to two: only the central and local governments now levy taxes.

In the spring of 2009, the government and one of the opposition parties agreed upon a major tax reform to be phased in from 2010 to 2019. The reform aims at reducing the high marginal tax rates on personal income and thus to stimulate labour supply in the medium to long-term. The reform decreases income taxes by DKK 29 billion in 2010. The tax reform is planned to be revenue neutral as a whole, but was underfinanced in the short run (2010-12) in order to stimulate the economy. The main measures taken in 2010 include the reduction of the rate of the bottom tax bracket from 5.26% to 3.67%, abolition of the medium tax bracket with the 6% rate altogether, and increase the top tax bracket threshold by DKK 28 800 to DKK 389 000. The reform will decrease the lowest marginal tax rate from 42.4% to 41.0% and the highest marginal tax rate on labour income from 63.0% to 56.1%. The marginal tax rate on positive net capital income (up to 51.5 after abolition of the middle tax bracket) is further reduced for the vast majority by introduction of an extra allowance of DKK 40 000 (DKK 80 000 for married couples) for positive net capital income in the top bracket tax.

The reform is partly financed by higher energy, transport and environmental taxes to support the energy and climate policy objectives of the government, and also by increases of excise rates on health-related goods (fat, candy, sugary drinks, tobacco). These increases are partly compensated by giving a ‘green check’ to households (see section 3). The tax reform is also partly financed by base broadening measures. The measures include a gradual reduction from 2012 to 2019 of the tax value (from 33.5% to 25.5%) of assessment oriented deductions and limitations of the tax deductibility of net interest payments over a nominal threshold of DKK 50 000 (DKK 100 000 for married couples). Also the deductibility of payments above DKK 100 000 a year to individual pension insurance schemes with less than life-long coverage has been limited, as well as tightening of the tax treatment of company cars and other fringe benefits. Furthermore, a 6% tax is imposed from 2011 on pension payments exceeding DKK 362 800.

To consolidate the budget, a *Fiscal Consolidation Agreement* was reached in May 2010, somewhat modifying the prescriptions of the Spring Package of 2009.

The specific provisions of the *Fiscal Consolidation Agreement* include:

- The suspension from 2011 until 2013 of automatic adjustments in various tax thresholds (including personal allowances).
- Postponing from 2011 to 2014 the increase of the threshold for the top income tax rate (15%) from DKK 389 900 to 409 100 (EUR 52 316 to 54 892). The increase was an element of the 2009 tax reform.
- The labour union membership fees' tax deductibility is limited to DKK 3 000 (EUR 403) from the year 2011. The threshold is not adjusted.
- From 2011, the annual amount of child allowance is limited to DKK 35 000 (EUR 4 696), irrespective of the number of children. This was abolished by the new government by 2012. Child allowances will be gradually reduced by 5% until 2013.

As part of the Finance Act 2012 it was decided to introduce an 'additional green check' to people beyond 18 years with low income (less than DKK 212 000). The 'additional green check' is DKK 280.

In June 2012 a tax reform was reached. Included in the reform were changes in the earned income tax credit and the top tax bracket. The earned income tax credit is gradually raised from 4.40% in 2012 to 10.65% in 2022 (6.95% in 2013) where the maximum limit of earned income tax credit is raised from DKK 14 100 in 2012 to DKK 34 100 in 2022 (DKK 22 300 in 2013). Furthermore, a special earned income tax credit for single parents was decided from 2014. This will be gradually introduced to the amount of 6.25% in 2022 with a maximum limit of DKK 20 000. In The Tax Reform 2012 it was also decided to gradually raise the top tax bracket from DKK 389 900 in 2012 to DKK 467 000 in 2022 (DKK 421 000 in 2013).

As part of the Finance Act 2013 an agreement, The Excise Duty and Competition Package, was reached. This agreement includes a decrease in the excise duty on electricity, an abolition of the fat tax and a planned expansion in the excise duty on sugar, which will reduce expenses of both consumers and companies. This was financed by an increase in the bottom tax rate of 0.19 percentage points and a reduction in the personal allowance by DKK 900 for all persons (under and over 18 years) introduced from the income year 2013. As a consequence, the marginal tax ceiling was increased from 51.5% to 51.7%. It is estimated that the abolished excise duties and the increased income taxes will have similar effects on distribution and labour supply.

Certain elements of the tax reform from 2012 were accelerated in the 2014 Budget. The employment allowance is adjusted upwards to 7.65% (2014), 8.05% (2015), 8.3% (2016) and 8.75% (2017), with a simultaneous increase of the maximum allowance from DKK 25 000 in 2014 to DKK 28 600 in 2018. The extra employment allowance for single parents is increased to 5.40% in 2014 (instead of 2.60%) with a maximum allowance of DKK 17 700.

Growth Plan 2014 contained measures to reduce the public service obligation on electricity and roll back an increase in excise duty on fossil fuel. As part of the financing of Growth Plan 2014 the low tax bracket rate is increased by 0.28 percentage point over the next five years, including 0.25 percentage point in 2015, with a parallel increase in the tax ceiling. In addition, the green check and the supplementary green check are reduced over the next five years, starting in 2015.

In the autumn 2014, the new ESA 2010 guidelines (European System of National and Regional Accounts) and a major revision of the Danish national accounts were implemented which changed the classification of a few taxes. For example, the church tax

and contributions to the unemployment fund are no longer classified as taxes, but as volunteer contributions (see Section 2.1).

As part of the Finance Act 2015 the tax deductibility of labour union membership fees is increased from DKK 3 000 to DKK 6 000 in 2015.

The Finance Act of 2016 included an abolishment of the so-called PSO-excise duty. To finance the abolishment the tax rate for the bottom tax bracket will be increased with 0.05 percentage point from 2018 increasing to 0.09 percentage point in 2022. Fully phased-in the tax rate for the bottom tax bracket will be 12.20% in 2022. Additionally, the tax ceiling will be increased from 51.95% in 2017 to 52.07% in 2022. The 'green check' will be reduced with 190 DKK from 2018 increasing to 380 DKK in 2022. The 'additional green check' will be lowered proportionally. Low-income earners such as senior citizens and early retirees are exempt from the decrease in the 'green check'.

In February 2018, an agreement on lower tax on labour income and larger deductions for pension payments was made. The agreement will gradually be introduced from 2018 to 2020 and consists of the following elements: 1) Additional tax deductions for pension payments. The deduction will be 12% for persons with more than 15 years until they reach state pension age and 32% if they have 15 years or less - up to DKK 70,000. 2) A new job allowance of 4.5% of labour on income over DKK 187,500 to a maximum of DKK 2,500. 3) Expansion of the basis of the employment allowance to also cover pension payments. 4) Increase of the ceiling for the employment allowance from DKK 37,400 to 38,400. 5) Lowering of the bottom-bracket tax rate with 0.02 percentage points.

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. Employer and employee's contribution to private schemes

Employees typically participate in a private occupational (labour market) pension scheme to which both the employee and the employer contribute. The employee's contribution is deductible for income tax purposes until payment. The employer's contribution is not included in the gross wage income of the employee.

2018 Parameter values

Average earnings	Ave_earn	421 547	Secretariat estimate
Central taxes	Health_tax_rate	0.01	
	Low_rate	0.1113	
	Medium_thrsh	0	
	Medium_rate	0	
	Top_thrsh	498 900	
	Top_rate	0.15	
	Marg_rate_ceil	0.5202	
	Adj_top_rate	0.1498	
	Temp_tax_rate	0.00	
	Temp_tax_thrsh	0	
	Personal_al	46 000	
	Job_deduc_min	187 500	
	Job_deduc_rate	0.025	
	Job_deduc_max	1 400	
The green check	green_check	765	
	1 child	175	
	child max	350	
	Green_check_thrsh	397 000	
	Green_check_taper_rate	0.075	
	Extra_green_check	280	
	Extra_green_check_thrsh	232 000	
Local taxes	gener_rate	0.2491	
	church_rate	0	
total local tax rate	Local_rates	0.24910	
Earned income tax credit scheme	earncredit_rate	0.095	
	earncredit_max	34 300	
for single parents	Sing_par_earncredit_rate	0.06	
	Sing_par_earncredit_max	21 200	
Child transfers	Child_3to6	14 268	
	Child_7to17	11 232	
	Child_limit	765 800	
	Child_red	0.02	
for single parents	Sing_par_basic	5 760	
	Sing_par_ch	21 972	
Labour Market Contribution	Labour_market_rate	0.08	

2018 Tax equations

The equations for the Danish system in 2018 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. In addition, 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	Labour_market_contr
		earncredit	B	Min(earn*earncredit_rate, earncredit_max)+(Children>0)*(Married=0)*Min(earn *Sing_par_earncredit_rate; Sing_par_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)
	Personal income	pers_inc	B	Positive(earn-Labour_market_contr)
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_princ-Top_thrsh)
		CG_health_tax_excl_princ	P	Health_tax_rate*tax_inc_princ
		CG_tax_excl_spouse	S	Low_rate*tax_inc_spouse+Medium_rate*Positive(tax_inc_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_al-pers_inc_spouse)*Low_rate+MIN(Positive(earn_princ-Job_deduc_min)*Job_deduc_rate,Job_deduc_max)*(gener_rate+Health_tax_rate)
		health_tax_cr_princ	P	Health_tax_rate*(Personal_al+Married*Positive(Personal_al-tax_inc_spouse))
		tax_cr_spouse	S	Personal_al*Low_rate+MIN(Positive(earn_spouse-Job_deduc_min)*Job_deduc_rate,Job_deduc_max)*(gener_rate+Health_tax_rate)
		health_tax_cr_spouse	S	(Married=1)*Health_tax_rate*Personal_al
	Labour Market Contribution	Labour_market_contr	B	Labour_market_rate*earn
7.	CG tax	CG_tax	B	Positive(CG_tax_excl-tax_cr)+Positive(CG_health_tax_excl-health_tax_cr)+Labour_market_contr
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	SSC_total	B	0

	Line in country table and intermediate steps	Variable name	Range	Equation
10.	Total payments	tot_payments	J	Positive(CG_tax_total+local_tax_total+SSC_total)
11.	Cash transfers	cash_trans	J	Positive(((Children>0)*(Child_3to6+(Children>1)*(Children-1)*Child_7to17+(Married=0)*(Sing_par_basic+Children*Sing_par_ch)))-(Positive(earn_princ-Child_limit)*Child_red)-(Positive(earn_spouse-Child_limit)*Child_red))+IF(Married=1,(Taper(green_check,pers_inc_princ,Green_check_thrsh,Green_check_taper_rate)+Taper(green_check+MIN(Children*_1_child,child_max),pers_inc_spouse,Green_check_thrsh,Green_check_taper_rate)),Taper(green_check+MIN(Children*_1_child,child_max),pers_inc_princ,Green_check_thrsh,Green_check_taper_rate))+IF(Married=1,(IF(pers_inc_princ<Extra_green_check_thrsh,Extra_green_check,0)+IF(pers_inc_spouse<Extra_green_check_thrsh,Extra_green_check,0)),IF(pers_inc_princ<Extra_green_check_thrsh,Extra_green_check,0))
13.	Employer's soc security	SSC_empr	B	0

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

Estonia

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Estonia 2018

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**	10 789	16 103	26 893	10 789
2.	**Standard tax allowances**				
	Basic allowance	6 000	5 054	0	7 848
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	173	258	430	173
	Work-related expenses				
	Other				
	Total	6 173	5 311	430	8 021
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	4 617	10 792	26 462	2 769
5.	**Central government income tax liability (exclusive of tax credits)**	923	2 158	5 292	554
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children	0	0	0	0
	Other				
	Total	0	0	0	0
7.	**Central government income tax finally paid (5-6)**	923	2 158	5 292	554
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	173	258	430	173
	Taxable income				
	Total	173	258	430	173
10.	**Total payments to general government (7 + 8 + 9)**	1 096	2 416	5 723	726
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	1 780
	Total	0	0	0	1 780
12.	**Take-home pay (1-10+11)**	9 693	13 687	21 170	11 843
13.	**Employer's compulsory social security contributions**	3 647	5 443	9 090	3 647
14.	**Average rates**				
	Income tax	8.6%	13.4%	19.7%	5.1%
	Employees' social security contributions	1.6%	1.6%	1.6%	1.6%
	Total payments less cash transfers	10.2%	15.0%	21.3%	-9.8%
	Total tax wedge including employer's social security contributions	32.9%	36.5%	41.2%	18.0%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	21.3%	32.4%	21.3%	21.3%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	41.2%	49.5%	41.2%	41.2%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Estonia 2018

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**	16 103	21 417	26 893	21 417
2.	**Standard tax allowances**				
	Basic allowance	9 062	12 131	12 902	10 283
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	258	343	430	343
	Work-related expenses				
	Other				
	Total	9 319	12 473	13 332	10 625
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	6 784	8 944	13 561	10 792
5.	**Central government income tax liability (exclusive of tax credits)**	1 357	1 789	2 712	2 158
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children	0	0	0	0
	Other				
	Total	0	0	0	0
7.	**Central government income tax finally paid (5-6)**	1 357	1 789	2 712	2 158
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	258	343	430	343
	Taxable income				
	Total	258	343	430	343
10.	**Total payments to general government (7 + 8 + 9)**	1 614	2 131	3 142	2 501
11.	**Cash transfers from general government**				
	For head of family				
	For two children	1 320	1 320	1 320	0
	Total	1 320	1 320	1 320	0
12.	**Take-home pay (1-10+11)**	15 809	20 606	25 070	18 916
13.	**Employer's compulsory social security contributions**	5 443	7 347	9 090	7 347
14.	**Average rates**				
	Income tax	8.4%	8.4%	10.1%	10.1%
	Employees' social security contributions	1.6%	1.6%	1.6%	1.6%
	Total payments less cash transfers	1.8%	3.8%	6.8%	11.7%
	Total tax wedge including employer's social security contributions	26.6%	28.4%	30.3%	34.2%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	32.4%	32.4%	32.4%	32.4%
	Total payments less cash transfers: Spouse	9.7%	1.6%	21.3%	1.6%
	Total tax wedge: Principal earner	49.5%	49.5%	49.5%	49.5%
	Total tax wedge: Spouse	33.5%	2.4%	41.2%	2.4%

The Estonian currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In 2018, the average worker in Estonia earned EUR 16 103 (Secretariat estimate).

1. Personal income tax system

1.1. Central government income tax

1.1.1. Tax unit

The tax unit is the individual since January 1st 2017.

1.1.2. Tax allowances

1.1.2.1. Standard tax reliefs

- A general (basic) allowance of EUR 6000 is deductible from individual income in 2018. It starts declining from income of 14400 and reaches EUR 0 at EUR 25 200. From January 1st 2017, the supplementary basic allowance for the spouse came into force. The spouse's yearly income must be below EUR 2 160 and the family`s total yearly income must be below EUR 50 400.
- A child allowance of EUR 1 848 is also deductible from income for each of the second and any subsequent children up to and including the age of 16.
- Relief for social security contributions: Employee's compulsory contributions for unemployment insurance are deductible for income tax purposes.
- Tax credits: was abolished from 2017.

1.1.2.2. Non – standard tax reliefs applicable to income from employment

- II pillar pension contributions: In 2018, these represent voluntary payments to private funds for all employees and are paid at a rate of 2% of earnings.
- Housing loan interest, educational costs, gifts and donations are deductible from taxable income within upper limits of EUR 1 200 and 50% of taxable income per year. Housing loan interest deductions upper limit is 300€ within that 1 200€ from 2017.
- Voluntary pension contributions (III pillar): Contributions paid by a resident to the provider of a pension plan based in Estonia or in another EU Member State according to a pension plan that is approved and entered into a special register in accordance with the pension legislation are deductible from taxable income. In 2018 such deductions are subject to an annual limit of a sum equal to 15% and maximum of EUR 6 000 of the employee's, public servant`s or members of legal person management or control body income in a calendar year.

1.1.3. Tax schedule

The rate of 20% applies for all levels of taxable income.

1.2. Regional and local income tax

There are no regional or local income taxes.

2. Compulsory social security insurance system

The compulsory social security insurance system consists of three schemes as follows:

- pension insurance;
- health insurance;
- unemployment insurance.

2.1. Employees' contributions

Employees pay 1.6% of their earnings in contributions for unemployment insurance. The taxable base is the total amount of the gross wage or salary including vacation payments, fringe benefits and remuneration of expenses related to work above a certain threshold. The assessment period is the calendar month.

2.2. Employers' contributions

Social security insurance contributions are also paid by employers on behalf of their employees. The taxable base and the assessment period are the same as for employees' contributions. The employers' contribution rates are applied in two parts:

- Unemployment insurance – 0.8% of employee earnings.
- Pension and health insurance – as follows for monthly earnings above EUR 470.

Scheme name	Rate of contribution (%)
Pension insurance	20.00
Health insurance	13.00
Total	33.00

In addition, there is a lump sum payment for each employee of EUR 155.10 per month (split between pensions and health insurance on a 20:13 basis).

3. Payroll tax

None.

4. Universal cash transfers

4.1. Transfers related to marital status

None.

4.2. Transfers for dependent children

Estonia's family benefits are designed to provide partial coverage of the costs families incur in caring for, raising and educating their children.

The state pays family benefits to all children until they reach the age of 16. Children enrolled in basic or secondary schools or vocational education institutions operating on the basis of basic education, have the right to receive family benefits until the age of 19. Applications for the allowance are made on an annual basis and the payments are not taxable. The values of these benefits in 2018 are shown in the table below. The single parent child allowance is paid for each child. From 1 July 2017, the parents' allowance for families with three to six children was introduced, EUR 300 per month. Parents

allowance for families with seven or more children was increased from EUR 168.74 per month to EUR 400 per month from 1.07.2017.

In addition there are nine other types of family benefits for which payment depends on either the age of the child(ren) and/ or the status of the person(s) looking of them: maternity benefit; childbirth allowance; parental benefit; child care allowance; conscript's child allowance; child's school allowance, child allowance for a child under guardianship or foster care; start in independent life allowance; adoption allowance (single payment). These are not included in the modelling.

Type of benefit	Annual amount of benefit (in EUR)
Child allowance (paid until children turn 16 or until the end of the academic year in which they turn 19 if they continue studying).	
- For the first and second child	660.00
- For the third and any subsequent children	1 200.00
- Single parent's child allowance	230.16
- Parents allowance for families with three to six children	3 600.00
- Parents allowance for families with seven or more children	4 800.00

In addition to existing benefits, from 1 July 2013 the need-based child benefits were introduced. Need-based family benefit income threshold is based on Statistical Office relative poverty threshold published by the 1st of March in a year before current budget year. In 2017, the need based threshold is EUR 394 in a month for the first household member. For every other at least 14-years old member the threshold is EUR 197 and for the younger members EUR 118.2 in a month. Need-based family benefit is in 2017 EUR 45 in a month for single child family and EUR 90 for families with two or more children. These need-based benefits were abolished from 2018.

5. Main changes in tax/benefit system since 2005

- The personal income tax rate was steadily reduced from 24% in 2005 to 21% in 2008. In 2015, it was reduced to 20%.
- The child tax allowance applied for the third and subsequent children for 2005 and the second and subsequent children in 2006 and 2007. It applied to all children in 2008 and then returned to the 2007 position in 2009.
- The employee unemployment contribution rate was reduced from 1% to 0.6% in 2006 and then raised in 2 stages to 2.8% at the end of 2009. The corresponding rates for employers were a reduction from 0.5 % to 0.3% in 2006 increasing to 1.4%. In 2013 the employee unemployment contribution rate was reduced from 2.8% to 2.0% and the corresponding rate for employers from 1.4% to 1.0%. In 2015 the employee unemployment contribution rate was reduced from 2.0% to 1.6% and the corresponding rate for employers from 1.0% to 0.8%.
- In addition to existing benefits, from July 1, 2013 the need-based child benefits were introduced. Further details in section 4.2 on cash transfers. These were abolished from 2018.
- From 2016, a non-payable tax credit for low-income earners ("madalapalgaliste tagasimakse") was introduced. Further details in section 1.1.2. on tax allowances. It was abolished from 2017.
- From 2017 the possibility to use spouse`s basic tax-free allowance was reformed. From January 1st 2017, the supplementary basic allowance for the spouse came

into force. The spouse's yearly income must be below EUR 2 160 and the family`s total yearly income must be below EUR 50 400.

6. Memorandum items

6.1. Average gross annual wage earnings calculation

In Estonia the gross earnings figures cover wages and salaries paid to individuals in formal employment including payment for overtime. They also include bonus payments and other payments such as pay for annual leave, paid leave up to seven days, public holidays, absences due to sickness for up to 30 days, job training, and slowdown through no fault of the person in formal employment.

The average gross wage earnings figures of all adult workers covering industry sectors B–N by NACE Rev.2 are estimated with average wage growth rate forecast of Estonian Ministry of Finance.

6.2. Employer contributions to private pension and health schemes

Some employer contributions are made to private health and pension schemes but there is no relevant information available on the amounts that are paid.

2018 Parameter values

Average earnings/yr	Ave_earn	16 103	Secretariat estimate
Allowances	Basic_al	6 000	
	Basic_al_thrs_1	14400	
	Basic_al_thrs_2	25200	
	Suppl_al	2160	
	Incoome_lim	50 400	
	Child_al	1 848	
Income tax	Tax_rate	0.20	
Employers SSC	SSC_rate1	0.33	
	Threshold	5 640	
	lump_sum	1 861.2	
	SSC_rate2	0.008	
Employees SSC	SSC_rate3	0.016	
Child allowances			
First & second child	CA_first&second	660	
Other children	CA_others	1 200	
Additional for children of lone parents	CA_onepar	230.16	
Days in tax year	numdays	365	

2018 Tax equations

The equations for the Estonian system are mostly on an individual basis.

The functions which are used in the equations (Taper, MIN, Tax etc) are described in the technical note about tax equations. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable

values for the principal and spouse. In addition, 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	MINA(Positive(Basic_al-(Positive(earn-Basic_al_thrs_1)*(Basic_al/(Basic_al_thrs_2-Basic_al_thrs_1))))+IF(spouse_earn<Suppl_al,IF(AND(household_earn<income_lim,Married>0),Positive(Suppl_al-spouse_earn),0),0)+SSC_empee+(Children>1)*(Child_al*(Children-1)),earn)
			S	MINA(IF(earn>0,Positive(Basic_al-(Positive(earn-Basic_al_thrs_1)*(Basic_al/(Basic_al_thrs_2-Basic_al_thrs_1)))),0)+SSC_empee,earn)
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	Positive(earn-tax_al)
5.	CG tax before credits	CG_tax_excl	B	Tax_inc*tax_rate
6.	Tax credits :	tax_cr	B	0
7.	CG tax	CG_tax	B	CG_tax_excl
8;	State and local taxes	local_tax	B	0
9.	Employees' soc security	SSC_empee	B	earn*SSC_rate3
11.	Cash transfers	cash_trans	J	IF(Children<3,CA_firstsecond*Children,(2*CA_firstsecond)+(CA_other*(Children-2)))+(Married='0)*Children*CA_onepar
13.	Employer's soc security	SSC_empr	B	IF(earn>0,IF(earn>threshold,earn*SSC_rate1,lump_sum),0)+earn*SSC_rate2

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 2018

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**	29 470	43 984	73 454	29 470
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	2 882	4 302	7 184	2 882
	Work-related expenses	750	750	750	750
	Other				
	Total	3 632	5 052	7 934	3 632
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	25 837	38 933	65 520	25 837
5.	**Central government income tax liability (exclusive of tax credits)**	542	2 801	8 312	542
6.	**Tax credits**				
	Basic credit	1 540	1 371	885	1 540
	Married or head of family				
	Children	0	0	0	0
	Other				
	Total	1 540	1 371	885	1 540
7.	**Central government income tax finally paid (5-6)**	163	1 593	7 590	163
8.	**State and local taxes**	3 556	7 284	12 828	3 556
9.	**Employees' compulsory social security contributions**				
	Gross earnings	2 882	4 302	7 184	2 882
	Taxable income	0	0	0	0
	Total	2 882	4 302	7 184	2 882
10.	**Total payments to general government (7 + 8 + 9)**	6 601	13 178	27 602	6 601
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	3 676
	Total	0	0	0	3 676
12.	**Take-home pay (1-10+11)**	22 869	30 806	45 852	26 545
13.	**Employer's compulsory social security contributions**	6 304	9 408	15 712	6 304
14.	**Average rates**				
	Income tax	12.6%	20.2%	27.8%	12.6%
	Employees' social security contributions	9.8%	9.8%	9.8%	9.8%
	Total payments less cash transfers	22.4%	30.0%	37.6%	9.9%
	Total tax wedge including employer's social security contributions	36.1%	42.3%	48.6%	25.8%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	44.2%	45.8%	49.4%	44.2%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	54.0%	55.4%	58.3%	54.0%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Finland 2018

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**		43 984	58 499	73 454	58 499
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes		4 302	5 721	7 184	5 721
	Work-related expenses		750	1 500	1 500	1 500
	Other					
		Total	5 052	7 221	8 684	7 221
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		38 933	51 278	64 770	51 278
5.	**Central government income tax liability (exclusive of tax credits)**		2 801	2 801	3 342	2 801
6.	**Tax credits**					
	Basic credit		1 371	2 813	2 911	2 813
	Married or head of family					
	Children		0	0	0	0
	Other					
		Total	1 371	2 813	2 911	2 813
7.	**Central government income tax finally paid (5-6)**		1 593	1 593	1 756	1 593
8.	**State and local taxes**		7 284	7 284	10 840	7 284
9.	**Employees' compulsory social security contributions**					
	Gross earnings		4 302	5 721	7 184	5 721
	Taxable income		0	0	0	0
		Total	4 302	5 721	7 184	5 721
10.	**Total payments to general government (7 + 8 + 9)**		13 178	14 598	19 779	14 598
11.	**Cash transfers from general government**					
	For head of family					
	For two children		2 397	2 397	2 397	0
		Total	2 397	2 397	2 397	0
12.	**Take-home pay (1-10+11)**		33 203	46 298	56 071	43 901
13.	**Employer's compulsory social security contributions**		9 408	12 513	15 712	12 513
14.	**Average rates**					
	Income tax		20.2%	15.2%	17.1%	15.2%
	Employees' social security contributions		9.8%	9.8%	9.8%	9.8%
	Total payments less cash transfers		24.5%	20.9%	23.7%	25.0%
	Total tax wedge including employer's social security contributions		37.8%	34.8%	37.1%	38.2%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		45.8%	45.8%	45.8%	45.8%
	Total payments less cash transfers: Spouse		9.8%	9.8%	44.2%	9.8%
	Total tax wedge: Principal earner		55.4%	55.4%	55.4%	55.4%
	Total tax wedge: Spouse		25.7%	25.7%	54.0%	25.7%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year, the average worker earned EUR 43 984 (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 750 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 12% of income exceeding EUR 2 500, until it reaches its maximum of EUR 1 540. The amount of the credit is reduced by 1.65% of the earned income minus work related expenses exceeding EUR 33 000. The credit is fully phased out when taxpayers' income is about EUR 127 000.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Interest: Interest on loans associated with the earning of taxable income, 45% of the interest on loans for the purchase of owner-occupied dwellings, and student loans guaranteed by the state can be deducted against capital income. Of the excess of interest over capital income, 30% (32% for first-time homebuyers) can be credited against income tax up to a maximum of EUR 1 400.
- 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 750 up to a maximum deduction of EUR 7 000.
- Double housing expenses: If the place of employment is located too far from home in order to commute (distance > 100km), the taxpayer can deduct the costs of hiring a second dwelling located near the place of work up to EUR 250 per month. This deduction can be claimed only by one person per household.
- Other work-related outlays: Outlays for tools, professional literature, research equipment and scientific literature, and expenses incurred in scientific or artistic work (unless compensated by scholarships).

Travelling expenses and other work related outlays are deductible only to the extent that their total amount exceeds the amount of the standard deduction for work related expenses.

1.1.3. Rate schedule

Central government income tax:

Taxable income (EUR)	Tax on lower limit (EUR)	Tax on excess income in bracket (%)
17 200-25 700	8	6
25 700-42 400	518	17.25
42 400-74 200	3 398.75	21.25
74 200	10 156.25	31.25

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 2018 the tax rate varies between 17.00 and 22.50%, the average rate being approximately 19.86%.

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% of income between EUR 2 500 and EUR 7 230 and 28% of the income exceeding EUR 7 230, until it reaches its maximum of EUR 3 570. The amount of the allowance is reduced by 4.5% on earned income minus work related expenses exceeding EUR 14 000.
- A basic tax allowance is granted on the basis of taxable income remaining after the other allowances have been subtracted. The maximum amount, EUR 3 100, is reduced by 18% on income exceeding the aforementioned amount.

2. Compulsory Social Security Contributions to Schemes Operated within the Government Sector

2.1. Employee contributions

2.1.1. Rate and ceiling

In 2018, the rate of the health insurance contribution for medical care paid by an employee is 0%. The tax base for this contribution is net taxable income for municipal income tax purposes.

In addition there is an employees' pension insurance contribution which amounts to 6.35% of gross salary, an employees' unemployment insurance contribution equal to 1.9% of gross salary and a health insurance contribution for daily allowance equal to 1.53% of gross salary. For employees aged 53 and older, the pension insurance contribution amounts to 7.85% 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 2018 is 21.39% of gross wage.

	Contribution rates (%)
Health insurance	0.86
Unemployment insurance (avg)	1.91
Earnings-related pension insurance	17.75
Accident insurance (avg)	0.8
Group life insurance (avg)	0.07
Total	21.39

3. Universal Cash Transfers

3.1. Amount for marriage

None.

3.2. Amount for children

The central government pays in 2018 the following allowances (EUR):

For the first child	1 138.56
For the second child	1 258.08
For the third child	1 605.48
For the fourth child	1 838.88
Fifth and subsequent child	2 072.28

The child subsidy for a single parent is increased by an annual amount of EUR 639.6 for each child.

4. Main Changes in the Tax/Benefit System since 2017

Adjustments for inflation and rise of earnings levels were made to the central government tax scale in 2018. Also, all bracket rates of the tax scale were lowered by 0.25 percentage points, leaving the top tax rate at 31.25%.

In 2018 the Public Broadcasting Tax is 2.5% of the part of your total taxable earned income and capital income exceeding EUR 14 000. The tax is capped at EUR 163.The maximum amount of the earned income tax credit in state taxation was raised from EUR 1 420 to EUR 1 540.

Home-loan interest counts at 35%, down from 45%, as deductible/creditable interest.

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.

2018 Parameter values

Average earnings	Ave_earn	43 984	Secretariat estimate
Expenses	Work_exp_max	750	
	Work_exp_rate	1	
Allowances	al_SSC_rate	0.0978	
State tax	Tax_min	8	
Tax schedule	Tax_sch	0	17 200
		0.06	25 700
		0.1725	42 400
		0.2125	74 200
		0.3125	
Broadcasting tax	brdcst_tax_rate	0.025	
	brdcst_tax_thres	14000	
	brdcst_tax_max	163	
Earned income tax credit	eitc_thrsh	2 500	
	eitc_rate	0.12	
	eitc_redn_thrsh	33 000	
	eitc_redn_rate	0.0165	
	eitc_max	1 540	
Child tax credit	child_cr	0	
	child_thres	0	
	child_red	0	
Earned income tax allowance	al_thrsh	2 500	
	al_thrsh2	7 230	
	al_rate	0.51	
	al_rate2	0.28	
	al_redn_thrsh	14 000	
	al_redn_rate	0.045	
	al_max	3 570	
low income	SL_max	3 100	
	SL_rate	0.18	
Local intax	Local_rate	0.1986	
	Church_rate	0	
	Local_tot	0.1986	
Soc sec taxpayer	SSC_rate	0.0	
soc.sec empr	SSC_empr	0.2139	
Cash transfer	ch_1	1 138.56	
	ch_2	1 258.08	
	ch_3	1 605.48	
	ch_4	1 838.88	
	ch_5	2 072.28	
	ch_small	0	
	ch_lone	639.6	

2018 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))
	Child tax credit	child_cr	P	taper(child_cr*(1+(married=0))*children,earn_p-work_rel,child_thres,child_red)
			S	If(tax_inc_s>0,taper(child_cr*children,earn_s-work_rel,,child_thres,child_red),0)
		broadcasting_tax	B	IF((earn-(work_rel+brdcst_tax_thrsh))*brdcst_tax_rate<0,0,IF((earn--(work_rel+brdcst_tax_thrsh))*brdcst_tax_rate>brdcst_tax_max,brdcst_tax_max,(earn---(work_rel+brdcst_tax_thrsh))*brdcst_tax_rate))
7.	CG tax	CG_tax	B	Positive(CG_tax_excl - tax_cr-child_cr)+broadcasting_tax
	Earned income allowance	earninc_al	B	MIN(al_max, IF(earn>al_thrsh2, al_rate*(al_thrsh2-al_thrsh1)+al_rate2*(earn-al_thrsh2), Positive(earn-al_thrsh)))-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_l*Local_tot-(local_tot/(local_tot+SSC_rate))*If((Tax_cr-CG-tax_excl)>0,(Tax_cr-CG-tax_excl)+child_cr,0)
9.	Employees' soc security	SSC	B	Positive(SSC_rate*tax_inc_l -(SSC_rate/(local_tot+SSC_rate))*IF((Tax_cr-CG-tax_excl)>0,(Tax_cr-CG-tax_excl)+child_cr,0)) + SSC_prog_rate* Positive(tax_inc_l-SSC_prog_thrsh)+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_lone
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 2018

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**	26 422	39 436	65 858	26 422
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	4 913	7 333	11 775	4 913
	Work-related expenses	2 151	3 210	5 408	2 151
	Other				
	Total	7 064	10 543	17 183	7 064
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	19 358	28 893	48 675	19 358
5.	**Central government income tax liability (exclusive of tax credits)**	3 623	6 628	15 081	2 518
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children				
	Other	181	0	0	0
	Total	181	0	0	0
7.	**Central government income tax finally paid (5-6)**	3 443	6 628	15 081	2 518
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	3 148	4 698	7 375	3 148
	Taxable income				
	Total	3 148	4 698	7 375	3 148
10.	**Total payments to general government (7 + 8 + 9)**	6 590	11 326	22 456	5 666
11.	**Cash transfers from general government**				
	In-work benefit (Gross)	0	0	0	998
	For two children (Gross)	0	0	0	4 325
	CRDS Deducted	0	0	0	- 27
	Total	0	0	0	5 296
12.	**Take-home pay (1-10+11)**	19 832	28 110	43 402	26 052
13.	**Employers' compulsory social security contributions**	8 425	14 243	28 674	8 425
14.	**Average rates**				
	Income tax	13.0%	16.8%	22.9%	9.5%
	Employees' social security contributions	11.9%	11.9%	11.2%	11.9%
	Total payments less cash transfers	24.9%	28.7%	34.1%	1.4%
	Total tax wedge including employer's social security contributions	43.1%	47.6%	54.1%	25.2%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	44.4%	43.4%	42.1%	51.1%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	69.7%	58.4%	59.5%	73.4%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

France 2018

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**	39 436	52 450	65 858	52 450
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	7 333	9 752	12 245	9 752
	Work-related expenses	3 210	4 270	5 361	4 270
	Other				
	Total	10 543	14 022	17 607	14 022
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	28 893	38 428	48 251	38 428
5.	**Central government income tax liability (exclusive of tax credits)**	3 758	5 120	8 804	7 561
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children				
	Other	0	24	174	455
	Total	0	24	174	455
7.	**Central government income tax finally paid (5-6)**	3 758	5 095	8 630	7 106
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	4 698	6 248	7 845	6 248
	Taxable income				
	Total	4 698	6 248	7 845	6 248
10.	**Total payments to general government (7 + 8 + 9)**	8 456	11 343	16 475	13 354
11.	**Cash transfers from general government**				
	In-work benefit (Gross)	0	0	0	0
	For two children (Gross)	1 578	1 578	1 578	0
	CRDS Deducted	- 8	- 8	- 8	0
	Total	1 570	1 570	1 570	0
12.	**Take-home pay (1-10+11)**	32 550	42 676	50 953	39 096
13.	**Employers' compulsory social security contributions**	14 243	15 229	22 668	15 229
14.	**Average rates**				
	Income tax	9.5%	9.7%	13.1%	13.5%
	Employees' social security contributions	11.9%	11.9%	11.9%	11.9%
	Total payments less cash transfers	17.5%	18.6%	22.6%	25.5%
	Total tax wedge including employer's social security contributions	39.4%	36.9%	42.4%	42.2%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	21.4%	35.8%	47.2%	45.4%
	Total payments less cash transfers: Spouse	22.2%	35.8%	47.2%	45.4%
	Total tax wedge: Principal earner	42.3%	52.8%	61.2%	59.9%
	Total tax wedge: Spouse	27.7%	40.3%	71.2%	49.2%

The national currency is the Euro (EUR). In 2018, EUR 0.85 equalled USD 1. In that year, the average worker earned EUR 39 436 (Secretariat estimate).

1. Personal income tax system

1.1. Tax levied by the central government on 2018 income

1.1.1. Tax unit

The tax unit is aggregate family income, but children over 18 are included only if their parents claim them as dependants. Other persons may be fiscally attached on certain conditions: unlike spouses, who are always taxed jointly, children over 18 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 437 and a ceiling of EUR 12 502 per earner).
- Family status: The "family quotient" (quotient familial) system takes a taxpayer's marital status and family responsibilities into account. It involves dividing net taxable income into a certain number of shares [two shares for a married (or "PACSed") couple, one share for a single person, one half-share for each dependent child, an additional share for the third and each subsequent dependent child, an additional half-share for 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 1 551 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 single parent, in which case the maximum benefit is EUR 3 660.

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 (30% tax credits, subject to a multi-year maximum); compensatory allowances in case of divorce if paid in a lump sum (25% reduction, capped at EUR 30 500); 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 those in needs; trade union dues, etc. The exemption of the

employer's participation to the collective contracts of supplementary health cover is abolished in the budget act for 2014 (i.e. income earned in 2013).

1.1.3. Tax schedule

	Fraction of taxable income (1 share, in Euros)	Rate (in %)
1st bracket	Up to 9 964	0
2nd bracket	From 9 964 to 27 519	14
3rd bracket	From 27 519 to 73 779	30
4th bracket	From 73 779 to 156 244	41
5th bracket	From 156 244	45

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 1 595 for single households and less than 2 627 for the couples. The rebate is equal to the three-quarter of the difference between this ceiling and the amount of tax before the rebate.

A special tax reduction has been established for the 2018 income tax. The reduction rate is 20% of the tax liable if the household income is less than EUR 18 984 (doubled for couples, plus EUR 3 797 for each dependent person) and it decreases linearly until zero for households whose income equals to EUR 21 036 (doubled for couples, plus EUR 3 797 for each dependent person).

If the final tax is less than EUR 61, no tax is payable.

1.1.4. Exceptional contribution on high revenues

An exceptional contribution on high revenues is based on the reference taxable income (*revenu fiscal de référence*). The tax rates are 3% from EUR 250 000 to EUR 500 0000 (single person), 4% over EUR 500 0000 (single person), 3% from EUR 500 000 to EUR 1 000 000 (married couple or civil union) and 4% over EUR 1 000 000 (married couple or civil unions).

1.2. Taxes levied by decentralised authorities

Local taxes levied on working households are:

- Residency tax (*taxe d'habitation*), which is set by local authorities;
- Property taxes on developed and undeveloped land;
- There are common rules for each type of tax, to which certain municipalities make certain adjustments.

These local taxes, the rates of which vary widely, depending on the municipality, are not assessed here.

1.3. Universal social contribution (contribution sociale généralisée, or CSG)

The universal social contribution (CSG) was introduced on 1 February 1991. Since 1 January 2018, the rate of CSG has been 9.2%. This rate has been applied to a base of 98.25% as of 1st January 2012. The CSG is deductible against taxable income, but at a lower rate of 6.8%.

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 98.25% of gross pay as of 1st January 2012. 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 2018, the ceiling was EUR 3 311 (or EUR 39 732 per year).

2.1. Employee contributions

2.1.1. Pension

- 6.9% on earnings up to the ceiling (after 6.9% in 2017).
- 0.4% on total earnings (after 0.4% in 2017).

2.1.2. Illness, pregnancy, disability, death

- 0.0% on total earnings. (0,75% in 2017)

2.1.3. Unemployment

- 0.0% on earnings up to 4 times the ceiling since 1st October 2018, and 0.95% between 1st January 2018 and 30 September (after 2.4% in 2017)

2.1.4. Others

- Supplemental pension[10] for non-managers: minimum 3.1% up to the ceiling and 8.1% between one and three times the ceiling; for managers, 3.10 % up to the ceiling and 7.80 % between one and four times the ceiling.[11]
- The AGFF (*Association pour la gestion du fonds de financement*) contribution replaces ASF (*Association pour la gestion de la structure financière*), which had previously been included in "unemployment" levies. The rate of this contribution is, for non-managerial workers,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 ; for managerial workers, its rate is 0.8% up to the social security ceiling plus 0.9% from one to eight times the ceiling. In the table, this is combined with the rate for supplemental pensions.

[10] The social protection scheme is named ARRCO for non-managers and AGIRC for managers.

[11] Between four and eight times the ceiling, the repartition of the pension contributions between employee and employer contribution is not nationally decided.

2.2. Employer contributions

2.2.1. Pensions

8.55% (8.55% in 2017) of gross pay, up to the ceiling, plus a 1.90% (1.90% in 2017) levy on total pay.

2.2.2. Illness, pregnancy, disability, death

13.0% of total earnings (after 12.89% in 2017).

An additional contribution of 0.3% (*contribution de solidarité autonomie* – (CSA) is levied on total salary.

2.2.3. Unemployment

4.05% of earnings (4.5%, 5.5% or 7% for some temporary contracts), up to four times the ceiling; in addition, 0.15% (0.2% in 2017) 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*). In 2018, the average rate is 2.22% (after 2.32% in 2017).

2.2.5. Family allowances

5.25% of total pay. The rate has been reduced to 3.45% up to 1.6 times the minimum wage from 2015 with the responsibility pact, up to 3.5 times the minimum wage from April 2016.

2.2.6. Others

- Supplemental pension: for non-managers, 4.65% up to the ceiling and 12.15% between one and three times the ceiling; for managers, 4.65% up to the ceiling and 12.75% between one and four times the ceiling.
- The AGFF contribution is 1.2% for non-managers or managers up to the ceiling, 1.3% for non-managers between one and three times the ceiling and 1.3% for managers between one and eight times the ceiling. In the table, this is combined with the rates for supplemental pensions.
- Others (construction, housing, apprenticeship, further training): 2.646% of pay (for enterprises with more than 20 employees). The transport tax is not included because it varies geographically. Contributions to finance a fund dedicated to workers exposed to distressing work conditions ("*Fonds Pénibilité*") vary with the levels of exposure of each worker and are therefore not included.

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% (in companies with more than 20 employees) for a worker paid the minimum wage. It then declines gradually

to zero at 160% of the annual minimum wage. It applies irrespective of the number of hours worked. Since 2018 the maximum reduction has been increased up to 28.54% (28.49% in 2017) for companies with more than 20 employees, and up to 28.14 % (28.09% in 2016) for companies with less than 20 employees.

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.

In 1 January 2011 the "Fillon act" was modified and included an annualized calculation of the general tax reliefs of employer contributions. 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.

From 2015, the Responsibility Pact (Phase 1) includes new reductions of the labour cost: total exemption of all URSSAF employer contributions on the minimum wage (except unemployment contributions); reduction of 1.8 point on employer-paid contributions for family allowance (3.45% instead of 5.25% for salary up to 1.6 times the minimum wage, and up to 3.5 times from April 2016).

The gross annual minimum wage (for 1 820 hours) in 2018 was an estimated EUR 17 982.

2.2.8. Competitive tax credit (CICE - Crédit d'impôt pour la compétitivité et l'emploi)

As for 2015, the competitive tax credit (CICE - *Crédit d'impôt pour la compétitivité et l'emploi*) will benefit all businesses, regardless of their legal status or economic sector, that employ salaried workers and be liable for either corporation tax or income tax, based on actual profits.

The CICE is based on all wages paid to salaried employees in a given calendar year up to 2.5 times the minimum wage (without taking into account any overtime or additional hours worked). For part-time employees and seasonal workers, the minimum wage corresponding to the working hours stipulated in the contract shall be taken into account.

The rate of the tax credit shall be 6% for wages paid in 2018 (after 7% in 2017).

3. Universal cash transfers

3.1. Main minimum social benefits

The RSA (*revenue de solidarité active*) is the minimum income benefit. However, the eight family types studied here earn too high an income to benefit from this benefit.

3.2. Main family benefits (in respect of dependent children)

- Family allowances: monthly base for family allowances (BMAF) = EUR 407.84 between 1st January and 1st April 2018, since 1st April, the BMAF is EUR 411.92. The family allowances are subject to revenue conditions since 1 July 2015:
- Up to 67 542 (+5 628 per child after the second child), the rate is 32% for two children and 41% per additional child. An extra amount of 16% of the BMAF is reversed if the child is over 14 (the extra amount is not incorporated into the model).

- Between 67 542 (+5 628 per child after the second child) and 90 026 (+5 628 per child after the second child), the above rates are divided by 2.
- Beyond 90 026 (+5 628 per child after the second child), the above rates are divided by 4.
- ASF (*Allocation de soutien familial*): extra child benefit for isolated parent EUR 106.65 and EUR 115.30 since the 1st April 2018 (EUR 105.27 in 2016) per child per month (28.13% of the BMAF since 1st April 2018, 27.02% percent before).
- ARS (*Allocation de Rentrée Scolaire*): The amount payable depends on the age of the child to reflect needs. The allowance is payable to families or persons with children aged 6 to 18 attending school, and whose income is below a certain level (not incorporated into the model).

Age of the child	Percentage of the BMAF in 2018
6–10 years	89.72%
11–14 years	94.67%
15–18 years	97.95%

- Family supplement (*Complément Familial*): 41.65% of the BMAF. Subject to revenue ceilings, this is paid to families as of the third child. An extra amount (EUR 67.68/month) is reversed for families whose incomes are below the poverty line (not incorporated into the model).
- Early childhood benefit (not incorporated in the model) known as PAJE (*Prestation d'Accueil du Jeune Enfant*): subject to revenue ceilings. It includes:
  - A birth grant of 229.75% of the BMAF (EUR 941.68 after deduction of the CRDS) received at the 7th month of pregnancy.
  - A benefit ("allocation de base") of 45.95% of the BMAF (EUR 183.7 after deduction of the CRDS (or EUR 91.8 depending on revenue) a month from the birth of the child until three years of age.
- The CRDS is levied on family allowances at a rate of 0.5% (no deduction). The allowances mentioned above are after deduction of the CRDS for the benefits expressed in EUR.

3.3. Housing benefits

The housing benefits are not included in the model.

3.4. In-work benefit

The November 2014 Supplementary Budget Act eliminated the earned income tax credit (*Prime pour l'emploi*, PPE) so that it could be merged with the in-work income supplement (*RSA Activité*) and become a single in-work benefit. The in-work benefit was created by the Act of 17 August 2015 on Labour-Management Dialogue and Employment, and has been in place since 1 January 2016. The in-work benefit is better targeted to promote a return to full-time work for low-paid workers.

The amount of in-work benefit is equal to a targeted income, less the maximum between resources and a lump sum. The targeted income is determined as the sum of three elements:

- A lump sum of EUR 526.25 between 1 January and 1 April, then 531.51 between 1st April and 1st September and 551.51 up to 1 September, modulated according to the composition of the household. For instance, it is increased by 50% for couple,

then 30% for each child until two (EUR) and 40% for each additional child (EUR). The amount may be increased for isolated parent (128.412% of the basic lump sum for the adult and then 42% for each child).

Number of dependents	Single	Couple
0	535.20	802.79
1	802.79	963.35
2	963.35	1 123.91
For each additional dependent	214.08	214.08

- An individual bonus of EUR 67.26 (12.782% of the basic lump sum) is planned for persons whose net income exceeds 80% of the net minimum wage; this bonus grows linearly if the net income is between 50% and 80% of the net minimum wage.[12]
- 62% of the net professional income of the household.

Then resources are assessed as the sum of the household income, plus the benefits (family benefits, housing benefits).[13] A lump sum depending on the composition of the household (12% of the basic lump sum (EUR 526.25) for a single person, 16% for a couple, 16.5% for three persons or plus) is used to take into account the housing benefits.[14]

4. Main changes in the tax system and social benefits regime since the taxation of 2015 income

- Tax system (2016 income)
  - Special income tax reduction.
- Increase of 1.7 points of CSG deductible
- Social benefits regime
  - Increased reduction of employer-paid contributions for family allowance: 3.45% instead of 5.25% for salary up to 3.5 times the minimum wage from April 2016 (1.6 times before).
  - Removal of sickness employee contribution
  - Creation of a new cash transfer benefit for low income workers (*prime d'activité*) which replace the PPE and the *RSA activité*.[15]

5. Memorandum items

To assess the degree of comparability between countries, the following additional information should be taken into account:

- Coverage is of the private and semi-public sectors of NACE sections C to K up to 2007 and NACE rev.2 sections B to N from 2008.

[12] The boundaries are defined as: minimum of 59 hours paid at gross minimum wage per hour per month and maximum of 95 hours paid at gross minimum wage per hour per month.

[13] Capital income, unemployment benefits, pensions or minimum old-age pensions are not taken into account in this model.

[14] The complete formula uses the minimum of this lump sum tax and the amount of housing benefits. As the model does not include housing benefits, we only use the lump sum in the formula. This method tends to minimize the amount of *prime d'activité* served.

[15] In the previous model, for 2015 revenues, this reform only affects the income tax (no PPE in 2016) but not the benefits, since the *prime d'activité* will be served as from the beginning of 2016.

- 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.

2018 Parameter values

APW earnings	Ave_earn	39 436	Secretariat estimate
Income tax			
Work expenses	work_rel_fl	437	
	work_rel_ceil	12502	
	work_rel_rate	0,1	
Tax schedule	tax_sch	0	9964
		0,14	27519
		0,3	73779
		0,41	156244
		0,45	
	limit_demipart	1551	
	limit_sp_demipart1	3660	
Décote value	decote_sing	1595	
	decote_mar	2627	
	decote_pente	0,75	
Tax reduction	red_taux	0,20	
	red_seuil_1	18984	
	red_seuil_2	21036	
	red_seuil_dp	3797	
	tax_min	61	
CEHR	cehr_rate1	0,03	
	cehr_rate2	0,04	
	cehr_ceil1	250000	
	cehr_ceil2	500000	
CSG+CRDS	CSG_CRDS_abat	0,0175	
	CSG_rat_noded	0,0240	
	CRDS_rat_noded	0,0050	
	CSG_CRDS_rat_noded	0,0290	
	CSG_rat_ded	0,0680	
	CRDS_special	0,0050	
Employee contributions			
	pension_rate	0,069	
	pension_rate2	0,004	
Sickness	sickness_rate	0,0000	
Unemployment	unemp_rate	0,007125	
Extra pension (non-cadres) (incl. AGFF)	pens_rate_ex	0,039	
	pens_rate_ex2	0,09	
Employer contributions			
	pens_empr1	0,0855	
	pens_empr2	0,0190	
Sickness	sickness_empr	0,1300	
Authonomous Solidarity Contribution	CSA	0,0030	
Unemployment (incl. "garantie de salaire")	unemp_empr	0,0420	

Accidents	accidents_empr	0,0222
Family Allowance	fam_empr	0,0525
	fam_empr_2	0,0345
Extra pension (incl. AGFF)	pens_empr_ex	0,0585
	pens_empr_ex2	0,1345
Others	others_empr	0,02646
CS reduction & corporate tax credit		
Employer SSC reduction rate	SSC_empr_redrate2	0,6
Employer SSC reduction maximum	SSC_empr_red_max	0,2854
Employer SSC reduction SMIC reference	SSC_empr_SMIC_ref	1,6
	SSC_empr_SMIC2	3,5
Taux de réduction CICE	cice_red	0,06
	cice_max	2,5
Social transfers		
Child benefit (second child)	CB_2	1577,86
third & subsequent before CRDS	CB_3	2021,63
First ceiling for CB	CB_c1	67542
Second ceiling for CB	CB_c2	90026
Increase of ceiling per child	CB_ceiling_extra_child	5628
Extra child benefit for isolated parent	CB_isol	1373,45
Prime d'activité	pa_forf	535,20
	pa_maj1	0,50
	pa_maj2	0,30
	pa_maj3	0,40
	pa_maj_isol1	0,28412
	pa_maj_isol2	0,42804
	pa_pct	0,62
	pa_bonus	0,12782
	pa_bonus1	0,39
	pa_bonus2	0,63
	pa_forf_logement1	0,12
	pa_forf_logement2	0,16
	pa_forf_logement3	0,165
Others		
Social security contributions	SSC_ceil	39732
Derivation of minimum income	SMIC_horaire	9,88
	SMIC_heures	1820
	SMIC	17981,6

2018 Tax equations

The equations for the French system are mostly calculated on a family basis. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	Earn		
	Quotient for tax calculation	Quotient	J	1+Married+IF(Children<3, Children/2, Children-1)+0.5*(Married=0)*(Children>0)
2.	Allowances			
	CSG deductible	CSG_ded	B	CSG_rat_ded*((1-CSG_CRDS_abat)*MIN(earn;4*SSC_ceil)+Positive(earn-4*SSC_ceil))
	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_dec)))
	Basic	basic_al	B	0
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	J	Positive(earn_dec_total-work_exp)
5.	CG tax before credits			
	Calculation according to schedule	sch_tax	J	MAX(quotient*Tax(tax_inc/quotient, tax_sch), IF(Married, 2*Tax(tax_inc/2, tax_sch)-limit_demipart*(quotient-2), Tax(tax_inc, tax_sch)-(Children>0)*(limit_sp_demipart1+limit_demipart*(quotient-2))))++cehr_rate1* MIN((cehr_ceil2-cehr_ceil1)*(1+Married);MAX(tax_inc-cehr_ceil1*(1+Married);0))+cehr_rate2 * MAX(tax_inc-cehr_ceil2*(1+Married);0)
	Adjusted for decote	adj_tax	J	SI(Married;Positive(MINA(tax_sch;(1+decote_pente)*tax_sch-decote_pente*decote_mar));Positive(MINA(tax_sch;(1+decote_pente)*tax_sch-decote_pente*decote_sing)))
	Tax liable	inc_tax	J	(adj_tax>=tax_min)*adj_tax
	CSG+CRDS (non-deductible)	CSG_CRDS_noded	B	CSG_CRDS_rat_nod*((1-CSG_CRDS_abat)*MIN(earn;4*SSC_ceil)+Positive(earn-4*SSC_ceil))
	CSG deductible	CSG_ded	B	CSG_rat_ded*((1-CSG_CRDS_abat)*MIN(earn;4*SSC_ceil)+Positive(earn-4*SSC_ceil))
6.	Tax credits :	tax_cr	J	adj_tax*SI((tax_inc<=red_seuil_1*(1+Married)+red_seuil_dp*Children);red_taux;SI(tax_inc<='red_seuil_2*(1+Married)+red_seuil_dp*Children;(tax_inc*red_taux'/(red_seuil_1*(1+Married)+red_seuil_dp*Children-(red_seuil_2*(1+Married)+red_seuil_dp*Children)))+(red_taux*(red_seuil_2*(1+Married)+red_seuil_dp*Children))/(red_seuil_2*(1+Married)+red_seuil_dp*Children-(red_seuil_1*(1+Married)+red_seuil_dp*Children));0))
7.	CG tax	CG_tax	J	inc_tax+CSG_CRDS_noded+CSG_ded-tax_cr
8.	State and local taxes	local_tax	J	0
9.	Employees' soc security	SSC	B	pension_rate*MINA(earn, SSC_ceil) +(sickness_rate+pension_rate2)*earn +unemp_rate*MINA(earn, 4*SSC_ceil) +pens_rate_ex*MINA(earn,

	Line in country table and intermediate steps	Variable name	Range	Equation
				SSC_ceil)+(earn>SSC_ceil)*pens_rate_ex2*MINA(earn-SSC_ceil, 3*SSC_ceil-SSC_ceil)
11.	Cash transfers	cash_transf_gross	J	SI(Children<2;0;(CB_2+(Children-2)*CB_3)*SI(tax_inc<=(CB_c1+CB_ceiling_extra_child*(Children-2));1;SI(tax_inc<=(CB_c2+CB_ceiling_extra_child*(Children-2));0,5;0,25)))+SI(Isolated=1;CB_isol*Children;0)
		in_work_benefit_gross	J	MAX(SI((Isolated='1);' 12*pa_forf*(1+pa_maj_isol1+pa_maj_isol2*Children); 12*pa_forf*(1+SI(Married=1;pa_maj1;0)+pa_maj2*SI(Children<=2;Children;0)+pa_maj3*SI(Children>2;Children-2;0)))+pa_pct*(earn_dec-CSG_CRDS_noded)+pa_bonus*pa_forf/(pa_bonus2-pa_bonus1)*12*SI(ET(pa_bonus1*SMIC<(earn_dec_princ-CSG_CRDS_noded_princ);pa_bonus2*SMIC>(earn_dec_princ-CSG_CRDS_noded_princ));(earn_dec_princ-CSG_CRDS_noded_princ)/SMIC-pa_bonus1;0)+pa_bonus*pa_forf/(pa_bonus2-pa_bonus1)*12*SI(ET(pa_bonus1*SMIC<(earn_dec_spouse-CSG_CRDS_noded_spouse);pa_bonus2*SMIC>(earn_dec_spouse-CSG_CRDS_noded_spouse));(earn_dec_spouse-CSG_CRDS_noded_spouse)/SMIC-pa_bonus1;0)+pa_bonus*pa_forf*12*SI((earn_dec_princ-CSG_CRDS_noded_princ)>=pa_bonus2*SMIC;1;0)+pa_bonus*pa_forf*12*SI((earn_dec_spouse-CSG_CRDS_noded_spouse)>=pa_bonus2*SMIC;1;0)-MAX(earn_dec-CSG_CRDS_noded+(family_benefit_gross-SI(Isolated='1;CB_isol*Children;0)*(1-(22,5%'/28,15%)))+((Married+Children='0)*' pa_forf_logement1*pa_forf*12+ (Married+Children='1)*pa_forf_logement2*pa_forf*1,5*12' + (Married+Children>='2)*pa_forf_logement3*pa_forf*1,8*12);' SI(ET((Married='0);(Children>0));' 12*pa_forf*(1+pa_maj_isol1+pa_maj_isol2*Children);pa_forf*12*(1+SI(Married=1;pa_maj1;0)+pa_maj2*SI(Children<=2;Children;0)+pa_maj3*SI(Children>2;Children-2;0))));0)
		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	(sickness_empr + CSA + pens_empr2 + accidents_empr+others_empr)*earn + pens_empr1*MINA(earn;SSC_ceil) + pens_empr_ex*MINA(earn;SSC_ceil) + pens_empr_ex2* MAX(MIN(earn;3*SSC_ceil) - SSC_ceil;0)+unemp_empr*MIN(earn;4*SSC_ceil)) + + SI(earn<SSC_empr_SMIC2*SMIC; fam_empr_2*earn; fam_empr*earn)
		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*SMIC/earn-1)*earn)) -IF(earn<cice_max*SMIC;earn*cice_red)
		SSC_empr_final	B	SSC_empr_gross+SSC_empr_reduction

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

Germany

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Germany 2018

The tax/benefit position of single persons

	Wage level (per cent of average wage)		67	100	167	67
	Number of children		none	none	none	2.00
1.	**Gross wage earnings**		33 866	50 546	84 412	33 866
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family		0	0	0	2 148
	Dependent children		0	0	0	0
	Deduction for social security contributions and income taxes		5 483	8 183	10 264	5 398
	Work-related expenses		1 000	1 000	1 000	1 000
	Other		36	36	36	36
		Total	6 519	9 219	11 300	8 582
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		27 347	41 327	73 112	25 284
5.	**Central government income tax liability (exclusive of tax credits)**		4 790	9 647	23 299	3 934
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children		0	0	0	4 656
	Other					
		Total	0	0	0	4 656
7.	**Central government income tax finally paid (5-6)**		4 790	9 647	23 299	- 722
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		6 985	10 425	13 641	6 900
	Taxable income					
		Total	6 985	10 425	13 641	6 900
10.	**Total payments to general government (7 + 8 + 9)**		11 775	20 072	36 940	6 178
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)**		22 091	30 474	47 472	27 688
13.	**Employers' compulsory social security contributions**		6 562	9 793	12 977	6 562
14.	**Average rates**					
	Income tax		14.1%	19.1%	27.6%	-2.1%
	Employees' social security contributions		20.6%	20.6%	16.2%	20.4%
	Total payments less cash transfers		34.8%	39.7%	43.8%	18.2%
	Total tax wedge including employer's social security contributions		45.4%	49.5%	51.3%	31.5%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		47.0%	52.5%	44.3%	44.7%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		55.6%	60.2%	44.3%	53.7%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Germany 2018

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**		50 546	67 226	84 412	67 226
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family		0	0	0	0
	Dependent children		0	0	14 856	0
	Deduction for social security contributions and income taxes		8 057	10 716	13 455	10 884
	Work-related expenses		1 000	2 000	2 000	2 000
	Other		72	72	72	72
		Total	9 129	12 788	30 383	12 956
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		41 417	54 438	54 029	54 270
5.	**Central government income tax liability (exclusive of tax credits)**		5 312	9 269	9 371	9 446
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children		4 656	4 656	0	0
	Other					
		Total	4 656	4 656	0	0
7.	**Central government income tax finally paid (5-6)**		656	4 613	9 371	9 446
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		10 299	13 697	17 199	13 865
	Taxable income					
		Total	10 299	13 697	17 199	13 865
10.	**Total payments to general government (7 + 8 + 9)**		10 955	18 311	26 569	23 312
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)**		39 591	48 916	57 843	43 914
13.	**Employers' compulsory social security contributions**		9 793	13 025	16 355	13 025
14.	**Average rates**					
	Income tax		1.3%	6.9%	11.1%	14.1%
	Employees' social security contributions		20.4%	20.4%	20.4%	20.6%
	Total payments less cash transfers		21.7%	27.2%	31.5%	34.7%
	Total tax wedge including employer's social security contributions		34.4%	39.0%	42.6%	45.3%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		43.0%	46.6%	49.5%	46.9%
	Total payments less cash transfers: Spouse		44.1%	46.6%	49.5%	46.9%
	Total tax wedge: Principal earner		52.3%	55.3%	57.7%	55.5%
	Total tax wedge: Spouse		53.2%	55.3%	57.7%	55.5%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. The average worker earned EUR 50 546 (Secretariat estimate).

1. Personal Income Tax Systems

1.1. Central/federal government income taxes

1.1.1. Tax unit

Spouses may choose between two options: Joint assessment or individual assessment. The vast majority of couples benefits financially from the joint assessment by minimizing the tax burden of the household. The income of dependent children is not assessable with that of the parents. The calculations in this Report are therefore based on the assumption of joint taxation for 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 for spouses who are assessed jointly is computed as follows:
- Splitting method:
  - First step: Calculating the tax base: All incomes of the spouses are summed up and the sum is divided by two.
  - Second step: The tax rate is applied to this tax base.
  - Third step: The amount calculated in step 2 is doubled.

Results: Given the progressive income taxation the resulting tax liability for the household is lower than the sum of individual taxation. The household as a unit benefits from this solution otherwise both parts of the couple would opt out. Principal and second earners have the same average and marginal income tax rates.

The splitting effect decreases by increasing convergence of the incomes of principal earner and the spouse.

- Relief(s) for children: As of 1 January 2018, there are increased tax credits of EUR 2 328 for the first and the second child, of EUR 2 400 for the third child and of EUR 2 700 for the fourth and subsequent children. There is a tax allowance of EUR 2 394 for the subsistence of a child and an additional EUR 1°320 for minding and education or training needs (EUR 3 714). The amount of this allowance is doubled in case of jointly assessed parents. If the value of the tax credit is less than the relief calculated applying the tax allowances, the taxpayer obtains the tax allowance instead of the tax credit. It is also doubled for lone parents in cases where the other parent does not pay alimony. This is the assumption in the calculations presented in this Report.
- Relief for lone parents: As of 1 January 2015, 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 1 908 (formerly EUR 1 308). This additional allowance is increased by EUR 240 for each child in case of more than one child living in the household.

- Reliefs for social security contributions and life insurance contributions: Social security contributions and other expenses incurred in provision for the future (e.g. life insurance) are deductible up to specific ceilings. In 2005, a new calculation scheme came into force:
  - Step 1: all contributions made to pension funds (i.e. both employee's and employer's contributions) are added up. Step 2: the resulting amount is limited to EUR 20 000. Step 3: a certain percentage is applied to this amount (starting from 60% in 2005, this percentage will be increased by 2 percentage points each year; it will reach 100% in 2025). Step 4: the resulting amount, diminished by the (tax-free) contributions of the employer, is deductible from income.
  - The tax treatment of social security expenses (health, unemployment and care insurance) changed as of 1 January 2010. Employees' annual contributions to statutory health insurance excluding sickness benefit (assumed to amount to 96% of statutory health contributions) and employees' contributions to mandatory long-term care insurance are deductible from the tax base. In case these contributions do not exceed EUR 1 900/3 800 (single/married couples), contributions to unemployment insurance and other insurances premiums can be deducted in addition up to this ceiling.
  - If the resulting sum of deductible amounts according the legislation in force since 2005 is lower than the allowance calculated under the scheme that was valid up to 2004, the former regulations are applied in favour of the taxpayer (for more details on the old scheme: see 2005 edition and section 4. of this Report).
- Work related expenses: EUR 1 000 lump sum allowance per gainfully employed person.
- Special expenses: Lump sum allowance (EUR 36/72 (singles/couples)) for special expenses, e.g. for tax accountancy. The actual expenses will be fully deductible from taxable income if the taxpayer proves that these expenses exceed the lump sum allowance.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Contributions to pensions, life insurance, superannuation schemes: Other expenses than the compulsory contributions to social security are deductible as reliefs for (voluntary) social security contributions up to specific ceilings (see section 1.1.2.1.).
- Medical expenses: Partially deductible if not covered by insurance.
- Other: Work related expenses that exceed the lump-sum allowance are fully deductible (no ceiling).

1.1.3. Tax schedule

The German tax schedule is formula based. Taxable income is rounded down (to the EUR).

- X is the taxable income,
- T is the income tax liability,
- As of 1 January 2018 the following definitions are used in the income tax liability formulas:

$$Y = \frac{X - 9\,000}{10\,000}$$

$$Z = \frac{X - 13\,996}{10\,000}$$

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

1. $T = 0\ for\ X \leq 9\,000$
2. $T = (997.80\ Y + 1\,400)Y\ for\ 9\,001 \leq X \leq 13\,996$
3. $T = (220.13\ Z + 2\,397)Z + 948.49\ for\ 13\,997 \leq X \leq 54\,949$
4. $T = 0.42\,X - 8\,621.75\ for\ 54\,950 \leq X \leq 260\,532$
5. $T = 0.45\,X - 16\,437{,}70\ for\ 260\,533 \leq X$

These formulas are used to calculate the income tax for single individuals and married couples too.

If families choose the option of being assessed separately these formulas are applied to the individual taxable income of the principal earner and the spouse. In the case of jointly assessed families these rates are applied to half of the joint taxable income (see point 1.1.2.1. Splitting method).

1.1.4. Solidarity surcharge

The solidarity surcharge is levied at 5.5% of the income tax liability subject to an exemption limit of EUR 972/1 944 (singles/couples). The income tax liability is calculated applying the tax allowance for children. If the income tax liability exceeds the exemption limit, the solidarity surcharge will be phased in at a higher rate of 20% of the difference between the income tax liability and the exemption limit until it equals 5.5% of the total liability.

1.2. State and local income taxes

None.

2. Compulsory Social Security Contributions to Schemes Operated Within the Government Sector

The amount of social security contributions depends on the wage and the insurance contribution rate. All contributions are subject to a contribution ceiling, i.e. the maximum income for which statutory insurance contributions are calculated. The contribution rates for pension, health, care and unemployment insurances are fixed by the government.

2.1. Employees' contributions

In general, earnings up to EUR 4 800 per year were free of employee social security contributions until 31 December 2012. As of 1 January 2013, some essential changes came into effect concerning minimally paid employment. The earnings limit increased from EUR 400 to EUR 450 per month. Persons whose mini-job started before 2013 and do not exceed the previous earnings limit of EUR 400 stay contribution-free in all classes of social insurance. Otherwise, persons who take up a new mini-job are generally subject to mandatory insurance coverage in the statutory pension scheme with the full pension contribution rate of 18.6% (in 2018). If the earnings are below the amount of EUR 175 (minimum contribution limit), a minimum contribution of EUR 32.55 has to be paid

(18.6% of EUR 175). The employer's share amounts to 15% of the whole pay whereas the employee's part adds up to 3.6% (or the difference between minimum contribution and employer share). By applying for an exemption from obligatory insurance coverage the mini-job holder may reduce his share to EUR 0.

As of 1 April 2003, there was an additional concession for employees with monthly income between EUR 400.01 and EUR 800 per month (the so-called 'sliding pay scale', EUR 4 800.12 and EUR 9 600 per year). Due to the new regulations mentioned above the earnings limits shifted to EUR 450.01 and EUR 850.00 per month (EUR 5 400.12 and EUR 10 200 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 regular contributions on the employee's earnings. The arrangement is purely intended to relieve the financial burden on employees. The employees' contributions to social insurance rise on a straight-line basis over the income band reaching the full rate at EUR 850 per month. Details on social security contributions for workers earning more than EUR 10 200 per year are provided below.

2.1.1. Pensions

Employers and employees pay each half of the contribution rate of 18.6% in 2018, that is 9.3% of the employee's gross wage earnings, up to a contribution ceiling of EUR 78 000.

2.1.2. Sickness

As of 1 January 2015, the applicable contribution rate is 14.6% on principle (portion of 7.3% for employers and employees). Depending on the financial situation of each sickness fund, employees are obliged to pay a supplementary contribution to the sickness fund. In 2018, this supplementary contribution amounts to 1.0% on average. Therefore, the contribution rate averages 8.3% for employees in 2018. The contribution ceiling in 2018 is EUR 53 100. 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 2018, the contribution rate is 3.0% of assessable income. Employee and employer each pay 1.5%. The contribution ceiling is EUR 78 000.

2.1.4. Care

A long-term care insurance (a 1% contribution rate) went into effect on 1 January 1995. The rate was raised to 1.7% of the gross wage when home nursing care benefits were added six months later. As of 1 July 2008, the rate was increased to 1.95%. In 2013 and 2014, the contribution rate amounted to 2.05%. In 2015 and 2016, the contribution rate added up to 2.35%. As of 1 January 2017, the contribution rate was augmented to 2.55%. The employers pay half of the contributions for long-term care insurance. In other words, employers and employees both pay a rate of 1.275 %. The assessable income is scaled according to the gross wage earnings but there is a contribution ceiling of EUR 53 100 in 2018.

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%, raising the contribution rate paid by a childless employee from 0.975% to 1.225% as of 1 July 2008. In 2013 and 2014, the contribution rate of a childless employee added up to 1.275%. In 2015 and 2016, the contribution rate amounted to 1.425% for a childless employee. As of 1 January 2017, the contribution rate was raised to 1.525% for a childless employee.

2.1.5. Work injury

Employer only.

2.1.6. Family allowances

None.

2.1.7. Others

None.

2.2. Employers' contributions

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's annual pay and the employer's respective hazard level. As it is not possible to identify a representative contribution rate, these amounts are not considered in this Report.

2.2.3. 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	1 350	1 350	1 841	2 147	3 534
1999	1 534	1 534	1 841	2 147	3 534
2000	1 657	1 657	1 841	2 147	5 080
2002	1 848	1 848	1 848	2 148	5 808
2009*	1 968	1 968	2 040	2 340	6 024
2010	2 208	2 208	2 280	2 580	7 008
2015	2 256	2 256	2 328	2 628	7 152
2016	2 280	2 280	2 352	2 652	7 248
2017	2 304	2 304	2 376	2 676	7 356
2018	2328	2328	2400	2700	7 428

* 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% of gross wages (serving as a proxy for employers' social security contributions). This deduction was provided as a partial compensation for the self-employed who 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% and 42%. 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 6 322 to EUR 7 664. The tax cuts reduce the tax burden for all income taxpayers, affording the greatest relief to employees and families with low and medium incomes as well as to small- and medium-sized unincorporated businesses.

On 1 January 2005, the law regulating the taxation of pensions and pension expenses entered into force. The law provides a gradual transition to ex-post taxation of pensions paid by the statutory pensions insurance. In the long run, the tax treatment of capital-based employee pension schemes based on a contract between employer and employee will be reformed in the same way as the tax treatment in respect of the state pension scheme. In addition to the increased deductibility of contributions to the state and certain private pension schemes, the law contains rules which are intended to increase the

attractiveness of private capital-based pension schemes and to encourage individuals to invest privately for their old-age pension.

Up to 30 June of 2005, employees paid half of the sickness insurance contributions; the employer paid the other half. As from 1 July 2005, members of the statutory health insurance scheme also pay an income-linked contribution of 0.9% 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% 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%. The basic allowance was increased to EUR 7 834. All thresholds were increased by EUR 400.

Since 1 January 2010, the basic allowance has been augmented to EUR 8 004 and all thresholds have been increased by EUR 330. Furthermore, new legislation improves the tax treatment of expenditure on health insurance and long-term care insurance. As of 1 January 2013, the basic allowance rose to EUR 8 130. As of 1 January 2014, the basic allowance was increased to EUR 8 354. As of 1 January 2015, the basic allowance amounted to EUR 8 472. The relief for lone parents adds up to EUR 1 908. Lone parents are entitled to an extra allowance of EUR 240 for the second and each subsequent child. Since 1 January 2016, the basic allowance has been risen to EUR 8 652. As of 1 January 2017, the basic allowance was enhanced to EUR 8 820. Since 1 January 2018, the basic allowance has been augmented to EUR 9 000.

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.

2018 Parameter values

Average earnings/yr		Ave_earn	50 546	Secretariat estimate
Tax allowances	Child_al		7 428	
Lone Parents, first child	Lone_al		1 908	
Lone parents, subsequent child	Lone_al_add		240	
Work related	Work_rel_al		1 000	
SSC allowance	SSC_dn		600	
	SSC_dn_rt		0.16	
	SSC_dn_lim		1 334	
	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		9 000	
	Tax_thrsh2		13 996	
Top Rate Tax Reduction	Reduction		8 621.75	
	Reduction2		16 437,70	
Tax Equation Rates				
tax_eqn_rates	Squared		Single	Constant
z	220.13		2 397	948.49
y	997.80		1 400	0
Income tax rate stage	tax_first_stage		9 000	
	tax_second_stage		13 996	
	tax_third_stage		54 949	
	tax_fourth_stage		260 532	
Solidarity Surcharge	surcharge		0.055	
Solidarity Exemption Limit	surcharge_limit		972	
Alternative Surcharge Rate	surcharge_alt		0.2	
Child credit	Ch_cred			
	1. ch.		2 328	
	2. ch.		2 328	
	3.ch.		2 400	
	4.ch.		2 700	

2018 Parameter values

social security	Sickness	Pension	Unemploy-ment	Care	Alternative employer rate	SSC Factor F
period_1	12	12	12	12	12	12
period_2	0	0	0	0		
sum (Month's)	12	12	12	12	12	12
employer_1	0.073	0.093	0.015	0.01275	0.3	0.7547
employer_2	0	0	0	0		
employee_1	0.083	0.093	0.015	0.01275	0.036	0.7547
employee_2	0	0	0	0		
childless_1	0.083	0.093	0.015	0.01525	0.036	0.7547
childless_2	0	0	0	0		
ceil	53 100	78 000	78 000	53 100	2 100	
SSC Floor	SSC_floor	10 200				
Intermediate SSC Ceiling	SSC_floor1	5 400				

2018 Tax equations

The equations for the German system in 2018 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 carries out a rounded calculation for the tables but the unrounded version purtax is used in calculating the marginal rates.

For a taxpayer with children, either the child allowance is given in the tax calculation or the cash transfer is given if this is more beneficial. In practice, therefore, it is necessary to make two calculations - with and without the child allowance. Nevertheless, the calculation of solidarity surcharge is always based on the calculation which does assume that the child tax allowance is given.

Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". The affixes "_princ" and "_spouse" on Variable names in functions indicate that the values have to be calculated for the principal and spouse, respectively. The parameter year in function SSC_Allowance is the year for which you calculate the Allowance.

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
	Quotient for tax calculation	quotient	J	1+Married
2.	Allowances:			
	Children	children_al	J	Children*Child_al
	Lone parent	lone_allce	J	Children>0)*(Married=0)*Lone_al+(Children>0)*(Married=0)*(Children-1)*Lone_al_add
	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

	Line in country table and intermediate steps	Variable name	Range	Equation
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 2018

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**	14 213	21 214	35 427	14 213
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	2 274	3 394	5 668	2 274
	Work-related expenses				
	Other				
	Total	2 274	3 394	5 668	2 274
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	11 939	17 820	29 759	11 939
5.	**Central government income tax liability (exclusive of tax credits)**	2 627	3 920	7 230	2 627
6.	**Tax credits**				
	Basic credit	1 900	1 900	1 802	2 000
	Married or head of family				
	Children				
	Other				
	Total	1 900	1 900	1 802	2 000
7.	**Central government income tax finally paid (5-6)**	727	2 148	6 092	627
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	2 274	3 394	5 668	2 274
	Taxable income				
	Total	2 274	3 394	5 668	2 274
10.	**Total payments to general government (7 + 8 + 9)**	3 001	5 543	11 760	2 901
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	1 008
	Total	0	0	0	1 008
12.	**Take-home pay (1-10+11)**	11 213	15 671	23 667	12 321
13.	**Employer's compulsory social security contributions**	3 562	5 316	8 878	3 562
14.	**Average rates**				
	Income tax	5.1%	10.1%	17.2%	4.4%
	Employees' social security contributions	16.0%	16.0%	16.0%	16.0%
	Total payments less cash transfers	21.1%	26.1%	33.2%	13.3%
	Total tax wedge including employer's social security contributions	36.9%	40.9%	46.6%	30.7%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	34.5%	36.3%	45.4%	34.5%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	47.6%	49.1%	56.3%	47.6%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Greece 2018

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**	23 335	31 036	38 970	31 036
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	3 734	4 966	6 235	4 966
	Work-related expenses				
	Other				
	Total	3 734	4 966	6 235	4 966
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	19 602	26 070	32 735	26 070
5.	**Central government income tax liability (exclusive of tax credits)**	4 312	5 735	7 202	5 735
6.	**Tax credits**				
	Basic credit	2 000	4 000	4 000	3 800
	Married or head of family				
	Children				
	Other				
	Total	2 000	4 000	4 000	3 800
7.	**Central government income tax finally paid (5-6)**	2 480	2 480	3 394	2 580
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	3 734	4 966	6 235	4 966
	Taxable income				
	Total	3 734	4 966	6 235	4 966
10.	**Total payments to general government (7 + 8 + 9)**	6 213	7 445	9 629	7 545
11.	**Cash transfers from general government**				
	For head of family				
	For two children	1 008	672	672	0
	Total	1 008	672	672	0
12.	**Take-home pay (1-10+11)**	18 130	24 263	30 013	23 491
13.	**Employer's compulsory social security contributions**	5 848	7 778	9 766	7 778
14.	**Average rates**				
	Income tax	10.6%	8.0%	8.7%	8.3%
	Employees' social security contributions	16.0%	16.0%	16.0%	16.0%
	Total payments less cash transfers	22.3%	21.8%	23.0%	24.3%
	Total tax wedge including employer's social security contributions	37.9%	37.5%	38.4%	39.5%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	36.3%	36.3%	36.3%	36.3%
	Total payments less cash transfers: Spouse	20.8%	16.0%	36.3%	16.0%
	Total tax wedge: Principal earner	49.1%	49.1%	49.1%	49.1%
	Total tax wedge: Spouse	36.7%	32.8%	49.1%	32.8%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In 2018, the estimated gross earnings of the average worker are EUR 21 214 (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 (more than 183 days) is subject to tax on his/her worldwide income irrespective of the individual's nationality. Due consideration is given to bilateral conventions designed to obviate double taxation.

All individuals who have completed 18 years of age are obliged to file a tax return regardless of having taxable income or not. Regarding income derived by minor children, the parent who has the custody is liable for filing a tax return. The income of minor children is added to the income of the parent who has the custody and is taxed in the name of the parent who is in principle liable for tax filing. This provision does not apply to the following types of income, in respect of which the minor child has a personal tax obligation: a) employment income and b) pensions due to the death of his father or mother. Spouses file a joint return but each spouse is liable for the tax payable on his or her share of the joint income. A joint return can also file persons who have entered into a civil union – partnership. In this case the two parts have the same tax treatment as married couples. Losses incurred by one spouse or one part of a civil union-partnership may not be set off against the income of the other spouse or part. Spouses or parts of a civil union – partnership file a return separately if a) they have been divorced or have terminated the civil partnership at the time of the tax filing or b) one of the spouses or one part of the civil partnership is bankrupt or has been subject to guardianship. Taxpayer's spouse can be considered as a dependent member, provided that he/she does not have any taxable income.

Single children under the age of 18, children who are adults up to 25 years old and study at the university, or serve their military service or are registered as unemployed to the Manpower Employment Organisation (OAED), taxpayers' ascendants and spouses' relatives (up to the 3rd degree) who are orphans are deemed to be borne by the taxpayer provided that they cohabit with the taxpayer and their annual taxable income does not exceed the amount of EUR 3 000 (alimony and disability benefits and similar allowances are not included). Single disabled children (>=67%) or spouses' disabled siblings (>=67%) are also considered as dependent members, except if their annual income exceeds the amount of EUR 6 000 (alimony and disability benefits and similar allowances are not included).

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 fully deductible from taxable gross income.

1.1.2.2. Deductions from the payable amount of tax, as calculated on the basis of the scale (Non-Standard tax credits):

A. The tax arising by the tax scale for employees and pensioners is reduced as following:

- by EUR 1 900 for annual income up to EUR 20 000, for taxpayers with no dependent children
- by EUR 1 950 for annual income up to EUR 20 000 for taxpayers with one dependent child
- by EUR 2 000 for annual income up to EUR 20 000 for taxpayers with two dependent children
- by EUR 2 100 for annual income up to EUR 20 000 for taxpayers with 3 dependent children or more;
- for income exceeding EUR 20 000, the above mentioned tax credit is being reduced by EUR 10 for every EUR 1 000 of taxable income

In order to maintain the above tax reduction under this, the taxpayer is required to make payments of acquiring goods and receiving services within the country or in Member States of the European Union or EEA, which have been paid through electronic payments, the minimum amount of which is determined as a percentage of taxable income, in accordance with the following scale:

- for taxable income up to EUR 10.000 the minimum amount of expenses paid electronically to be collected is 10% (of taxable income)
- for taxable income from EUR 10.001 up to EUR 30.000 the minimum amount of expenses paid electronically to be collected is 15% (of taxable income)
- for taxable income above EUR 30.000 the minimum amount of expenses paid electronically to be collected is 20% (of taxable income) and up to EUR 30.000.

Should the value of the above payments is less than the one required, a penalty of 22% is imposed to the remaining amount.

B. The payable amount of tax is reduced by ten percent (10%) on the donations to certain bodies, as well as to political parties, party alliances and candidates for the National Parliament and the European Parliament, since the donations exceed during the tax year the amount of EUR one hundred (100). The total amount of donations cannot exceed five percent (5%) of taxable income.

C. The amount of tax derived on the basis of all scales is reduced by EUR 200 for the taxpayer himself as well as for each dependent member, provided that the taxpayer or his dependents are handicapped (over 67%) or handicapped soldiers or military personnel injured in the course of their duties or war victims or victims of terrorist attacks or in case they receive pension by the State as war victims or as handicapped.

Note: Taxpayers who reside abroad but derive taxable income from sources in Greece are not eligible for these deductions, with the exemptions of residents of the EU Member States who derive at least 90% of their total income from sources in Greece.

Spouses:

When the wife derives income taxable on the basis of the scale, then the following are deducted from her own payable amount of tax: donations and the lump sum of EUR 200 of the spouse.

If from the joint tax return submitted the wife has no income declared then the sum of her deductions is attributed to the payable tax of the other spouse.

1.1.2.3. Exemptions

Some forms of income, specified by Law are exempt from the tax.

Examples:

- on condition of reciprocity, income of all kinds derived abroad by foreign ambassadors and diplomatic representatives, consulate agents and employees of embassies and consulates that have the nationality of the represented State as well as by individuals working in the EU Institutions or other International Organizations;
- alimony received by the beneficiary according to the Court adjudication or notary Document;
- all forms of pensions and relief provided to war victims and their families, as well as to soldiers and military personnel injured in the course of their duties in times of peace;
- benefits and similar allowances provided to special categories of handicapped people;
- salaries, pensions etc. paid to handicapped people (over 80%);
- unemployment benefits granted by the National Employment Organisation (OAED) provided that the total annual income of the beneficiary does not exceed the amount of EUR 10 000;
- the social solidarity benefit (E.K.A.S.) of pensioners;
- financial aid to recognized political refugees, to people residing temporarily in Greece for humanitarian reasons and to persons that have submitted the relevant application to the competent Greek authorities, paid by bodies carrying out refugee aid schemes financed by the UN and the EU;
- the benefit for hazardous labor provided to employees working in the armed forces, the police, the fire and port departments as well as the special allowance to medical, nursing and ambulance staff up to 65%;

1.1.2.4. Tax calculation

Taxable income is derived from the following sources:

a) Income from employment and pensions
b) Income from business activity which includes income from agricultural activity although taxed differently
c) Investment Income which includes income from dividends, interests and loyalties and income from immovable property (rental income).
d) Income from capital gains, which includes income deriving on transfer of real estate or securities.

Net income is computed separately within each category with tax rules that vary across income categories.

Taxpayer is subject to an alternative minimum tax when his imputed income is higher than his total declared income. In this case, the difference between imputed and actual income is added to the taxable income. Imputed income is calculated on the basis of the taxpayer's and his dependents' living expenses.

Employment income 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% of the total amount of taxes due. The resulting tax is the annual tax due, 1/14 of which constitutes the monthly withholding tax for the private sector's employees (every employee in the private sector receives 14 monthly salaries per year, i.e. 12 monthly wages plus 1 salary as Christmas bonus, ½ salary as Easter bonus and ½ salary as summer vacation bonus). For the employees of the public sector, the monthly withholding tax is calculated as 1/12 of the annual tax due, because of the fact that bonuses in the public sector have been eliminated. If the taxpayer's final tax liability (derived from the annual declared income) exceeds the aggregate of the amounts already withheld or prepaid, the remaining tax is generally payable in three equal bimonthly instalments. Any excess tax paid or withheld will be refunded.

1.1.3. Rate schedule

Depending on the income category the following tax schedules apply:

Income from employment and pensions is pooled together with income from business activity and is taxed at the following rates:

Income bracket (EUR)	Tax rate (%)	Tax bracket (EUR)	Total amount	
			Income (EUR)	Tax (EUR)
20 000	22%	4 400	20 000	4 400
10 000	29%	2 900	30 000	7 300
10 000	37%	3 700	40 000	11 000
Excess	45%			

The above tax scale does not apply for employment income acquired by:

- Officers working in ships of the merchant marine, whose income is taxed at a 15% flat rate and
- Low-income crew working in ships of the merchant marine, whose income is taxed at a 10% flat rate.

For deductions see above: 1.1.2.2. Deductions from the payable amount of tax, as calculated on the basis of the scale: Income from agricultural business is taxed separately but with the same tax schedule. The previously described tax credit is granted to farmers as well. In the case where a farmer is earning income from employment / pension, only one tax credit is given.

Income from dividends and interests is taxed at a 15% flat rate.

Income from royalties is taxed at a 20% flat rate. Income from immovable property (Rental Income) is taxed at the following rates:

Income	Tax Rate
0-12 000	15%
12 001 – 35 000	35%
35 001-	45%

From 1-1-2017, with the above tax scale is taxed, under certain conditions, income deriving from short term rentals of sharing economy.

Income from capital gains is taxed at a 15% flat rate.

In the total taxable income, Special Solidarity Contribution is additionally imposed. is applied Income up to EUR 12 000 is not subject to solidarity contribution. For income exceeding EUR 12 000, solidarity contribution applies with the following marginal rates:

Solidarity Contribution Marginal Tax Rates

Income	Tax Rate
0 – 12 000	0%
12 001 – 20 000	2.2%
20 001 – 30 000	5.00%
30 001 – 40 000	6.50%
40 001 – 65 000	7.50%
65 001 – 220 000	9.00%
>220 000	10.00%

1.2. State and local income taxes

There are no local income taxes in Greece. Municipalities (the local authorities) receive 20% 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 public and private sector and render dependent personal services are principally, directly and compulsorily insured in the Unified Social Security Fund (EFKA).Apart from the main contribution, EFKA compulsorily collects contributions for other minor Funds created for the employee's benefit (Unemployment Benefits Funds, etc.). A subsidiary Unified Supplementary Insurance and Lump-Sum Fund (ETEAEP) for employees has been established since 1/1/2017 for which the contribution rates have changed from 1/6/2016 and have been formed as follows.

The average rates of contributions payable by white-collar employees as a percentage of gross earnings are as follows (%):

From 1 January 2018 to 31 December 2018

	Employer	Employee	Total
1. Unified Social Security Fund (EFKA)	17.88	9.22	27.10
2. Supplementary Insurance Branch of (ETEAEP)	3.50	3.50	7.00
3. Other Funds	3.68	3.28	6.96
Total	**25.06**	**16.00**	**41.06**

Higher contributions are due (19.45% paid by the employee and 27.21% 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 (2.20% for EFKA and 1.25% for ETEAEP paid by the employee and 1.40% for EFKA and 0.75% for ETEAEP paid by the employer). In the industrial sector, the employer pays an additional occupational risk contribution at a rate of 1% because these workers are more vulnerable to labour accidents and occupational diseases. The amount of the maximum insurable earnings for calculating the monthly insurance contribution of employees and employers is set from 1 January 2018 to EUR 5 860.80 according to Law 4387/2016.

All these social security contributions are fully deductible for income tax purposes.

3. Universal Cash Transfers

3.1. Transfers related to marital status

According to the National General Collective Labour Agreement, a marriage allowance, which is set at a rate of 10% of the gross salary, is granted only to workers employed by employers that belong to the contracting employer organisations[16]. For public servants no marriage benefit is granted.

3.2. Transfers for dependent children

According to the Law 4512/2018, the "Single children support allowance" is calculated according to the number of dependent children as well as the household equivalent income category.

The equivalence scale assigns a value of 1 to the first household member, of 1/2 to the spouse and of 1/4 to each dependent child. Especially, for single parent families, a value of ½ is assigned to the first dependent child and a value of ¼ to each additional child.

Households that are entitled to the allowance are divided into three income categories according to their income:

- Household Equivalent Income of < EUR 6 000: monthly allowance of EUR 70 for the first child, EUR 70 for the second child and EUR 140 for every additional child
- Household Equivalent Income of EUR 6 001 – 10 000: monthly allowance of EUR 42 for the first child, EUR 42 for the second child and EUR 84 for every additional child

[16] Namely the Hellenic Federation of Enterprises, the Hellenic Confederation of Professionals, Craftsmen & Merchants, the National Confederation of Hellenic Commerce and the Association of Greek Tourism Enterprises.

- Household Equivalent Income of EUR 10 001 – 15 000: monthly allowance of EUR 28 for the first child, EUR 28 for the second child and EUR 56 for every additional child

4. Main Changes in the Tax/benefit System since 2016

No significant changes in the tax and benefit system have taken place since 2016.

5. Memorandum items

5.1. Identification of an AW and method of calculations used

Methodological note for the estimation of the average annual earnings per employee, for the period 2000 – 2016

Terminology and coverage

The average annual earnings below refer to full time employees for Sectors C to N of ISIC Rev.3.1, before 2008, and for Sectors B to N including Division 95 and excluding Divisions 37, 39 and 75 of ISIC Rev. 4, for 2008 onwards.

Data sources

In the estimation procedure of the average annual earnings per employee, for the period 2000-2016 the following data are taken into account:

- Annual earnings and number of employees, as derived from the Structure of Earnings Survey (SES), of the years 2002, 2006, 2010 and 2014
- Hours worked and annual average number of employees, as derived from the Labour Force Survey (LFS), of the years 2000 – 2016.
- Average annual earnings indices, as derived from the Indices on Quarterly Labour Cost Survey, of the years 2000 – 2016.

Annual Gross earnings per full time employee 2000-2016 Greece

Year	NACE Rev 2 classification
2000	15 458.90
2001	15 715.43
2002	**17 358.52**
2003	19 239.95
2004	21 446.10
2005	22 012.44
2006	**23 799.82**
2007	23 934.85
2008	23 849.13
2009	24 568.99
2010	**24 155.88**
2011	23 928.89
2012	23 308.82
2013	21 101.09
2014	**21 321.50**
2015	20 833.23
2016	20677.76
2017	20 841

Notes:
1. The Average gross Annual Earnings per full time employee for the period 2000 to 2017 includes:
The special payments for shift and night work, as well as work during weekends and holidays;
The total annual bonuses as well as those that are regularly paid on a monthly basis, the 13th salary (Christmas salary, where applicable) and 14th salary (Easter and vacation payments, where applicable)
The annual bonuses based on productivity; -The education and working time allowance;
The marriage and children allowance and excludes :
The annual payments in kind: foods, drinks, footwear, clothes, accommodation, business cars provided, mobile phones, etc;
The annual premiums related to profit-sharing schemes
2. The data for 2015 and onwards will be revised when the final results of the SES 2018 will be available.
3. Data in bold refer to data from SES 2002, 2006, 2010 and 2014.
4.It should be noted that the data with reference years 2000 - 2005 are different from those of the succeeding years with regard to the source that was used for the calculation of the LCI_Wages. For the years 2000 - 2005 the index was calculated on the basis of data from National Accounts deriving from administrative sources, while for the years 2006 - 2017 the calculation of LCI_Wages was based on the quarterly Labour Cost Survey.
5.Finally, we would like to inform you that the data refer to the mean yearly gross income for full-time paid employees, regardless of:
- Marital status
- Number of children
- Employer's contributions
- Taxes paid

Source: ELSTAT

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 (but they are subject to special taxation entailing extinction of tax liability). 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.

2018 Parameter values

Average earnings/yr	Ave_earn	21 214	Secretariat estimate
Tax credit	Child_cred	0	
Rates of family subsidies			
paid by employers	Wife_sub	0.1	
children (up to 3)	Child_sub	0	
Income tax schedule	Tax_sch	0.22	20 000
		0.29	30 000
		0.37	40 000
		0.45	
Tax deduction	Tax_cred	1 900	
	Tax_cred_1dc	1 950	
	Tax_cred_2dc	2 000	
	Tax_cred_3dc	2 100	
	Tax_cred_thrsh	20 000	
	Tax_red	10	
Solidarity contribution	Solidarity_sch	0	12 000
		0.022	20 000
		0.05	30 000
		0.065	40 000
		0.075	65 000
		0.09	220 000
		0.10	
Social security contributions	SSC_rate	0.16	
	SSC_rate_empr	0.2506	
	SSC_ceil	82051.2	
	SSC_ceil_use	1	
Single children support allowance	Child_all	0	840
		6 000	504
		10 000	336
		15 000	0
	Spouse_weight	0,50	
	Child_weight	0,25	

2018 Tax equations

The equations for the Greek system in 2018 are mostly on an individual basis. The level of gross earnings for the principal earner is increased by the spouse and child subsidy paid by the employer.

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

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn_princ	P	Ave_earn*(1+Married*Wife_sub+ MIN(Children,3)*Child_sub)
		earn_spouse	S	Ave_earn*(1+Married*Wife_sub+ MIN(Children,3)*Child_sub)
2.	Allowances:	tax_al	B	SSC
3.	Credits in taxable income	taxbl_cr		0
4.	CG taxable income	tax_inc	B	Positive(earn-tax_al)
5.	CG tax before credits	CG_tax_excl	B	Tax(tax_inc,tax_sch)-Low_rate *Positive(MIN(Effect_low_band-Low_thrsh,tax_inc-Low_thrsh))
	Solidarity contribution	sol_contr	B	=Solidarity(earn-SSC,Solidarity_sch)
6.	Tax credits :	tax_cr	**B**	Positive(IF(Children>0, tax_cred_1dc*(Children=1)+tax_cred_2dc*(Children='2)+tax_cred_3dc*(Children>2), tax_cred)-(INT(Positive(earn-tax_cred_thrsh)'/1000)*tax_cred_red))
7.	CG tax	CG_tax	B	Positive(CG_tax_excl-tax_cr)+sol_contr
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			
		fam_netinc	B	(earn – CG_tax – SSC)/(1+IF(Married>0,(Married*Spouse_weight)+(Children* Child_weight),min(children,1) *Spouse_weight+positive(children-1)*Child_weight))
		cash_trans	B	VLOOKUP(fam_netinc,Child_all,2)*Children
13.	Employer's soc security	SSC_empr	B	IF(SSC_ceil_use=1,SSC_rate_empr*MIN(earn,SSC_ceil),SSC_rate_empr*earn)

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

Hungary

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Hungary 2018

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**		2 772 790	4 138 492	6 911 282	2 772 790
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family					
	Dependent children		0	0	0	2 800 080
	Deduction for social security contributions and income taxes					
	Work-related expenses					
	Other					
		Total	0	0	0	2 800 080
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	27 290
4.	**Central government taxable income (1 - 2 + 3)**		2 772 790	4 138 492	6 911 282	0
5.	**Central government income tax liability (exclusive of tax credits)**					
	Central government income tax liability (exclusive of tax credits)		415 918	620 774	1 036 692	0
		Total	415 918	620 774	1 036 692	0
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)**		415 918	620 774	1 036 692	0
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		512 966	765 621	1 278 587	508 873
	Taxable income					
		Total	512 966	765 621	1 278 587	508 873
10.	**Total payments to general government (7 + 8 + 9)**		928 885	1 386 395	2 315 279	508 873
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	355 200
		Total	0	0	0	355 200
12.	**Take-home pay (1-10+11)**		1 843 905	2 752 097	4 596 002	2 619 117
13.	**Employer's wage dependent contributions and taxes**					
	Employer's compulsory social security contributions		540 694	807 006	1 347 700	540 694
	Payroll taxes		41 592	62 077	103 669	41 592
		Total	582 286	869 083	1 451 369	582 286
14.	**Average rates**					
	Income tax		15.0%	15.0%	15.0%	0.0%
	Employees' social security contributions		18.5%	18.5%	18.5%	18.4%
	Total payments less cash transfers		33.5%	33.5%	33.5%	5.5%
	Total tax wedge including employer's social security contributions		45.0%	45.0%	45.0%	21.9%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		33.5%	33.5%	33.5%	33.5%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		45.0%	45.0%	45.0%	45.0%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Hungary 2018

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**		4 138 492	5 504 195	6 911 282	5 504 195
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family					
	Dependent children		2 800 080	2 800 080	2 800 080	0
	Deduction for social security contributions and income taxes					
	Work-related expenses					
	Other					
		Total	2 800 080	2 800 080	2 800 080	0
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		1 338 412	2 704 115	4 111 202	5 504 195
5.	**Central government income tax liability (exclusive of tax credits)**					
	Central government income tax liability (exclusive of tax credits)		200 762	405 617	616 680	825 629
		Total	200 762	405 617	616 680	825 629
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)**		200 762	405 617	616 680	825 629
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		765 621	1 018 276	1 278 587	1 018 276
	Taxable income					
		Total	765 621	1 018 276	1 278 587	1 018 276
10.	**Total payments to general government (7 + 8 + 9)**		966 383	1 423 893	1 895 267	1 843 905
11.	**Cash transfers from general government**					
	For head of family					
	For two children		319 200	319 200	319 200	0
		Total	319 200	319 200	319 200	0
12.	**Take-home pay (1-10+11)**		3 491 309	4 399 501	5 335 214	3 660 289
13.	**Employer's wage dependent contributions and taxes**					
	Employer's compulsory social security contributions		807 006	1 073 318	1 347 700	1 073 318
	Payroll taxes		62 077	82 563	103 669	82 563
		Total	869 083	1 155 881	1 451 369	1 155 881
14.	**Average rates**					
	Income tax		4.9%	7.4%	8.9%	15.0%
	Employees' social security contributions		18.5%	18.5%	18.5%	18.5%
	Total payments less cash transfers		15.6%	20.1%	22.8%	33.5%
	Total tax wedge including employer's social security contributions		30.3%	33.9%	36.2%	45.0%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		33.5%	33.5%	33.5%	33.5%
	Total payments less cash transfers: Spouse		33.5%	33.5%	33.5%	33.5%
	Total tax wedge: Principal earner		45.0%	45.0%	45.0%	45.0%
	Total tax wedge: Spouse		45.0%	45.0%	45.0%	45.0%

The national currency is the Forint (HUF). In 2018, HUF 270.22 was equal to USD 1. In 2018, the average worker earned HUF 4 138 492 (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: Since 1st January 2012 there is no employee tax credit.
- Family tax allowance: For families having children, the basis of income tax can be reduced by the family tax allowance, which amounts to HUF 66 670 per month (for families having one child), HUF 116 670 per month/each dependent (for families having two children) or HUF 220 000 per month/each dependent (for families having at least three children). This tax allowance can be applied by a pregnant woman (or her husband) as from the 91st day after conception until birth of the child. The tax allowance may be claimed by one spouse or be split between the spouses. As of 1st January 2014 the family tax allowance was extended: families whose combined PIT base is not sufficient to claim the maximum amount of the family tax allowance can deduct the remaining sum from the 7% health insurance contribution and the 10% pension contribution. This measure does not affect the eligibility for social security benefits (pensions, healthcare, transfers, etc.).

1.1.2.2. Main non-standard tax reliefs

- Trade Union membership dues: Membership dues and contributions paid to trade unions and other corporate bodies of employees are deductible without any restriction.
- Tax credits are made available for physical disability or agricultural activities. Tax deduction is available for those having income from abroad.
- From 1st January 2015 for newly married couples (where it's the first marriage for at least one of the parties) the basis of income tax can be reduced by HUF 33 335 per month for one person of the couple for 24 months.

1.1.3. Tax schedule

The rate of personal income tax amounts to 15%.

1.2. State and local income taxes

In Hungary there is no local personal income tax system supplementing the central one.

2. Compulsory Social Security Contributions to Schemes Operated within the Government Sector

2.1. Employees' contributions

2.1.1. Pensions

The rate of pension contribution amounts to 10% of gross earnings.

2.1.2. Sickness

The rate of health security contribution amounts to 7% of gross earnings.

2.1.3. Unemployment

The worker must pay, as employees' contribution, 1.5% of gross earnings.

2.1.4. Others

None. The average worker does not have any obligation to pay other contributions than the above mentioned. However, the contribution rates may be different for certain types of income or for certain groups of income recipients (e.g. employees with pensioner status). None of these exceptions are applicable to the workers taken into consideration in this report.

2.2. Employers' contributions

2.2.1. Pensions

None.

2.2.2. Sickness

None.

2.2.3. Unemployment

None.

2.2.4. Others

From 2012 the employers' social security contributions were merged into the new payroll tax, called social contribution tax. This change is of legal nature, the combined rate remains 27% while the revenue is divided among the pension, health care and labour-market funds. In 2017 the social contribution tax decreased to 22%, and in January, 2018 the rate was lowered to 19.5%.

The employer contributions also include a payroll tax: the training levy amounts to 1.5% of gross earnings.

From 1st January 2013, the Job Protection Act (JPA) introduced new targeted reliefs in the employers' contributions (social contribution tax and training levy) to incentivise the employment of the most disadvantageous groups on the labour market. This measure reduces the standard rate of the employers' contributions up to a cap of HUF 100 000 per

month. From 2017 the JPA introduced a permanent reduction of the employers' tax rate by 50% of the current tax rate for:

- employees under 25 years of age,
- employees over 55 years of age,
- employees working in elementary occupations,
- employees working in agricultural occupations.

It also introduced temporary reductions (21% in the first two years of the employment, and 50% of the current tax rate in the third year) for:

- long term unemployed re-entering the labour market,
- people returning to work after child-care leave,
- career starters.

From 1st January 2015 the budgetary institutions are not eligible for the JPA tax allowances anymore.

The targeted reliefs in the employers' contributions are not considered in the Taxing Wages model.

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).

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	12 200
For a single earner with one child	13 700
For a couple with two children, per child	13 300
For a single earner with two children, per child	14 800
For a couple with 3 or more children, per child	16 000
For a single earner with 3 or more children, per child	17 000
For a couple with permanently sick and disabled child	23 300
For a single earner with permanently sick and disabled child	25 900

4. Main Changes in the Tax/benefit System Since 2010

- The tax base correction was phased out in two steps.
- The employee tax credit was abolished.
- The employees' health care contribution was increased.
- The employers' social security contributions were merged into the social contribution tax (legal change only, rates and base remained unchanged).
- Health contributions on benefits in kind were increased.
- As a temporary measure, a wage compensation scheme was in effect in the form of an employers' SSC credit.

- Targeted employment incentives to boost the employment levels of groups at the margin of the labour force.
- The child tax allowance was extended in 2014 by allowing the deduction of the allowance from employees' SSC.
- The rate of the PIT decreased by 1 percentage point in 2016.
- The rate of family tax benefit for families with two children is gradually increased from 2016 so that it will be doubled by 2019.
- From 2017 the social contribution tax decreased to 22% and from 2018 subsequently to 19.5%.

5. Memorandum Items

5.1. Employer contributions to private social security arrangements

In Hungary the law dealing with the voluntary mutual insurance funds (like pension funds) was enacted on 6 December 1993. Based on the rules for 2017, the monthly contribution paid to a voluntary mutual fund (health or pension)by the employer of a private worker who participates in a voluntary fund, is not limited and it's taxable according to an effective personal income tax rate of 17.7% (the nominal tax rate of 15% multiplied by 1.18) and an effective health contribution of 23.01% (the nominal tax rate of 19.5% multiplied by 1.18). Sponsor's donations paid by the employer to its employees' voluntary mutual insurance fund are taxable as well. In addition, employees can apply a 20% tax credit with a limit of HUF 150 000 per year on payments made by the employees themselves. The tax authority pays the tax credit directly to a voluntary fund.

In general, insurance premiums (on the basis of which an employee is named as the recipient/beneficiary of insurance services) paid by the employer are taxable, and social security contributions plus training contribution are also payable. At the same time insurance premiums related to life insurance policy for accidental death, injury liability, or medical care insurance for full and permanent incapacity to work are exempted from taxation and any contributions.

As from 2008, employer pension institutions can be established. Based on the rules for 2017, the monthly contribution paid to an employer pension institution by the employer of a private worker is not limited and it's taxable according to an effective personal income tax rate of 17.7% and an effective health contribution of 25.96%. From 2018 the effective health contribution is 23.01%.

2018 Parameter values

Average earnings/yr	Ave_earn	4 138 492	Secretariat estimate		
Child allowance (per child)	child_al	1	800 040		
		2	1 400 040		
		3	2 640 000		
		4	2 640 000		
Income tax schedule	tax_sch	0.15			
Social security contributions	SSC_unemp	0.015			
	SSC_p	0.1			
	SSC_h	0.07			
Payroll taxes	SSC_empr	0.195			
	payroll_rate	0.015			
		# of children	1	2	3+
Transfers for children	CB_rates	0	12 200	13 300	16 000
(monthly)		1	13 700	14 800	17 000

2018 Tax equations

The equations for the Hungarian system in 2018 are mostly on an individual basis. But the child allowance can be split between the spouses 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_al	P	IF(Children>0, Children*VLOOKUP(Children, child_al, 2), 0)
	Total	tax_al	B	child_al
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	P	MAX(0,earn -tax_al)
	CG taxable income	tax_inc	S	Positive(earn_spouse-Positive(tax_al-earn_spouse-SSC_deduction_princ/tax_sch))
5.	CG tax before credits	CG_tax_excl	B	tax_inc*tax_sch
7.	CG tax	CG_tax	B	CG_tax_excl-tax_cr
8.	State and local taxes	local_tax	B	0
	Child tax allowance (Employees' SSC)	SSC_child_cr	P	=MIN(earn_princ*(SSC_h+SSC_p),Positive(tax_al-earn_princ)*tax_sch)
	Child tax allowance (Employees' SSC)		S	=MIN(earn_spouse*(SSC_h+SSC_p),Positive(-earn_princ)*tax_sch)
9.	Employees' soc security	SSC	B	earn*(SSC_unemp+ SSC_h+SSC_p)-SSC_child_cr
11.	Cash transfers	cash_trans	J	Children*(VLOOKUP((1-Married), CB_rates, MIN(Children, 3)+1)*12)
13.	Employer's soc security	SSC_empr	B	earn*SSC_empr
	Employer's payroll taxes	Payroll	B	earn*payroll_rate

Key to range of equation B calculated separately for both principal earner and spouse P calculated for principal only (value taken as 0 for spouse calculation) J calculated once only.

Iceland

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Iceland 2018

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**	6 132 150	9 152 462	15 284 612	6 132 150
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	245 286	366 098	611 384	245 286
	Work-related expenses				
	Other				
	Total	245 286	366 098	611 384	245 286
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	5 886 864	8 786 364	14 673 227	5 886 864
5.	**Central government income tax liability (exclusive of tax credits)**	1 324 544	1 976 932	3 668 703	1 324 544
6.	**Tax credits**				
	Basic credit	646 739	646 739	646 739	646 739
	Married or head of family				
	Children				
	Other				
	Total	646 739	646 739	646 739	646 739
7.	**Central government income tax finally paid (5-6)**	677 805	1 330 193	3 021 964	677 805
8.	**State and local taxes**	850 063	1 268 751	2 118 814	850 063
9.	**Employees' compulsory social security contributions**				
	Gross earnings	28 954	28 954	28 954	28 954
	Taxable income				
	Total	28 954	28 954	28 954	28 954
10.	**Total payments to general government (7 + 8 + 9)**	1 556 822	2 627 898	5 169 732	1 556 822
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	697 011
	Total	0	0	0	697 011
12.	**Take-home pay (1-10+11)**	4 575 327	6 524 564	10 114 880	5 272 338
13.	**Employer's compulsory social security contributions**	413 920	617 791	1 031 711	413 920
14.	**Average rates**				
	Income tax	24.9%	28.4%	33.6%	24.9%
	Employees' social security contributions	0.5%	0.3%	0.2%	0.5%
	Total payments less cash transfers	25.4%	28.7%	33.8%	14.0%
	Total tax wedge including employer's social security contributions	30.1%	33.2%	38.0%	19.5%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	35.5%	35.5%	44.4%	46.5%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	39.5%	39.5%	47.9%	49.9%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Iceland 2018

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**		9 152 462	12 172 775	15 284 612	12 172 775
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes		366 098	486 911	611 384	486 911
	Work-related expenses					
	Other					
		Total	366 098	486 911	611 384	486 911
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		8 786 364	11 685 864	14 673 227	11 685 864
5.	**Central government income tax liability (exclusive of tax credits)**		1 976 932	2 629 319	3 301 476	2 629 319
6.	**Tax credits**					
	Basic credit		1 293 478	1 293 478	1 293 478	1 293 478
	Married or head of family					
	Children					
	Other					
		Total	1 293 478	1 293 478	1 293 478	1 293 478
7.	**Central government income tax finally paid (5-6)**		683 454	1 335 841	2 007 998	1 335 841
8.	**State and local taxes**		1 268 751	1 687 439	2 118 814	1 687 439
9.	**Employees' compulsory social security contributions**					
	Gross earnings		28 954	57 908	57 908	57 908
	Taxable income					
		Total	28 954	57 908	57 908	57 908
10.	**Total payments to general government (7 + 8 + 9)**		1 981 159	3 081 188	4 184 720	3 081 188
11.	**Cash transfers from general government**					
	For head of family					
	For two children		495 064	234 260	10 208	0
		Total	495 064	234 260	10 208	0
12.	**Take-home pay (1-10+11)**		7 666 367	9 325 847	11 110 100	9 091 587
13.	**Employer's compulsory social security contributions**		617 791	821 662	1 031 711	821 662
14.	**Average rates**					
	Income tax		21.3%	24.8%	27.0%	24.8%
	Employees' social security contributions		0.3%	0.5%	0.4%	0.5%
	Total payments less cash transfers		16.2%	23.4%	27.3%	25.3%
	Total tax wedge including employer's social security contributions		21.5%	28.2%	31.9%	30.0%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		45.1%	42.7%	42.7%	35.5%
	Total payments less cash transfers: Spouse		45.1%	42.7%	42.7%	35.5%
	Total tax wedge: Principal earner		48.5%	46.3%	46.3%	39.5%
	Total tax wedge: Spouse		48.5%	46.3%	46.3%	39.5%

The national currency is the Króna (plural: Krónur) (ISK). In 2018, ISK 108.27 was equal to USD 1. That year, the average worker is expected to earn ISK 9 152 462 (Secretariat estimate).[17]

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 646 739 in 2018, 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% of each spouses' unutilised portion of his/her basic tax credit.
- Relief(s) for children: None.
- Relief(s) for compulsory pension contributions: The compulsory payment to pension funds amounts to 4% of wages and is deductible. In addition, an optional payment of up to 4% of wages may also be deducted. As the additional 4% contribution is optional, it is viewed as a non-standard relief in this Report.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Interest payment relief: A fully refundable tax credit is granted to purchasers of personal dwellings (homes) to recuperate a part of mortgage-related interest expenses. The maximum tax related interest credit in 2018 is ISK 420 000 for a single person, ISK 525 000 for a single parent and ISK 630 000 for a married couple. The following constraints apply to interest rebates: (1) they cannot exceed 7.0% 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 840 000 for an individual, ISK 1 050 000 for a single parent and ISK 1 260 000 for a couple. (3) 8.5% of taxable income is subtracted from the interest expense. (4) The rebates begin to be curtailed at a net worth threshold of ISK 5 000 000 for a single individual and a single parent and ISK 8 000 000 for a couple and are eliminated altogether at a 60% higher amount, or ISK 8 000 000 and 12 800 000, respectively. (These amounts are based on income in the year 2018 but are paid out in 2019).

[17] The definition of average worker in Iceland includes workers in five categories. See section 5.1.

1.1.3. Tax schedule

The income tax base is composed of personal income (e.g. wages, salaries, fringe benefits, pensions, etc.), which is taxed on an individual basis, and capital income which is taxed jointly for married couples.

The tax on personal income is double-rated. The central government income tax rate in 2018 is 22.5% for income up to ISK 893 713 per month. For income exceeding ISK 893 713 the tax rate is 31.8%. Tax relief is provided by the basic credit described in Section 1.1.2.1. As a result of the basic credit, personal income is free of income tax for personal income up to ISK 151 978 per month (ISK 1 823 732 per year), when accounting for the deductible, compulsory pension payments.

The tax on capital income is 22%. It is levied on all capital income of individuals, such as interest, dividends, rents etc. Interest income up to ISK 150 000 per year and 50% of income from long-term rent of a maximum of two residential properties is tax free.

1.2. Local government income tax

The local government income tax base is the same as the central government's personal income tax base.

The local governments' income tax is single rated, but the rate varies between 12.44% and 14.52% between municipalities. The average rate in 2018 is 14.44%.

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 11 454 in 2018, provided the individual's taxable income is at least ISK 1 750 782 for the year. This tax will be collected in 2019.

Fee to the broadcast media: 16 to 70 year-old individuals with taxable income over ISK 1 750 782 for the year are subject to a fixed tax of ISK 17 500 in 2018, which will be collected in 2019.

2.2. Employers' contributions

Employers have to pay a social security tax on total wages of 6.75%. In addition, 0.65% is levied on the wages of fishermen as a premium for their government accident insurance. Other taxes, levied on the social security tax base, but based on other legislation, are the Promote Iceland Market Fee and the Wage Guarantee Fund Fee, 0.05% each. Furthermore, a new financial activities tax was introduced in 2012, which requires financial and insurance companies to pay an additional 5.5% payroll tax.

3. Universal Cash Transfers

3.1. Marital status related transfers

None.

3.2. Transfers for dependent children

Child benefits are granted for each child, subject to income thresholds. In 2018 they are as follows (in ISK per year):

- For each child under the age of seven: 140 000
- Children under the age of eighteen at the end of 2018:
  - First child: 234 500
  - Each additional child: 279 200
- Benefits for single parents:
  - First child: 390 700
  - Each additional child: 400 800
- Income threshold for benefit curtailment:
  - For couples: 7 200 000
  - For a single parent: 3 600 000
- Curtailment of benefits (children under the age of seven only):
  - For each child: 4%
- Curtailment of benefits (all children under the age of eighteen):
  - For one child: 4%
  - For two children: 6%
  - For three children or more: 8%
  - An additional 1.5% is deducted for income above a threshold of 5 500 000 for single parents and 11 000 000 for couples (not applicable for the curtailment of supplemental benefit for children under the age of seven).

Note that child benefits in this Report are based on income in the year 2018 but are paid out in 2019 (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% of wages and the employer contribution was 6%, and increased to 8% as of beginning 2007. On 1 July 2016 the employer contribution increased to 8.5% and one year later it increased again to 10%. The employer contribution increased once again on July 1st, 2018 to 11.5%. 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% of wages is also deductible and goes into an individual retirement account. However, from 2012 to mid-2014, this additional payment was temporarily set at 2%.

This voluntary pension savings option was first introduced in 1999 in order to encourage personal saving. At the time the contribution rate was 2% for employees and 0.2% for employers. In May 2000 these rates were doubled to 4 and 0.4%, 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% against a voluntary employee contribution of 4% in 2001 and 2% as of the beginning of 2002. All such contributions are tax-deductible, both with the employer and the employee at the time the contribution is made. The actual pension is taxed as personal income when it is drawn. As of the beginning of 2004, the employer option of deducting the above 0.4% 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. Central and local income tax rates in 1997-2016

In 1997–2007, the Government pursued a policy of reducing the marginal tax rate, as can be seen in the table below. This development was reversed in 2009 when income tax was raised by 1.35 percentage points in response to the Treasury's rising debt burden brought on by the economic crisis. At the beginning of 2010 the tax system was changed from single rated to triple rated. The tax rate was set at 24.1% for the first monthly ISK 200 000 but it was raised by 2.9% for the next ISK 450 000 and again by 6% for income in excess of ISK 650 000. In 2017, the tax system was changed again but now to double rated. The rates are 22.5% for income up to 893 713 per month and 31.8% for income higher than 893 713 per month; see section 1.13 for further details. From 1998 onwards, the central government and average local government personal income tax rates have been as follows:

	Central government general 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
2010	24.10	13.12	37.32	2.90/6.00
2011	22.90	14.41	37.31	2.90/6.00
2012	22.90	14.44	37.34	2.90/6.00
2013	22.90	14.42	37.32	2.90/6.00
2014	22.86	14.44	37.30	2.44/6.50
2015	22.86	14.44	37.30	2.44/6.50
2016	22.68	14.45	37.13	1.22/7.90
2017	22.5	14.44	36.94	9.3
2018	22.5	14.44	36.94	9.3

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%. For 2003-income, it was reduced back to 5%. It was reduced to 4% for 2004 income and to 2% for 2005-income. In the fiscal year 2006, the tax was abolished. In the latter half of 2009, the special tax on higher income was introduced again at 8%. In 2010, the tax system changed to triple-rated and in 2017 it was changed to double rated; see sections 4.2 and 1.1.3.

4.4. A revision of child benefit system

Child benefits are granted for each child, subject to income thresholds. The amendments to tax legislation that came into effect in 2004 included a schedule for raising child benefits. As from 2007, the child benefits will be paid for children up to 18 years old instead of 16 years old. For 2009–2017, benefits are as follows (in ISK per year):

	2010	2011	2012	2013	2014	2015	2016	2017	2018
For all children under the age of seven	61 191	61 191	100 000	100 000	115 825	119 300	122 879	133 300	140 000
Children under the age of eighteen:									
First child	152 331	152 331	167 564	167 564	194 081	199 839	205 834	223 300	234 500
Each additional child	181 323	181 323	199 455	199 455	231 019	237 949	245 087	265 900	279 200
Benefits for single parents:									
First child	253 716	253 716	279 087	279 087	323 253	332 950	342 939	372 100	390 700
Each additional child	260 262	260 262	286 288	286 288	331 593	341 541	351 787	381 700	400 800
Income threshold for benefit curtailment:									
For couples	3 600 000	3 600 000	4 800 000	4 800 000	4 800 000	4 800 000	5 400 000	5 800 000	7 200 000 / 11 000 000
For a single parent	1 800 000	1 800 000	2 400 000	2 400 000	2 400 000	2 400 000	2 700 000	2 900 000	3 600 000 / 5 500 000
Curtailment of benefits under the age of seven:									
For each child	3%	3%	3%	3%	4%	4%	4%	4%	4%
Curtailment of benefits under the age of eighteen:									
For one child	3%	3%	3%	3%	4%	4%	4%	4%	4% / 5.5%
For two children	5%	5%	5%	5%	6%	6%	6%	6%	6% / 7.5%
For three children or more	7%	7%	7%	7%	8%	8%	8%	8%	8% / 9.5%

4.5. A revision of interest rebates

In 2004, the interest rebate was cut by 10%, effective for that year only. The ceiling on interest payments that qualify for the interest rebate was reduced from 7% to 5.5% in 2005 and the interest rate cut was reduced from 10% to 5%. As of the beginning of 2006, the ceiling was further reduced to 5%. 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% and the maximum rebate amount increased by 37%. These measures stayed in effect in 2009. In 2010 the maximum rebate amount increased by 47–62% and the net worth ceiling was reduced significantly. The rate of taxable income which is subtracted from the interest expense was increased from 6% to 8% and further to 8.5% in 2014. In addition to the ordinary interest payment relief, a temporary interest cost rebate was in effect in 2010–2011; see section 1.1.2.2.

4.6. Transferability of basic tax credit between spouses

The basic tax credit was made transferable between spouses in stages; see section 1.1.2.1. above. In fiscal year 2001, 90% of the credit became transferable, rising to 95% in 2002 and 100% in 2003.

5. Memorandum Items

5.1. Identification of AW (only eight categories) and valuation of earnings

The data on average earnings refers to average workers in eight categories according to the NACE rev. 2 classification which corresponds to the ISIC rev.4 system. The categories are C – Manufacturing, D – Electricity, gas, steam and air conditioning supply (from 2008), E – Water supply; sewerage, waste management and remediation activities (from 2008) F – Construction, G – Wholesale and retail trade, repair of motor vehicles, motorcycles, H – Transport, storage, and J – Information and communication K - Financial and insurance activities. Public sector employees are not included. Together, these categories comprise approximately 80% of Iceland's private sector labour force.

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, and form the second pillar pension protection. The private pension funds are not part of the basic, first pillar, government-run social security system, to which a social security tax is paid as described under section 2.2 above. Compulsory and voluntary payments to such funds are described in section 4.1 above.

2018 Parameter values

Average earnings/yr	Ave_earn	9 152 462	Secretariat estimate
Pension rate for tax allowance	pension_rate	0.04	
Tax credit	Basic_crd	646 739	
	Married_propn	1	
Central income tax	tax_sch	0.225	10 724 553
		0.318	
Special tax	special_rate	0	
threshold	special_thrsh		
Local tax	local_rate	0.1444	
Church tax	church_tax	0	
Social Security Contr.	SSC_fixed	28 954	
	SSC_thrsh	1 750 782	
Employer SSC	SSC_empr	0.0675	
General child allowance:			
child allowance	CA	140 000	
Maximum number of children under 7	max_child_under7	1	
Supplement child allowance:			
Married couple case			
first child	SA_first_m	234 500	
other children	SA_others_m	279 200	
income threshold	SA_tresh_m	7 200 000	
	SA_thresh_m_2	11,000,000	
Single parent case			
first child	SA_first_s	390 700	
other children	SA_others_s	400 800	
income threshold	SA_tresh_s	3 600 000	
	SA_thresh_s_2	5,500,000	
reduction rate (one child)	SA_redn_1	0.04	
reduction rate (two children)	SA_redn_2	0.06	
reduction rate (tree or more children)	SA_redn_3	0.08	
additional reduction rate (for higher income)	SA_redn_4	0.015	

2018 Tax equations

The equations for the Iceland system are mostly on an individual basis. But the tax credit for married couples is relevant only to the calculation for the principal earner and child benefit is calculated only once. This is shown by the Range indicator in the table below.

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

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
2.	Allowances:	tax_al	B	earn*pension_rate
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	earn-tax_al
5.	CG tax before credits	CG_tax_excl	B	tax(tax_inc, tax_sch)
6.	Tax credits :	tax_cr	P	MIN(CG_tax_excl_princ,Basic_crd+MAX(Married*Basic_crd-CG_tax_excl_spouse-(tax_inc_spouse*local_rate),0))
			S	MIN(Married*Basic_crd, CG_tax_excl_spouse)
		special_tax	J	0
7.	CG tax	CG_tax	B	CG_tax_excl-tax_cr+special_tax
8.	State and local taxes	local_tax	P S	MAX(tax_inc_princ*local_rate-MAX(Basic_crd+ Max(Married*Basic_crd-CG_tax_excl_spouse-(tax_inc_spouse*local_rate),0)-CG_tax_excl_princ,0),0) MAX(tax_inc_spouse*local_rate-MAX(Married*Basic_crd-CG_tax_excl_spouse,0),0)
9.	Employees' soc security	SSC	B	SSC_fixed*(earn>SSC_thrsh)
11.	Cash transfers:			
	Total family income	inc_tot	J	earn_total
	Child allowance	cash_trans	J	IF(Children = 0, 0, IF(AND(Married = 1, Children = 1),SA_first_m - MAX(0, (EARN*(1-pension_rate)) - SA_thresh_m) * SA_redn_1 - (MAX(0, (EARN*(1-pension_rate)) - SA_thresh_m_2) * SA_redn_4) + ((CA * max_child_under7) - MAX(0, (EARN*(1-pension_rate)) - SA_thresh_m) * SA_redn_1), IF(AND(Married = 1, Children = 2), (SA_first_m + SA_others_m) - (MAX(0, (EARN*(1-pension_rate)) - SA_thresh_m) * SA_redn_2) - (MAX(0, (EARN*(1-pension_rate)) - SA_thresh_m_2) * SA_redn_4) + MAX(0, ((CA *max_child_under7) - MAX(0, (EARN * (1 - pension_rate)) - SA_thresh_m) *SA_redn_1)), IF(AND(Married = 0, Children =1), SA_first_s - MAX(0, (EARN*(1-pension_rate)) - SA_thresh_s) * SA_redn_1 - (MAX(0, (EARN*(1-pension_rate)) - SA_thresh_s_2) * SA_redn_4) + ((CA * max_child_under7) - MAX(0, (EARN*(1-pension_rate)) - SA_thresh_s) * SA_redn_1), IF(AND(Married = 0, Children = 2), (SA_first_s + SA_others_s) - (MAX(0, (EARN*(1-pension_rate)) - SA_thresh_s) * SA_redn_2) - (MAX(0, (EARN*(1-pension_rate)) - SA_thresh_s_2) * SA_redn_4) + MAX(0, ((CA * max_child_under7) - MAX(0, (EARN * (1 - pension_rate)) - SA_thresh_s) * SA_redn_1)), 0)))))

	Line in country table and intermediate steps	Variable name	Range	Equation
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 2018

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**	31 339	46 774	78 113	31 339
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)**	31 339	46 774	78 113	31 339
5.	**Central government income tax liability (exclusive of tax credits)**	6 268	11 800	24 335	6 268
6.	**Tax credits**				
	Basic credit	1 650	1 650	1 650	1 650
	Single, head of family	0	0	0	1 650
	Children				
	Other	1 650	1 650	1 650	1 650
	Total	3 300	3 300	3 300	4 950
7.	**Central government income tax finally paid (5-6)**	3 743	10 009	24 295	2 093
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 254	1 871	3 125	1 254
	Taxable income				
	Total	1 254	1 871	3 125	1 254
10.	**Total payments to general government (7 + 8 + 9)**	4 997	11 880	27 419	3 347
11.	**Cash transfers from general government**				
	For head of family	0	0	0	2 299
	For two children	0	0	0	3 360
	Total	0	0	0	5 659
12.	**Take-home pay (1-10+11)**	26 342	34 895	50 694	33 651
13.	**Employer's compulsory social security contributions**	3 400	5 075	8 475	3 400
14.	**Average rates**				
	Income tax	11.9%	21.4%	31.1%	6.7%
	Employees' social security contributions	4.0%	4.0%	4.0%	4.0%
	Total payments less cash transfers	15.9%	25.4%	35.1%	-7.4%
	Total tax wedge including employer's social security contributions	24.2%	32.7%	41.5%	3.1%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	28.8%	48.8%	52.0%	71.5%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	35.7%	53.8%	56.7%	74.3%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Ireland 2018

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**	46 774	62 210	78 113	62 210
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)**	46 774	62 210	78 113	62 210
5.	**Central government income tax liability (exclusive of tax credits)**	10 000	13 087	17 425	13 087
6.	**Tax credits**				
	Basic credit	3 300	3 300	3 300	3 300
	Single, head of family	0	0	0	0
	Children				
	Other	2 850	3 300	3 300	3 300
	Total	6 150	6 600	6 600	6 600
7.	**Central government income tax finally paid (5-6)**	5 359	8 124	13 110	8 124
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 871	1 871	3 125	1 871
	Taxable income				
	Total	1 871	1 871	3 125	1 871
10.	**Total payments to general government (7 + 8 + 9)**	7 230	9 995	16 234	9 995
11.	**Cash transfers from general government**				
	For head of family	0	0	0	0
	For two children	3 360	3 360	3 360	0
	Total	3 360	3 360	3 360	0
12.	**Take-home pay (1-10+11)**	42 905	55 575	65 239	52 215
13.	**Employer's compulsory social security contributions**	5 075	6 402	8 475	6 402
14.	**Average rates**				
	Income tax	11.5%	13.1%	16.8%	13.1%
	Employees' social security contributions	4.0%	3.0%	4.0%	3.0%
	Total payments less cash transfers	8.3%	10.7%	16.5%	16.1%
	Total tax wedge including employer's social security contributions	17.3%	19.0%	24.7%	23.9%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	48.8%	48.8%	48.7%	48.8%
	Total payments less cash transfers: Spouse	17.9%	22.0%	48.7%	22.0%
	Total tax wedge: Principal earner	53.8%	53.8%	53.8%	53.8%
	Total tax wedge: Spouse	24.4%	28.2%	53.8%	28.2%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year, the average worker earned EUR 46 774 (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 1 650 per year.
- Standard marital status reliefs: The married person's credit is EUR 3 300 per year (i.e. twice the basic credit of EUR 1 650).
- Employee credit: With the exception of certain company directors and their spouses and the spouses of partners in partnership cases, all employees, including (subject to certain conditions) children who are full-time employees in the business of their parents, are entitled to an employee credit of EUR 1 650.
- Earned Income credit: Individuals in receipt of earned income are entitled to an earned income credit of EUR 1150 for 2018et seq. Note: The combined employee credit and earned income credit is limited to EUR 1 650.
- One-Parent Family credit: The single parent family credit is EUR 1 650.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Interest on qualifying loans: This relief can no longer be claimed by new applicants but those who had claimed prior to 2012 are still eligible for relief up to 2018 inclusive. The relief varies between 25% and 15% of the following limits.

	First Time Mortgage Holders	Other Mortgage Holders
Married Couple	EUR 20 000	EUR 6 000
Widowed Person	EUR 20 000	EUR 6 000
Single Person	EUR 10 000	EUR 6 000

- 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. The maximum relief is EUR 1 000 in respect of an adult and EUR 500 in respect of a child. This relief is now granted at source and is paid to the insurance provider.
- 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 1200 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 7 199. A reduced measure of relief is granted for income between EUR 7 200 and EUR 9 600: if the income exceeds EUR 7 200 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 7 200 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 Protection.

1.1.3. Tax schedule

Band of taxable Income (EUR)				Rate (%)
Single/ Widow(er)	Married Couple (One Income)	Married Couple (Two Incomes)	One-Parent Families	
Up to 34550	Up to 43550	Up to the lesser of: 6 69100; 43550plus the amount of the lowest income	38550	20
Balance	Balance	Balance	Balance	40

1.1.4. Low income exemption and marginal relief tax

Where total income of an individual aged 65 and over is less than or equal to the income exemption limit that income is exempt from tax.

Exemption limits:

- Single / Widowed: EUR 18 000
- Married: EUR 36 000

The exemption limits may be increased in respect of children, as follows:

- One or two children (each): EUR 575
- Subsequent children: EUR 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 than twice the relevant exemption limit, otherwise tax is charged under the normal tax schedule.

Marginal relief tax is charged, where applicable, at a rate of 40% on the difference between total income and the relevant exemption limit.

1.1.5. Universal Social Charge (USC)

The USC is charged on an individualised basis on gross income at 0.5% on income up to and including EUR 12 012, at 2% for income in excess of EUR 12 012 but not greater than EUR 19 372, at 4.75% for income in excess of EUR 19 372 but not greater than EUR 70 044, and at 8% above that level. The lower exemption threshold is EUR 13 000.The USC does not apply to social welfare payments, including contributory and non-contributory social welfare State pensions.

USC rates for individuals whose total income does not exceed EUR 60 000 and who are (a) aged 70 years and over or (b) who hold FULL medical cards: The 2% rate applies to all income over EUR 12 012.

There is a surcharge of 3% on individuals who have income from self-employment that exceeds EUR 100 000 in a year.

1.2. State and local income taxes

No State or local income taxes exist in Ireland.

2. Compulsory Social Security Contributions to Schemes Operated within the Government Sector.

2.1. Employees' contributions

Contributions are payable at a rate of 4 percent of an employee's gross earnings less allowable superannuation contributions. No distinction is made by marital status or sex. Those earning less than EUR 352 per week are exempt. The following is a breakdown of the 2018 rate of contribution together with ceilings where applicable:

Description	Rate	Threshold (EUR)	Ceiling (EUR)
Pension and social insurance	4.00	352 per week	

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 2018 rate of contribution:

Description	Rate %
Occupational injuries	0.50
Redundancy contribution	0.40
Pension and social insurance	9.85
TOTAL	10.75

The employers' contribution is reduced from 10.85% to 8.6% in respect of employees earning less than EUR 376 per week. 0.1% increase in National Training Levy from 1 January 2018 included in Employer PRSI for Class A and Class H employments

3. Universal Cash Transfers

3.1. Transfers related to marital status

None.

3.2. Transfers for dependent children

These are payable to all children under the age of 16 (or under 18 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. Entitlements to higher rate for the third and subsequent child are being phased out over two years. The amounts payable in 2018 are as follows:

Period	Monthly rate per child	
January 2017 to December 2017	First to second child: EUR 140.00	Subsequent children: EUR 140.00

3.3. Transfers for low income families

A non-taxable family income supplement is payable to low income families where either the principal earner and/or the spouse are in full-time employment. Full-time employment is defined as working nineteen hours per week or more. The hours worked by the principal and the spouse can be aggregated for the purposes of this definition. When calculating income for the purposes of the relief superannuation payments, social welfare payments, tax payments, health and employment and training levies are all subtracted to arrive at disposable income.

The level of payment is dependent on the amount of family income and the number of children. The supplement payable is 60% 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 2018 is EUR 612 per week.

One Parent Family Payment: This 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 person's earnings does not exceed EUR 110.00 per week (EUR 130.00 per week from 29 March 2018). Where earnings are between EUR 110.00 per week (EUR 130.00 per week from 29 March 2018) and EUR 425.00 per week a reduced payment is received. The amount of the full payment for 2018 is EUR 193.00 per week (EUR 198.00 per week from 29 March 2018) plus EUR 29.80 per week (EUR 31.80 per week from 29 March 2018) for each child.

4. Other Main Changes in Tax/Benefit System Since 2016

4.1. Earned Income credit

Individuals in receipt of earned income are entitled to an earned income credit of EUR 1150 for 2018 et seq. Note: The combined employee credit and earned income credit is limited to EUR 1 650.

5. Memorandum Items

5.1. Employer contributions to private social security arrangements

Information not available, although such schemes do exist.

2018 Parameter values

Average earnings/yr	Ave_earn	46 774	Secretariat estimate
Tax allowances			
Tax Credits	Basic_al_at_standardrate	1650	
	Married_al_at_standardrate	1650	
	Empl_al_at_standardrate	1650	
	Singleparent_at_standardrate	1650	
	Carers_allow	1200	
	Carers_thrsh1	7200	
	Carers_thrsh2	8600	
	Carers_taper_rt	0.5	
Exemption amount	Single_ex	0	
	Married_ex	0	
	Child_ex	0	
	Child_ex_3	0	
Marginal relief limit	Single_MR	0	
	Married_MR	0	
	Child_MR	0	
	Child_MR_3	0	
Marginal relief	marg_rel_rate	0.4	
Income tax	Single_sch	0.2	34550
		0.4	
	Single_sch_child	0.2	3 8550
		0.4	
	Married_sch_oneinc	0.2	43550
		0.4	
	Married_sch_twoinc	0.2	69100
		0.4	
Universal Social Charge	USC	0.005	12 012
		0.025	19372
		0.05	70044
		0.08	
	USC_sch_med_card	0.005	12 012
		0. 02	
	USC threshold	13000	
Maximum increase in first band	Band_increase_lim	25550	
Social security contributions	SSC_thresh	18304	
Employees	pension_rate	0.04	
	pension_ceil	Limit Abolished	
	Non_cum_Allc	0	
Employers	Empr_rate	0. 1085	
	Empr_lower_rate	0..086	
	Empr_thrsh	19552	
Child benefit	Empr_ceil	Limit Abolished	
	Ch_ben	1680	
Family income supplement	Ch_ben_3	1680	
	FIS_pay_limit	31824	
	FIS_min	1040	
Medical card	FIS_rate	0.6	
	single_med_card	9568	
	married_med_card	13858	
	Child_add_med_card	1976	
One-Parent Family	opf_basic	10236	

	opf_inclim_1	6520
	opf_inclim_2	22100
	opf_inclim_3	10475.2
	opf_dis	0.5
	opf_thrsh	395.2
	opf_red	130
	opf_childincr	1629.6

2018 Tax equations

The equations for the Irish system in 2018 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+OPF_total
	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)
	Universal social charge	USG	J	IF(earn>USC_threshold,IF(med_crd_fac=1,Tax(earn,USC_sch),Tax(earn,USC_sch_med_card)),0)
6.	Tax credits :	basic_cr	J	Basic_al_at_standardrate+(Married*Married_al_at_standardrate)
		single_par_cr		IF(Married='0,' IF(Children>0, Singleparent_at_standardrate, 0), 0)
		other_cr		Empl_al_at_standardrate+ (IF(earn_spouse>0, Empl_al_at_standardrate, 0))
		tax_cr		basic_cr+single_par_cr+other_cr
	Exemption amount	exemp_amt	J	Single_ex+Married*Married_ex+Child_ex*MIN(2, Children)+ (Children>2)*(Children-2)*Child_ex_3
	Marginal relief limit	MRL	J	Single_MR+Married*Married_MR+Child_MR*MIN(2, Children)+ (Children>2)*(Children-2)*Child_MR_3
7.	Net tax	CG_tax	J	If(earn_total<='MRL,' MIN(marg_rel_rate*positive(earn_total-exem_amt), positive(_tax_excl-tax_cr)), positive(_tax_excl-

	Line in country table and intermediate steps	Variable name	Range	Equation
				tax_cr))+USG
8.	State and local taxes	local_tax	J	0
	Employees' soc security			
	weekly allowance	weekly_allce	B	IF(earn=0,0,MINA(Non_cum_Allc,earn))
	Medical card factor	Med_crd_fac	J	(single_med_card+Married*(married_med_card-single_med_card) +child_add_med_card*Children<earn_princ+earn_spouse)
	employees' soc security	SSC	B	IF(earn>SSC_thresh, pension_rate*Positive(earn-weekly_allce), 0)
11.	Cash transfers			
		Child_benefit	J	Children*Ch_ben+(Children>2)*(Children-2)*(Ch_ben_3-Ch_ben)
		FIS	J	(Children>0)*IF((earn-_tax-SSC+OPF_total)<='FIS_pay_limit' , MAXA((FIS_pay_limit-(earn-_tax-SSC+OPF_total))*FIS_rate, FIS_min), 0)
		OPF_basic	P	=IF((earn-opf_inclim_1)*opf_dis<opf_thrsh,opf_basic,IF((earn-opf_inclim_1)*opf_dis>opf_inclim_3,0,Positive(opf_basic-(opf_red+ (opf_red*TRUNC((((earn-opf_inclim_1)*opf_dis)-opf_thrsh)/opf_red)))))*((Married=0)*(Children>0)))*(earn<opf_inclim_2)
		OPF_total		=IF(OPF_basic>0,OPF_basic+(opf_childincr*Children))
	Total cash transfers	cash_trans		Child_benefit+FIS+OPF_total
13.	Employer's soc security	SSC_empr	B	IF(earn<='Empr_thrsh,' Empr_lower_rate, Empr_rate)* MIN(earn, Empr_ceil)

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

Israel

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Israel 2018

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**	102 658	153 221	255 879	102 658
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				
	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)**	102 658	153 221	255 879	102 658
5.	**Central government income tax liability (exclusive of tax credits)**	11 377	21 205	51 477	11 377
6.	**Tax credits**				
	Basic credit	5 832	5 832	5 832	7 128
	Married or head of family	0	0	0	2 592
	Children	0	0	0	5 184
	EITC	0	0	0	2 380
	Unused wastable tax credits	0	0	0	3 527
	Total	5 832	5 832	5 832	17 284
7.	**Central government income tax finally paid (5-6)**	5 545	15 373	45 645	- 2 380
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	6 256	12 324	24 643	6 256
	Taxable income				
	Total	6 256	12 324	24 643	6 256
10.	**Total payments to general government (7 + 8 + 9)**	11 801	27 697	70 287	3 876
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	6 080
	Total	0	0	0	6 080
12.	**Take-home pay (1-10+11)**	90 857	125 524	185 592	104 862
13.	**Employer's compulsory social security contributions**	4 811	8 603	16 302	4 811
14.	**Average rates**				
	Income tax	5.4%	10.0%	17.8%	-2.3%
	Employees' social security contributions	6.1%	8.0%	9.6%	6.1%
	Total payments less cash transfers	11.5%	18.1%	27.5%	-2.1%
	Total tax wedge including employer's social security contributions	15.5%	22.4%	31.8%	2.4%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	26.0%	32.0%	47.0%	29.4%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	31.2%	36.7%	50.7%	34.3%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Israel 2018

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**	153 221	203 784	255 879	203 784
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				
	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)**	153 221	203 784	255 879	203 784
5.	**Central government income tax liability (exclusive of tax credits)**	21 205	26 261	32 582	26 261
6.	**Tax credits**				
	Basic credit	5 832	12 960	12 960	12 960
	Married or head of family	0	0	0	0
	Children	0	5 184	5 184	0
	EITC	0	0	0	0
	Unused wastable tax credits	0	7 256	935	2 072
	Total	5 832	18 144	18 144	12 960
7.	**Central government income tax finally paid (5-6)**	15 373	15 373	15 373	15 373
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	12 324	14 093	18 580	14 093
	Taxable income				
	Total	12 324	14 093	18 580	14 093
10.	**Total payments to general government (7 + 8 + 9)**	27 697	29 466	33 953	29 466
11.	**Cash transfers from general government**				
	For head of family				
	For two children	4 068	4 068	4 068	0
	Total	4 068	4 068	4 068	0
12.	**Take-home pay (1-10+11)**	129 592	178 386	225 994	174 318
13.	**Employer's compulsory social security contributions**	8 603	10 347	13 413	10 347
14.	**Average rates**				
	Income tax	10.0%	7.5%	6.0%	7.5%
	Employees' social security contributions	8.0%	6.9%	7.3%	6.9%
	Total payments less cash transfers	15.4%	12.5%	11.7%	14.5%
	Total tax wedge including employer's social security contributions	19.9%	16.7%	16.1%	18.6%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	32.0%	32.0%	32.0%	32.0%
	Total payments less cash transfers: Spouse	3.5%	3.5%	12.0%	3.5%
	Total tax wedge: Principal earner	36.7%	36.7%	36.7%	36.7%
	Total tax wedge: Spouse	6.7%	6.7%	18.1%	6.7%

The Israeli currency is the Israeli Shekel (ILS). In 2018, ILS 3.60 was equal to USD 1. In that year, the average worker in Israel earned ILS 153 221 (Secretariat estimate).

1. Personal income tax system

1.1. Central government income tax

1.1.1. Tax unit

In general, spouses are taxed separately on their earned income, subject to the condition that its sources are independent. The household is taxed jointly if their earned income is deemed to be interdependent. Until 2014, the conditions for interdependence involved situations where one spouse worked in a business which the other spouse either owned or had certain levels of capital or management/voting rights. Since 2014, spouses could still be taxed separately, even in cases where their earned income is deemed to be interdependent, if the labour of both spouses is needed to run the business and their income is commensurate to their effort.

1.1.2. Tax allowances and credits

1.1.2.1. Standard tax credits

The standard tax credits are given in the form of credit points subtracted from the tax liability. Each point is worth ILS 2 592 in 2018.

- *Basic credit*: Every resident taxpayer is entitled to 2.25 credit points (ILS 5 832 in 2018).
- *Additional credit for women*: Women are entitled to a further half credit point (ILS 1 296 in 2018).
- *Child credit*: Working mothers (and fathers in one parent families) with children aged under 18 are entitled to one additional credit point per child (ILS 2 592 in 2018). In 2012 this credit was increased to 2 credit points per child aged under 5. Since 2012, married working fathers with children aged under 2 are also entitled to 2 credit points per child. In 2017, the credit for both parents was increased to 2.5 credit points per child aged under 5 (ILS 6 480 in 2018). Since, according to the Taxing Wages methodology, the children in the model are between 6 and 11 inclusive, this change was not included in the model.
- *Single parent credit:* Single parents (male or female) are entitled to one additional credit point (ILS 2 592 in 2018).

1.1.2.2. Non – standard tax credits applicable to income from employment

- Tax credits are awarded for contributions to approved pension schemes, up to a ceiling which varies according to the employee's circumstances.
- Employees living in certain development areas or in conflict zones receive credits as a percentage of their income up to ceiling. In 2016, a comprehensive reform was implemented, where the average credit was decreased but the number of beneficiaries more than doubled. In 2018 the credits range from 7 % in the lowest category to 20% in the highest category with ceilings of ILS 132 000 and 241 080 respectively. About 20% of the population lives in these areas.

- New immigrants are entitled to three additional credit points in their first eighteen months in Israel, two additional credit points in the following year, and one credit point in the year after.
- Discharged soldiers receive 2 credit points for three years after the completion of at least 23 months of service or 1 credit point for a shorter service.
- Graduates of academic studies receive 1 credit point for three years after the completion of a B.A. degree (or after the completion of 1 700 study hours that led to a professional certificate) and 0.5 credit point for two years after the completion of a M.A. degree.

1.1.3. Tax schedule

The tax schedule for earned income in 2018 is as follows:

Taxable income (ILS per year)	Tax rate (%)
0 – 74 880	10
74 880 – 107 400	14
107 400 – 173 280	20
173 280 – 239 520	31
239 520 – 498 360	35
498 360 – 641 880	47
Above 641 880	50

1.2. Regional and local income tax

There are no regional or local income taxes.

2. Compulsory social security insurance system

Social security contributions are made up of a combination of those for National Insurance and Health Insurance. The tax rates paid by employees and employers are applied in two brackets:

- A reduced rate for income up to a level of 60% of the average wage per employee post (ILS 5 944 per month in 2018).
- A full rate for income exceeding 60% of the average wage per employee post and up to ILS 43 370 per month (in 2018).

2.1. Employees' contributions

The taxable base for social security insurance contributions paid by employees is the total amount of the gross wage or salary including fringe benefits. The assessment period is the calendar month. The effective employees' contribution rates in 2018 are as follows:

Insurance branch	Full rate contribution (%)	Reduced rate contribution (%)
Total for National Insurance branches	7.00	0.40
Health	5.00	3.10
Total contributions	12.00	3.50

2.2. Employers' contributions

Employers on behalf of their employees also pay social security insurance contributions. These relate to National Insurance only - employers do not pay any contributions for health insurance.

The employers' contribution rates in 2018 are as follows:

Insurance branch	Full rate contribution (%)	Reduced rate contribution (%)
Total for National Insurance branches	7.5	3.45
Health	--	--
Total contributions	7.5	3.45

3. Payroll taxes

The following payroll taxes exist in Israel but neither of them is included in the modelling as they have limited coverage:

- Wage tax on the non-profit institutions: the VAT law imposes a 7.5 per cent on the wage-bill on the non-profit sector including Government,
- Wage tax on the financial institutions: the VAT law also imposes a 17.00 per cent tax on the wage-bill of the financial institutions**.**

4. Universal cash transfers

4.1. Transfers related to marital status

None.

4.2. Transfers for dependent children

A monthly child allowance is paid to the parent (usually the mother) of unmarried children aged up to 18. The amount of the entitlement for each child depends on the date of birth of the child. Between August 2003 and June 2009, all children born after 1 June 2003 received the same benefit as the first child. But, according to the Coalition agreement signed in March 2009, the benefits for the second, third and fourth child (including those born after June 2003) were increased gradually over a period of four years (i.e. from 2009 to 2012). In August 2013 the allowance for all children born after June 2003 were decreased to ILS 140 per month per child.

In December 2015 (retroactively from May 2015) the allowance for all children were increased.

Moreover, the government deposits ILS 50 per child per month, starting with May 2015 (for the period May 2015-December 2016, the actual deposit will be only delivered, in 36 equal instalments, between January 2017-December 2019). The savings are liquid only when the child turns 18. Considering this delay of cash payments, they do not benefit the household, but rather the child and therefore are not included in the Taxing Wages modelling for 2018.

	Children born before 1 June 2003	Children born on or after 1 June 2003
First child	150	150
Second child	189	189
Third child	189	189
Fourth child	336	189
Fifth child and above	354	150

In addition, a Study Grant is paid to lone parents with children aged 6 to 14. The grant is paid in one instalment, usually in September at the beginning of the school year. In 2018, the grant per child was ILS 1 006.

5. Main changes in the tax and benefit systems since 2002

- There has been a policy of gradually reducing the level of personal income taxes since 2003. This policy was expected to continue till 2016 but came to an end in 2012 with the top tax bracket increasing from 45% to 48% although the rate of one middle income tax bracket was further decreased from 23% to 21%. The rates were further increased in 2013. In 2013 a surtax of 2% was imposed on total income above ILS 811 560, effectively increasing the top marginal rate to 50%. In 2017 the surtax was increased to 3% on total income above ILS 640 000, while the top marginal rate remained unchanged at 50%. In 2013 the value of some tax brackets weren't fully indexed to the CPI and even suffered a nominal decrease. In 2014 the value of all tax brackets and of the "credit point" weren't indexed to the CPI. In 2017 some tax rates and the width of some tax brackets were changed, effectively decreasing the tax burden for low and mid income while increasing the burden for higher incomes.
- The full contribution rate for employee social security contributions was increased gradually from 9.7% in 2002 to 12% in 2006. The reduced contribution rate was lowered from 5.76% in 2002 to 3.5% in 2006. The upper threshold for contributions was removed in July 2002 but re-instated one year later. In August 2009, as a temporary measure until December 2011, it was increased to 10 times the average wage per employee post until December 2010 and to 9 times the average wage per employed post until December 2011.
- Prior to July 2005, there was only one contribution rate for employer social security contributions and this was set at 5.93% between July 2002 and June 2005. The upper threshold for contributions was removed in July 2002 but was re-instated one year later. The current system of two tax brackets was introduced in July 2005 with a reduced contribution rate of 5.33% and a full rate of 5.68%. There has been a lowering of rates in each year between 2006 and 2009. In August 2009, as a temporary measure until March 2011, the reduced rate was increased from 3.45% to 3.85%. In April 2011 the regular rate was increased to 5.9%. It was increased again to 6.5% in January 2013, 6.75% in January 2014, 7.25% in January 2015 and 7.5% in January 2016.
- The Employers tax on wage bill of the non-profit sector excluding Government was abolished in 2008.
- In the period between August 2003 and June 2009, all children that were born on or after 1 June 2003 received the same level of benefit payment as the first child. The 2009 Coalition agreement introduced a gradual increase in the benefit payments for the second, third and fourth children in all families (including those

where children were born after June 2003) over a period of four years from July 2009 to Apr 2012. In August 2013 the allowance for all children born after June 2003 was decreased to ILS 140 per month per child. In December 2015 (retroactively from May 2015) the allowance for all children were increased.

- In 2017, the tax credit for both parents was increased to 2.5 credit points per child aged under 5.

6. Memorandum items

6.1. Average gross annual wage earnings calculation

The average wage figures represent the amount earned for a full time post by employees working 35 hours per week or more. Until 2011 the AW data came from a combination of 2 sources - the income and expenditure survey and the labour force survey. Since 2012 the data come exclusively from the income and expenditure survey as the labour force survey has no more data on income. The Central Bureau of Statistics has now computed a new AW series based exclusively on the income and expenditure survey back from 2000.

As to the economic classification, until 2012, Israel used a modified version of ISIC 3 where the B-I industries (see Table below) are a very close equivalent of C-K industries in ISIC 3.1. Israel's Central Bureau of Statistics adopted ISIC 4 in 2012 and since 2013 the Average Wage used in the modelling is based on ISIC 4.

A	Agriculture.
B	Manufacturing.
C	Electricity and water supply.
D	Construction (building and civil engineering projects).
E	Wholesale and retail trade and repairs.
F	Accommodation services and restaurants
G	Transport, storage and communication.
H	Banking, insurance and other financial institutions.
I	Business activities.
J	Public administration.
K	Education.
L	Health, welfare and social work services.
M	Community, social, personal and other services.

6.2. Employer contributions to private pension

Until 2007, employers were not legally obliged to pay into a pension plan for their employees. Pension rights were guaranteed in collective agreements that covered less than half of the labour force. About one million employees in Israel had no pension arrangement (mainly those earning a relatively low wage, temporary workers and those working for subcontractors).

In 2008, a compulsory employment pension was introduced for employees with a period of employment of at least 6 months. The minimum rate of contributions in January 2018 was 18.5 per cent of the employee’s salary (up to the level of the average wage of ILS 9 906 per month), about one third to be paid by the employee and two thirds by the employer.

6.3. Earned income tax credit

A non-wastable earned income tax credit was implemented in 2008 in selected geographical areas of Israel covering 15 % of the population. Entitlement to this credit is established based on earnings in the previous year. The tax credit was extended to all areas of Israel in 2012 (based on the earnings in 2011 and therefore we already included it in the 2011 version of the model). For mothers of children up to the age of 2 and for single parents the full coverage started in 2011 (based on earnings in 2010).

Under the law, workers aged 23 or more who are parents of one or two children aged less than 18 (or workers aged 55 or more even without children), and earn at least ILS 2 100 per month (about 39 per cent of the minimum wage) but not more than ILS 6 320 per month are eligible for a monthly increment of up to ILS 330. The corresponding figure for a family with 3 or more children is ILS 490.

Since 2016, single parents are eligible for the EITC for a wider income range – from ILS 1 290 per month to ILS 9 570 per month (for a single parents of 1-2 children) or ILS 11 690 per month (for a single parents of 3 or more children).

Since 2013 (based on earnings in 2012), these sums were increased by 50% for working mothers (and fathers in one-parent family).

A temporary measure (for earnings in 2018 only), expanded the 50% bonus to all working fathers and furthermore added a bonus of 30% for families where both parents work. This was included in the Taxing Wages modelling for 2018

Families in which both parents work, and their joint income does not exceed ILS 12 380, are entitled to these benefits for each wage-earner. The grant is paid four times a year directly into the account of the eligible persons.

2018 Parameter values

Average earnings/yr	Ave_earn	153 221	Secretariat esimate
Income tax	Tax_sch	0.10	74 880
		0.14	107 400
		0.20	173 280
		0.31	239 520
		0.35	498 360
		0.47	641 880
		0.50	
Employees SSC	SSC_sch	0.035	71 328
		0.12	520 440
		0	
Employers SSC	SSC_rate2	0.0345	71 328
		0.0750	520 440
		0.0000	
Child benefit	CB_firstchild	1 800	
	CB_secondchild	2 268	
	Studygrant_rate	1 006	
Wastable tax credits			
Basic element	WTC_Basic	5 832	
Lone parent	WTC_lone	2 592	
Parents/per child	WTC_Child	2 592	
Women	WTC_woman	1 296	
Negative Income tax			
Married with 1 or	NIT_sch1	0	25200
2 children		0.161	43088
		0	43800
		0	60000
		-0.230	75840
Married with 3 or	NIT_sch2	0	25200
more children		0.235	43788
		5.985	43800
		0	60000
		-0.235	83160
Single with 1 or	NIT_sch3	0	15480
2 children		0.108	42147
		0	43800
		0	82200
		-0.116	114840
Single with 3 or	NIT_sch4	0	15480
		0.155	43788
		4.355	43800
		0	91800
		-0.116	140280
	NIT_basic1	1080	
	NIT_basic2	1440	
	NIT_min	240	
	NIT_MinIncome1	25200	
	NIT_MinIncome2	15480	
	Nit_AddIncome1	17520	
	Nit_AddIncome2	58320	
	Nit_MaxIncome	148560	
	NIT_Bonus1	1.5	

	NIT_Bonus2	1.3	
	NIT_PartnerIncome	43800	
Days in tax year	numdays	366	

2018 Tax equations

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings			
2.	Allowances:	Tax_al	B	0
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	Earn
5.	CG tax before credits	CG_tax_excl	B	Tax(tax_inc, tax_sch)
6.	Tax credits (nonwastable):			
	Principal	tax_cr_princ	B	(earn>0)*(wtc_basic+(IF(married=0)*(children>0),wtc_woman+wtc_lone+(wtc_child*children))
	Spouse	tax_cr_spouse	B	(earn>0)*(wtc_basic+wtc_woman+(wtc_child*children))
	Tax credits (nonwastable)	NIT_princ	B	NIT=MAX(0,IF(Children=0,0,IF(Married=1,IF(Children<='2,NIT_basic1*(Princ_earnings>NIT_MinIncome1)+Tax(Princ_earnings,NIT_sch1),NIT_basic2*('Princ_earnings>NIT_MinIncome1)+Tax(Princ_earnings,NIT_sch2)),(IF(Children<='2,NIT_basic1*('Princ_earnings >NIT_MinIncome2)+Tax(Princ_earnings,NIT_sch3),NIT_basic2*(Princ_earnings >NIT_MinIncome2)+Tax(Princ_earnings,NIT_sch4)))))) NIT=+MAX(0,NIT+IF(Children=0,0,IF(Children<=2,-0.23,-0.235)) *MAX(0,+(Princ_earnings +Spouse_earnings)-NIT_MaxIncome-MIN(MAX(0, Princ_earnings -NIT_Addincome2),NIT_AddIncome1)-MIN(MAX(0,Spouse_earnings-NIT_Addincome2),NIT_AddIncome1))) NIT=IF(NIT<NIT_min,0,NIT)*NIT_Bonus1*IF(Spouse_earnings>NIT_PartnerIncome,NIT_Bonus2,1)
		NIT_spouse	B	NIT=MAX(0,IF(Children=0,0,IF(Married=1,IF(Children<=2,NIT_basic1*(Spouse_earnings>NIT_MinIncome1)+Tax(Spouse_earnings,NIT_sch1),NIT_basic2*(Spouse_earnings>NIT_MinIncome1)+Tax(Spouse_earnings,NIT_sch2)),(IF(Children<=2,NIT_basic1*(Spouse_earnings>NIT_MinIncome2)+Tax(Spouse_earnings,NIT_sch3),NIT_basic2*(Spouse_earnings>NIT_MinIncome2)+Tax(Spouse_earnings,NIT_sch4)))))) NIT=+MAX(0,NIT+IF(Children=0,0,IF(Children<='2,-0.23,-0.235))' *MAX(0,+(Princ_earnings +Spouse_earnings)-NIT_MaxIncome-MIN(MAX(0, Princ_earnings -NIT_Addincome2),NIT_AddIncome1)-MIN(MAX(0,Spouse_earnings-NIT_Addincome2),NIT_AddIncome1))) NIT=IF(NIT<NIT_min,0,NIT)*NIT_Bonus1*IF(Princ_earnings>NIT_PartnerIncome,NIT_Bonus2,1)
7.	CG tax	CG_tax	B	Positive(CG_tax_excl-tax_cr)-NIT
8.	State and local taxes	local_tax	B	0
9.	Employees' soc security	SSC	B	Tax(earn, SSC_sch)
11.	Cash transfers	cash_trans	J	IF(children=1,CB_firstchild,IF(Children=2,CB_firstchild+CB_secondchild)+(IF(married=0)*(children>0),Studygrant_rate*children)
13.	Employer's soc security	SSC_empr	B	Tax(earn, SSC_rate2)

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

Italy

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Italy 2018

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**	20 966	31 292	52 258	20 966
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	1 990	2 970	5 016	1 990
	Work-related expenses				
	Other				
	Total	1 990	2 970	5 016	1 990
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	18 976	28 323	47 243	18 976
5.	**Central government income tax liability (exclusive of tax credits)**	4 524	7 083	14 272	4 524
6.	**Tax credits**				
	Basic credit	1 385	966	281	1 385
	Married or head of family	0	0	0	0
	Children	0	0	0	1 572
	Other	960	0	0	960
	Total	2 345	966	281	3 917
7.	**Central government income tax finally paid (5-6)**	2 179	6 116	13 991	606
8.	**State and local taxes**	499	745	1 603	499
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 990	2 970	5 016	1 990
	Taxable income				
	Total	1 990	2 970	5 016	1 990
10.	**Total payments to general government (7 + 8 + 9)**	4 667	9 831	20 610	3 095
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	2 580
	Total	0	0	0	2 580
12.	**Take-home pay (1-10+11)**	16 299	21 462	31 648	20 451
13.	**Employer's compulsory social security contributions**	6 621	9 882	16 503	6 621
14.	**Average rates**				
	Income tax	12.8%	21.9%	29.8%	5.3%
	Employees' social security contributions	9.5%	9.5%	9.6%	9.5%
	Total payments less cash transfers	22.3%	31.4%	39.4%	2.5%
	Total tax wedge including employer's social security contributions	40.9%	47.9%	54.0%	25.9%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	40.4%	49.5%	51.2%	42.0%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	54.7%	61.7%	62.9%	55.9%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Italy 2018

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**	31 292	41 619	52 258	41 619
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	2 970	3 950	4 959	3 950
	Work-related expenses				
	Other				
	Total	2 970	3 950	4 959	3 950
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	28 323	37 669	47 299	37 669
5.	**Central government income tax liability (exclusive of tax credits)**	7 083	9 232	11 606	9 232
6.	**Tax credits**				
	Basic credit	966	2 786	2 351	2 786
	Married or head of family	690	0	0	0
	Children	1 411	1 411	1 492	0
	Other	0	960	960	960
	Total	3 067	5 156	4 803	3 746
7.	**Central government income tax finally paid (5-6)**	4 016	4 076	6 803	5 487
8.	**State and local taxes**	745	907	1 244	907
9.	**Employees' compulsory social security contributions**				
	Gross earnings	2 970	3 950	4 959	3 950
	Taxable income				
	Total	2 970	3 950	4 959	3 950
10.	**Total payments to general government (7 + 8 + 9)**	7 730	8 932	13 007	10 343
11.	**Cash transfers from general government**				
	For head of family				
	For two children	1 514	921	819	0
	Total	1 514	921	819	0
12.	**Take-home pay (1-10+11)**	25 076	33 607	40 070	31 276
13.	**Employer's compulsory social security contributions**	9 882	13 143	16 503	13 143
14.	**Average rates**				
	Income tax	15.2%	12.0%	15.4%	15.4%
	Employees' social security contributions	9.5%	9.5%	9.5%	9.5%
	Total payments less cash transfers	19.9%	19.2%	23.3%	24.9%
	Total tax wedge including employer's social security contributions	39.1%	38.6%	41.7%	42.9%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	51.1%	51.1%	50.3%	49.5%
	Total payments less cash transfers: Spouse	17.4%	36.0%	41.2%	36.0%
	Total tax wedge: Principal earner	62.8%	62.8%	62.2%	61.7%
	Total tax wedge: Spouse	37.2%	51.3%	55.3%	51.3%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year the average worker earned EUR 31 292 (Secretariat estimate).

1. Personal Income Tax

1.1. Central government income tax

1.1.1. Tax unit

Spouses are taxed separately.

1.1.2. Tax allowances and tax credits

1.1.2.1. Tax allowances

- Social security contributions due by law.

1.1.2.2. Tax credits

Italy increased the basic employee tax credit from EUR 1 840 to EUR 1 880 and as from 2014 introduced an additional refundable tax credit of EUR 960 for employees with income between EUR 8 146 and EUR 24 600, with a phase-out for income between EUR 24 600 and EUR 26 600.

Taxable income (EUR)	Fiscal bonus (EUR)
Up to 8 145	0
From 8 146 to 24 600	960
From 24 001 to 26 600	960*(26 000 – taxable income)/2 000
More than 26 600	0

- Standard tax credits (not refundable)

The PAYE tax credit is defined as a function of net income:

Taxable income (EUR)	PAYE tax credit (EUR)
Up to 8 000	1 880
From 8 001 to 28 000	Maximum tax credit + 902*(28 000 – taxable income)/20 000
From 28 001 to 55 000	Maximum tax credit*(55 000 – taxable income)/27 000
More than 55 000	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 8 001 to 15 000	978
From 15 001 to 23 000	978
From 23 001 to 24 000	978
From 24 001 to 25 000	978
From 24 001 to 26 000	978
From 26 001 to 27 700	978
From 27 701 to 28 000	978
From 28 001 to 55 000	978

- Tax credits for family dependents (not refundable)

The tax credits for family dependants, which have replaced the former tax allowances, are as follows:

Family tax credit (EUR)*	Amount (EUR)
Spouse	800 decreasing to 0 for net income over 80 000
Children	
Under three years of age	1 220 decreasing to 0 for net income over 95 000
Over three years of age	950 decreasing to 0 for net income over 95 000
Other dependent relatives	750 decreasing to 0 for net income over 80 000

(*) Tax credits are granted for family dependents earning less than EUR 2 840.51

The spouse tax credit is calculated as a function of net income:

Level of taxable income (EUR)	Amount of tax credit (EUR)
Up to 15 000	800–110*taxable income/15 000
From 15 001 to 29 000	690
From 29 001 to 29 200	700
From 29 201 to 34 700	710
From 34 701 to 35 000	720
From 35 001 to 35 100	710
From 35 101 to 35 200	700
From 35 201 to 40 000	690
From 40 001 to 80 000	690*(80 000–taxable income)/40 000
More than 80 000	0

The child tax credit is calculated as a function of net income:

- for families with only one child: 950*(95 000-taxable income)/95 000;
- for families with more than one child the amount of 95 000 is increased by 15 000 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.

Families with more than 3 children receive a refundable tax credit of EUR 1 200 (per family).

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%) 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 50% for 2015 of full expenses up to EUR 96 000, apportioned into 10 annual allowances of the same amount;

- Expenses for energy requalification of buildings at 65% for 2015 of full expenses apportioned into 10 annual allowances of the same amount;
- Expenses for the replacement of covers, windows and shutters and for the installation of solar panels (only for hot water production) at 65% of full expenses (up to EUR 60 000).

For the following expenses, a tax credit of 19% of each incurred expense is allowed:

- Mortgage loan interest (up to EUR 4 000);
- Most medical expenses that exceed EUR 129.11;
- Payments to insurance funds up to EUR 1 291.14;
- Expenses to attend secondary school and university courses; in case such courses are private, the expenses allowed cannot exceed those foreseen for State courses;
- Expenses for nursery school (up to EUR 632 for each child);
- Rents paid by out of town students (up to EUR 2 633);
- Funeral charges up to EUR 1 549.37;
- Expenses for disabled persons;
- Payments to foundations (up to EUR 2 065.83);
- Expenses related to sport activities for children between 5 and 18 years of age (up to EUR 210 per child).
- Personal assistance for non-self-sufficient people (up to EUR 2 100);
- Most veterinary expenses that exceed EUR 129.11 (up to EUR 387.34).

For the following expenses, a tax credit of 26% of each incurred expense is allowed:

- Donations to political parties (ranging from EUR 30.00 to EUR 30 000.00);
- Donations to non-profit organizations of social utility - ONLUS - (up to EUR 30 000.00).

1.1.3. Tax schedule

The following tax schedule is applied to taxable income:

Bracket (EUR)	Rate (%)
up to 15 000	23
over 15 000 up to 28 000	27
over 28 000 up to 55 000	38
over 55 000 up to 75 000	41
over 75 000	43

Decree-Law n. 138 of 13th August 2011 introduced the “Contributo di Solidarietà” for the 2011-2013, (extended up to 2016), tax periods, that is a 3% “solidarity contribution” on the portion of income higher than EUR 300 000 (the amount paid is deductible from PIT base)”. As from 2017 the “Contributo di solidarietà” measure is not in force.

1.2. State and local taxes

These surcharges are due only by taxpayers who pay individual income tax IRPEF (imposta sul reddito delle persone fisiche).

Regional surcharge tax

This surcharge tax has been introduced in 1997. The tax is levied by each region on resident taxpayers' total taxable income at a discretionary rate, which must fall within an established range. As from the year 2000 this range is 0.9% – 1.4%.

In December 2011, with the DL 201/2011, the minimum state rate has been increased from 0.9% to 1.23%

The figure given in the 2016 parameter values table under the heading "Regional and local tax" includes the regional surcharge tax paid in the most representative city which is Rome (Lazio); the rate is 3.33% for taxable income bracket over EUR 15 000 and 1.73% for income under EUR 15 000. As from 2017 a progressive tax schedule is applied to taxable income:

Bracket (EUR)	Rate (%)
up to 15 000	1.73
over 15 000 up to 28 000	2.73
over 28 000 up to 55 000	2.93
over 55 000 up to 75 000	3.23
over 75 000	3.33

Nevertheless, if the taxable income is under the threshold of EUR 35 000 the rate applicable to the total amount of taxable income is 1.73%.

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%. If the tax is levied, the local government can increase the initial rate, on a yearly basis, up to a maximum of 0.5%. Each yearly increase cannot exceed 0.2%. As from 2012, municipalities can increase the rate up to 0.8. A 0.9 special rate can be introduced by Roma Capitale Local Government.

The figure given in the 2015 parameter values table under the heading "Regional and local tax" includes the local surcharge tax paid in the most representative city which is Rome; the rate is 0.9% in 2015.

Starting from 2011, exemption is provided to taxpayers whose total income consists of retirement income not exceeding EUR 7 500, income from land not exceeding EUR 185.92, and income from primary residence. As from 2015 the rate is not applied to taxpayers with income under EUR 12 000. The ordinary rate is applied if any one of these limits is passed.

The surcharge rates can be adjusted above the fixed roof because of the health care losses.

2. Compulsory Social Security

2.1. Employee contributions

- Rate and ceiling
  - The average rate is 9.49% on earnings up to EUR 46 630;
  - The average rate is 10.49% on earnings over EUR 46 630 and up to EUR 101 427;
  - For earnings exceeding EUR 101 427, the employee pays a fixed amount given by (0.0949 x 46 630) + 0.1049 x (101 427–46 630).
- Distinction by marital status or sex

– None.

2.2. Employer contributions

- Contributions equal 31.58% on earnings up to EUR 101 427. For earnings exceeding EUR 101 427, the employer pays a fixed amount given by 0.3158 x 101 427.
- A General Government employer work-related accident insurance exists in Italy. It is compulsory for employers with employees and contract workers in activities involving the use of machinery and in risky activities as defined by the law. The standard premium to be paid is calculated by applying to remuneration the rates linked to the activity in which the employee works. The rates that vary between 0 to about 13% are provided by a special classification that takes into account the different categories of risk between the various activities. It is not possible to provide a representative or average rate since the contribution rates vary depending on the industrial activities and also other factors of risk. Those contributions are not included in the Report.

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% 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 granted with reference to family income earned in year t-2.
July–December	The amount of cash transfers is that given in the INPS table published in July t. The transfers are granted 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

Employer SSC rate has been updated. SSC contributions thresholds have been updated.

Employee refundable tax credit thresholds have been updated.

5. Memorandum Item

5.1. Identification of an AW

The data refer to the annual earnings of average workers.

5.2. Contributions by employers to private pension, health, etc. schemes

In addition to the mandatory social security contributions employers may pay contributions to private pension schemes (currently about forty pension funds). Employer's contributions are included in the taxable income of the employee.

Employees may also choose to contribute to the pension funds with all or part of the retirement allowance that is otherwise withheld by the employers. In this case the employee can deduct from his taxable income an amount equal to twice the amount of the contribution paid to fund.

Employer's contributions to private health insurance schemes are not included in the taxable income of the employee up to the limit of EUR 3 615.20.

2018 Parameter values

Average earnings/yr	Ave_earn	31 292	Secretariat estimate
Tax schedule	tax_sch	0.23	15 000.00
		0.27	28 000.00
		0.38	55 000.00
		0.41	75 000.00
		0.43	999 999 999.99
Sloidarity contribution	sol_tax	0.03	
	sol_inc_limit	300 000	
Tax credits			
Fiscal bonus	thre_min	8 146	
	thre_max	24 600	
	f_bonus	960	
Employment			
	emp_add	0	1 880.00
		8 000	978.00
		15 000	978.00
		23 000	978.00
		24 000	978.00
		25 000	978.00
		26 000	978.00
		27 700	978.00
		28 000	978.00
		55 000	0.00
Spouse	Spouse_cred	0	800.00
		15 000	690.00
		29 000	700.00
		29 200	710.00
		34 700	720.00
		35 000	710.00
		35 100	700.00
		35 200	690.00
		40 000	690.00
		80 000	0
limit	Sp_crd_lim	2 840.51	
Child credit	Child_credit	950	
Additional child credit	add_child	200	
Regional and local tax	reg_rt_sch	0.0173	15000.00
		0.0273	28000.00
		0.0293	55000.00
		0.0323	75000.00
		0.0333	999999999.99
	reg_rt	0.0173	
	Local_rt	0.009	
Social security contributions	SSC_sch	0.0949	46 630
		0.1049	101 427
		0.00	999 999 999.99
Employer contributions	Empr_sch	0.3158	100 324
		0.00	999 999 999.99
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	

2018 Tax equations

The equations for the Italian system in 2018 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<='28000,emp_cr_max+902*(28000-tax_inc)'/20000, IF(tax_inc>55000,emp_cr_max,emp_cr_max*(55000-tax_inc)/27000))))+
			S	MIN(CG_tax_excl_spouse, IF(tax_in_spousec<='8000,emp_cr_max_spouse,' IF(tax_inc_spouse<='28000,emp_cr_max_spouse+902*(28000-tax_inc_spouse)'/20000, IF(tax_inc_spouse>55000,emp_cr_max_spouse,emp_cr_max_spouse*(55000-tax_inc_spouse)/27000))))+
	Fiscal bonus	fiscal_b	B	IF(tax_inc<=thre_min,0,IF(tax_inc<=thre_max,f_bonus,IF(tax_inc<=26600,f_bonus*(266000-tax_inc)'/2000)))
	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-1)*800*(110000-tax_inc)/110000)*(1-child_crpct_spouse), MAX(800*(95000-tax_inc)/95000, 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))))))+(Children-1)*800*(110000-tax_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)

	Line in country table and intermediate steps	Variable name	Range	Equation
8.	State and local taxes	reg_rt	B	=IF(CG tax=0;0;IF(tax_inc<12000;0;tax_inc*local_rt))+IF(CG tax=0;0;IF(tax_inc<35000;tax_inc*reg_rt;tax(tax_inc;reg_rt_sch)))
9.	Employees' soc security	SSC	B	Tax(earn, SSC_sch)
11.	Cash transfers		J	IF(Children='0,0,12*VLOOKUP(earn_total,' IF(Married,trans_sch,trans_sch_sp),1+Children))
13.	Employer's soc security	SSC_empr	B	Tax(earn, Empr_sch)

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

Japan

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Japan 2018

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**	3 476 457	5 188 742	8 665 198	3 476 457
2.	**Standard tax allowances:**				
	Basic allowance	380 000	380 000	380 000	380 000
	Married or head of family	0	0	0	0
	Dependent children	0	0	0	0
	Deduction for social security contributions and income taxes	502 348	749 773	1 140 016	502 348
	Work-related expenses	1 222 937	1 577 748	2 066 520	1 222 937
	Other				
	Total	2 105 285	2 707 521	3 586 535	2 105 285
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	1 371 172	2 481 220	5 078 663	1 371 172
5.	**Central government income tax liability (exclusive of tax credits)**	69 998	153 785	600 585	69 998
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)**	69 998	153 785	600 585	69 998
8.	**State and local taxes**	144 617	255 622	515 366	144 617
9.	**Employees' compulsory social security contributions**				
	Gross earnings	502 348	749 773	1 140 016	502 348
	Taxable income				
	Total	502 348	749 773	1 140 016	502 348
10.	**Total payments to general government (7 + 8 + 9)**	716 964	1 159 180	2 255 967	716 964
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	240 000
	Total	0	0	0	240 000
12.	**Take-home pay (1-10+11)**	2 759 493	4 029 561	6 409 231	2 999 493
13.	**Employer's compulsory social security contributions**	531 550	793 359	1 212 803	531 550
14.	**Average rates**				
	Income tax	6.2%	7.9%	12.9%	6.2%
	Employees' social security contributions	14.5%	14.5%	13.2%	14.5%
	Total payments less cash transfers	20.6%	22.3%	26.0%	13.7%
	Total tax wedge including employer's social security contributions	31.2%	32.6%	35.1%	25.2%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	22.8%	27.7%	31.1%	22.8%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	33.1%	37.3%	35.1%	33.1%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Japan 2018

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**		5 188 742	6 901 026	8 665 198	6 901 026
2.	**Standard tax allowances**					
	Basic allowance		380 000	760 000	760 000	760 000
	Married or head of family		380 000	210 000	0	210 000
	Dependent children		0	0	0	0
	Deduction for social security contributions and income taxes		749 773	997 198	1 252 121	997 198
	Work-related expenses		1 577 748	2 262 662	2 800 685	2 262 662
	Other					
		Total	3 087 521	4 229 860	4 812 806	4 229 860
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		2 101 220	2 671 166	3 852 392	2 671 166
5.	**Central government income tax liability (exclusive of tax credits)**		114 987	152 761	223 783	152 761
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)**		114 987	152 761	223 783	152 761
8.	**State and local taxes**		222 622	282 117	400 239	282 117
9.	**Employees' compulsory social security contributions**					
	Gross earnings		749 773	997 198	1 252 121	997 198
	Taxable income					
		Total	749 773	997 198	1 252 121	997 198
10.	**Total payments to general government (7 + 8 + 9)**		1 087 382	1 432 076	1 876 144	1 432 076
11.	**Cash transfers from general government**					
	For head of family					
	For two children		240 000	240 000	240 000	0
		Total	240 000	240 000	240 000	0
12.	**Take-home pay (1-10+11)**		4 341 359	5 708 950	7 029 055	5 468 950
13.	**Employer's compulsory social security contributions**		793 359	1 055 167	1 324 909	1 055 167
14.	**Average rates**					
	Income tax		6.5%	6.3%	7.2%	6.3%
	Employees' social security contributions		14.5%	14.5%	14.5%	14.5%
	Total payments less cash transfers		16.3%	17.3%	18.9%	20.8%
	Total tax wedge including employer's social security contributions		27.4%	28.2%	29.6%	31.3%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		27.7%	27.7%	27.7%	27.7%
	Total payments less cash transfers: Spouse		20.1%	21.3%	22.8%	21.3%
	Total tax wedge: Principal earner		37.3%	37.3%	37.3%	37.3%
	Total tax wedge: Spouse		30.7%	31.8%	33.1%	31.8%

The national currency is the Yen (JPY). In 2018 JPY 110.44 was equal to USD 1. In that year, the average worker is assumed to earn JPY 5 188 742 (Secretariat estimate). In Japan, the central government income tax year is a calendar year and the local government income tax year is from April to March. The calculations in this report are based on the tax rules and rates, which are applicable the April 1st.

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 (Personal deduction): a taxpayer may deduct JPY 380 000 as a personal deduction from his or her income.
- Allowance for spouse: a tax allowance up to JPY 380 000 is given to a resident taxpayer whose income does not exceed JPY10 000 000 and who lives with a spouse whose income does not exceed JPY 380 000.
- Allowance for elderly spouse: a tax allowance up to JPY 480 000 is given to a resident taxpayer
  - whose income does not exceed JPY 10 000 000 and
  - who lives with a spouse of 70 years old and over, whose income does not exceed JPY 380 000,
  - instead of the allowance for spouse mentioned above.
- Special allowance for spouse: a tax allowance up to the amount shown in the following table is given to a resident taxpayer whose income does not exceed JPY10 000 000 and who lives with a spouse:

Spouse's income JPY	Amount
0–380 000	0
380 001–850 000	380 000
850 001–900 000	360 000
900 001–950 000	310 000
950 001–1 000 000	260 000
1 000 001–1 050 000	210 000
1 050 001–1 100 000	160 000
1 100 001–1 150 000	110 000
1 150 001–1 200 000	60 000
1 200 001–1 230 000	30 000
1 230 001 or more	0

- Allowance for dependents: if a resident taxpayer has dependent children or other dependent relatives who are 16 years old and over, whose income does not exceed JPY 380 000, a tax allowance of JPY 380 000 per each dependent is given to the taxpayer.
- Special allowance for dependents: if a resident taxpayer has dependents between 19 and 22 years old whose income does not exceed JPY 380 000 and who live

with the taxpayer, an allowance of JPY 630 000 is given for each dependent, instead of the allowances for dependents mentioned above.

- Allowance for elderly dependent: if a resident taxpayer has dependents who are 70 years old and over whose income does not exceed JPY 380 000, a tax allowance of JPY 480 000 per each dependent is given to the taxpayer, instead of the allowances for dependents mentioned above. (If the dependents are lineal ascendance of the taxpayer or his/her spouse, and permanently live with the taxpayer or his/her spouse, a tax allowance of JPY 580 000 per each dependent is given to the taxpayer.)
- Deduction for social insurance premiums: the whole amount of social insurance premiums for a resident taxpayer or his/her dependents shall be deducted from his/her income.
- Employment income deduction: the following amounts may be deducted from employment income in calculating salary income:
  - If gross employment income (GEI) does not exceed JPY 1 800 000, the deduction is 40% of GEI, but the minimum amount deductible is JPY 650 000.
  - If gross employment income exceeds JPY 1 800 000, but not JPY 3 600 000, the deduction is JPY 180 000 plus 30% of GEI.
  - If gross employment income exceeds JPY 3 600 000, but not JPY 6 600 000, the deduction is JPY 540 000 plus 20% of GEI.
  - If gross employment income exceeds JPY 6 600 000, but not JPY 10 000 000, the deduction is JPY 1 200 000 plus 10% of GEI.
  - If gross employment income exceeds JPY 10 000 000, the deduction will be fixed at JPY 2 200 000.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Deduction for life insurance premiums: If a resident taxpayer pays insurance premiums on life insurance contracts and the beneficiary is the taxpayer, his/her spouse or other relatives, the portion of these insurance premiums which does not exceed the limit described below, is deductible from ordinary income, retirement income or timber income.
- In addition, if a resident taxpayer pays insurance premiums for "qualified private pension plan (insurance type)", and the recipient of the pension payment is the taxpayer or his/her spouse or relatives living with the taxpayer, the portion of such premiums which does not exceed the limit described below, is deductible from ordinary income, retirement income, or timber income.
- Furthermore, if a resident taxpayer pays insurance premiums on nursing and medical insurance contacts and part of the nursing/medical care which the taxpayer receives is financed by the insurance, the portion of such premiums which does not exceed the limit described below, is deductible from ordinary income, retirement income, or timber income.

Annual Premium Paid (JPY)		Deduction
Over	Not over	
	20 000	Total amount of premiums paid (1)
20 000	40 000	(1) x 1/2 + JPY 10 000
40 000	80 000	(1) x 1/4 + JPY 20 000
80 000	--	JPY 40 000

- For insurance contracts made on or after 1 January 2012 the maximum total deduction is JPY 120 000. A resident taxpayer can claim the deduction up to JPY 40 000 for life insurance premiums, private pension plan premiums and nursing and medical insurance premiums respectively.
- For the insurance contracts made on or before 31 December 2011, a resident taxpayer can claim the deduction up to JPY 50 000 for life insurance premiums, personal pension plan premiums respectively. Thus, a resident tax payer can claim the deduction up to JPY 100 000 in total.
- Deduction for medical expenses: If a resident taxpayer pays bills for medical or dental care for himself/herself or for his/her dependent spouse or other dependent relatives living with him/her and the amount of such expenses (excluding those covered by insurance) exceeds JPY 100 000 or 5% 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.

  If a resident taxpayer who receives health checks, vaccinations, etc., pays bills for switch OTC drugs for himself/herself or for his/her spouse or other relatives dependent on him/her from 1 January 2017 to 31 December 2021, amount of such expenses (excluding those recovered by insurance) exceeding JPY 12 000 is deductible from taxpayer's ordinary income, retirement income or timber income. This is an alternative to the deduction for medical expenses mentioned above and the maximum deduction is JPY 88 000.

- Deduction for earthquake insurance premiums: Earthquake insurance premiums up to JPY 50 000 can be deducted from income. Although the income deduction for casualty insurance premiums are 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 15 000. If an individual applies for a deduction for both earthquake insurance premiums and long-term casualty premiums, the maximum deductible amount is JPY 50 000 in total.
- 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 after the first use of the house, provided that the floor space is not less than $50m^2$ and that at least half of the floor space is used as the owner-occupied dwelling. The tax credit is calculated based on the remaining housing loan debt amount and the years which the taxpayer has lived in the house. The loan can consist not only from private financial institutions but also from public institutions. This tax credit cannot be claimed by those whose total income is more than JPY 30 million.

Residence starts:	From 1 April 2014 to 31 December 2021
Tax Credit Rate	For the part of R.H.L.B. within JPY 40 million: The R.H.L.B x 1.0% If the rate of tax(consumption tax etc.) included in the amount of cost etc. of housing is other than 8% or 10%; For the part of R.H.L.B. within JPY 20 million: The R.H.L.B x 1.0%
Maximum tax credit amount (for each year)	JPY 400 000 If the rate of tax(consumption tax etc.) included in the amount of cost etc. of housing is other than 8% or 10%; JPY 200 000
Maximum tax credit amount (for the deductible period in total)	JPY 4 million If the rate of tax(consumption tax etc.) included in the amount of cost etc. of housing is other than 8% or 10%; JPY 2 million

The rates of the tax credits correspond to the year in which residence in the house commenced. The rates are as follows:

1.1.3. Tax schedule

Taxable Income (JPY) (*)		Tax Rate (%)	Deductible Amounts for Each Bracket (JPY)
Over	Not over	(A)	(B)
	1 950 000	5	--
1 950 000	3 300 000	10	97 500
3 300 000	6950 000	20	427500
6950 000	9 000 000	23	636 000
9 000 000	18 000 000	33	1 536 000
18 000 000	40 000 000	40	2796 000
40 000 000		45	4 796 000

(*) The fraction of taxable income that is less than JPY 1 000 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:

7 000 000 x 0.23 (A) − 636 000 (B) = JPY 974 000.

In addition, a taxpayer is required to file tax returns and make tax payments for additional 2.1% of the base income taxes from 2013 through 2037 (special income tax for reconstruction) annually together with the regular income tax of respective years.

1.2. Local taxes (personal inhabitant's taxes)

1.2.1. General description of the system

Local taxes in Japan (personal inhabitant's taxes) consist of prefectural inhabitant's tax levied by prefectures and municipal inhabitant's tax levied by cities, towns and villages. The prefectural inhabitant's tax is collected together with the municipal inhabitant's tax by cities, towns and villages.

1.2.2. Tax base

Basically, personal inhabitant's taxes (prefectural and municipal inhabitant's taxes) consist of two parts; one is income based tax and the other is a fixed per capita amount.

The taxable income of personal inhabitant's taxes is computed on the basis of the previous year's income. The main difference from state tax (income tax) is the amount of income reliefs (tax deductions). For example, the amount of personal deduction and tax deduction for dependants is JPY 330 000, and tax allowance for spouse is up to JPY 330 000, the amount of specified allowance for dependants is JPY 450 000, etc.

1.2.3. Tax rate

- The standard fixed (annual) per-capita amount of Prefectural inhabitant's tax is JPY 1 500;
- The standard fixed (annual) per-capita amount of Municipal inhabitant's tax is JPY 3 500;
- The standard rate of the income based tax is 10% (Prefectural inhabitant's tax: 4%, Municipal inhabitant's tax: 6%, for ordinance-designated cities, Prefectural inhabitant's tax: 2%, for Municipal inhabitant's tax: 8%) (*).

(*) The personal inhabitant's taxes rate and the income tax rate were changed in the FY 2006 tax reform. Adjusted credit (a form of tax credit) 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 allowances (basic tax allowance, tax allowance for spouse, tax allowance for dependents, special tax allowance for dependents, etc.) for national income tax purposes and for inhabitant tax purposes.

Taxable income for local income tax purposes	The tax credit
JPY 2 000 000 or less	5% of the lesser of: - total amount of differences in personal reliefs between those for income tax purposes and for personal inhabitant's taxes purposes; or - taxable income amount for personal inhabitant's taxes purposes
More than JPY 2 000 000	((total amount of differences in personal reliefs between those for income tax purposes and for personal inhabitant's taxes purposes) – (taxable income amount for personal inhabitant's taxes purposes – JPY 2 000 000)) * 5%. Note: The minimum credit is JPY 2 500

Notes: Local authorities do not levy the per-capita rate and the income based tax on a taxpayer whose previous year's income does not exceed a certain amount. For example, in special wards of Tokyo, this threshold is calculated as follows:

- per-capita rate: (1 + number of spouse and dependent(s) qualified for the allowance for spouse/dependents) * 350 000 (+ 210 000 in case the taxpayer has a qualified spouse or dependent(s)))
- income based tax: (1 + number of spouse and dependent(s) qualified for the allowance for spouse/dependents) * 350 000 (+ 320 000 in case the taxpayer has a qualified spouse or dependent(s)))

1.2.4. Tax rate selected for this study

State tax (income tax) rates as aforementioned. The local tax (personal inhabitant's taxes) rates chosen for the purpose of this Report represent the standard rate.

2. Compulsory Social Security Contribution to Schemes Operated Within the Government Sector

2.1. Employees' contributions

2.1.1. Pension

9.15% of total remuneration (standard remuneration and bonuses). The insurable ceiling of the monthly amount of pensionable remuneration is JPY 620 000 and the insurable ceiling of the standard amount of bonus is JPY 1 500 000.

2.1.2. Sickness

As from April 2012 about 5.00%, (about 4.75% before March 2012), of total remuneration, (standard remuneration and bonuses). The insurable ceiling of the monthly amount of standard remuneration is JPY 1 390 000 and the insurable ceiling of the yearly amount of standard bonus is JPY 5 730 000.

2.1.3. Unemployment

0.3% of total remuneration for Commerce and industry in general except for Business of agriculture, forestry and fisheries, and the rice wine brewing business, and Construction business. It is 0.4% for those exceptions.

2.1.4. Work injury and family allowance

None.

2.2. Employers' contributions

2.2.1. Pensions

9.15% of total remuneration (standard remuneration and bonuses). The insurable ceiling of the monthly amount of pensionable remuneration is JPY 620 000 and the insurable ceiling of the standard amount of bonus is JPY 1 500 000.

2.2.2. Sickness

As from April 2012, about 5.00% (about 4.75% before March 2012) of total remuneration. The insurable ceiling of the monthly amount of standard remuneration is JPY 1 390 000 and the insurable ceiling of the yearly amount of standard bonus is JPY 5 730 000.

2.2.3. Unemployment

0.6% of total remuneration for Commerce and industry in general except for Business of agriculture, forestry and fisheries, and the rice wine brewing business, and Construction business. It is 0.7% for Business of agriculture, forestry and fisheries, and the rice wine brewing business, and 0.8% for Construction business.

2.2.4. Work injury

0.25% to 8.8% of total remuneration, the contribution rate depending on each industry's accident rate over the last three years and other factors. There are twenty-eight rates for

fifty-four industrial categories at present.

2.2.5. Family allowance

0.29% of total remuneration.

3. Cash Benefits

3.1. Benefits related to marital status

Not available.

3.2. Benefits for dependent children

From April 2012 (Income caps are applied beginning from June 2012 payments):

a) For persons earning incomes below the income cap
- JPY 15 000 (per month) is paid to parents/guardians for each child who is under 3 years old or for the third or subsequent child from 3 years old until he/she graduates from elementary school.
- JPY 10 000 (per month) is paid to parents/guardians for each child who is for the first or second child from 3 years old until he/she graduates from elementary school or who is a junior high school student.

b) For persons earning incomes no less than the income cap
- JPY 50 00 (per month) is paid to parents/guardians for each child until he/she graduates from junior high school as the Special Interim Allowances.

The income cap is set at JPY 6 220 000 (the principal's gross earnings net of certain deductions, plus JPY 380 000 per dependent).

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% to 37%. The top rate of the local inhabitant's tax was reduced from 15% to 13%. A proportional tax reduction was granted with respect to the national income tax and the local inhabitant's tax. The amount is equal to the lesser of 20% (local inhabitant's tax: 15%) of the amount of tax before reduction or JPY 250 000 (local inhabitant's tax: JPY 40 000).

As part of the FY 2005 tax reform, the rate of proportional tax reduction was reduced from 20% to 10% (local inhabitant's tax: from 15% to 7.5%) and the ceiling was reduced from JPY 250 000 to JPY 125 000 (local inhabitant's tax from JPY 40 000 to JPY 20 000) as from 2006 (local inhabitant's tax: FY 2006). In the FY 2006 tax reform, the proportional tax reduction was abolished as from 2007 (local inhabitant's 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% to 40%, and the rate of local inhabitant's tax became proportional at a single rate of 10%.

As part of the FY 2012 tax reform, the upper limit on employment income deduction (JPY 2 450 000) was set for those who earn employment income of more than JPY 15 000 000 as from 2013 (personal inhabitant's tax: FY 2014).

As part of the FY 2013 tax reform, the tax rate of 45% was set for the income beyond JPY 40 000 000 from 2015 creating a 7 brackets structure.

As part of the FY 2014 tax reform, the upper limit on employment income deduction was determined to be gradually reduced. In 2016 (as for personal inhabitant's taxes, in FY2017), the limit became JPY 2 300 000 for salary income more than JPY 12 000 000. In addition, in 2017 (as for personal inhabitant's taxes, in FY2018), the limit became JPY 2 200 000 for salary income more than JPY 10 000 000.

As part of the FY 2017 tax reform, as regards allowance for spouse and special allowance for spouse, the maximum spousal income qualifying for the tax allowance (maximum JPY 380 000) were raised from JPY 380 000 to JPY 850 000. At the same time, an upper income limit was introduced as a requirement for taxpayers to qualify for allowance for spouse and special allowance for spouse. The reform goes into effect in 2018. (As for personal inhabitant's taxes, allowance for spouse and special allowance for spouse will be revised similarly. This reform will go into effect in FY2019.)

As part of the FY 2018 tax reform, following tax systems will be revised. The reform will go into effect in 2020 (as for personal inhabitant's taxes, in FY2021):

- The amount of employment income deduction and pension income deduction will be reduced uniformly by 100 000 yen while the amount of personal deduction will be raised uniformly by 100 000 yen.
- The amount of employment income deduction from income exceeding 8 500 000 yen will be reduced to 1 950 000 yen. However, in consideration of child care and long-term care, measures will be taken to avoid increase in burden on households with a dependent relative(s) under 23 years of age and households with a member(s) dependent on care (*).
  * Relatives receiving "special deduction for persons with disabilities"
- A cap of 1 955 000 yen will be put on pension income deduction for pension income exceeding 10 000 000 yen. The deduction will be reduced for pensioners with income other than pension exceeding 10 000 000 yen after deductions.
- Personal deduction will be diminished for people with total income exceeding 24 000 000 yen after deductions, and the amount will be further reduced gradually to zero when total income exceeds 25 000 000 yen.

Eligible age for cash benefits for dependent children was raised from three to six as from 1 June 2000, from six to nine as from 1 April 2004 and from nine to twelve as from 1 April 2006. Benefit amount has been doubled to JPY 10 000 for the first and second child under the age of three as from 1 April, 2007.

As from 2010, JPY 13 000 per month is paid to parents/guardians regardless of their income for each child until he/she graduates from junior high school.

As from April 2012 (Income caps are applied beginning from June 2012 payments):

a) For persons earning incomes below the income cap
   JPY 15 000 (per month) is paid to parents/guardians for each child who is under 3 years old or for the third or subsequent child from 3 years old until he/she graduates from elementary school.
   JPY 10 000 (per month) is paid to parents/guardians for each child who is for the first or second child from 3 years old until he/she graduates from elementary school or who is a junior high school student.

b) For persons earning incomes over the income cap
JPY 5 000 (per month) is paid to parents/guardians for each child until he/she graduates from junior high school as the Special Interim Allowances.

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 establishments with ten or more regular employees over the whole country, and contains statistical figures for monthly contractual cash earnings in June and annual special cash earnings (such as bonuses) received by various categories of workers. Male and female workers of the manufacturing, mining and quarrying, construction, wholesale and retail trade, accommodation and food service activities, financial and insurance activities, real estate activities sector are the point of departure. Their gross annual earnings have been calculated by multiplying monthly contractual cash earnings by 12 and adding any annual special cash earnings. In the Basic Survey, sickness and unemployment compensations are excluded from cash earnings, but average overtime and bonuses are included.

As far as the Basic Survey is concerned, it covers the whole country, and no special assumption is made regarding the place of residence of the average worker.

5.2. Employer contributions to private pension and health schemes

DB: JPY 2960 billion (FY 20152014)

Employees' Pension Funds (EPFs): JPY 294 billion (FY 2016)

DC: JPY 856 billion (FY2016)

Data of DB and EPFs are the total amount of employers' contribution and employees' one and there is no data of those which indicates only employers' contribution. Under DC schemes, as from January 2012, matching contribution which enables employee to pay additional contribution to employer's one became available. The amount of DC does not include the amount of matching contribution. It is regulated by law that employers' contribution must be higher than employees' one.

2018 Parameter values

Average earnings/yr	Ave_earn	5 188 742	Secretariat estimate
Allowances for central tax	basic_al	380 000	
	spouse_al	380 000	
	Spouse_al_sp	0	0
		380 001	380 000
		850 001	360 000
		900 001	310 000
		950 001	260 000
		1 000 001	210 000
		1 050 001	160 000
		1 100 001	110 000
		1 150 001	60 000
		1 200 001	30 000
		1 230 001	0
	taxpayer_lim	0	1
		9000001	2/3
		9500001	1/3
		10000001	0
spouse_al_ceil		380 000	
	child_al	0	
Employment income deduction	emp_inc_min	650 000	
	emp_inc_sch	0.4	1 800 000
		0.3	3 600 000
		0.2	6 600 000
		0.1	10 000 000
	emp_inc_max	2 200 000	
Central gov't tax schedule	tax_sch	0.05	1 950 000
		0.10	3 300 000
		0.20	6 950 000
		0.23	9 000 000
		0.33	18 000 000
		0.40	40 000 000
		0.45	
	surtax	1.021	
Allowances for state/local tax	s_basic_al	330 000	
	s_spouse_al	330 000	
	s_spouse_al_sp	0	0
		380 001	330 000
		900001	310000
		950001	260000
		1000001	210000
		1050001	160000
		1100001	110000
		1150001	60000
		1200001	30000
		1230001	0
	S_spouse_al_ceil	380 000	
	s_child_al	0	
Prefectural tax	pref_per_cap	1 500	
Municipal tax	mun_per_cap	3 500	
	local_sch	0.1	

Social security contributions	SSC_pens	0.915
	pens_ceil	7 440 000
	SSC_sick	0.05
	sick_ceil	16 680 000
	SSC_unemp	0.003
Employer contribution proportion	SSC_empr_unemp	0.006
	SSC_empr_oth	0.0054
Child transfer	Child_transfer	120 000
	Child_transfer2	60 000
	Child_transfer_lim	6 220 000
	Child_transfer_lim_incr	380 000

2018 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 + ROUNDUP(Married*(earn_spouse-MIN(emp_inc_max,MAX(emp_inc_min,Tax(earn_spouse,emp_inc_sch))) <=spouse_al_ceil)*spouse_al*VLOOKUP(positive(earn_princ-MIN(emp_inc_max,MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch)))),taxpayer_lim,2,TRUE),-4)) + ROUNDUP(Married*VLOOKUP(Positive(earn_spouse-MIN(emp_inc_max,MAX(emp_inc_min,Tax(earn_spouse,emp_inc_sch))))) ,spouse_al_sp,2,TRUE)*VLOOKUP(positive(earn_princ-MIN(emp_inc_max,MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch)))),taxpayer_lim,2,TRUE),-4)+ Children*child_al + MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch)) + SSC_princ
			S	MIN(earn_spouse, basic_al + MAX(emp_inc_min, Tax(earn, emp_inc_sch)) + SSC_spouse)
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	Positive(earn-tax_al)
5.	CG tax before credits	CG_tax_excl	B	Positive(Tax(tax_inc, tax_sch))
6.	Tax credits :	tax_cr	B	0
7.	CG tax	CG_tax	B	CG_tax_excl*surtax
8.	State and local taxes			
	Local taxable income	local_tax_inc	P	Positive(earn_princ- (s_basic_al+ ROUNDUP(VLOOKUP(positive(earn_princ-MIN(emp_inc_max,MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch)))),taxpayer_lim,2,TRUE)*Married*((earn_spouse-

	Line in country table and intermediate steps	Variable name	Range	Equation
				(earn_spouse>0)*MAX(emp_inc_min,Tax(earn_spouse,emp_inc_sch))<=s_spouse_al_ceil)*s_spouse_al+VLOOKUP(Positive(earn_spouse-(earn_spouse>0)*MAX(emp_inc_min,Tax(earn_spouse,emp_inc_sch))),s_spouse_al_sp,2,TRUE))+Children*s_child_al+MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))+SSC_princ))
			S	Positive(earn_spouse-(s_basic_al+(earn_spouse>0)*MAX(emp_inc_min,Tax(earn_spouse,emp_inc_sch))+SSC_spouse))
	Local tax	local_tax	P	(earn_princ-MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))>350000+(Married*(earn_princ - (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<='s_spouse_al_ceil)+Children>0)*((Married*(earn_princ' - (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<='s_spouse_al_ceil)+Children)*350000+210000))*(pref_per_cap+mun_per_cap)+(earn_princ-MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))>350000+(Married*(earn_princ' - (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<='s_spouse_al_ceil)+Children>0)*((Married*(earn_princ' - (earn_princ>0)*MAX(emp_inc_min,Tax(earn_princ, emp_inc_sch))<=s_spouse_al_ceil)+Children)*350000+320000))*Positive(Tax(Positive(earn_spouse-tax_al_spouse),local_sch)-IF(Positive(earn_spouse-tax_al_spouse)>2000000,MAXA(2500,((Positive(earn_spouse-tax_al_spouse)-MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch)))-(Positive(earn_spouse-tax_al_spouse)-2000000))*5%),MINA((Positive(earn_spouse-tax_al_spouse)-MAX(emp_inc_min,Tax(earn_princ,emp_inc_sch))),Positive(earn_spouse-tax_al_spouse))*5%))
			S	(earn_spouse - (earn_spouse>0)*MAX(emp_inc_min,Tax(earn_spouse, emp_inc_sch))>350000)*(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_spouse-2000000))*5%),MINA((local_tax_inc_spouse-tax_inc_spouse),local_tax_inc_spouse)*5%)))
9.	Employees' soc security	SSC	B	SSC_pens*MIN(earn, pens_ceil)+SSC_sick*MIN(earn, sick_ceil)+SSC_unemp*earn
11.	Cash transfers	cash_trans	B	IF(Children>0,IF(Positive(princ_inc - princ_empl_inc)<Child_transfer_lim+(Child_transfer_lim_incr*Children), Child_transfer,Child_transfer2)*Children,0)
13.	Employer's social 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 2018

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**		32 271 621	48 166 599	80 438 221	32 271 621
2.	**Standard tax allowances**					
	Basic allowance		1 500 000	1 500 000	1 500 000	1 500 000
	Married or head of family		0	0	0	0
	Dependent children		0	0	0	3 000 000
	Deduction for social security contributions and income taxes		1 452 223	2 167 497	2 424 600	1 452 223
	Work-related expenses					
	Other		11 381 691	14 085 117	16 989 646	12 381 691
		Total	14 333 914	17 752 614	20 914 246	18 333 914
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		17 937 708	30 413 985	59 523 975	13 937 708
5.	**Central government income tax liability (exclusive of tax credits)**		1 610 656	3 482 098	9 065 754	1 010 656
6.	**Tax credits**					
	Basic credit		740 000	660 000	500 000	855 861
	Married or head of family					
	Children					
	Other					
		Total	740 000	660 000	500 000	855 861
7.	**Central government income tax finally paid (5-6)**		870 656	2 822 098	8 565 754	154 795
8.	**State and local taxes**		87 066	282 210	856 575	15 480
9.	**Employees' compulsory social security contributions**					
	Gross earnings		2 743 170	4 094 284	5 642 335	2 743 170
	Taxable income					
		Total	2 743 170	4 094 284	5 642 335	2 743 170
10.	**Total payments to general government (7 + 8 + 9)**		3 700 892	7 198 592	15 064 664	2 913 445
11.	**Cash transfers from general government**					
	For head of family		0	0	0	0
	For two children		0	0	0	0
		Total	0	0	0	0
12.	**Take-home pay (1-10+11)**		28 570 729	40 968 007	65 373 556	29 358 176
13.	**Employer's compulsory social security contributions**		3 372 467	5 033 533	7 210 880	3 372 467
14.	**Average rates**					
	Income tax		3.0%	6.4%	11.7%	0.5%
	Employees' social security contributions		8.5%	8.5%	7.0%	8.5%
	Total payments less cash transfers		11.5%	14.9%	18.7%	9.0%
	Total tax wedge including employer's social security contributions		19.8%	23.0%	25.4%	17.6%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		21.1%	22.8%	28.0%	14.2%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		28.6%	30.1%	32.1%	22.3%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Korea 2018

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**		48 166 599	64 061 577	80 438 221	64 061 577
2.	**Standard tax allowances**					
	Basic allowance		1 500 000	3 000 000	3 000 000	3 000 000
	Married or head of family		1 500 000	0	0	0
	Dependent children		3 000 000	3 000 000	3 000 000	0
	Deduction for social security contributions and income taxes		2 167 497	2 882 771	3 619 720	2 882 771
	Work-related expenses					
	Other		14 085 117	22 219 364	25 966 808	22 219 364
		Total	22 252 614	31 102 135	35 586 528	28 102 135
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		25 913 985	32 959 442	44 851 693	35 959 442
5.	**Central government income tax liability (exclusive of tax credits)**		2 807 098	3 364 825	4 567 754	3 814 825
6.	**Tax credits**					
	Basic credit		960 000	1 273 000	1 700 000	973 000
	Married or head of family					
	Children					
	Other					
		Total	960 000	1 273 000	1 700 000	973 000
7.	**Central government income tax finally paid (5-6)**		1 847 098	2 091 825	2 867 754	2 841 825
8.	**State and local taxes**		184 710	209 183	286 775	284 183
9.	**Employees' compulsory social security contributions**					
	Gross earnings		4 094 284	5 445 398	6 837 455	5 445 398
	Taxable income					
		Total	4 094 284	5 445 398	6 837 455	5 445 398
10.	**Total payments to general government (7 + 8 + 9)**		6 126 092	7 746 406	9 991 984	8 571 406
11.	**Cash transfers from general government**					
	For head of family		0	0	0	0
	For two children		0	0	0	0
		Total	0	0	0	0
12.	**Take-home pay (1-10+11)**		42 040 507	56 315 171	70 446 237	55 490 171
13.	**Employers' compulsory social security contributions**		5 033 533	6 694 599	8 406 000	6 694 599
14.	**Average rates**					
	Income tax		4.2%	3.6%	3.9%	4.9%
	Employees' social security contributions		8.5%	8.5%	8.5%	8.5%
	Total payments less cash transfers		12.7%	12.1%	12.4%	13.4%
	Total tax wedge including employer's social security contributions		21.0%	20.4%	20.7%	21.6%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		22.8%	22.8%	22.8%	22.8%
	Total payments less cash transfers: Spouse		10.2%	10.9%	21.1%	10.9%
	Total tax wedge: Principal earner		30.1%	30.1%	30.1%	30.1%
	Total tax wedge: Spouse		18.7%	19.3%	28.6%	19.3%

The national currency is the Won (KRW). In 2018, KRW 1 100.19 was equal to USD 1. In this year, the average worker is expected to earn KRW 48 166 599 (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 2 400 000 of overwork payment of productive workers in manufacturing and mining sectors whose monthly wage is less than KRW 1 500 000 and whose yearly wage is less than KRW 25 000 000.

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 5 000 000	70%
KRW 5 000 000 to KRW 15 000 000	KRW 3 500 000 plus 40% of the salary over KRW 5 000 000
KRW 15 000 000 to KRW 45 000 000	KRW 7 500 000plus 15% of the salary over KRW 15 000 000
KRW 45 000 000 to KRW 100 000 000	KRW 12 000 000 plus 5% of the salary over KRW 45 000 000
Over KRW 100 000 000	KRW 14 750 000 plus 2% of the salary over KRW 100 000 000

- Basic allowance: a taxpayer can deduct KRW 1 500 000 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 1 000 000(Spouse only have a salary earned income is less than KRW 5 000 000);
  - 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 1 000 000(Dependent only have a salary earned income is less than KRW 5 000 000) 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 1 000 000 (500 000 in the case of (c), KRW 2 000 000 in the case of(b))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) are modelled):
  - a person aged 70 years or older(a)
  - a handicapped person (b)
  - a female wage earner who is the head of a household with dependents (but without spouse) or a female wage earner with spouse when her taxable income is not more than KRW 30 million(c)
  - a single parent with descendants including adoptees*(f)
  - * Overlapping of deductions for (c) and (f) is not allowed. So a taxpayer should select only one.
- National pension deduction: employees can deduct 100% of their National Pension contributions
- Working Tax credit: wage and salary income earners obtain the following tax credit:

Calculated tax	Amount of tax credit
Up to KRW 1 300 000	55% of calculated tax
Over KRW 1 300 000	KRW 715 000 plus 30% of the calculated tax over KRW 1 300 000

Total wage and salary income	Ceiling on credit amount
Not more than KRW 33 million	KRW 740 000
Not more than KRW 70 million	The greater of KRW 660 000 and KRW 740 000 [(total wage and salary income -KRW 33 million) 0.8%]
Exceeding KRW 70 million	The greater of KRW 500 000 and KRW 660 000 [(total wage and salary income- KRW 70 million) 50%]

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: the Medical insurance premium and the Unemployment insurance premium can be entirely (100%) deducted from taxable income.
- Saving/Payment for housing: 40% of deposits of an account for purchasing a house, which is held by a person who does not own a house that is smaller than 85 square miles in size 40% of repayments of loans including interest borrowed for the purpose of the lease by a person owning no house may be deducted up to three million won per year.
- Credit card purchases: Employees may deduct 15% of their credit card (30% of their debit card, prepaid card or cash receipt) purchases that exceed 25% of their total income up to the lesser of KRW 3 000 000 or 20% of their total income in the case of the total income not over KRW 70 000 000(up to the lesser of KRW 2 500 000 or 20% of their total income in the case of the total income from over KRW 70 000 000 to KRW 120 000 000 and up to the lesser of KRW 2 000 000 or 20% of their total income in the case of the total income over KRW 120 000 000) However, for expenditures spent for traditional markets and public transportation the allowed deduction is equivalent to 40%(30% for the

expenditures of books and performances) of the expenditure and the ceiling is raised by an additional KRW 1 000 000 respectively.

1.1.2.3. Child tax credit

- Where a resident with taxable income has dependent children including adoption, he/she gets annual tax credit of KRW 150 000 for having a child, KRW 300 000 for having two children and KRW 300 000 plus KRW 300 000 per an excess child over two children in case of having more than three children.
- Residents get tax credit of KRW 300 000 for first child, KRW 500 000 For Second Child, KRW 700 000 for Third child or more for birth and adoption of the year.

1.1.2.4. Credit for Pension Insurance Premiums

- A resident who paid pension contributions to a pension account may deduct the amount equal to 12% of the premiums paid from his/her global income tax amount, only up to KRW 4 million for pension account as well as KRW 7 million for sum of the pension account and retirement –pension account.
- A resident whose labour income is not exceeding KRW 55 million when he has labour income only or whose global income is not exceeding KRW 40 million would deduct 15% of the premium.

1.1.2.5. Special tax credit

Wage and salary income earners may obtain following tax credit during the tax year:

- Insurance premiums (a):12% of the general insurance premium up to KRW 1 000 000 can be deducted from his/her income tax amount.
- Medical expenses (b):15% of the medical expenses exceeding 3% of taxable income can be deducted from his/her income tax amount. The medical expenses for taxpayer's dependents who are eligible for the basic deduction is limited KRW 7 000 000 and the medical expenses for the taxpayer himself, taxpayer's dependents who are aged 65 years or older and handicapped persons, Treatment cost of infertility is not limited.
  - Treatment cost of infertility's credit rate is 20%
- Educational expenses (c):15% of 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 his/her income tax amount. The tuition fee for the taxpayer himself is not limited. For the taxpayer's dependents, the limits of tuition fees are as follows:
  - For pre-school: up to KRW 3 000 000 per child;
  - For elementary, middle and high school: up to KRW 3 000 000 per student;
  - For college/university: up to KRW 9 000 000 per student.
- Charities (d):15% of the amount of donation (in case of the donation exceeding KRW 20 000 000, 30% of the excess over KRW 20 million) is deducted from income tax amount. The limits of donations are as follows:
  - donations to a government body, donations for national defence, natural disaster, and certain charitable associations: up to gross income;

- donations to public welfare or religious associations: up to 30% of gross income.

- Standard Credits: Alternatively, a taxpayer may elect to choose an annual standard credit of KRW 70 000 (KRW 130 000 for wage and salary earners and KRW 120 000 for business owners meeting certain requirements), if he or she fails to claim deductions for insurance premium, saving/payment for housing and special tax credit.

1.1.3. Tax schedule

Over (KRW)	Not more than (KRW)	Marginal tax rate (%)
0	12 000 000	6
12 000 000	46 000 000	15
46 000 000	88 000 000	24
88 000 000	150 000 000	35
150 000 000	300 000 000	38
300 000 000	500 000 000	40
500 000 000		42

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% is applied. However, the local government can adjust the rate between the lower limit of 5% and the upper limit of 15%.

1.2.3. Tax rate (selected for this study)

A country-wide rate of 10% 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

The National pension contribution rate is 4.5% of the standardised average monthly wage income as of 2018.

The scope of the standardised average monthly wage income is from KRW 290 000to KRW 4 490 000 as of 1 July 2018.

2.1.2. Medical insurance

The Medical insurance premium, which has a rate of 3.350256% (Health insurance: 3.12%, Long term care insurance 7.38% of Health insurance premium rate), is levied on average monthly wage income as of 1 January 2018.

The scope of the average monthly wage income is from KRW 280,000 to KRW 99 249 000.

2.1.3. Unemployment insurance

0.65% of gross income.

2.1.4. Industrial accident compensation insurance (premiums)

Compulsory application, premiums paid only by employers.

2.2. Employers' contribution

2.2.1. National pension

The national pension contribution rate is 4.5% of the standardised average monthly wage income as of 2018.

The scope of the standardised average monthly wage income is from KRW 290 000 to KRW 4 490 000 as of 1 July 2018.

If the average monthly wage income of a person is less than KRW 290 000, the average monthly wage income of the person is regarded as KRW 290 000 and the rate (0.045) is applied. If the average monthly wage income of a person is more than KRW 4 490 000, the average monthly wage income of the person is regarded as KRW 4 490 000 and the rate (0.045) is applied; so the maximum of the national pension contribution per year is KRW 2 424 600(=KRW 4 490 000 x 0.045 x 12 months).

2.2.2. Medical insurance

The Medical insurance premium, which has a rate of 3.350256% (Health insurance 3.12%, Long-term care insurance: 7.38% of Health insurance premium rate), is levied on average monthly wage income as of 1 January, 2018.

The scope of the average monthly wage income is from KRW 280 000 to KRW 99 249 000.

2.2.3. Unemployment insurance

- the insurance premium is between 0.9% and 1.5% of total wage;
- the insurance premium selected for this study is 0.9%.

2.2.4. Work injury insurance

- the insurance premium consists of an industry-specific rate which is set by the Ministry of Employment and Labour multiplied by total wage;
- the average rate of all industries (selected for this study) is 1.70%.

3. Universal Cash Transfers

- Child Benefit

Child benefit is paid every month to those who have children aged 5 years or younger: KRW 200 000 for a child aged 12 months or younger, KRW 150 000 for a child aged 1 to 2 years and KRW 100 000 for a child aged 2 to 5 years.

If a child attends a nursery or pre-school, childcare benefit is paid instead every month: KRW 441 000 for a child aged 0, KRW 388 000 for a child aged 1 year, KRW 321 000 for a child aged 2 years and KRW 220 000 for a child aged 3 to 5 years.

The above child benefits are not included in the Taxing Wages calculations that consider children aged between 6 and 11 inclusive.

- Child Allowance

A monthly allowance of KRW 100 000 for every child under the age of 6 with the exception of households in the top 10% income bracket, as of Sept. 2018

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 12 000 000) is abolished from 2001
2001	Personal income tax rates are lowered by 10% (10, 20 ,30, 40% were reduced to 9, 18, 27, 36%, respectively) from 2002
2002	Limits of deduction for education fees are expanded from 2003. For pre-school: from KRW 1 000 000 to KRW 1 500 000. For elementary, middle school and high school: from KRW 1 500 000 to KRW 2 000 000. For college and university: from KRW 3 000 000 to KRW 5 000 000. Limit of deduction for interest of long-term mortgage loan for housing is expanded from KRW 3 000 000 to KRW 6 000 000 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 5 000 000 to KRW 15 000 000 is increased from 45% to 47.5%. The tax credit rate for calculated tax below KRW 500 000 is increased from 45% to 50% and the maximum tax credit is increased from KRW 400 000 to KRW 450 000.
2004	Limits of deduction for education fees are expanded. For pre-school: from KRW 1 500 000 to KRW 2 000 000. For college and university: from KRW 5 000 000 to KRW 7 000 000. Limit of deduction for interest on long-term mortgage loan for housing is expanded from KRW 6 000 000 to KRW 10 000 000. The marginal deduction rate for the taxable wage income range from KRW 5 000 000 to KRW 15 000 000 is increased from 47.5% to 50%. The tax credit rate for tax amounts below KRW 500 000 is increased from 50% to 55% and the maximum permitted tax credit goes up from KRW 450 000 to KRW 500 000.
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 600 000 to KRW 1 000 000.
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 1 000 000 depending on the number of dependents. As from 2007, however, an income earner with two or more dependent children eligible for basic allowance is eligible for an allowance equivalent to KRW 500 000 if there are 2 children plus an additional KRW 1 000 000 for every additional child (e.g. 2 children: KRW 500 000; 3 children: KRW 1 500 000; 4 children: KRW 2 500 000, etc.).
2008	Tax schedule has been changed : from KRW 10 000 000, KRW 40 000 000 , KRW 80 000 000 to KRW 12 000 000, KRW 46 000 000, KRW 88 000 000; 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% (previously 15%) of their credit/debit card purchases that exceed 20% (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 have been changed: from 8%, 17%, 26%, 35% to6%, 16%, 25%, and 35%. Employment income deduction has been changed: from 100%, 50%, 15%, and 10% 5% to 80%, 50%, 15%, and 10%. 5%
2010	Personal income tax rates have been changed: from 6%, 16%, 25%, 35% to6%, 15%, 24%, and 35%.
2012	Personal income tax rates have been changed: from6%, 15%, 24%, and 35% to 6%, 15%, 24%, 35% and 38%
2013	A new additional allowance is added: a single parent with lineal descendants or adopted children who are eligible for basic exemption can deduct KRW 1 000 000. Insurance premiums, medical expenses, education expenses, loans for house, designated donations, saving deposits for housing subscription, investment in employee stock ownership associations or in associations for investment in start-ups, and credit cards are allowed income deduction with a ceiling at KRW 25 000 000 in total. However, for the amount of designated donations exceeding the ceiling, deduction canbe carried forward for 5 years.
2014	Tax schedule has been changed : KRW 300 000 000 to KRW 150 000 000 Personal and special income deductions(e.g. medical expenses, educational expenses) have been shifted toward tax credit Employment income deduction has been changed : 80% to 70%, 50% to 40%. The ceiling amount of earned income tax credit has been changed : KRW 500 000 to KRW 740 000(the salary <33 000 000), KRW 660 000(the salary < 70 000 000)
2015	Refundable CTC(Child Tax Credit) has established
2017	Personal income tax rate 40% is newly created over KRW 500 000 000
2018	Tax schedule has been changed: Tax base over KRW 150,000,000 up to KRW 500,000,000 devided into over KRW 150 000 000 up to KRW 300 000 000 and over KRW 300 000 000 up to KRW 500 000 000 The Highest income tax rate has been changed: 40%->42%

5. Memorandum Item

5.1. Identification of the Average Worker (AW)

Sectors used: industry Sectors B-N with reference to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4)

Geographical coverage: whole country

Type of workers: wage workers (male and female).

5.2. Method to calculate wages

Report on Labour Force Survey at Establishments covering data in 2017 by the Ministry of Employment and Labour is used to calculate the annual wages of the AW. The statistics were obtained through a sample survey of 12 000 firms with five or more permanent employees throughout the whole country.

Basic method of calculation used: average monthly wages multiplied by 12.

5.3. Employer's reserve for employee's retirement payment

An employer should pay to a retiree the retirement payment which is not less than 30 days' wage and salary per one year of service (about 8.3% 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).

2018 Parameter values

Average earnings/yr	Ave_earn	48 166 599	Secretariat estimate
Tax allowances	basic_al	1 500 000	
spouse	spouse_al	1 500 000	
dependents including children	dep_al	1 500 000	
additional allowance	add_all	500 000	
additional allowance 2	add2_all	1 000 000	
Employment income deduction	empdedsch	0	0.7
		5000000	0.4
		15 000 000	0.15
		45 000 000	0.05
		100 000 000	0.02
Earned income special credit threshold	earntaxcred	0.55	
		0.3	1 300 000
credit limit	credlimit	740 000	Ave_earn<33 000 000
		660 000	Ave_earn< 70 000 000
		500 000	Ave_earn> 70 000 000
Child tax credit	child_cred	150 000	
Lump sum tax credit	lump_cred	130 000	
	lump_thresh	866 667	
Tax schedule	tax_sch	0.06	12 000 000
		0.15	46 000 000
		0.24	88 000 000
		0.35	150 000 000
		0.38	300 000 000
		0.4	500 000 000
		0.42	
Local tax rate	local_rate	0.1	
Social security contributions	SSC_pens	0.045	
	SSC_pens_max	2 424 600	
	SSC_sick	0.03350256	
	SSC_sick_max	31 398 600	
	SSC_unemp	0.0065	
Employer contributions	emp_pens	0.045	
	emp_sick	0.03350256	
	emp_unemp	0.009	
	emp_inj	0.0170	

2018 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. In addition, 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
	additional allowances	add_al_princ	P	IF(AND(Married='0,Children>0),' add2_all,0)
	additional allowances	add_al_spouse	S	(earn_spouse>0)*add_all
	national pension deduction	np_de	B	Min(earn*SSC_pens, SSC_pens_max)
	Main non-standard tax relief	non-std_al	B	IF(earn*(SSC_sick+SSC_unemp)>lump_thresh,earn*(SSC_sick+SSC_unemp),0)
	Total	tax_al	B	emp_al+bas_al+sp_al+dp_al+add_al+np_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)
6.	Tax credits : earned income special tax credit child tax credit lump-sum tax credit Total	earn_cr child_cr lump_cr tax_cr	B P B B	MIN(earntaxcred(CG_tax_excl), credlimit(earn)) Children*child_cred IF(non-std_al='0,' lump_cred, 0) earn_cr+child_cr+lump_cr
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)+MIN(earn*(SSC_sick),SSC_sick_max)+earn*(SSC_unemp)
11.	Cash transfers	cash_trans	J	
13.	Employer's soc security	SSC_empr	B	MIN(earn*(SSC_pens),SSC_pens_max)+MIN(earn*(emp_sick),SSC_sick_max)+earn*(emp_unemp+emp_inj)

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

Latvia

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. 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.

Latvia 2018

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**		7 961	11 881	19 842	7 961
2.	**Standard tax allowances**					
	Basic allowance		1 443	42	0	1 443
	Married or head of family					
	Dependent children		0	0	0	4 800
	Deduction for social security contributions and income taxes		876	1 307	2 183	876
	Work-related expenses					
	Other					
		Total	2 318	1 349	2 183	7 118
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		5 642	10 532	17 659	842
5.	**Central government income tax liability (exclusive of tax credits)**		1 128	2 106	3 532	168
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children					
	Other		106	40	0	106
		Total	106	40	0	106
7.	**Central government income tax finally paid (5-6)**		1 023	2 066	3 532	63
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		876	1 307	2 183	876
	Taxable income					
		Total	876	1 307	2 183	876
10.	**Total payments to general government (7 + 8 + 9)**		1 898	3 373	5 714	938
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	510
		Total	0	0	0	510
12.	**Take-home pay (1-10+11)**		6 062	8 508	14 127	7 532
13.	**Employer's compulsory contributions**					
	Employer's compulsory social security contributions		1 918	2 862	4 780	1 918
	Payroll taxes		4	4	4	4
		Total	1 922	2 867	4 784	1 922
14.	**Average rates**					
	Income tax		12.8%	17.4%	17.8%	0.8%
	Employees' social security contributions		11.0%	11.0%	11.0%	11.0%
	Total payments less cash transfers		23.8%	28.4%	28.8%	5.4%
	Total tax wedge including employer's social security contributions		38.7%	42.3%	42.6%	23.8%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		37.7%	37.7%	28.8%	37.7%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		49.8%	49.8%	42.6%	49.8%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Latvia 2018

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**	11 881	15 802	19 842	15 802
2.	**Standard tax allowances**				
	Basic allowance	42	2 442	1 485	2 442
	Married or head of family				
	Dependent children	4 800	4 800	4 800	0
	Deduction for social security contributions and income taxes	1 307	1 738	2 183	1 738
	Work-related expenses				
	Other				
	Total	6 149	8 981	8 468	4 181
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	5 732	6 822	11 374	11 622
5.	**Central government income tax liability (exclusive of tax credits)**	1 146	1 364	2 275	2 324
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children				
	Other	40	192	146	192
	Total	40	192	146	192
7.	**Central government income tax finally paid (5-6)**	1 106	1 172	2 129	2 132
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 307	1 738	2 183	1 738
	Taxable income				
	Total	1 307	1 738	2 183	1 738
10.	**Total payments to general government (7 + 8 + 9)**	2 413	2 911	4 312	3 871
11.	**Cash transfers from general government**				
	For head of family				
	For two children	510	510	510	0
	Total	510	510	510	0
12.	**Take-home pay (1-10+11)**	9 978	13 401	16 040	11 932
13.	**Employer's compulsory contributions**				
	Employer's compulsory social security contributions	2 862	3 807	4 780	3 807
	Payroll taxes	4	9	9	9
	Total	2 867	3 815	4 789	3 815
14.	**Average rates**				
	Income tax	9.3%	7.4%	10.7%	13.5%
	Employees' social security contributions	11.0%	11.0%	11.0%	11.0%
	Total payments less cash transfers	16.0%	15.2%	19.2%	24.5%
	Total tax wedge including employer's social security contributions	32.3%	31.7%	34.9%	39.2%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	37.7%	37.7%	37.7%	37.7%
	Total payments less cash transfers: Spouse	12.7%	28.8%	37.7%	28.8%
	Total tax wedge: Principal earner	49.8%	49.8%	49.8%	49.8%
	Total tax wedge: Spouse	29.7%	42.6%	49.8%	42.6%

Since 2014, the Latvian currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. That year, the average worker in Latvia earned EUR 11 881 annually (Secretariat estimate).

1. Personal income tax system

From 1 January 2018, Latvia has introduced an ambitious tax reform. One of the main goal of this reform is reach Latvian government as well as international expert's expectations – to reduce the tax wedge, especially for low-wage earners.

1.1. Central government income tax

With labour tax reform for the first time the progressive income tax system is introduced, as well as the differential non-taxable minimum, the allowance for dependents and the non-taxable minimum for pensioners is increased, and the minimum monthly wage is raised.

1.1.1. Tax unit

The tax unit are individuals.

1.1.2. The main tax allowances

1.1.2.1. Standard tax reliefs

- A general (basic) allowance:

Since 2016, the differentiated non-taxable minimum is introduced.

The *differentiated non-taxable minimum* varies depending on the person's income level: higher for lower wages, but less for higher wages.

In 2018 the differentiated non-taxable minimum varies from EUR 0 to 200 per month, in 2019 - from EUR 0 to 230 per month and in 2020 - from EUR 0 to 250 per month (see table below).

Differentiated non-taxable minimum criteria's:

	2016	2017	2018	2019	2020
Maximum non-taxable minimum, *EUR per month*	100	115	200	230	250
Minimum non-taxable minimum, *EUR per month*	75	60	0	0	0
Taxable income* minimum threshold up to which the maximum annual non-taxable minimum will be applied, *EUR per month*	380	400	440	440	440
Taxable income* maximum threshold up to which the annual non-taxable minimum will be applied, *EUR per month*	1, 000	1,100	1,000	1,100	1,200

* Calculating taxable income takes into account not only the salary, but also other income (such as dividends and income from real estate etc.). Similarly, if a person works in several jobs, the salaries are added together and the non-taxable minimum is applied to total revenue

For example, in 2018, the maximum tax allowance amount is EUR 200 per month and it is applied to persons with the taxable income below EUR 440 per month. If taxable income is between EUR 440 per month and 1,000 EUR per month, the differentiated annual non-taxable minimum is calculated according to specific formula. The allowance

gradually decreases until it reaches zero or not be applied. The same calculation will be in 2019 and 2020 with relevant year data.

It is important to note that from 2018, the differentiated non-taxable minimum in full amount is applied already during the tax year. It is based on the State Revenue Service (SRS) forecast which takes account the taxpayer annual income of the previous year. In 2017 the non-taxable minimum was applied only in the minimum amount for all taxpayers (60 EUR) and only after the next tax year, when taxpayer submitted annual tax return, it applied on the basis of the data regarding person's annual taxable income.

- The allowance for dependents

The allowance for dependents is also deductible from income before taxes.

The tax allowance for each dependant (which in most cases are children) is raised - in 2018 to EUR 200 per month or EUR 2,400 per year, in 2019 to EUR 230 per month or EUR 2,760 per year and in 2020 to EUR 250 per month or EUR 3,000 per year. In 2017, it was EUR 175 per month or EUR 2,100 per year.

The taxpayer can apply allowance for a child below 18 years old and for a child below 24 years old if he or she continues studies of a general, professional, higher or special education. The allowance for child relates to taxpayer's child and in certain cases - sisters, brothers, grandchildren, as well as guardianship or dependent persons.

As of 2016, the rule of law narrowed, removing allowances for unemployed spouse, parents or grandparents, except if these persons are with disabilities.

From 2017, the tax allowance for dependents is expanded by non-working spouse, who is taking care of the minor child with a disability, if the non-working spouse does not receive taxable income or State pension.

In addition, as of July 1, 2018, the allowance is applicable for unemployed spouse who is taking care of:

- one child below 3 years old;
- three or more children below 18 years or below 24 years old (if he/she studies), of which at least one is below 7 years old;
- five children below 18 years or below 24 years old (if he/she studies).
- To support employment of youth during the summer (from June 1st to August 31st), parents can still receive tax allowance for dependents (children while they have working relationship).
- Relief for Compulsory social security contributions: Employee's state social security contributions are deductible from income before taxes.
- Tax credits: None for employees

1.1.2.2. The main exemptions:

- income from rural tourism or agricultural production, as well as of mushrooming, berry-picking or the collection of wild medicinal plants and flowers or an uncultivated species of an individual - a park of walrus (Helix pomatia),), if it does not exceed turnover of EUR 3,000 euro per taxation year, including the sums of State aid for agriculture or of the European Union aid for agriculture and rural development in amount EUR 3 000 per taxation year;
- insurance compensations, except such insurance compensations paid on the basis of a life, health and accident insurance contract entered into by the employer and

annuity insurance contract (with accrued funded pension assets in accordance with the National Occupational Pensions Act);

- insurance compensations which have been disbursed upon the occurrence of an insurable event in relation to the life and health of the insured person due to an accident or illness, in accordance with the life insurance policy (including with accumulation of funds) regardless of who has entered into the insurance contract;
- the supplementary pension capital, which has been formed from contributions of private individuals or their spouse or a person related to their relatives up to the third stage within the meaning of the Civil Law into private pension funds according to licensed pension plans and paid to participants in pension plans;
- income from Latvian or other EU Member State or EEA State and local government bonds;
- capital gains on immovable property, if the ownership of the payer has been for more than 60 months (5 years) and it has been the declared as place of residence of the person for at least 12 months (1 year);
- capital gains on immovable property, if the ownership of the payer has been for more than 60 months (5 years) and the last 60 months (5 years) this immovable property has been the only real estate of the payer;
- capital gains on immovable property which has occurred in relation to the division of property in the case of dissolution of marriage, if it has been the declared place of residence of both spouses at least 12 months until the day of entering into the alienation contract;
- capital gains on immovable property, if this income is invested a new in a functionally similar immovable property within 12 months or before alienation of the immovable property or real property prior to expropriation;
- income from the alienation of personal property (movable objects such as furniture, clothing and other movable objects belonging to an individual intended for personal use) except income from the sale of items (tangible or intangible) prepared for sale or purchased, an increase in capital and other income from capital and scrap sales;
- scholarships paid from the budget, association or foundation resources;
- scholarships up to 280 euros per month paid by an entrepreneur in accordance with the procedure set out by the Cabinet of Ministers for the organization and implementation of work environment training shall be paid by the merchant, institution, association, foundation, natural person registered as a performer of economic activity, as well as individual enterprise, including farmer or fishermen's farm, and other economic operators;
- grants paid to a student who attends a medical education program to promote the acquisition of an educational program and which is paid out from the institution of health care institution;
- income obtained as a result of inheritance;
- allowance (alimony);
- prizes of lotteries and gambling if the amount (total amount) of the prize (value thereof) does not exceed EUR 3000 per taxation year;
- goods and services lottery prizes;
- material and monetary prizes (premiums) received at competitions and contests, the total value of which in the taxation year does not exceed EUR 143, and the prizes and premiums acquired at international contests the total value of which

does not exceed EUR 1,423 a year, as well as the financial incentive paid out to the laureates of the prizes of the Baltic Assembly and prizes of the Cabinet;
- revenues from gifts up to EUR 1,425 from natural person, other than a close relative;
- revenues from gifts in full amount from natural persons, if the giver is connected to the payer by marriage or kinship to the third degree;
- dividends, income equal to dividends or notional dividends if the enterprise income tax has been paid etc..

1.1.3. Tax schedule

From 2018 the Personal income tax system is progressive (in 2017 the PIT rate was a flat - 23%).

The PIT rates are set:
- 20% - for income up to EUR 20,004 per year;
- 23% - for income exceeding EUR 20,004 but not exceeding EUR 55,000 per year;
- 31.4% - for income exceeding EUR 55,000 per year.

The tax rate 20% and 23% (depending on the level of income) is applicable monthly in the workplace where a payroll tax book is submitted. In the workplace where a payroll tax book is not submitted, only the rate 23% should be applied.

The rate 31.4% has calculated only in annual tax return. During the year, the tax is paid as Solidarity tax for employee revenue above EUR 55,000 per year. The Solidarity tax part of 10.5% is transformed into a Personal income tax rate of 31.4%. Compulsory social security contributions from incomes above EUR 55,000 per year is not be paid.

1.2. Regional and local income tax

No regional and local income taxes.

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

In 2018, the compulsory social insurance contribution rate is increased by one percentage point from 34.09% to 35.09% to ensure financing of the health sector (0.5% paid by the employee and 0.5% paid by the employer).

Social insurance contributions covers:
- state pension insurance;
- social insurance in case of unemployment;
- social insurance in respect of accidents at work and occupational diseases;
- disability insurance;
- maternity and sickness insurance;
- parental insurance;
- health insurance.

In 2018 the maximum object of mandatory social payments is 55 000 EUR per year.

2.1. Employees' contributions

Employees pay 11% of their earnings in contributions. The taxable base is the total amount of the gross wage or salary including vacation payments, fringe benefits and remuneration of expenses related to work above a certain threshold. The assessment period is the calendar month.

2.2. Employers' contributions

Social security contributions are also paid by employers at a rate of 24.09% on behalf of their employees. The taxable base and the assessment period are the same as for employees' contributions.

The total contribution rates paid by employees and employers are applied:

Scheme name	Rate of contribution (%)
Pension insurance	24.50
Unemployment insurance	1.84
Insurance of accidents at work and occupational diseases	0.53
Disability insurance	2.23
Maternity and sickness insurance	3.65
Parental insurance	1.34
Health insurance	1.00
Total	35.09

3. Solidarity tax

From 2016 *Solidarity tax* was introduced.

Solidarity tax rate is set at the same level as the current social security contributions rates (11% and 24.09%).

The tax is paid for the income exceeding the maximum amount of the social security contributions object. The purpose if this tax is to eliminate existing regressivity in the labour tax system and to equalize the tax burden on labour between low-wage earners and the high wage earners. This problem appeared when the social contribution ceiling was re-introduced in 2014. In 2018 the ceiling is raised to EUR 55 000 per year (in 2017 was EUR 52 400 per year). The tax period is the calendar year.

In 2018, the Solidarity tax is reformed, which means it is divided and transformed into both the pension systems, the personal income tax rate (31.4%), and the state social budget (more see below in the table).

Solidarity tax applies to all socially insured individuals – employees, self-employed, if their income over a calendar year exceeded the maximum amount of mandatory contribution of the statutory social insurance. Employers are also subject to solidarity tax (in the same way, as they are liable for paying employer social insurance contributions).

Solidarity tax rate distribution

Employer's pays:	24,09%
Funded pension (2nd pillar pension scheme)*	6,00%
Private pension in the Fund's Pension Plan (3nd pillar pension scheme)*	4,00%
State Pension	13,59%
Health care	0,50%
Employee's pays:	11,00%
Personal income tax**	10,50%
Health care	0,50%

* If a person is not a member of a funded pension scheme, a private pension fund will be transferred 10%
** The Solidarity tax (paid by employee for incomes above EUR 55 000 per year) part of 10.5% is transformed into a Personal income tax rate of 31.4%. It means that, by the submitting the annual income statement and performing the conversion of the PIT into three PIT rates (the third rate of 31.4%), the share of paid Solidarity Tax is equal to PIT rate 31.4%.

4. Payroll tax

The Business risk fee is paid in the state basic budget, and then transferred to the Employee claim guarantee fund, which is administrated by the state agency "Insolvency administration". The Insolvency administration is a public institution controlled by the Ministry of Justice.

If an enterprise is insolvent, the Insolvency Administration satisfies employee claims for their unpaid salaries, compensations for the paid annual leaves and compensations for dismissal in case of the end of the employment relationships.

The Business risk fee does not confer entitlement to any kind of social benefits.

The Business risk fee is a constant payment for a person EUR 0.36 per employee per month.

5. Universal cash transfers

5.1. Transfers related to marital status

None.

5.2. Transfers for dependent children

From 2015, support for families has been introduced through differentiated family benefits:

- EUR 11.38 per month for the first child,
- EUR 22.76 per month for the second child,
- EUR 34.14 per month for the third child,
- EUR 50.07 per month for the fourth and each subsequent child (only from 2017).

From March 1, 2018 an additional allowance for families is paid:

- EUR 10 per month for 2 children;
- EUR 66 per month for 3 children,
- additionally EUR 50 per month for each subsequent child

For example, for family with six children additional allowance is EUR 216 per month (66 (for 3) +50+50+50).

The state pays family benefits to all children until they reach the age of 15. Children enrolled in basic or secondary schools or vocational education institutions operating on the basis of basic education have the right to receive family benefits until the age of 20 (before was up to 19).

In addition there are four other types of family benefits for which payment depends on either the age of the child(ren) and/ or the status of the person(s) looking after them: maternity and paternity benefit; childbirth benefit; parental benefit; child care benefit (additional benefit for child with disabilities). These are not included in the modelling.

6. Main changes in tax/benefit system in 2018

- From 1th January 2018, Latvia has introduced an ambitious tax reform. One of the main goal of this reform is to reduce the tax wedge, especially for low-wage earners.
- In 2018 the progressive personal income tax system has introduced and set three rates – 20%, 23% and 31.4% (in 2017 the PIT standard rate was a flat - 23%).
- The differential non-taxable minimum is increased - in 2018 ranges from EUR 0 to 200 per month, in 2019 - from EUR 0 to 230 per month and in 2020 - from EUR 0 to 250 per month. In 2017, non-taxable minimum ranged from EUR 60 to 115 per year.
- From 2018, the differentiated non-taxable minimum is applied every month based on the State Revenue Service (SRS) forecast. In 2017, the non-taxable minimum was applied in the minimum amount for all taxpayers (60 EUR) and only during the next tax year, when taxpayer submitted annual tax return, it applied on the basis of the data regarding person's annual taxable income.
- The tax allowance for each dependant is raised - in 2018 to EUR 200 per month, in 2019 to EUR 230 per month and in 2020 to EUR 250 per month. In 2017, it was EUR 175 per month.
- In addition, as of July 1, 2018, the allowance for each dependant is applicable for unemployed spouse who is taking care of:
  - one child below 3 years old;
  - three or more children below 18 years or below 24 years old (if in education), of which at least one is below 7 years old;
  - five children below 18 years or below 24 years old (if in education).
- The non-taxable minimum for pensioners is increased - in 2018 to EUR 250 per month, in 2019 to EUR 270 per month and in 2020 to EUR 300 per month. In 2017, it was EUR 235 per month.
- The minimum monthly wage is raised to EUR 430 (2017 was EUR 380).
- In 2018, the compulsory social insurance contribution rate is increased by one percentage point from 34.09% (2017) to 35.09% to ensure financing of the health sector (0.5% for the employee and 0.5% for the employer).

- Solidarity tax is reformed in 2018 and tax rate is raised from 34.09% to 35.09%. Solidarity tax is applied to income more than EUR 55,000 per year (in 2017 was EUR 52,400 per year).

  Revenue of Solidarity tax is divided and transferred into following budgets:
  - 1 % into the State basic budget for healthcare financing;
  - 6 % into the taxpayer the State funded pension scheme account;
  - 4 % into the tax payers private pension account (taxpayer is a member of the State funded pension scheme) or 10 percentage into the tax payers private pension account (taxpayer is not a member of the State funded pension scheme);
  - 10.5 % into the Personal Income Tax account;
  - 13.59 % into the State pension special budget.

  In 2016 and 2017, Solidarity tax revenue was transferred into the state budget and was not tied to social services.

- From March 1, 2018 an additional allowance for families is paid - EUR 10 per month for 2 children, EUR 66 per month for 3 children, EUR 50 per month additionally for each subsequent child (for example, for family with six children additional allowance is EUR 216 per month (66+50+50+50)).

7. Memorandum items

7.1. Average gross annual wage earnings

In Latvia the gross earnings figures cover wages and salaries paid to individuals in formal employment including payment for overtime. They also include additional bonuses and payments and other payments such as for the annual and supplementary vacations, public holidays, sick pay (sick-leave certificate A), payment for public holidays and other days not worked, social security compulsory contributions paid by the employees and personal income tax, as well as labour remuneration subsidies.

7.2. Employer contributions to private pension and health schemes

Some employer contributions are made to private health and pension schemes but there is no relevant information available on the amounts that are paid.

2018 Parameter values

Average earnings/yr	Ave_earn	11 881	Secretariat estimate
Average earnings/yr-1	Ave_earn_prevYear	10,980	
Basic allowance	Basic_al		
Minimum non-taxable minimum	MIN_non_taxable_2018	0	
Maximum non-taxable minimum	MAX_non_taxable_2018	2,400	
Taxable income maximum threshold up to which the annual non-taxable minimum will be applied	Income_for_MIN_non_taxable_2018	12,000	
Taxable income minimum threshold up to which the maximum annual non-taxable minimum will be applied	Income_for_MAX_non_taxable_2018	5,280	
Coefficient	Coefficient_2018	0.35714	
Allowance for dependants	Child_al	2,400	
Income tax schedule	Tax_sch	0.20	20 004
	Tax_rate_2	0.23	55 000
		0.314	
Employers SSC	SSC_rate1	0.2409	
Payroll tax - Business risk fee	payroll	4.32	
Income ceiling	Ceiling	55,000	
Employees SSC	SSC_rate2	0.11	
Child allowances	CA_first	136.56	
	CA_second	273.12	
	CA_third	409.68	
	CA_fourth and each next	600.84	
Additional child allowance	ACA_2ch	100	
	ACA_3ch	660	
	ACA_each next	500	
Days in tax year	numdays	365	
Differentiated non-taxable minimum criteria for year-1			
Minimum non-taxable minimum	MIN_non_taxable	720	
Maximum non-taxable minimum	MAX_non_taxable	1,380	
Taxable income* maximum threshold up to which the annual non-taxable minimum will be applied	Income_for_MIN_non_taxable	13,200	
Taxable income* minimum threshold up to which the maximum annual non-taxable minimum will be applied	Income_for_MAX_non_taxable	4,800	
Coefficient		0.0786	

* Calculating taxable income takes into account not only the salary, but also other income (such as dividends and income from real estate etc.). Similarly, if a person works in several jobs, the salaries are added together and the non-taxable minimum is applied to total revenue

2018 Tax equations

The equations for the Latvian system are mostly on an individual basis.

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

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
2.	Allowances:	tax_al	P	=MIN(Basic_al+SSC_empee_princ+(Children>0)*(Child_al*Children);earn_princ)
			S	=Min(Basic_al+SSC_empee_spouse,earn_spouse)
	Non-taxable minimum	Basic_al	B	=IF(earn<=0;0;(IF(earn-Income_for_MAX_non_taxable_2018<0;MAX_non_taxable_2018;(IF((MAX_non_taxable_2018-Coefficient_2018*(earn-Income_for_MAX_non_taxable_2018))>MIN_non_taxable_2018 ; (MAX_non_taxable_2018-Coefficient_2018*(earn-Income_for_MAX_non_taxable_2018));MIN_non_taxable_2018)))))
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	=Positive(earn-tax_al)
5.	CG tax before credits	CG_tax_excl	B	=Tax(tax_inc,Tax_sch)
6.	Tax credits :	tax_cr	B	0
7.	CG tax	CG_tax	B	CG_tax_excl-tax_cr-Addit_al_diff_from_prevYear
8;	State and local taxes	local_tax	B	0
9.	Employees' soc security	SSC_empee	B	= earn*SSC_rate2
11.	Cash transfers	cash_trans	J	=IF(Children<1;0;IF(Children=1;CA_first;IF(Children=2;CA_first+CA_second;IF(Children=3;CA_first+CA_second+CA_third;IF(Children=4;CA_first+CA_second+CA_third+CA_fourth_and_each_next;IF(Children>4;CA_first+CA_second+CA_third+CA_fourth_and_each_next*(Children-3)))))))
11.	Additional child allowances		J	=IF(Children<2;0;IF(Children=2;ACA_2ch;IF(Children=3;ACA_3ch;IF(Children>3;ACA_3ch+ACA_each_next*(Children-3)))))
13.	Employer's soc security	SSC_empr	B	=earn*SSC_rate1
		Payroll taxes	B	=payroll
14.	Overpaid tax previous year	Diff_non_taxable_min_prevYear	B	=IF(earn_prevYear-Income_for_MAX_non_taxable<0,MAX_non_taxable,(IF((MAX_non_taxable-Coefficient*(earn_prevYear-Income_for_MAX_non_taxable))>MIN_non_taxable, (MAX_non_taxable-Coefficient*(earn_prevYear-Income_for_MAX_non_taxable)),MIN_non_taxable)))
		Addit_al_diff_from_prevYear	B	=IF(earn_prevYear<=Income_for_MIN_non_taxable, (Diff_non_taxable_min_prevYear-MIN_non_taxable)*Tax_rate,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.

Lithuania

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.

Lithuania 2018

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**	7 451	11 121	18 571	7 451
2.	**Standard tax allowances**				
	Basic allowance	3 235	1 400	0	3 235
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	3 235	1 400	0	3 235
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	4 216	9 721	18 571	4 216
5.	**Central government income tax liability (exclusive of tax credits)**	632	1 458	2 786	632
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)**	632	1 458	2 786	632
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	671	1 001	1 671	671
	Taxable income				
	Total	671	1 001	1 671	671
10.	**Total payments to general government (7 + 8 + 9)**	1 303	2 459	4 457	1 303
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	1 085
	Total	0	0	0	1 085
12.	**Take-home pay (1-10+11)**	6 148	8 662	14 114	7 233
13.	**Employer's wage dependent contributions and taxes**				
	Employer's compulsory social security contributions	2 272	3 392	5 664	2 272
	Payroll taxes	52	78	130	52
	Total	2 325	3 470	5 794	2 325
14.	**Average rates**				
	Income tax	8.5%	13.1%	15.0%	8.5%
	Employees' social security contributions	9.0%	9.0%	9.0%	9.0%
	Total payments less cash transfers	17.5%	22.1%	24.0%	2.9%
	Total tax wedge including employer's social security contributions	37.1%	40.6%	42.1%	26.0%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	31.5%	31.5%	24.0%	31.5%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	47.8%	47.8%	42.1%	47.8%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Lithuania 2018

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**	11 121	14 790	18 571	14 790
2.	**Standard tax allowances**				
	Basic allowance	1 400	5 070	4 634	5 070
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	1 400	5 070	4 634	5 070
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	9 721	9 721	13 937	9 721
5.	**Central government income tax liability (exclusive of tax credits)**	1 458	1 458	2 091	1 458
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)**	1 458	1 458	2 091	1 458
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 001	1 331	1 671	1 331
	Taxable income				
	Total	1 001	1 331	1 671	1 331
10.	**Total payments to general government (7 + 8 + 9)**	2 459	2 789	3 762	2 789
11.	**Cash transfers from general government**				
	For head of family				
	For two children	1 085	720	720	0
	Total	1 085	720	720	0
12.	**Take-home pay (1-10+11)**	9 746	12 721	15 529	12 001
13.	**Employer's wage dependent contributions and taxes**				
	Employer's compulsory social security contributions	3 392	4 907	5 664	4 907
	Payroll taxes	78	111	130	111
	Total	3 470	5 018	5 794	5 018
14.	**Average rates**				
	Income tax	13.1%	9.9%	11.3%	9.9%
	Employees' social security contributions	9.0%	9.0%	9.0%	9.0%
	Total payments less cash transfers	12.4%	14.0%	16.4%	18.9%
	Total tax wedge including employer's social security contributions	33.2%	35.8%	36.3%	39.4%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	31.5%	31.5%	31.5%	31.5%
	Total payments less cash transfers: Spouse	18.9%	9.0%	31.5%	9.0%
	Total tax wedge: Principal earner	47.8%	47.8%	47.8%	47.8%
	Total tax wedge: Spouse	43.0%	4.7%	47.8%	4.7%

The Lithuanian currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In 2018, the average worker in Lithuania is expected to earn EUR 11 121 (Secretariat estimate).

1. Personal income tax system

1.1. . Central government income tax

1.1.1. Tax unit

The tax unit is an individual.

1.1.2. Tax allowances

1.1.2.1. Standard tax reliefs

- *A general (basic) allowance (tax-exempt amount)* is applied in calculating the taxable income of residents to the extent the income is derived from employment or similar relationships. However, the size of the annual tax-exempt amount depends on the total amount of annual taxable income before taxes and all allowances (hereinafter – annual income). In 2018 the annual tax-exempt amount is EUR 4 560 for individuals whose annual income does not exceed twelve minimum monthly wages effective on 1 January of a respective calendar year (EUR 4 800 in 2018). For others, the annual tax-exempt amount is estimated using the following formula:
- 4 560 – 0.5 x (annual income – twelve minimum monthly wages effective on 1 January of a respective calendar year).
- If according to this formula a negative amount is calculated, then the tax-exempt amount is not applied. As such, no basic personal allowance applies if annual income exceeds EUR 13 920.
- *An allowance for disadvantaged* is applied as follows: in 2018 the annual tax-exempt amount applicable to individuals with a working capacity level of 0-25% or individuals who have reached the retirement age and have an officially recognized high level of special needs, or individuals with high-level disability, is EUR 5 400. The annual tax-exempt amount applicable to individuals who have a working capacity level of 30-55% or individuals who have reached retirement age and have an officially recognized level of medium or low special needs, or individuals with medium or low-level disability, is EUR 4 680. The tax allowance for disadvantaged is not included in the Taxing Wages calculations.
- Non – standard tax reliefs applicable to income from employment
- Contributions to 3rd pillar pension funds, as well as additional voluntary health insurance contributions paid by the employer on behalf of an employee, are treated as non-taxable income (when such contributions combined do not exceed 25% of the gross wage).
- The following expenses incurred by a resident of Lithuania during the tax period may be deducted from his annual income (a total no more than 25% of annual income worth of expenses):

- *Life insurance contributions* paid for his own benefit or for the benefit of his spouse or minor children (adopted children) under life insurance contracts which provide for an insurance benefit not only upon the occurrence of an insurance event, but also upon the expiry of the term of the insurance contract.
- *Voluntary* 3rd pillar *pension contributions* paid for his own benefit or for the benefit of his spouse or minor children (adopted children) to pension funds.
- The deduction of expenses described above on *life insurance* and *voluntary 3rd pillar pension* funds savings tax reliefs apply only to insurance premium of up to a total of EUR 2 000 per year.
- *Payments for studies* (when the first higher education and/or qualification is obtained upon graduation, as well as doctoral studies and art post-graduate studies) made by studying residents of Lithuania. If the resident does not have annual income, the deduction of expenses from the income can be made by parents and/or spouse. If payments for studies are made with borrowed funds (a loan is taken out from a credit institution for that purpose), the repaid amount of the loan during the tax period may be deducted from income.

1.1.3. Tax schedule

A flat personal income tax rate of 15% applies for taxable wage related income. The tax is withheld from employee's wage and paid up to two times a month.

1.2. Regional and local income tax

There are no regional or local income taxes.

2. Compulsory social security insurance system

The compulsory social security insurance system consists of the following types of social security contributions:

- pension insurance;
- health insurance;
- sickness and maternity insurance;
- unemployment insurance;
- insurance from accidents at work and occupational diseases.

2.1. Employees' contributions

Employees pay 6% of their gross wage (including basic wage, bonuses, premiums, additional pays, severance pays, compensations calculated for annual and special leave as well as the monetary compensations calculated for unused annual leave, allowances and other benefits) in contributions for the health insurance and 3% of their gross wage in contributions for the pension insurance. The assessment period is the calendar month.

2.2. Employers' contributions

Social security insurance contributions are also paid by employers on behalf of their employees. The taxable base and the assessment period are the same as for employees' contributions. The following types of employers' contributions and rates are applied:

- pension insurance – 22.3%;
- health insurance – 3%;
- sickness and maternity insurance – 3.6%;
- unemployment insurance – 1.4% for termless employment contracts and 2.8% for fixed-term employment contracts
- insurance from accidents at work and occupational diseases – the overall rate is 0.2% (this is the rate that is modelled). In practice four categories of employers are set according to their history of accidents at work and occupational diseases. The tariffs for each of these categories are:

Category	Rate of contribution (%)
Category I	0.18
Category II	0.43
Category III	0.90
Category IV	1.80

Starting from 1 January 2018 a minimum amount ("floor") of state social insurance contributions is established. Employers must calculate and pay employer's share of state social insurance contributions from a base not lower than minimum monthly salary (MMS), which in 2018 was EUR 400. As of 1 July 2018 employers must pay not only the employer's share, but also the employee's share of social insurance contributions from a base not lower than MMS. Exceptions apply in cases where:

- The person has more than one insurer in Lithuania during the respective period;
- The person receives social insurance pension from the State Social Insurance Fund;
- The person is not older than 24 years;
- The person is disabled;
- The person receives allowance for maternity or paternity leave.

3. Payroll tax

Employers pay 0.2% of the gross wage to the Guarantee fund.

If a company goes bankrupt the Guarantee fund is used to satisfy employees' claims for their unpaid salaries, cash compensations for the unused annual leave, severance pay, pay for the damage caused by occupational accidents or diseases and payment for idle time.

Employers pay 0.5 % of the gross wage to the Long-term employment benefit fund.

The Long-term employment benefit fund is used for paying severance payments to long-tenure employees having lost jobs.

Some employers are exempt from these taxes, namely the Lithuanian Central bank and budget institutions (exempt from both Guarantee and Long-term employment benefit funds contributions), political parties, unions, religious organisations, embassies and branches of non-EEA companies, registered in Lithuania (exempt from Guarantee fund contributions). Given that the model covers the private sector only (sectors B to N by NACE Rev.2) and that the Guarantee fund and Long-term employment benefit fund contributions are paid by the majority of employers within those sectors, these contributions are included in the model.

4. Universal cash transfers

4.1. Transfers related to marital status

None.

4.2. Transfers for dependent children

Child benefits in Lithuania depend on the age and number of children as well as the size of income of the family. In 2018 a non means-tested universal child benefit was introduced for all families raising children up to 18 years of age. Additional child benefit was granted if family's income per person per year did not exceed EUR 2 196 for families with up to two children. For families with three or more children the additional child benefit is paid regardless of the amount of family income. When families complied with all requirements established in the law, the size of the child benefit was as follows:

Conditions for the age and number of children in the family	Annual amount of universal benefit (in EUR)	Annual amount of additional benefit (in EUR)
For the children up to 2 years of age	360	342
For the children from 2 to 18 years of age	360	182.4

5. Main changes in tax/benefit system since 2000

5.1. Tax system

- In 2000 the 3rd pillar private pension funds were introduced, allowing employees to voluntarily choose to accumulate for additional pension by taking part in the 3rd pillar private pension funds or negotiate it with employer as part of employment contract. Contributions to such funds are financed by employees themselves, if they chose to take part in pension scheme voluntarily or by the employer on behalf of the employee.
- In 2003 a possibility to deduct certain expenses from taxable annual income incurred by a resident of Lithuania was introduced.
- In 2004 the 2nd pillar pension system was introduced, allowing voluntary participation in the pension accumulation system which consists of a share of social security contributions paid by the employer, transferred to the pension fund on behalf of the employee.
- The personal income tax rate was lowered gradually from 33% to 27% as of 1 July 2006, then further to 24% in 2008 and again to 15% in 2009.

- In 2009 employee health insurance contributions were introduced together with a lower personal income tax rate.
- In 2009 a flat tax-exempt amount was replaced with a regressive tax exempt formula, gradually diminishing the tax-exempt amount at some level of income, therefore introducing an element of progressivity into taxation of wages.
- In 2014 the 2nd pillar pension system was modified. A possibility to increase the size of the private pension contribution was introduced by allowing employees to contribute additionally from their own gross wage with an additional contribution from the State.
- In 2017 the deduction of expenses described in section 1.122. on life insurance and voluntary 3rd pillar pension funds savings tax reliefs were given a "ceiling" and apply only to insurance premium of up to a total of EUR 2 000 per year.

In 2018 the additional tax exempt amount (child allowance) was replaced by direct child benefits, which are paid without testing for family income.

In 2018 a minimum amount ("floor") of state social insurance contributions was established. Employers calculate and pay employer's share of state social insurance contributions from a base not lower than MMS. As of 1 July 2018 employers must pay not only the employer's share, but also the employee's share of social insurance contributions from a base not lower than MMS.

5.2. Benefit system

- Between 2000 and June 2004 the child benefits were paid for all children up to 3 years of age, provided that none of the parents received maternity (paternity) benefits. Families with 3 or more children, below a set threshold of income per family member, were given more generous benefits for children up to 3 years of age, as well as benefits for children from 3 years to 16 years of age.
- Between July 2004 and 2008 the child benefits were paid without testing family income. The range of the age of children for which the benefits were paid depended on the size of the family. Different age ranges were applied for families with three or more children (the top of the range remained 18 years throughout the period) and families with up to two children (the top of the age range was gradually increased from 7 years to 9 years in 2006, from 9 years to 12 years in 2007 and from 12 years to 18 years in 2008).
- In 2009 testing of family income was introduced for families with up to two children above 3 years of age.
- In 2010 the testing for the fact and the size of the maternity (paternity) benefit was introduced for children up to 2 years of age and testing of family income was extended to all children above 2 years of age.
- Between 2012 and 2016 testing of family income applied to all children and only in families with three or more children the child benefit was paid for children over 7 years of age.
- In 2017 testing of family income was abolished for families with three or more children regarding child benefits. Moreover, families with up to two children under 7 years of age were included in the means-tested child benefit scheme.

In 2018 a universal child benefit replaced the abolished tax exempt amount for children.

6. Memorandum items

6.1. Average gross annual wage earnings calculation

The average gross wage is estimated by the Statistics Lithuania. For the purpose of this exercise the average annual earnings equal twelve average monthly gross wages in the industry sectors B–N by NACE Rev.2 (private sector, including individual enterprises). The gross wage is monetary remuneration, which includes the basic wage, additional pays, overtime, compensations calculated for annual and special leave and payment for idle time.

6.2. Employer contributions to private pension and health schemes

2nd pillar private pension funds. Employees can voluntarily choose to participate in the pension accumulation system which in 2018 consists of three types of contributions to the pension fund: (1) a share of social security contributions paid by the employer is transferred to the pension fund on behalf of the employee (2 p.p. from the total contribution paid by the employer); (2) an additional contribution of 2% deducted from the employee's gross wage to the pension fund; (3) another 2% of the Lithuanian average gross wage is transferred by the State. In total, if an employee chooses to participate in the pension accumulation system, roughly 6% (2+2+2) of gross wage is accumulated in the pension fund. However, the supplementary part of a social insurance pension will decrease for the period of participation in the accumulation of pensions depending on the amount of contributions paid.

3rd pillar private pension funds. Employees can voluntarily choose to accumulate for additional pension by taking part in the 3rd pillar private pension funds or negotiate it with employer as part of employment contract. Contributions to such funds are financed by employees themselves, if they chose to take part in pension scheme voluntarily or by the employer on behalf of the employee. Personal income tax relief related to the 3rd pillar contributions are applied (see section 1.1.2.2).

Additional voluntary health insurance. Employees can voluntarily choose to additionally insure their health for services and medicines that are not covered under the mandatory health insurance scheme. Contributions to such insurance schemes are financed by employees themselves and / or third parties on behalf of the employee (employer, family members, etc.). Personal income tax relief related to the contributions paid by the employers are applied (see section 1.1.2.1).

2018 Parameter values

Average earnings/yr	Ave_earn	11 121	Secretariat esimate
Allowances	Max_basic_al	4560	
	Threshold_max_basic_al	4800	
	Reduction_coeficient	0.5	
Income tax	Tax_rate	0.15	
Tax credit	tax_cred	0	
Minimum threshold for employer SSC and payroll tax	SSC_PRT_employer_min	4800	
Employer's SSC	SSC_rate_empr1	0.305	
	SSC_rate_empr2	0.35	
Employer's payroll tax	PRT_rate_empr	0.007	
Employee's SSC	SSC_rate_empee	0.09	
Universal Child benefits			
For each child	UCB	360	
Need-based child benefits			
for each child	CB	182.4	
Need-based family threshold			
each member	F_thrsh	2196	
Days in tax year	numdays	365	

2018 Tax equations

The equations for the Lithuanian system are mostly on an individual basis. But child benefit is only calculated once.

The functions which are used in the equations (Positive, MIN, 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.

	Line in country table and intermediate steps	Variable name	Range	Equation
1	Earnings	earn		
		earn_net	J	
2	Allowances	basic_al	B	=Positive(IF(earn<Max_basic_al;earn;IF(earn<Treshold_max_basic_al;Max_basic_al;Max_basic_al-Reduction_coefficient*(earn-Treshold_max_basic_al)
3	Credits in taxable income	taxbl_cr	B	0
4	CG taxable income	tax_inc	B	
5	CG tax before credits	CG_tax_excl	B	
6	Tax credits (wastable)	tax_cr		0
7	CG tax	CG_tax	B	
8	State and local taxes	local_tax	B	0
9	Employees' soc security	SSC_empee	B	
10	Cash transfers	cash_trans	J	=Children*UCB+IF(earn_net<F_thrsh*(Married+1)+F_thrsh*Children;CB*Children;0)
11	Employer's wage dependent contributions and taxes			
	Employer's soc security	SSC_empr	B	=IF(earn>0;earn*SSC_rate_empr1+IF(earn<SSC_PRT_employer_min;(SSC_PRT_employer_min-earn)*SSC_rate_empr2)
	Employer's payroll	PRT_empr	B	=IF(earn>0;earn*PRT_rate_empr+IF(earn<SSC_PRT_employer_min;(SSC_PRT_employer_min-earn)*PRT_rate_empr)
	Total	Cont_empr	B	

Key to range of equation B calculated separately for both principal earner and spouse P calculated for principal S calculated on the spouse J calculated once only on a joint basis.

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 2018

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**	39 863	59 497	99 359	39 863
2.	**Standard tax allowances**				
	Basic allowance	480	480	480	480
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	4 405	6 574	10 979	4 405
	Work-related expenses	540	540	540	540
	Other	0	0	0	0
	Total	5 425	7 594	11 999	5 425
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government rounded taxable income (1 - 2 + 3)**	34 400	51 900	87 350	34 400
5.	**Central government income tax liability (exclusive of tax credits)**	3 964	10 537	25 331	2 573
6.	**Tax credits**				
	Basic credit	600	308	0	600
	Married or head of family				
	Children				
	Other	0	0	0	1 448
	Total	600	308	0	2 048
7.	**Central government income tax finally paid (5-6)**	3 364	10 230	25 331	526
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	4 879	7 323	12 286	4 879
	Taxable income				
	Total	4 879	7 323	12 286	4 879
10.	**Total payments to general government (7 + 8 + 9)**	8 243	17 553	37 617	5 405
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	7 614
	Total	0	0	0	7 614
12.	**Take-home pay (1-10+11)**	31 620	41 944	61 743	42 072
13.	**Employer's compulsory social security contributions**	5 585	8 335	13 920	5 585
14.	**Average rates**				
	Income tax	8.4%	17.2%	25.5%	1.3%
	Employees' social security contributions	12.2%	12.3%	12.4%	12.2%
	Total payments less cash transfers	20.7%	29.5%	37.9%	-5.5%
	Total tax wedge including employer's social security contributions	30.4%	38.2%	45.5%	7.4%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	39.1%	51.1%	49.6%	44.9%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	46.6%	57.1%	55.8%	51.7%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Luxembourg 2018

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**		59 497	79 131	99 359	79 131
2.	**Standard tax allowances**					
	Basic allowance		480	960	960	960
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes		6 574	8 744	10 979	8 744
	Work-related expenses		540	1 080	1 080	1 080
	Other		0	4 500	4 500	4 500
		Total	7 594	15 284	17 519	15 284
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government rounded taxable income (1 - 2 + 3)**		51 900	63 800	81 800	63 800
5.	**Central government income tax liability (exclusive of tax credits)**		3 805	6 546	12 179	6 546
6.	**Tax credits**					
	Basic credit		308	908	908	908
	Married or head of family					
	Children					
	Other		0	0	0	0
		Total	308	908	908	908
7.	**Central government income tax finally paid (5-6)**		3 497	5 638	11 271	5 638
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		7 323	9 684	12 202	9 684
	Taxable income					
		Total	7 323	9 684	12 202	9 684
10.	**Total payments to general government (7 + 8 + 9)**		10 820	15 322	23 474	15 322
11.	**Cash transfers from general government**					
	For head of family					
	For two children		7 614	7 614	7 614	0
		Total	7 614	7 614	7 614	0
12.	**Take-home pay (1-10+11)**		56 290	71 422	83 499	63 808
13.	**Employer's compulsory social security contributions**		8 335	11 086	13 920	11 086
14.	**Average rates**					
	Income tax		5.9%	7.1%	11.3%	7.1%
	Employees' social security contributions		12.3%	12.2%	12.3%	12.2%
	Total payments less cash transfers		5.4%	9.7%	16.0%	19.4%
	Total tax wedge including employer's social security contributions		17.0%	20.8%	26.3%	29.3%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		31.1%	36.8%	46.3%	36.8%
	Total payments less cash transfers: Spouse		23.0%	35.3%	44.8%	35.3%
	Total tax wedge: Principal earner		39.6%	44.6%	52.9%	44.6%
	Total tax wedge: Spouse		32.5%	43.2%	51.6%	43.2%

The national currency is the Euro (EUR). In 2018, EUR 0.85 equalled USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 59 497 (Secretariat estimate).

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.

For 2018, there will be the option to file separate tax returns for married couples and civil partners.

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.
- The first 4 distance units (i.e. 4 * 99 = EUR 396 per year) of the lump sum deduction for travel expenses between a taxpayer's home and his working places are abolished. The maximum deduction will be limited to EUR 2 574 per year.
- 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 4 500.
- 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. The tax credit will increase progressively until it is capped at EUR 600 per year for taxpayers earning between EUR 11 265 and EUR 40 000. Between EUR 40 000 and EUR 80 000, the tax credit will decline progressively. Over EUR 80 000, the tax credit is 0.
- Single-parents receive a refundable tax credit. The tax credit will be increased to EUR 1 500 per year for taxpayers earning up to EUR 35 000. Between EUR 35 000 and EUR 105 000, the tax credit will decline progressively. Over EUR 105 000 the tax credit is EUR 750 like in the past.

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.
- 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.
- From 2017 onwards, the deductibility of interest charges and for insurance and legal responsibility is aggregated under one category and limited to EUR 672.
- Payments to an insurance company or credit institution in respect of an individual retirement scheme are deductible. These payments are capped at EUR 3 200 and must meet certain investment policy constraints.
- Contributions to building society savings are deductible up to the limit of EUR 672. If the taxpayer is under 40 years old, this limit will be double to EUR 1 344.
- 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 2 000; for the following five years it is EUR 1 500 ; thereafter it is EUR 1 000. 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 6 000. This ceiling is increased by an equal amount for the taxpayer's spouse/partner and by 1 200 for each qualifying child. For taxpayers over the age of 30, the allowable deduction of EUR 6 000 is increased by 8% (e.g. EUR 480) 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).
- The deductibility for domestic costs is set at EUR 5 400.
- A EUR 5 000 tax allowance will be granted for the purchase of an electric or hydrogen-powered car. A EUR 2 500 tax allowance will be granted for the purchase of a rechargeable hybrid car, when CO2 emissions do not exceed 50g/km. The tax allowance is EUR 300 for the purchase of a pedelec or bicycle.

1.1.3. Tax schedule reliefs

Income tax is determined on the basis of the following schedule (amounts in Euros):

0% for the portion of income up to 11 265
8% for the portion of income between 11 265 and 13 137
9% for the portion of income between 13 137 and 15 009
10% for the portion of income between 15 009 and 16 881
11% for the portion of income between 16 881 and 18 753
12% for the portion of income between 18 753 and 20 625
14% for the portion of income between 20 625 and 22 569
16% for the portion of income between 22 569 and 24 513
18% for the portion of income between 24 513 and 26 457
20% for the portion of income between 26 457 and 28 401
22% for the portion of income between 28 401 and 30 345
24% for the portion of income between 30 345 and 32 289
26% for the portion of income between 32 289 and 34 233
28% for the portion of income between 34 233 and 36 177
30% for the portion of income between 36 177 and 38 121
32% for the portion of income between 38 121 and 40 065
34% for the portion of income between 40 065 and 42 009
36% for the portion of income between 42 009 and 43 953
38% for the portion of income between 43 953 and 45 897
39% for the portion of income between 45 897 and 100 002
40% for the portion of income between 100 002 and 150 000
41% for the portion of income between 150 000 and 200 004
42% for the portion of income exceeding 200 004

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 39% for the portion of income between EUR 37 842 and EUR 100 002, 40% for the portion of income between EUR 100 002 and EUR 150 000, 41% for the portion of income between EUR 150 000 and EUR 200 004, and 42% for the portion of income exceeding EUR 200 004.

Income tax as determined by the applicable schedules is subject to a 7% "solidarity" surtax to finance the employment fund. The rate is 9% for the taxable income exceeding EUR 150 000 (tax classes 1 and 1a), respectively EUR 300 000 (tax class 2).

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 4 020.

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	119 915.16
b) Health insurance	3.05	3.05	119 9150.16
c) Dependency insurance		1.4	Monthly allowance 499.65*
d) Health in the workplace	0.11		
e) Accident insurance	0.90		

(Monthly allowance: EUR 499,65 = 0.25 social minimum salary / 12). The social minimum salary in 2018 is equal to EUR 23 983,08.

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.

The temporary budget balancing tax, the *impôt d'équilibrage budgétaire temporaire* (IEBT), introduced in 2015, is abolished from 1 January 2017.

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 0.46% to 2.92%. A representative rate of 1.95% is used in the Taxing Wages calculations.

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.

There has been a reform of the family allowance system in 2016.

For families that are eligible for family allowance before 1 August 2016, the old system remains, and the amounts for 2018 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.

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.

For children born on or after 1 August 2016, the child bonus amounting to EUR 76.88 per child per month has been abolished and incorporated in the new higher amounts:

Effective date	As of 1 August 2016
1 eligible child	EUR 265
2 eligible children	EUR 530
3 eligible children	EUR 795

The amounts indicated above (under the old regime as well as under the new regime) are increased by EUR 20 for children aged 6 to 11 and by EUR 50 for those aged 12 years or older. These new additional amounts, depending on the children's age, are applicable for all children and are replacing the amounts of EUR 16.17 respectively EUR 48.52 from 1 August 2016 onwards.

4. Main changes since 2008

4.1. Partnerships

The Act of 9 July 2004 introduced the notion of partnerships into tax law. The Act construes the term "partnership" as a relationship between two persons, called "partners", of opposite sex or the same sex, who live together as a couple and declare themselves as such.

As from 1 January 2008, the fiscal treatment of the partnerships is modified. The deduction for extraordinary expenses is replaced by the joint taxation of partners as it already exists for spouses.

4.2. Introduction of tax credits

The following changes were made as of 1 January 2017:

- The existing tax credit of EUR 300 for employees, self-employed people and pensioners will be increased progressively until it is capped at EUR 600 per year for taxpayers earning between EUR 11 265 and EUR 40 000. For taxpayers earning between EUR 40 000 and 80 000, the tax credit will decline progressively. Taxpayers earning more than EUR 80 000 will not benefit anymore from the tax credit.
- The existing tax credit of EUR 750 for single parents with children will be increased to EUR 1 500 per year for taxpayers earning up to EUR 35 000. For taxpayers earning between EUR 35 000 and EUR 105 000, the tax credit will decline progressively. For taxpayers earning more than EUR 105 000, the tax credit will remain at its current level of EUR 750.

5. Memorandum item

5.1. Identification of the average worker

Average gross hourly wages by industry and by gender are determined on the basis of biannual surveys on industry wages and working hours. These surveys cover gross compensation for regular hours (working hours + leave time) plus overtime pay. Hourly

wages include bonuses and allowances such as premiums for output, production or productivity. In contrast, non-periodic compensation (bonuses, profit-sharing) that is not paid systematically in each pay period is not included. Nevertheless, in order to allow for comparisons between countries, gross annual pay is adjusted on the basis of average non-periodic compensation as calculated from triennial surveys of labour costs.

Regarding working hours, the time taken into account is the time effectively offered, including regular working hours, overtime, night shifts and work on Sunday.

2018 Parameter values

Average earnings/yr	Ave_earn	59 497	Secretariat estimate
Tax allowances: general	gen_dedn	480	
professional expenses	prof_exp	540	
travel expenses	travel_exp	0	
extra if both spouses earning	extra_dedn	4 500	
Low earner allowance	allow_1		
Low earner allowance (couples)	allow_2		
Class 1a limit	cl_1a_lim	45 060	
Tax schedule	tax_sch	0	11 265
		0.08	13 137
		0.09	15 009
		0.10	16 881
		0.11	18 753
		0.12	20 625
		0.14	22 569
		0.16	24 513
		0.18	26 457
		0.20	28 401
		0.22	30 345
		0.24	32 289
		0.26	34 233
		0.28	36 177
		0.30	38 121
		0.32	40 065
		0.34	42 009
		0.36	43 953
		0.38	45 897
		0.39	100 002
		0.40	150 000
		0.41	200 004
		0.42	
Child credit maximum	ch_cred	0	
Social Minimum Salary	min_salary	23 983.08	
Multiplier for unemployment	unemp_rate_1	1.07	
	Unemp_rate_2	1.09	
	Unemp_lim	150 000	
Social security contributions	SSC_rate	0.1105	
	SSC_ceil	119 915.16	
	infirm	0.014	
	infirm_abatement	0.25	
Employer contributions	workhealth	0.0011	
	SSC_empr	0.1105	
	SSC_acc	0.009	
	empr_mutual	0.020	
Child benefit (1 child)	CB_1	185.6	
2 children	CB_2	440.72	
extra age 6-11	CB_ex	20	
extra age above 11		50	
Child bonus	ch_bonus	922.50	
Worker tax credit	wtc_basic_1	300	
	wtc_basic_2	600	
	wtc_incomelim_1	936	

	wtc_incomelim_2	11265
	wtc_incomelim_3	40000
	wtc_incomelim_4	80000
	wtc_incr_rate	0.029044438
	wtc_decr_rate	0.015
Single parent tax credit	sptc_basic_1	1500
	sptc_basic_2	750
	sptc_incomelim_1	35000
	sptc_incomelim_2	105000
	sptc_decr_rate	0.010714286
Class 1a Discount	discount	0.50
Maximum Marginal Rate	max_rate	0.42

2018 Tax equations

The equations for the Luxembourg system are on a joint basis except for social security contributions.

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

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
2.	Allowances:			
	Basic	basic	J	IF(earn_spouse='0,' 1, 2)*gen_dedn
	work-related	work_rel	J	IF(earn_spouse='0,' 1, 2)*(prof_exp)
	Other	other_al	J	(earn_spouse>0)*extra_dedn
	Total	tax_al	J	min(basic+work_rel+other_al+SSC_ded_total, earn)
3.	Credits in taxable income	taxbl_cr	J	0
	family quotient	quotient	J	1+Married
4.	CG taxable income unadjusted taxable income	tax_inc	J	earn-tax_al
5.	CG tax before credits	tax_excl	J	((Children=0)*IF(Married='0,Tax(tax_inc,' tax_sch), quotient*Tax(tax_inc/quotient, tax_sch)) + (Children>0)*IF(Married='0,' Taxclass1a(tax_inc, tax_sch, discount, cl_1a_lim, max_rate), quotient*Tax(tax_inc/quotient, tax_sch)))*IF(tax_inc>unemp_lim*(1+Married,unemp_rate_2,unemp_rate_1)
6.	Tax credits :	worker_cr	J	Positive(IF(earn_princ>wtc_incomelim_1,wtc_basic_1+(Positive(MIN(earn_princ,wtc_incomelim_2)-wtc_incomelim_1)*wtc_incr_rate)-(Positive(earn_princ-wtc_incomelim_3)*wtc_decr_rate),0))+ Positive(IF(earn_spouse>wtc_incomelim_1,wtc_basic_1+(Positive(MIN(earn_spouse,wtc_incomelim_2)-wtc_incomelim_1)*wtc_incr_rate)-(Positive(earn_spouse-wtc_incomelim_3)*wtc_decr_rate),0))
		monoparent_cr	J	IF(AND(Married=0,Children>0),IF(earn<sptc_incomelim_1,sptc_basic_1,sptc_basic_1-((MIN(earn,sptc_incomelim_2)-sptc_incomelim_1)*sptc_decr_rate)),0)
		tax_cr	J	worker_cr+monoparent_cr
7.	CG tax	CG_tax	J	tax_excl-tax_cr
8.	State and local taxes	local_tax	J	0
9.	Employees' soc security	SSC	B	SSC_rate*MIN(earn, SSC_ceil)+infirm*Positive(earn-infirm_abatement*min_salary)+()
	deductible portion	SSC_ded	B	SSC_rate*MIN(earn, SSC_ceil)
11.	Cash transfers	cash_trans	J	((Children='1)*(CB_1+CB_ex)+' (Children=2)*(CB_2+2*CB_ex))*12+Children*ch_bonus
13.	Employer's soc security	SSC_empr	B	(SSC_empr+workhealth)*MIN(earn, SSC_ceil)+SSC_acc*MIN(earn,SSC_ceil)+empr_mutual*MIN(AA7,SSC_ceil)

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

Mexico

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations.

Mexico 2018

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**	81 879	122 208	204 088	81 879
2.	**Standard tax allowances**				
	Basic allowance	2 754	2 920	3 257	2 754
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	2 754	2 920	3 257	2 754
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	79 125	119 288	200 831	79 125
5.	**Central government income tax liability (exclusive of tax credits)**	5 658	10 834	27 376	5 658
6.	**Tax credits**				
	Basic credit	3 042	0	0	3 042
	Married or head of family				
	Children				
	Other	0	0	0	0
	Total	3 042	0	0	3 042
7.	**Central government income tax finally paid (5-6)**	2 616	10 834	27 376	2 616
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 023	1 663	3 014	1 023
	Taxable income				
	Total	1 023	1 663	3 014	1 023
10.	**Total payments to general government (7 + 8 + 9)**	3 639	12 497	30 391	3 639
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)**	78 240	109 711	173 697	78 240
13.	**Employers' compulsory social security contributions**	11 338	14 340	20 578	11 338
14.	**Average rates**				
	Income tax	3.2%	8.9%	13.4%	3.2%
	Employees' social security contributions	1.3%	1.4%	1.5%	1.3%
	Total payments less cash transfers	4.4%	10.2%	14.9%	4.4%
	Total tax wedge including employer's social security contributions	16.1%	19.7%	22.7%	16.1%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	12.1%	17.6%	22.9%	12.1%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	17.5%	23.4%	28.4%	17.5%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Mexico 2018

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**	122 208	162 944	203 680	162 944
2.	**Standard tax allowances**				
	Basic allowance	2 920	4 762	5 673	4 762
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	2 920	4 762	5 673	4 762
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	119 288	158 182	198 007	158 182
5.	**Central government income tax liability (exclusive of tax credits)**	10 834	13 012	16 447	13 012
6.	**Tax credits**				
	Basic credit	0	4 879	3 042	4 879
	Married or head of family				
	Children				
	Other	0	0	0	0
	Total	0	4 879	3 042	4 879
7.	**Central government income tax finally paid (5-6)**	10 834	8 132	13 405	8 132
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 663	2 173	2 682	2 173
	Taxable income				
	Total	1 663	2 173	2 682	2 173
10.	**Total payments to general government (7 + 8 + 9)**	12 497	10 305	16 087	10 305
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)**	109 711	152 639	187 593	152 639
13.	**Employers' compulsory social security contributions**	14 340	22 997	25 652	22 997
14.	**Average rates**				
	Income tax	8.9%	5.0%	6.6%	5.0%
	Employees' social security contributions	1.4%	1.3%	1.3%	1.3%
	Total payments less cash transfers	10.2%	6.3%	7.9%	6.3%
	Total tax wedge including employer's social security contributions	19.7%	17.9%	18.2%	17.9%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	17.6%	17.6%	17.6%	17.6%
	Total payments less cash transfers: Spouse	-5.4%	7.4%	12.1%	7.4%
	Total tax wedge: Principal earner	23.4%	23.4%	23.4%	23.4%
	Total tax wedge: Spouse	13.1%	13.0%	17.5%	13.0%

The national currency is the peso (MXN). In 2018, MXN 19.18 was equal to USD 1. That year, the estimated earnings of the average worker are MXN 122 208 (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% of six days of the worker's wage. The maximum exemption according to the Tax Law is equivalent to 15 UMAs.[18]
- End-of-year bonus: The minimum end-of-year bonus established in the Labour Law is 15 days of the worker's wage. The Tax Law exempts end-of-year-bonuses up to 30 UMAs.

1.1.2.2. Main non-standard tax reliefs

Deductions:

- Compulsory school transportation costs.
- Medical expenses (doctor, dental, psychology and nutrition fees and hospital expenses): For expenses made by the taxpayer on behalf of his or her spouse and straight line relatives, the deduction is allowed only if the taxpayer´s relative earns less than the minimum annual wage.
- Complementary contributions of certain retirement accounts are considered eligible as long as they do not exceed 10% of taxable income and MXN 147 014 (5 annual UMAs).
- Funeral expenses: for the spouse and straight-line relatives up to 1 annual UMA.
- 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 152 000.
- Health insurance premiums for individuals, if the beneficiary is the taxpayer, and/or his family.

[18] In 2018, the value of the minimum wage is 88.36 while the value of the UMA is 80.60.

- Real interest expenditure of mortgage loans if the value of the property does not exceed MXN 4 499 824. Real interest expenditure is defined as the excess of interest expense over the inflation rate.
- Deduction of taxpayer's educational expenditures for himself, on behalf of his/her spouse, parents or children, among others, for the following educational levels.

Educational Level	Maximum Annual Deduction (MXN)
Kinder Garden	14 200
Primary Education	12 900
Secondary Education	19 900
Technical Profession	17 100
High School	24 500

Since 2016 the limit amount for personal deductions was increased. The new limit is the minimum between 15% of taxpayer's gross income and an amount equivalent to 5 annual UMAs (MXN 147 014 in 2018). The limit does not apply to private school´s tuition, charity donations, complementary contributions to retirement´s personal accounts, professional fees, and medical expenses in the event of incapacity or disability.

1.1.2.3. Employment subsidy credit

The employment subsidy credit is decreasing on workers´ income and is assigned based on a table of income brackets. 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[19]

Taxable income (MXN)		Fixed quota (MXN)	Tax on the amount in excess of the lower limit (%)
Lower Limit	Upper Limit		
0.01	6 942.20	0.00	1.92
6 942.21	58 922.16	133.28	6.40
58 922.17	103 550.44	3 460.01	10.88
103 550.45	120 372.83	8 315.57	16.00
120 372.84	144 119.23	11 007.14	17.92
144 119.24	290 667.75	15 262.49	21.36
290 667.76	458 132.29	46 565.26	23.52
458 132.30	874 650.00	85 952.92	30.00
874 650.01	1 166 200.00	210 908.23	32.00
1 166 200.01	3 498 600.00	304 204.21	34.00
3 498 600.01	And over	1 097 220.21	35.00

For 2018, the income tax brackets updated, since the cumulative level of inflation reached 10%. The rates remain the same with a maximum marginal rate for income over MXN 3.5 million of 35%.

[19] The income tax schedule are updated once the accumulated inflation reaches 10%.

1.1.3.2. Employment subsidy credit table

For annual 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	21 227.52	4 884.24
21 227.53	31 840.56	4 881.96
31 840.57	41 674.08	4 879.44
41 674.09	42 454.44	4 713.24
42 454.45	53 353.80	4 589.52
53 353.81	56 606.16	4 250.76
56 606.17	64 025.04	3 898.44
64 025.05	74 696.04	3 535.56
74 696.05	85 366.80	3 042.48
85 366.81	88 587.96	2 611.32
88 587.97	And Over	0.00

1.2. State and local income taxes

States do not levy taxes on income.

1.3. Payroll taxes

Mexico does not have a Federal pay-roll tax. However, most States apply a state pay-roll tax with an average rate of 2.49 %. 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% of the workers monthly wage, plus 0.40% of the amount in excess of 3 UMAs. For disability and life insurance, 0.625% of the monthly wage.

In 2018, a ceiling of 25 UMAs applies to the salary that is used to calculate the social security contributions.

2.2. Employers' contributions

- For sickness and maternity 20.40% of the UMA, plus 1.10% of the amount in excess of 3 UMAs, plus 1.75% of the monthly wage.
- For disability and life insurance, 1.75% of worker's monthly wage.
- For social services and nursery, 1% of worker's monthly wage.

- For insurance for work injuries of employees, 2.018% of worker's monthly wage.[20]

In 2018, a ceiling of 25 UMAs applies to the salary that is used to calculate the social security contributions.

3. Universal Cash Transfers

3.1. Transfers related to marital status

None.

3.2. Transfers for dependent children

None.

4. Main Changes in the Tax/Benefit System since 1995

The Social Security Law enacted in July 1997 changed fundamentally the financing of non-government employees' social security, which shifted from a pay-as-you-go scheme to funded individual accounts. The government does not manage these accounts; new private financial institutions were created specifically for this purpose. However, the contractual obligation is between the workers and the government, not with the private administrator of the funds, because legally they are still considered as contributions to social security, independently of who manages the funds. 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, independently of the administration of the funds as well.

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.

[20] The amount of the work injury fee depends on the risk level in which the company is classified. The Mexican Institute of Social Security provided a weighted average rate that considers the economic activities from C to K of the International Standard Classification.

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

	Account	% 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

2018 Parameter values

Average earnings/yr	Ave_earn	122 208	Secretariat estimate	
Unit of Measure and Update	UMA	80.60		
Income tax	tax_table	0.00	0	0.0192
		6 942.21	133.28	0.0640
		58 922.17	3 460.01	0.1088
		103 550.45	8 315.57	0.1600
		120 372.84	11 007.14	0.1792
		144 119.24	15 262.49	0.2136
		290 667.76	46 565.26	0.2352
		458 132.30	85 952.92	0.3000
		874 650.01	210 908.23	0.3200
		1 166 200.01	304 204.21	0.3400
		3 498 600.01	1 097 220.21	0.3500
Tax credit basic	Basic_crd	0.0	4 884.24	
		21 227.53	4 881.96	
		31 840.57	4 879.44	
		41 674.09	4 713.24	
		42 454.45	4 589.52	
		53 353.81	4 250.76	
		56 606.17	3 898.44	
		64 025.05	3 535.56	
		74 696.05	3 042.48	
		85 366.81	2 611.32	
		88 587.97	0.00	
Employees SSC	SSC_rate	0.0125		
	SSC_rate_sur	0.0040		
Employers SSC	SSC_empr	0.06518		
	SSC_empr_min	0.2040		
	SSC_empr_sur	0.0110		

2018 Tax equations

The equations for the Mexican system in 2018 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	MIN(earn, MIN(earn*(6/365)*0.25, UMA*15)+ MIN(earn*(15/365), UMA*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, UMA*25*365*ssc_rate)+MIN(Positive(earn-(3*365*UMA))*ssc_rate_sur, UMA*(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, UMA*25*365*ssc_empr)+365*UMA*ssc_empr_min +MIN(Positive(earn-(3*365*UMA))*ssc_empr_sur, UMA*(25-3)*365*ssc_empr_sur)
	Memorandum item: 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).

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 2018

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**	34 550	51 567	86 116	34 550
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				
	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)**	33 281	49 292	81 800	33 281
5.	**Central government income tax liability (exclusive of tax credits)**	3 527	9 870	24 625	3 527
6.	**Tax credits :**				
	Basic credit				
	Married or head of family				
	Children				
	Other				
	Total	1 191	868	364	1 899
7.	**Central government income tax finally paid (5-6)**	2 336	9 002	24 261	1 628
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	0	0	0	0
	Taxable income (net of credits)	5 501	6 701	8 267	3 410
	Total	5 501	6 701	8 267	3 410
10.	**Total payments to general government (7 + 8 + 9)**	7 836	15 703	32 528	5 038
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	6 328
	Total	0	0	0	6 328
12.	**Take-home pay (1-10+11)**	26 713	35 863	53 588	35 839
13.	**Employers' compulsory social security contributions**	4 034	5 974	6 619	4 034
14.	**Average rates**				
	Income tax	6.8%	17.5%	28.2%	4.7%
	Employees' social security contributions	15.9%	13.0%	9.6%	9.9%
	Total payments less cash transfers	22.7%	30.5%	37.8%	-3.7%
	Total tax wedge including employer's social security contributions	30.8%	37.7%	42.2%	7.1%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	46.2%	46.2%	52.3%	46.8%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	51.7%	51.7%	52.3%	52.2%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Netherlands 2018

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**	51 567	68 584	86 116	68 584
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				
	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)**	49 292	65 943	82 572	65 943
5.	**Central government income tax liability (exclusive of tax credits)**	9 870	11 352	13 397	11 352
6.	**Tax credits :**				
	Basic credit				
	Married or head of family				
	Children				
	Other				
	Total	1 052	2 383	2 767	1 951
7.	**Central government income tax finally paid (5-6)**	8 818	8 969	10 630	9 401
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	0	0	0	0
	Taxable income (net of credits)	6 130	6 599	10 112	7 941
	Total	6 130	6 599	10 112	7 941
10.	**Total payments to general government (7 + 8 + 9)**	14 948	15 568	20 742	17 341
11.	**Cash transfers from general government**				
	For head of family				
	For two children	2 146	1 964	1 964	0
	Total	2 146	1 964	1 964	0
12.	**Take-home pay (1-10+11)**	38 764	54 980	67 338	51 242
13.	**Employers' compulsory social security contributions**	5 974	7 992	10 008	7 992
14.	**Average rates**				
	Income tax	17.1%	13.1%	12.3%	13.7%
	Employees' social security contributions	11.9%	9.6%	11.7%	11.6%
	Total payments less cash transfers	24.8%	19.8%	21.8%	25.3%
	Total tax wedge including employer's social security contributions	32.6%	28.2%	29.9%	33.1%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	52.6%	46.2%	46.2%	46.2%
	Total payments less cash transfers: Spouse	4.7%	2.3%	40.4%	8.3%
	Total tax wedge: Principal earner	57.4%	51.7%	51.7%	51.7%
	Total tax wedge: Spouse	14.8%	12.6%	46.5%	18.0%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year, the average worker earned EUR 51 567 (Secretariat estimate).[21]

1. Personal Income Tax System (Central Government)

1.1. Central government income tax

There are three categories ('boxes') of taxable income:

- Taxable income from work and owner-occupied housing;
- Taxable income from a substantial interest in a limited liability company;
- Taxable income from savings and investments.

This description is limited to the most relevant aspects of taxable income from the first category, 'taxable income from work and owner-occupied housing', because of its relevance for the AW.

1.1.1. Tax unit

Husbands and wives are taxed separately on their personal income, which includes income from business, profession and employment, pensions and social security benefits. Certain parts of income may be freely split between husbands and wives, such as the net-income from owner occupied housing and the income from savings and investments.

1.1.2. Tax allowances

1.1.2.1. Standard allowances

Related to wage earnings:

Employees' social security contributions (see Section 2.1.) are deductible.

1.1.2.2. Non-standard allowances applicable to AW

Related to wage earnings:

- For distances of more than 10 km between home and work, fixed amounts for travel expenses with public transportation are deductible. The maximum deduction for employees who travel by public transport is EUR 2 090 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;
- 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:

[21] 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.

- Medical expenses and other exceptional expenses: Fiscal deduction of exceptional health expenses is reduced to the specific costs as a result of a chronic illness. As specific costs are seen medical treatment (not paid for by insurance company), diet costs, special medicine described by a doctor, extra domestic care, special expenses for clothing and transportation costs. Visual tools and insurance premiums are not seen as specific costs and are therefore not deductible. Expenses for wheelchairs, scooters for the disabled and home adjustments made because of a chronic illness are not deductible.

  All expenses except for medical treatment expenses may be increased by a factor. This factor is income and age dependent. The factor amounts to 1.4 if the person is below the legal pension age and has an income on or below EUR 34 404. The factor amounts to 2.13 if the person is on or above the legal pension age and has an income on or below EUR 34 404. People with an income above EUR 34 404 cannot apply the factor.

  For a single person: the specific expenses (after multiplication with the factor) in excess of 1.65% of income are deductible if income exceeds EUR 7 647 and is below EUR 40 619. If income is lower than or equal to EUR 7 647, the non-deductible limit is EUR 131. For a person with a partner: the joint income is used to determine the non-deductible amounts and the non-deductible limit is EUR 262.

  If income exceeds EUR 40 619 the specific expenses in excess of 1.65% of EUR 40 619 increased with 5.75% of income above EUR 40 619 are deductible.
- Some educational expenses: in direct connection with vocational education. Expenses above the threshold of EUR 250 are deductible. Expenses above EUR 15 000 are not deductible.
- Donations to certain institutions (charity) that serve the public good are deductible if in excess of 1% of the income and in excess of EUR 60. No more than 10% 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 security contributions	
		< 65 years	> 65 years
0–20 142	8.9	27.65	9.75
20 142–33 994	13.2	27.65	9.75
33 994–68 507	40.85	-	-
68 507 and over	51.95		-

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 9.75% (for widows and orphans pensions, and exceptional medical expenses). Individuals younger than 65 years and a few month pay 27.65%, (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 deducted partly from the income tax liability and partly from the contributions that are made to the general social security schemes (see Section 1.13). For most families, the share of the credit attributed to tax is related to the ratio of the tax rate to the sum of the tax rate and the social security contributions rate in the first bracket of the tax schedule. In 2018, this ratio was 24.35% (= 8.90% / (8.90% + 27.65%), implying that 24.35% of the (tax) credit is attributed to the personal income tax and the remaining 75.65% to social security contributions. If the individual's total tax credit is higher than the total tax and social security contributions levied on the first tax bracket, the shares of the residual amount of the tax credit that are attributed to the personal income tax and social security contributions are based on the rates in the second tax bracket in order that the employee can benefit from the full amount of the credit where the level of income allows it. As a result, the ratio of the tax rate to the sum of the tax rate and social security contribution rates is increased to 32.31% for the residual amount in 2018 (i.e. 13.20%/(27.65%+13.20%)).

Division of credits for tax and social security contributions is essential in the OECD publications. In the Netherlands no division is made in the general tax scheme between tax and SSC.

Note that the tax/benefit position tables show the total amount of social security contributions net of the credits that are claimed.

- General tax credit: The general tax credit is dependent on income since 2014, meaning that higher incomes receive less general tax credit. Since 2016, the general tax credit is fully phased out, meaning that higher incomes receive no general tax credit. In 2018, the maximum of the general tax credit is EUR 2 265 when no reduction is applicable (people who are on or above the legal pension age receive less general tax credit, because they do not pay social contributions for the state pension) and taxable income is below or equal to EUR 20 142. For incomes above this threshold, the general tax credit is fully phased out at a rate of 4.683% (per euro). So incomes above EUR 68 507 receive no general tax credit. The transfer of the general tax credit of the spouse to the principal will diminish with 6.67%-points per year in the period 2009-2023, such that in 15 year time the general tax credit for a non-working (or a low earning) spouse cannot be capitalised against the tax paid by the principal. In 2018, 33.33% of the general tax credit can be transferred.
  This reduction of the transfer of the general tax credit started in 2009. In 2023 the general tax credit can only be capitalised against the tax and social security contributions paid on own earned income. In 2012 a reduction of the general tax credit for non-working spouses born after 31 December 1962 and before 1 January 1972 is introduced. The reduction will be equal to the reduction of non-working spouses born before 1 January 1963 in year 2015. For Household types in de Taxing Wages model no difference is made between year of birth before 1963 or after 1963, idem before or after 1972. For that reason the additional reduction of the general tax credit is not added to the Taxing Wages model.
- Work credit: The amount of work credit depends on taxable income from work and is phased in on two trajectories; the first one runs from EUR 0 till EUR 9 468. On this first trajectory, work credit equals 1.764% of taxable income from work.

On the second trajectory, which runs from EUR 9 468 till EUR 20 450, the work credit equals EUR 167 plus 28.064% of the part of income that is above EUR 9 468. So at an income of EUR 20 450, the maximum of EUR 3 249 is reached. The work credit stays at its maximum till an income of EUR 33 112. After this threshold, the work credit is fully phased out at a rate of 3.6% (per euro) so that incomes above EUR 123 362 receive no work credit. 2016 is the first year in which higher incomes receive no work credit.

- Income dependant combination credit: A taxpayer who is either a single parent and working or the working partner with the lowest income, and who has children below the age of 12 and has his/her taxable income from work exceeding EUR 4 934, is entitled to an income dependent combination credit of EUR 1 052 plus an extra combination credit of 6.159% of taxable income from work above EUR 4 934. The maximum total combination credit is EUR 2 801 and reached at an income level of EUR 33 331.
- Single parent credit: abolished since 2015.
- Additional single parent credit: abolished since 2015.

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. This only applies to the work credit and the income dependent combination credit. This rule will be abolished from 2019.

1.2. State and local income taxes

None.

2. Compulsory Social Security Contributions to Schemes Operated Within the Government Sector

2.1. Employees' contributions

General schemes (for everyone earning income from (former) employment)

- Old age pension: The age is adjusted such that elderly will receive Old Age (state) pension at the age of 66 years old in 2018 and at 67 years old in 2021. The Old age premium percentage is 17.9% of taxable income in the first and second tax bracket. This scheme does not apply to individuals above the current pension age;
- Widows and orphans pension: 0.10% of taxable income in the first and second tax bracket;
- Long-term care: 9.65% of taxable income in the first and second tax bracket.

Schemes for employees:

- Unemployment: 0% of the gross earnings below EUR 54 614 (this contribution is only for the general unemployment fund); employees do not have to pay an unemployment premium in order to reduce administration costs. Employers pay both an unemployment premium and a premium for invalidity for their employees (see par.2.2).

- For basic health insurance each adult pays an average amount of EUR 1 312 a year to a self-chosen private health insurance company. This premium is a non-tax compulsory payment and it is not included in the Taxing Wages calculations but only in the NTCP calculations.
- Employees might obtain compensation for the nominal contribution of on average EUR 1 312 for the basic health insurance, depending on the household's personal situation and taxable income. This is called the health care benefit. This benefit is included in the NTCP calculations as it compensates for the basic health insurance premium of on average EUR 1 312 (see www.oecd.org/ctp/taxingwages for more details on non-tax compulsory payments as well as the Special Feature in the 2009 edition of the *Taxing Wages* Report). The care benefit is calculated as follows:

  Single parent households: 1546 – 1.990% * 20 451–13.49% * (taxable income – 20 451)

  Married couples: number of adults * 1546 – 4.750% *20 451– 13.49% * (taxable income principal and spouse – 20 451).

2.2. Employers' contributions

Schemes for employers:

- Unemployment: 2.85% of gross earnings below EUR 54 614 for the general unemployment fund and a contribution on average of 1.286% of gross earnings below EUR 54 614 for the industrial insurance associations redundancy payments fund;
- Invalidity: 7.99% of gross earnings below EUR 54 614;
- For medical care employers contribute 6.90% of gross earnings net of employees' pension premiums and unemployment social security contributions until a maximum of gross earnings of EUR 54 614. This contribution is modelled as a NTCP from the employer to the Health Care 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 1 964 a year.

An additional income dependent child benefit exists for low-income families (kindgebonden budget). 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 maximum value is EUR 1 152 per year for families with one child in 2018. The

maximum value is EUR 2 040 a year for families with two children. The benefit is reduced at a rate of 6.75% per euro when the family's yearly taxable income exceeds EUR 20 451 and is completely phased out for families with two children when the taxable income exceeds EUR 51 992. As from 2015 an extra benefit for single parents is introduced (independent of the number of children and the age of the children) which amounts to EUR 3 101 per year in 2018. This amount is also phased out at a rate of 6.75%.

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 33 000 were obliged to take a private insurance. These private health insurance contributions were not included in the Taxing Wages calculations because they were made to a privately-managed fund (and are therefore not taxes). Since 2006, every individual contributes a nominal contribution to a privately-managed fund (on average EUR 1 064, depending on the competition between insurance companies, a year in 2009) and, in addition for employees, a percentage of gross income (6.9%) net of employees' pension premiums and unemployment social security contributions until a maximum of gross income of EUR 32 369 (in 2009). For this last contribution, the employee receives mandatory compensation of his employer for the same amount. The premium itself, however, is not modelled (either as an employee or employer SSC) in Taxing Wages. Instead it is modelled as a non-tax compulsory payment from the employer to a public-managed health insurance fund. The spending of this fund mainly compensates private insurance companies for their (public) obligation to insure individuals with a high health risk. Taxpayers might obtain compensation for the nominal contribution to the private insurance company of on average EUR 1 064 in 2009, depending on the households personal situation and taxable income. This is called the health care benefit and is part of the NTCP (see Section 2.1).

In 2007, the tax system has not been changed, except for some parameter updates. In 2008, the child credit has been replaced by an extra child benefit.

In 2009 the general tax credit will be reduced for non-working spouses in order to cut down the capitalization of this tax credit in 2024. A non-working spouse can in 2024 capitalise 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).

In 2013 the income base for SSC and Income-Tax is harmonised. Standardising or harmonisation of the income tax base for levying SSC and Taxes is introduces in 2013 and is called the Law "WUL" i.e. Harmonising the income base for SSC and Taxes (see publication CPB the Netherlands). So the income tax base is since 2013 exclusive the income dependant health care contribution and employees will no longer have to pay taxes over income dependant health care contributions, instead they pay a higher tax rate in the first tax bracket and mainly Work credit is adjusted. The tax rate in the first tax bracket has been increased from 1.95% to 5.85% and the Work credit is reduced for employees with a higher income such that the effect of this harmonisation is budgetary neutral.

The main adjustment in 2014 is the General tax credit which is made income dependent. Higher income will receive less general credit and the reduction is 2% per euro of income between EURO 56 495 and EURO 19 645 per year. See also par 1.141.

In 2015 the child arrangements are reduced from 10 items to 4 items. For that reason Single parent credits have stopped. Cash transfers for parents with children and low income increase. And for single parents with children an extra cash benefit of EUR 3 050 is introduced to compensate the loss of single parent credits.

Not all child arrangements are part of the TW model because these are quite specific arrangements for disabled children and parents with low income with children.

- Long term health care is modernised. The SSC rate for (AWBZ Dutch) reduced with 3% to 9.65% of taxable income. The tax rates in the first two brackets are raised with 3% because Social spending is still used but now for other general social purposes.

In 2016, as part of a EUR 5 billion package of tax reductions on work, the general tax credit and the work credit were phased out fully, meaning that higher incomes no longer receive the general tax credit and the work credit.

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.

On the base of new information on wages per industry sector, the AW is delivered to EUROSTAT in November 2009 by the CBS for years 2006 and 2007. The standard classification NACE Rev. 1 for industrial sectors C-K is used.

The new classification NACE Revision 2 (sectors B-N) will be applicable as from 2008 onwards. The estimation of the AW for 2008 according to the new classification is applicable at the beginning of May 2010. The AW for 2009 is available since November 2010. For 2008 the average annual gross earnings (full-time NACE REV 2) comes to EUR 43 146, for 2009 EUR 44 412, and EUR 45 215 in 2010. The latest information according to Eurostat is an AW in 2011 of EUR 46 287 (NACE Rev 2)

No new data is found on EU site
http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

The average wages from 2012 onwards include the private and the public sectors, since values on the private sectors only (sectors B to N) are not available. The values were provided by Statistics Netherlands.

5.2. Main employers' contributions to private pension, health and related schemes

In addition to the obligatory contributions of employees to private insurance companies, all employers pay contributions to a public-managed health fund. More information is included in the Special Feature where the contributions to the public-managed health funds are also presented.

Employers have to pay at least 70% 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.

2018 Parameter values

Average earnings/yr	Ave_earn	51 567	Secretariat estimate
minimum wage	min_wage	20556	
Social security contributions	SSC_ceil	54614	
Employees' schemes	Unemp_rate1	0	
	Unemp_franchise1	0	
Medical care	Med_rate	0.069	
	Med_limit	999999	
	Med_ceil	54614	
	Med_adult	1312	
	Med_child	0	
	Med_compensation1	0.01990	
	Med_compensation2	0.13490	
	Med_compenation 3	0.04750	
	Med_compensation 4	0.13490	
	Med_key	20450.88	
	Med_adult for care benefit	1546	
General schemes	Old_rate	0.179	0.2765
	Wid_rate	0.001	
	Ex_med_rate	0,0965	0.2435
	Gen_Schemes_thrsh	33994	0.3231
	Unemp_empr1	0.0285	
	Unemp_empr2	0.0128	
	Unemp_unempr_franchise1	0	
	Unemp_unempr_franchise2	0	
	Inv_empr_rate	0.0799	
	Inv_empr_franchise	0	
	Med_empr	0.069	
	Med_franchise	0	
Payroll tax	Extra_wage_tax	0	
	EWT_threshold	0	
Tax schedule	Tax_sch	0.0890	20142
	"tax_sch_lowest"	0.132	33994
	"tax_thrsh_1"	0.4085	68507
	"tax_sch_2"	0.5195	
Tax credits	Gen_credit_1	2265	
	Gen_credit_2	0	
	Gen_credit1_thr	20142	
	Gen_credit2_thr	68507	
	Gen_credit_per	0.04683	
	Red_gen_credit	755	
	Emp_credit1	167	
	Emp_credit2	3082	3249
	Emp_credit3	0	
	Emp_credit1_thr	9468	
	Emp_credit2_thr	20450	
	Emp_credit3_thr	33112	
	Emp_credit4_thr	123362	
	Ch_credit	not applicable	
	Ch_credit_thr	not applicable	
	Ch_decline	not applicable	
	Ex_ch_credit	not applicable	
	Ex_ch_credit_thr	not applicable	

	add_ex_ch_credit	not applicable
	add_ex_ch_credit_thr	not applicable
	Comb_credit	0
	Comb_credit_franchise	4934
	add_comb_credit	0
	income_dependant_comb_credit1	1052
	income_dependant_comb_credit_max	2801
Family cash transfers	income_dependant_comb_par_credit_per	0.06159
	Sing_par_credit	0
	Ex_sing_par_credit_per	0
	Ex_sing_par_credit_max	0
	Ch1_trans	982
	Ch2_trans	1963.704
	Child_ben_1child	1152
	Child_ben_2children	2129
	Extra_cash_sing_par	3101
	Child_ben_redn	0.0675
	Child_ben_ceil	20450.88
Non-tax compulsory payments	dummyNTCP	
	NTCP_pension_ee	0
	NTCP_pension_er	0.0591
	NTCP_pension_franchise	0.1271
	NTCP_pension_max	13076

2018 Tax equations

The equations for the tax system in the Netherlands in 2018 are repeated for each individual of a married couple. Tax credits, except a part of the general credit of the spouse, depend also on the tax paid by the principal if the spouse's income is zero or very low, and the cash transfers are calculated only once. The functions which are used in the equations (Taper, MIN, Tax etc) are described in the technical note on the tax equations. Due to the adjustment of the work credit in 2016, the function Emp_credit(Value) was altered in 2016. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affix "_spouse" indicates the value for the spouse. No affix is used for the principal values. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings (gross)	gr_earn		
	Earnings (net)	earn	B	gr_earn
2.	Social security contributions	SSC_al	B	SSC_f(earn,Unemp_rate1,SSC_ceil,Unemp_franchise1)
3.	Credits in taxable income	taxbl_cr	B	MIN(earn-SSC_al, Med_ceil)*Med_rate
4.	CG taxable income	tax_inc	B	earn-SSC_al
5.	CG tax before credits	CG_tax_excl / tax_liable	B	Tax(tax_inc,Tax_sch)
6.	Tax credits	tax_cr	P	MIN(CG_tax_excl+SSC_taxinc,IF((tax_inc<Gen_credit1_thr),Gen_credit_1,(Gen_credit_1-MIN(Gen_credit_per*(Gen_credit2_thr-Gen_credit1_thr),Gen_credit_per*(tax_inc-Gen_credit1_thr))))+Emp_credit(tax_inc)+IF(AND(Children>0,tax_inc>Comb_credit_franchise),IF(Married='0,income_dependant_comb_credit1+MIN(income_dependant_comb_credit_max-income_dependant_comb_credit1,income_dependant_comb_par_credit_per*(tax_inc' - Comb_credit_franchise)),0)
		tax_cr_spouse	S	IF(Married>0,MIN(CG_tax_excl_spouse+SSC_taxinc_spouse+CG_tax_excl+SSC_taxinc-tax_cr,IF(tax_inc_spouse>0,IF((tax_inc_spouse<Gen_credit1_thr),Gen_credit_1,(Gen_credit_1-MIN(Gen_credit_per*(Gen_credit2_thr-Gen_credit1_thr),Gen_credit_per*(tax_inc_spouse-Gen_credit1_thr)))),Red_gen_credit)+Emp_credit(tax_inc_spouse)+IF(AND(Children>0,tax_inc_spouse>Comb_credit_franchise),income_dependant_comb_credit1+MIN(income_dependant_comb_credit_max-income_dependant_comb_credit1,income_dependant_comb_par_credit_per*(tax_inc_spouse - Comb_credit_franchise)),0)),0)
		tax_cr_inc	B	IF(tax_cr>Tax_thrsh_1*SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest),(tax_sch_2/SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_2))*(tax_cr-(SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*Tax_thrsh_1))+(tax_sch_lowest/SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest))*(Tax_thrsh_1*SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)),tax_sch_lowest/SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*tax_cr)
7.	CG tax	CG_tax	B	tax_liable-tax_cr_inc
8.	State and local taxes	local_tax	B	0

	Line in country table and intermediate steps	Variable name	Range	Equation
9.	Employees' soc security' based on earnings	SSC_earn	P	SSC_f(earn,Unemp_rate1,SSC_ceil,Unemp_franchise1)
		SSC_earn_spouse	S	SSC_f(earn_spouse,Unemp_rate1,SSC_ceil,Unemp_franchise1)
	Based on taxable income	SSC_taxinc	B	(Old_rate+Wid_rate+Ex_med_rate)*MINA(tax_inc,Gen_Schemes_thrsh)
	Total employees' soc security	SSC_liable	J	SSC_earn+SSC_taxinc+SSC_earn_spouse+SSC_taxinc_spouse
		tax_cr_SSC	B	IF(tax_cr>Tax_thrsh_1*SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest),((Old_rate+Wid_rate+Ex_med_rate)/SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_2))*(tax_cr-(SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*Tax_thrsh_1))+((Old_rate+Wid_rate+Ex_med_rate)/SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest))*(Tax_thrsh_1*SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)),SUM(Old_rate+Wid_rate+Ex_med_rate)/SUM(Old_rate+Wid_rate+Ex_med_rate+tax_sch_lowest)*tax_cr)
	Total	SSC	J	SSC_liable-tax_cr_SSC
10.	Total payments	total_payments	J	CG_tax+local_tax+SSC
11.	Cash transfers	cash_trans	J	IF(Children=1,Ch1_trans,IF(Children=2,Ch2_trans,0))+IF(Children=2;1;0)*MAX(0;(Child_ben_2children+IF(Married='0';1;0)*Extra_cash_sing_par-IF((tax)inc+tax_inc_spouse)>Child_ben_ceil;1;0)*' Child_ben_redn*(tax_inc+tax_inc_spouse – Child_ben_ceil)))
13.	Employer's soc security	SSC_empr	B	Function Emp_credit(Value) If Value <= 0 Then Emp_credit = 0 ElseIf Value <= Range("Emp_credit1_thr").Value Then Emp_credit = (Value / Range("Emp_credit1_thr").Value) * Range("Emp_credit1").Value ElseIf 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 ElseIf Value <= Range("Emp_credit3_thr").Value Then Emp_credit = Range("Emp_credit1").Value + Range("Emp_credit2").Value ElseIf 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 = 0 End If End Function

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
(2018-19 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 2018

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**		40 441	60 360	100 801	40 441
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)**		40 441	60 360	100 801	40 441
5.	**Central government income tax liability (exclusive of tax credits)**		6 097	11 128	24 184	6 097
6.	**Tax credits :**					
	Basic credit		520	0	0	0
	Married or head of family					
	Children					
	Other					
		Total	520	0	0	0
7.	**Central government income tax finally paid (5-6)**		5 577	11 128	24 184	6 097
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		0	0	0	0
	Taxable income					
		Total	0	0	0	0
10.	**Total payments to general government (7 + 8 + 9)**		5 577	11 128	24 184	6 097
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	14 393
		Total	0	0	0	14 393
12.	**Take-home pay (1-10+11)**		34 864	49 232	76 617	48 737
13.	**Employer's compulsory social security contributions**		0	0	0	0
14.	**Average rates**					
	Income tax		13.8%	18.4%	24.0%	15.1%
	Employees' social security contributions		0.0%	0.0%	0.0%	0.0%
	Total payments less cash transfers		13.8%	18.4%	24.0%	-20.5%
	Total tax wedge including employer's social security contributions		13.8%	18.4%	24.0%	-20.5%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		17.5%	30.0%	33.0%	17.5%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		17.5%	30.0%	33.0%	17.5%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

New Zealand 2018

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**	60 360	80 279	100 801	80 279
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)**	60 360	80 279	100 801	80 279
5.	**Central government income tax liability (exclusive of tax credits)**	11 128	13 634	17 225	13 634
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)**	11 128	13 634	17 225	13 634
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings				
	Taxable income				
	Total	0	0	0	0
10.	**Total payments to general government (7 + 8 + 9)**	11 128	13 634	17 225	13 634
11.	**Cash transfers from general government**				
	For head of family				
	For two children	9 978	4 998	0	0
	Total	9 978	4 998	0	0
12.	**Take-home pay (1-10+11)**	59 210	71 643	83 576	66 645
13.	**Employer's compulsory social security contributions**	0	0	0	0
14.	**Average rates**				
	Income tax	18.4%	17.0%	17.1%	17.0%
	Employees' social security contributions	0.0%	0.0%	0.0%	0.0%
	Total payments less cash transfers	1.9%	10.8%	17.1%	17.0%
	Total tax wedge including employer's social security contributions	1.9%	10.8%	17.1%	17.0%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	55.0%	55.0%	30.0%	30.0%
	Total payments less cash transfers: Spouse	37.6%	42.5%	17.5%	17.5%
	Total tax wedge: Principal earner	55.0%	55.0%	30.0%	30.0%
	Total tax wedge: Spouse	37.6%	42.5%	17.5%	17.5%

The national currency is the New Zealand dollar (NZD). In 2018, NZD 1.45 was equal to USD 1. In that year the average worker earned NZD 60 360 (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

None.

1.1.2.2. Main non-standard tax reliefs applicable to an average wage

None.

1.1.3. Schedule

- Rates of income tax for individuals:
  - On so much of the income as does not exceed NZD 14 000: 10.5%;
  - On so much of the income as exceeds NZD 14 000 but does not exceed NZD 48 000: 17.5%;
  - On so much of the income as exceeds NZD 48 000 but does not exceed NZD 70 000: 30%;
  - On so much of the income as exceeds NZD 70 000: 33%.

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 1.21% 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 0.72%). 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

For all families with children born, or due to be born, on or after 1 July 2018, the Best Start payment provides NZD 60 per week (3 120 per year) for the first year of the child's life. The Best Start payment continues to provide NZD 3 120 per year for the second and third year of a child's life, but abates at 21.00 cents in the dollar for every dollar by which a family's income exceeds the abatement threshold of NZD 79 000. For families receiving paid parental leave, the Best Start payment begins after paid parental leave ends.

For families with children born prior to 1 July 2018, the Parental Tax Credit provides NZD 220 per week for the first ten weeks of each child's life. The credit abates at 22.50 cents in the dollar for every dollar by which a family's income exceeds the abatement threshold (NZD 36,350) for payments received prior to 1 July 2018. For payments received from 1 July 2018, the credit abates at 25.00 cents in the dollar for every dollar by which a family's income exceeds the abatement threshold of NZD 42 700. The payment starts to abate once any Family Tax Credit and In Work Tax Credit has abated to zero. The abatement is based on the combined income of the parents. Instead of Parental Tax Credits some primary carers can qualify for paid parental leave. Paid parental leave is paid directly to the carer and is treated as normal taxable income.

3.3. Family Tax Credit

From 1 July 2018, for an eldest child, the rate of the Family Tax Credit is NZD 5 878 per year. For subsequent children the rate is NZD 4 745. The total credit is abated by 25.00 cents on each dollar earned over NZD 42 700. The abatement is based on the combined income of the parents.

From 1 April 2018 to 30 June 2018, for an eldest child aged 16-18, the rate of the Family Tax Credit is NZD 5 303 per year, while the rate of NZD 4 822 applies if the eldest child is younger than 16. For subsequent children the rate depends on the age of the child; NZD 4 745 per year for 16-18 year-olds, NZD 3 822 per year for 13-15 year-olds and NZD 3 351 per year for children under 13 years of age. The total credit is abated by 22.50 cents on each dollar earned over NZD 36 350. 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 3 770 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 26 156 per year plus the Family Tax Credit and In Work Tax Credit.

3.6. Independent Earner Tax Credit

The Independent Earner Tax Credit of NZD 520 is available to individuals with annual net income between NZD 24 000 and NZD 48 000 that do not receive other forms of tax credits or benefits. It is abated by 13 cents on each dollar earned over NZD 44 000.

4. Main Changes in Tax/Benefit Systems Over 2018/19

No changes in tax/benefit systems over 2017/18.

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 B-N industry groups. The annual earnings figure for the average worker is the sum of the four quarterly earnings figures, with each quarterly figure calculated by taking the average total weekly earnings and multiplying it by 13 weeks per quarter.

5.2. Employer's contributions to private pension, health schemes, etc.

No information available.

2018 Parameter values

		Ave_earn	60 360	Country estimate
Income tax schedule	Tax_sch		0.105	14 000
			0.175	48 000
			0.3	70 000
			0.33	
Family tax credit	Fam_sup_eld		5 878	
	Fam_sup_oth		4 745	
	Fam_sup_thrsh		42 700	
	Fam_sup_rate		0.25	
In-work tax credit	In_work_children123		3 770	
	In_work_children4plus		780	
Minimum Family Tax Credit	Min_inc		26 156	
Independent Earner Tax Credit	IETC		520	
	IETC_thrsh1		24 000	
	IETC_thrsh2		44 000	
	IETC_rate		0.13	

2018 Tax equations

The equations for the New Zealand system in 2018 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
	Independent Earner Tax Credit	IETC_rebate	B	=AND(Children=0,earn>IETC_thrsh1)*Taper(IETC,earn,IETC_thrsh2,IETC_rate)
6.	Tax credits:	tax_cr	B	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:			
	Family tax credit (unabated)	fam_tax_cr	J	Fam_sup_eld*(Children>0)+ Fam_sup_oth*Positive(Children-1)
	In-work tax credit (unabated)	in_work_tax_cr	J	(Children>0)*(In_work_children123+Positive(Children-3)*In_work_children4plus)
	Tax credits abated	tax_cr_ab	J	Taper(fam_tax_cr+in_work_tax_cr, earn_total, Fam_sup_thrsh1, Fam_sup_rate1)
	Minimum Family tax credit	min_fam_tax_cr	J	Positive(GMI-(earn_total-CG_tax_excl_totall))
	Cash transfers	cash_trans	J	tax_cr_ab + min_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 2018

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**		399 639	596 477	996 116	399 639
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	152 360	152 360	152 360	204 164
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable (ordinary) income (1 - 2 + 3)**		247 279	444 117	843 756	195 475
5.	**Central government income tax liability (ordinary + personal)**		27 444	50 770	135 373	23 015
6.	**Tax credits (applicable against local tax)**					
	Basic credit					
	Married or head of family					
	Children		0	0	0	0
	Other					
		Total	0	0	0	0
7.	**Central government income tax finally paid (5-6)**		27 444	50 770	135 373	23 015
8.	**State and local taxes (net of tax credits)**		35 732	64 175	121 923	28 246
9.	**Employees' compulsory social security contributions**					
	Gross earnings		32 770	48 911	81 681	32 770
	Taxable income					
		Total	32 770	48 911	81 681	32 770
10.	**Total payments to general government (7 + 8 + 9)**		95 947	163 856	338 977	84 032
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	34 920
		Total	0	0	0	34 920
12.	**Take-home pay (1-10+11)**		303 693	432 621	657 139	350 528
13.	**Employer's compulsory social security contributions**		51 953	77 542	129 495	51 953
14.	**Average rates**					
	Income tax		15.8%	19.3%	25.8%	12.8%
	Employees' social security contributions		8.2%	8.2%	8.2%	8.2%
	Total payments less cash transfers		24.0%	27.5%	34.0%	12.3%
	Total tax wedge including employer's social security contributions		32.8%	35.8%	41.6%	22.4%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		34.5%	34.5%	46.6%	34.5%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		42.0%	42.0%	52.7%	42.0%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Norway 2018

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**		596 477	793 314	996 116	793 314
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	152 360	295 687	304 720	295 687
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable (ordinary) income (1 - 2 + 3)**		444 117	497 627	691 396	497 627
5.	**Central government income tax liability (ordinary + personal)**		50 770	55 734	78 214	55 734
6.	**Tax credits (applicable against local tax)**					
	Basic credit					
	Married or head of family					
	Children		0	0	0	0
	Other					
		Total	0	0	0	0
7.	**Central government income tax finally paid (5-6)**		50 770	55 734	78 214	55 734
8.	**State and local taxes (net of tax credits)**		64 175	71 907	99 907	71 907
9.	**Employees' compulsory social security contributions**					
	Gross earnings		48 911	65 052	81 681	65 052
	Taxable income					
		Total	48 911	65 052	81 681	65 052
10.	**Total payments to general government (7 + 8 + 9)**		163 856	192 693	259 802	192 693
11.	**Cash transfers from general government**					
	For head of family					
	For two children		23 280	23 280	23 280	0
		Total	23 280	23 280	23 280	0
12.	**Take-home pay (1-10+11)**		455 901	623 900	759 594	600 620
13.	**Employer's compulsory social security contributions**		77 542	103 131	129 495	103 131
14.	**Average rates**					
	Income tax		19.3%	16.1%	17.9%	16.1%
	Employees' social security contributions		8.2%	8.2%	8.2%	8.2%
	Total payments less cash transfers		23.6%	21.4%	23.7%	24.3%
	Total tax wedge including employer's social security contributions		32.4%	30.4%	32.5%	33.0%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		34.5%	34.5%	34.5%	34.5%
	Total payments less cash transfers: Spouse		14.7%	22.3%	34.5%	22.3%
	Total tax wedge: Principal earner		42.0%	42.0%	42.0%	42.0%
	Total tax wedge: Spouse		24.5%	31.2%	42.0%	31.2%

The national currency is the Kroner (NOK). In 2018, NOK 8.13 was equal to 1 USD. In that year the average worker earned NOK 596 477 (2018 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. 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 bracket tax. The tax base is personal income from which no deductions are allowed. As part of the overall tax rate of 24% on ordinary income, 9.55% is considered to be the central government income tax.

1.1.3. Rate schedule of the bracket tax

Rate (%)	NOK
0	0-169 000
1,4	169 000-237 900
3,3	237 900–598 050
12,4	598 050–962 050
15,4	962 050 and over

1.2. Local government income tax

The overall tax rate on ordinary income is 23%. The local government (municipal and county) income tax is 14.45% points of the overall rate. Tax on ordinary income is levied after taking into account a standard allowance of NOK 54 750 (class 1), while class 2 was abolished in 2018. Single parents are eligible to an additional special tax allowance of NOK 51 804. The deductions in the computation of ordinary income are:

1.2.1. Standard reliefs

- Basic allowance: each individual receives a minimum allowance equal to 45% of personal income, with a minimum of NOK 4 000 and a maximum of NOK 97 610. For wage income each individual can choose a separate allowance of NO-K 31 800 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 25 000 for one child
  - plus NOK 15 000 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 22 350;
- Labour union fees up to NOK 3 850;
- Donations to voluntary organisations up to NOK 40 000;
- Contributions to individual pension agreement schemes, maximum NOK 15 000;
- 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% of annual savings up to NOK 25 000 in special accounts is granted. Total savings may not exceed NOK 300 000.

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 8.2% of personal wage income. Employees do not make contributions if their wage income is less than NOK 54 650. Once wage income exceeds this floor, an alternative calculation is made where the contributions equal 25% of the wage income in excess of the floor. The actual contributions made would represent the minimum between the alternative calculation and 8.2% of the total wage income.

Contributions from the self-employed are 11.4% of personal income attributable to labour.

2.1.2. Employers' contributions

Employer's social security contributions are due for all employees in both the private and the public sector. The contribution is geographically differentiated according to the municipality where the work-place is. The standard rates are 14.1%, 10.6%, 7.9%, 6.4%, 5.1% or 0% of gross wages. The highest rate applies to central parts of southern Norway. Lower rates may apply under certain circumstances. The weighted average rate is approximately 13%.

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 11 640 per child aged 0-18 years.

Single parents receive transfers for one more child than their actual number of children.

4. Main Changes in Tax/Benefit Systems Since 2002

- Most important changes related to wage taxation in 2018:
  - The general tax rate on ordinary income was reduced from 24% to 23%.
  - The progressive bracket tax increased in all four brackets, less than the reduction in the rate of ordinary income so as the marginal tax was reduced at all income levels.
  - The upper limit of the basic allowance for wage income/social security benefits was increased by NOK 2 860 and the rate was increased to 44%.
  - The standard allowance for class 2 was abolished, tax exemptions for employees on hire in shipping vessels was abolished, and the rules for commuters expenses were tighten.
- Most important changes related to wage taxation in 2017:
  - The general tax rate on ordinary income was reduced from 25% to 24%.
  - The rates under the bracket tax was increased with 0,71-0,82 percentage points, which is less than the reduction in the rate of ordinary income.
  - The upper limit of the basic allowance for wage income/social security benefits was increased by NOK 3 300 and the rate was increased to 44%.
  - The lower threshold for the payment of employee's social security contributions was increased from NOK 49 650 to NOK 54 650.
- Most important changes related to wage taxation in 2016:
  - The general tax rate on ordinary income was reduced from 27% to 25%.
  - A bracket tax with on personal income with 4 tax brackets was introduced and replaced the former surtax on personal income.
- Most important changes related to wage taxation in 2015:
  - The threshold in surtax bracket 1 was increased by NOK 5 750.
  - The upper limit of the basic allowance for wage income/social security benefits was increased by NOK 2 100.
  - The lower threshold for the payment of employee's social security contributions was increased from NOK 39 600 to NOK 49 650.
- Most important changes related to wage taxation in 2014:
  - The general tax rate on ordinary income was reduced from 28% to 27%.
  - The employee's social security contributions were increased by 0.4 percentage points.
  - The rate in the basic allowance against wage income was increased to 43%.
  - Tax class 2 for married couples was reduced.
- Most important changes in 2013:

  - The personal allowance for labour income was increased for low income earners (below NOK 213 950) by 2 percentage points from 38% to 40% of their labour income.
  - The taxable value of second homes and commercial property for the purposes of net wealth tax was increased from 40% to 50% of estimated market value.
  - The basic allowance in the net wealth tax was increased from NOK 750 000 to NOK 870 000. Married couples will thus have a total basic allowance of NOK 1 740 000.
  - The current class 2 for sole providers was replaced by a special allowance for ordinary income which provides an equivalent tax benefit.
  - The maximum deduction for labour union fees was increased from NOK 3 750 to NOK 3 850.
- Most important changes in 2012:
  - The personal allowance for labour income was increased for low income earners (below NOK 217 000) by 2 percentage points from 36% to 38% of their labour income.
  - For self-employed the wage allowance was abolished to eliminate residual discrimination between sole proprietorships with employees and limited companies.
  - In the deduction for travel expenses for travels between home and work the deduction rate per kilometre was increased for tax payers travelling between 35 000 km and 50 000 km per year.
  - The maximum deduction for labour union fees was increased by NOK 90 to NOK 3 750.
- In 2011 changes to the tax system was made to provide better incentives for people to work when drawing a pension. The tax limitation rule for early-retirement and old-age pensioners was replaced by a new tax allowance for pension income. The allowance ensures that people who only receive the minimum pension will continue not to pay income tax. The allowance is scaled down against pension income, so that the marginal tax on earned income is reduced to the same level as for wage earners. The marginal tax on capital for low-income pensioners is also reduced to the same level as for other taxpayers. The new tax allowance is determined regardless of the spouse's income and married early-retirement and old-age pensioners will each have their own allowance. In addition, the pension income social security contribution is increased and the special allowance for age is discontinued.
- In 2010 a new formula-based system for determining the tax-assessed value of homes was introduced. The new tax-assessed value will be determined by multiplying the floor space of the dwelling by a square metre price based on the geographical location (neighbourhood, municipality, sparsely populated vs. densely populated area), size, age and type (detached, semi-detached, terraced, flat) of the property. For primary homes (owner-occupied), the per square metre rate will be set at 25% of the estimated sale price per square metre, whereas the rate for second homes, i.e. any other dwellings in addition to the primary home that are not defined as business or recreational properties, will be set at 40% of the estimated sale price per square metre. The current "safety valve" system is being continued so that taxpayers can appeal and have the tax-assessed value reduced to 30% of the documented fair market value (60% for second homes). In addition, the tax-assessed values of recreational properties are increased by 10%.

- Most important changes in 2009 were the abolition of the 80% 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% rule has been more than doubled since 2005.
- The home savings scheme (BSU) was expanded in 2009 by increasing the annual savings amount to NOK 20 000 and the maximum aggregate savings amount to NOK 150 000.
- The rates of the inheritance tax were reduced and the exempted amount was increased in 2009. The instalment scheme for family businesses was expanded through the abolition of the upper limit, and the payment period was increased from 7 to 12 years.
- Other changes in the personal tax base in 2009:
  - The fishermen's allowance was increased from NOK 115 000 to NOK 150 000.
  - The reindeer husbandry allowance was increased to the same level as the agriculture allowance.
  - The allowance for labour union fees was increased by NOK 450 to NOK 3 600.
  - The rate of the travel allowance was increased from NOK 1.40 per km to NOK 1.50 per km.
- The tax-free net income thresholds under the tax limitation rule were increased such as to ensure that singles and couples who receive the minimum state pension will still not be paying tax following the favourable social security settlement they benefited from in 2008.
- A tax favoured contributions to individual pension agreement schemes was reintroduced as of 2008.
- From 1 January 2008 the employees' SSC rate for self-employed was increased from 10.7% to 11.0%.
- 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% for gross wage income that exceeds 16 times "G" (average "G" is estimated to be NOK 74 721 in 2010) was removed.
- From 1 January 2006 the class 2 in the surtax was removed.
- From 1 January 2005 the ceiling in the parent allowance for two and more children was removed, and the maximum allowance was increased with NOK 5 000 for each child after the first. From 2008 the maximum allowance will be increased with NOK 15 000 for each child after the first.
- The additional child support of NOK 7 884 for children aged 1 and 2 years was abolished as of August 1, 2003.
- An allowance of maximum NOK 6 000 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 12 000 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 0%. From 2007 the reduction was abolished.

5. Memorandum Items

5.1. Identification of an AW and calculation of earnings

The wage series used refers to full time employees in the B-N industry group (ISIC rev.4).

The calculation of annual wage earnings is as follows:

- Weighted average monthly wage plus overtime times 12.

The average monthly wage is agreed payment for a wage earner working a normal agreed working-year. It includes bonus payments and other allowances, but not payments for overtime, sick leave, and an establishment's indirect wage costs. The sum is weighted with the number of persons employed in the different industry groups.

5.2. Employers' contributions to private health and pension schemes

No information available.

2018 Parameter values

Average earnings/yr	Ave_earn	596 477	Secretariat estimate
Central rate (pers)	Tax1_sch	0	169 000
class 1		0.014	237 900
		0.033	598 050
		0.124	962 050
		0.154	
class 2	Tax2_sch	0.000	169 000
		0.014	237 900
		0.033	598 050
		0.124	962 050
		0.154	
Central rate (ord)	Cent_rate_ord	0.0855	
Local rate (ord)	Local_rate	0.1445	
Allowances	Class_al_1	54 750	
	Class_al_2	abolished	
	Special_al	51 804	
Basic relief	Basic_min	4 000	
	Basic_max	97 610	
	Basic_rel_rate	0.45	
	Basic_min_wage	31 800	
Soc security contribs	SSC_rate	0.082	
Employer	SSC_empr	0.13	
Trygd. low.lim	SSC_low_lim	54 650	
pct.rate	SSC_low_rate	0.25	
Ref. Income "G"	SSC_G	95 800	
"G" Multiple	SSC_Gmult	16	
Supplemental Rate	SSC_rate_sup	0	
Child cash transfer	Child_sup	11 640	

2018 Tax equations

The equations for the system for Norway in 2018 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 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+IF(AND(Married='0,Children>0),Special_al,o),' 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_p, Tax2_sch)+ Tax(earn_s, 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 2018

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**	36 308	54 191	90 499	36 308
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	4 978	7 430	12 407	4 978
	Work-related expenses	1 335	1 335	1 335	1 335
	Other				
	Total	6 313	8 765	13 742	6 313
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	29 995	45 427	76 757	29 995
5.	**Central government income tax liability (exclusive of tax credits)**	5 399	8 177	13 816	5 399
6.	**Tax credits**				
	Basic credit	556	556	556	1 112
	Married or head of family				
	Children	0	0	0	2 224
	Other (health insurance)	2 428	3 624	6 052	2 428
	Total	2 984	4 180	6 608	5 764
7.	**Central government income tax finally paid (5-6)**	2 415	3 997	7 208	- 365
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	3 653	5 452	9 104	3 653
	Taxable income	2 820	4 209	7 028	2 820
	Total	6 472	9 660	16 132	6 472
10.	**Total payments to general government (7 + 8 + 9)**	8 887	13 657	23 340	6 107
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	17 131
	Total	0	0	0	17 131
12.	**Take-home pay (1-10+11)**	27 421	40 534	67 159	47 332
13.	**Employers' compulsory social security contributions**	5 962	8 898	14 860	5 962
14.	**Average rates**				
	Income tax	6.7%	7.4%	8.0%	-1.0%
	Employees' social security contributions	17.8%	17.8%	17.8%	17.8%
	Total payments less cash transfers	24.5%	25.2%	25.8%	-30.4%
	Total tax wedge including employer's social security contributions	35.1%	35.8%	36.3%	-12.0%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	26.7%	26.7%	26.7%	96.3%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	37.0%	37.0%	37.0%	96.9%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Poland 2018

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**		54 191	72 074	90 499	72 074
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes		7 430	9 881	12 407	9 881
	Work-related expenses		1 335	2 670	2 670	2 670
	Other					
		Total	8 765	12 551	15 077	12 551
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		45 427	59 523	75 422	59 523
5.	**Central government income tax liability (exclusive of tax credits)**		8 177	10 714	13 576	10 714
6.	**Tax credits**					
	Basic credit		1 112	1 112	1 112	1 112
	Married or head of family					
	Children		2 224	2 224	2 224	0
	Other (health insurance)		3 624	4 820	6 052	4 820
		Total	6 960	8 156	9 388	5 932
7.	**Central government income tax finally paid (5-6)**		1 217	2 558	4 188	4 782
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		5 452	7 251	9 104	7 251
	Taxable income		4 209	5 597	7 028	5 597
		Total	9 660	12 848	16 132	12 848
10.	**Total payments to general government (7 + 8 + 9)**		10 877	15 406	20 320	17 630
11.	**Cash transfers from general government**					
	For head of family					
	For two children		6 600	6 600	6 600	0
		Total	6 600	6 600	6 600	0
12.	**Take-home pay (1-10+11)**		49 915	63 268	76 779	54 444
13.	**Employers' compulsory social security contributions**		8 898	11 834	14 860	11 834
14.	**Average rates**					
	Income tax		2.2%	3.5%	4.6%	6.6%
	Employees' social security contributions		17.8%	17.8%	17.8%	17.8%
	Total payments less cash transfers		7.9%	12.2%	15.2%	24.5%
	Total tax wedge including employer's social security contributions		20.9%	24.6%	27.1%	35.1%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		26.7%	26.7%	26.7%	26.7%
	Total payments less cash transfers: Spouse		25.3%	26.7%	26.7%	26.7%
	Total tax wedge: Principal earner		37.0%	37.0%	37.0%	37.0%
	Total tax wedge: Spouse		35.9%	37.0%	37.0%	37.0%

The national currency is the Zloty (PLN). In 2018, PLN 3.61 was equal to USD 1. In that year, the average worker earned PLN 54 191 (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[22] 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% rate. Single individuals with dependent children are also entitled to use the splitting system (their family quotient is two). For the purpose of this report, it is assumed that married couples are taxed on joint income.

1.1.1.1. Tax base

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:[23]
  – PLN 1 440 – for the tax base not higher than PLN 8 000;
  – PLN 1 440 minus the amount resulting from the following formula: PLN 883.98 × (tax base PLN 8 000) ÷ PLN 5 000, for the tax base higher than PLN 8 000 and not higher than PLN 13 000;
  – PLN 556.02 - for the tax base higher than PLN 13 000 and not higher than PLN 85 528;
  – PLN 556.02 minus the amount resulting from the following formula: PLN 556.02 × (tax base– PLN 85 528) ÷ PLN 41 472, for the tax base higher than PLN 85 528 and not higher than PLN 127 000

[22] However, a widowed spouse is entitled to apply the joint income taxation.

[23] Applicable only in a tax return.

- Marital status relief: None.
- Relief for children: Yes[24].

A taxpayer can deduct from the due tax decreased by the amount of health contributions specified in the PIT Act, the amount, which is equal for each month of raising a child:

- PLN 92.67 (annually PLN 1 112.04) for the first child, if the income received by parents (married or single parent, who meets special requirements) doesn't exceed in the tax year the amount of PLN 112 000. For other parent the threshold of income is PLN 56 000;
- PLN 92.67 (annually PLN 1 112.04) for the second child;
- PLN 166.67 (annually PLN 2 000.04) for the third child;
- PLN 225.00 (annually PLN 2 700.00) for the fourth and every next child.

Since 1st of January 2015 taxpayers whose due tax is lower than the amount of relief for children, may claim for cash refund for amount of relief which has not been utilized. However, such cash refund cannot exceed the amount of deductible social security and health insurance contributions paid by taxpayer (with some exceptions).

- 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% of the calculation basis whereas the tax credit is 7.75% 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 place of residence	1 335.00[25]	2 002.05
Workplace in different town/city as place of residence	1 668.72	2 502.56

Note: If the actual commuting expenses exceed standard deduction, relief can be determined by the actual expenses incurred solely on personal season tickets.

1.1.2.2. 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% of income;
- Donations made for charity church care - in the amount of the donation;

[24] 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 irrespective of their age. The actual description in section 4.

[25] For the purpose of the calculations in this publication, it is assumed that the worker has the same town/city as place of residence.

- Expenses incurred for the use of the Internet – a taxpayer is entitled to deduct the Internet tax allowance within the next two years, providing that during the phase preceded this period he did not deduct expenses for the use of the Internet (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 325 990 for investments finished in 2017.

Tax credits:

- Donation made to public benefit organizations – up to 1% of due tax.[26]
- 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		less a basic tax credit
0	85 528	18% of the tax base,	
85 528		PLN 15 395.04+ 32% of surplus over PLN 85 528	

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% of the gross wage. This contribution includes:

- Pension insurance contribution – 9.76% of the gross wage[27].3.65 percentage points of the pension contribution are treated as non-tax compulsory payments because these payments are either made to the OPF (1.46%) and to personal sub-account in ZUS (2.19%) or only to sub-account in ZUS (3.65%).Disability insurance contribution – 1.5% of the gross wage,
- Sickness/maternity insurance contribution – 2.45% of the gross wage,

[26] This relief is distinct from an allowance for donations deducted from income.

[27] Since July 2014 out of total 19.52% of social contributions 7.3% goes to subaccount in ZUS either – if voluntarily stated by insured person – 2.92% goes to account in open ended funds and 4.38% to subaccount in ZUS.

- In case of pension and disability insurance, contributions are not paid on the part of the wage that exceeds PLN 133 290.[28]

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 20.07% of gross wage. This value consists of:

- 9.76 percentage points are aimed for pension insurance[29]. 3.65 percentage points of the pension contribution are treated as non-tax compulsory payments because these payments are either made to the OPF (1.46%) and to personal sub-account in ZUS (2.19%) or only to sub-account in ZUS (3.65%).
- 6.5 percentage points are aimed for disability insurance,
- 3.81 percentage points are aimed for other insurances i.e. 1.26 percentage points (on average) accident insurance, 2.45 percentage points for Labour Found and 0.1 percentage points for the Guaranteed Employee Benefit Fund.
- In case of pension and disability insurance, contributions are not paid on the part of the wage that exceeds PLN 133 290.

3. Universal Cash Transfers

3.1. Transfers related to marital status

None.

3.2. Transfers for dependent children

From 1st of November 2012 families where the average monthly income per household member for the previous period is no greater than PLN 539 or PLN 623 when there are one or more disabled children in the household) are entitled to family allowances. From 1st of November 2015 the income criteria will be as high as PLN 674 and PLN 764. Families receive PLN 89 (from 1st of November 2016 – PLN 95) monthly for a child no older than 5 years, PLN 118 (from 1st of November 2016 – PLN 124) monthly for a child of 5 up to 18 years old, and PLN 129 (from 1st of November 2016 – PLN 135) monthly for a child of 18 up to 24 years old. The calculations in this Report are based on the assumption that the children are aged between 5 and 11 years inclusive.

Single parents are entitled to a supplement of PLN 185 (from 1st of November 2016 – PLN 193) for each child up to a maximum of PLN 370 (from 1st of November 2016 – PLN 386) for all children (and PLN 265 (from 1st of November 2016 – PLN 273) for a disabled child up to a maximum of PLN 530 (from 1st of November 2016 – PLN 546) for all children).

[28] The contribution ceiling of pension and disability insurance funds for a given calendar year may not exceed thirty times the amount of the projected average monthly remuneration in the national economy for that year, as set forth in the Budgetary Act.

[29] Since July 2014 out of total 19.52% of social contributions 7.3% goes to subaccount in ZUS either – if voluntarily stated by insured person – 2.92% goes to account in open ended funds and 4.38% to subaccount in ZUS.

There are several supplements to family allowances:

- for large families – PLN 90 (from 1st of November 2016 – PLN 95) monthly for the 3rd and next children in the family;
- for education of disabled children – PLN 80 (from 1st of November 2016 – PLN 90) monthly for children not older than 5 years and PLN 100 (from 1st of November 2016 – PLN 110) for children older than 5 years.

Parental benefit

On 1 January 2016 a parental benefit was introduced, aside from the already existing family and care benefits. The parental benefit is provided to families to which a child is born but whose members had not been eligible to a parental or maternity leave: students, the unemployed (regardless of registration with a labour office), people employed on the basis of civil law contracts, employees and people pursuing non-agricultural economic activity if they are not collecting maternity benefit. The parental benefit is granted regardless of income in the amount of PLN 1 000 a month for 52 weeks (after giving birth to one child in one labour), 65 weeks (after giving birth to two children in one labour), 67 weeks (after giving birth to three or four children in one labour) and for 71 weeks (after giving birth to five or more children in one labour).

Family 500 Plus Programme

Financial support for families with children

1 April 2016 (Act on state support for upbringing children entered into force 1 April 2016)

The Act on state support for upbringing children introduced new benefits- in amount of 500 PLN monthly per child until the child turns 18, which would be means-tested for the first child and available for all families for every additional child. The new benefit of PLN 500 a month (untaxed) is available for parents, actual guardian or legal guardian of a child until the child turns 18. The benefit will also be paid for the second child and any subsequent child without application of any income criteria. It will be paid for the first child if income of the family per one member does not exceed PLN 800 a month (PLN 1,200 if there is a disabled child in the family)[30]. Eligibility to this benefit is established for a year (from 1 October to 30 September).

Good Start Programme

Since 2018 a new benefit of 300 PLN was introduced. Every child that is attending school until it turns 20 is eligible for this benefit which is paid once a year at the start of the school year. There is no income test.

[30] Some of the features (namely, joint taxation and child tax credit) of the Polish tax system are optional and therefore can influence eligibility to "500+" family, and in a consequence tax wedge, in a non-linear way. As they both determine "net income for income test" and because of no tapering of "500+" sometimes it may be preferable not to use joint taxation or child tax credit (or to use it partially) in order to get the most appropriate net income to maximize the family benefit payments. As for now model treats both joint taxation and child tax credit as obligatory. With the parameters in the excel file (average wage etc.) it does not alter the results. However, if any of the parameters change, the previous statement may not hold.

4. Main Changes in Tax/benefit Systems Since 2012

Since January 2017, the tax schedule has been changed by introduction of degressive basic tax credit. The work-related expenses, tax allowances, relieves are the same as in previous years.

Since 2012 there were also changes in Social Security Contribution. Since February 2014, 14.96% of the old-age insurance contribution (2.92 percentage points) are transferred by ZUS to a privately-managed fund (OPF) but since July 2014 this part of contribution will be transferred only if insured persons decides to – otherwise all 7.3 percentage points of the contributions will be passed to subaccount in ZUS.

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.

2018 Parameter values

Average earnings/yr	Ave_earn	54 191	Secretariat Estimate
Work expenses	work_exp	1 335.00[31]	
Income tax schedule	tax_sch		
		0.18	85 528
		0.32	
Tax credits			
Basic credit	basic_cr1	1440	
	basic_cr2	556.02	
	basic_cr_lim1	8000	
	basic_cr_lim2	13000	
	basic_cr_lim3	85528	
	basic_cr_lim4	127000	
	red_rate_1	0.176796	
	red_rate_2	0.013407118	
Health insurance	health_ins	0.09	
	health_ins_credit	0.0775	
Children	Child_cr	1 112.04	
	Child_cr_lim	112 000	
Social security contributions			
Employers	SSC_empr	0.2007	
old-age pension and disability pension insurance	SSC_old	0,0976	
	SSC_old_ZUS	0.061176	
	SSC_old_ZUSII	0.0365	
	SSC_old_OPF	0	
	SSC_dis	0.065	
other insurances	SSC_a	0.0381	
Employees	SSC	0.1371	
old-age pension and disability pension insurance	SSC_old_e	0.0976	
	SSC_old_e_ZUS	0.0611	
	SSC_old_e_ZUSII	0.0365	
	SSC_old_e_OPF	0	
	SSC_dis_e	0.015	
sickness insurance	SSC_s	0.0245	
Contribution ceiling	SSC_c	133 290	
Family benefit	fam_ben	1 488	
single parent additional family benefit	fam_ben_Spsup	193	
single parent additional family benefit ceiling	fam_ben_Spsup_lim	386	
income limit	fam_ben_lim	8 088	
income limit for single parent	fam_ben_lim_sp	8 088	
Family 500 Plus Programme	plus_ben	6000	
	plus_ben_lim	9600	
“Good start” benefit	gs_ben	300	

31 Lump-sum annual work expenses for an employee having one workplace and living in the place (town, city) where the workplace is; employees living outside the city (town) where their workplace is may deduct 1668,72 PLN annually.

2018 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% of Central Government tax and is also allowed as a deduction when calculating taxable income. Variable names are defined in the table of parameters above, within the equations table, or are the standard variables "married" and "children". A reference to a variable with the affix "_total" indicates the sum of the relevant variable values for the principal and spouse. And the affixes "_princ" and "_spouse" indicate the value for the principal and spouse, respectively. Equations for a single person are as shown for the principal, with "_spouse" values taken as 0.

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
	Quotient for tax calculation	quotient	J	1+MAX(Married,(Children>0))
2.	Allowances:	tax_al	J	work_exp+MIN(earn_spouse,work_exp)+SSC+SSC_old_e_OPF*MIN(earn, SSC_c)
3.	Credits in taxable income	taxbl_cr	J	0
4.	CG taxable income	tax_inc	J	Positive(earn-tax_al)
5.	CG tax before credits	CG_tax_excl	J	quotient*Tax(tax_inc/quotient,tax_sch)
6.	Tax credits :			
	Basic credit	basic_cr	J	Positive(IF(tax_inc>basic_cr_lim1,basic_cr1-(Positive(MIN(tax_inc,basic_cr_lim2)-basic_cr_lim1)*red_rate_1)-(Positive(tax_inc-basic_cr_lim3)*red_rate_2),basic_cr1))*quotient
	Health insurance	health_ins_cr	B	health_ins_credit*(earn-SSC-SSC_old_e_OPF*MIN(earn, SSC_c))
	Child credit	child_cr	J	If(earn_total<Child_cr_lim,children*child_cr,0)
	Total tax credits	tax_cr	J	basic_cr+health_ins_cr+child_cr
7.	CG tax	CG_tax	J	MAX(0,Positive(CG_tax_excl-basic_cr-health_ins)-child_cr)-(child_cr>Positive(CG_tax_excl-basic_cr-health_ins))*MIN(SSC_al+health_ins,child_cr-Positive(CG_tax_excl-basic_cr-health_ins))
8.	State and local taxes	local_tax	J	0
9.	Employees' soc security	health_ins	B	(earn-(MIN(earn, SSC_c)*(SSC_old_e+SSC_dis_e)+earn*SSC_s))*health_ins
.		SSC	B	(SSC_old_e_ZUS+SSC_dis_e)*MIN(earn,SSC_c)+SSC_s*earn
11.	Cash transfers	cash_tran	J	='MAX(0,(fam_net_inc<fam_ben_lim*(1+Married+Children)-240+(Children*fam_ben+(1-Married)*(Children>0)*MIN(fam_ben_Spsup*Children,fam_ben_Spsup_lim)))*(Children*fam_ben+(1-Married)*(Children>0)*MIN(fam_ben_Spsup*Children,fam_ben_Spsup_lim))-IF(fam_net_inc>fam_ben_lim*(1+Married+Children),fam_net_inc-fam_ben_lim*(1+Married+Children),0))+Positive(IF((fam_net_inc'/(1+Married+Children))<plus_ben_lim,Children*plus_ben,(Children-1)*plus_ben))+ (gs_ben*Children)
		fam_net_i	J	=Positive(earn-SSC_al-health_ins-CG_tax-work_exp)

	Line in country table and intermediate steps	Variable name	Range	Equation
		nc		
13.	Employer's soc security	SSC_empr	B	(SSC_old_ZUS+SSC_dis)*MIN(earn,SSC_c)+SSC_a*earn

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

Portugal

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Portugal 2018

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**	12 290	18 343	30 633	12 290
2.	**Standard tax allowances**				
	Basic allowance	4 104	4 104	4 104	4 104
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes				
	Work-related expenses	0	0	0	0
	Other				
	Total	4 104	4 104	4 104	4 104
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	8 186	14 239	26 529	8 186
5.	**Central government income tax liability (exclusive of tax credits)**	1 280	2 867	6 807	1 280
6.	**Tax credits**				
	Basic credit	0	0	0	0
	Married or head of family				
	Children	0	0	0	1 200
	Other				
	Total	0	0	0	1 200
7.	**Central government income tax finally paid (5-6)**	1 280	2 867	6 807	80
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 352	2 018	3 370	1 352
	Taxable income				
	Total	1 352	2 018	3 370	1 352
10.	**Total payments to general government (7 + 8 + 9)**	2 632	4 885	10 177	1 432
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	994
	Total	0	0	0	994
12.	**Take-home pay (1-10+11)**	9 658	13 458	20 456	11 852
13.	**Employer's compulsory social security contributions**	2 919	4 356	7 275	2 919
14.	**Average rates**				
	Income tax	10.4%	15.6%	22.2%	0.7%
	Employees' social security contributions	11.0%	11.0%	11.0%	11.0%
	Total payments less cash transfers	21.4%	26.6%	33.2%	3.6%
	Total tax wedge including employer's social security contributions	36.5%	40.7%	46.0%	22.1%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	34.0%	39.5%	48.0%	34.0%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	46.7%	51.1%	58.0%	46.7%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Portugal 2018

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**		18 343	24 396	30 633	24 396
2.	**Standard tax allowances**					
	Basic allowance		4 104	8 208	8 208	8 208
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes					
	Work-related expenses		0	0	0	0
	Other					
		Total	4 104	8 208	8 208	8 208
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		14 239	16 188	22 425	16 188
5.	**Central government income tax liability (exclusive of tax credits)**		2 070	2 518	4 009	2 518
6.	**Tax credits**					
	Basic credit		0	0	0	0
	Married or head of family					
	Children		1 200	1 200	1 200	0
	Other					
		Total	1 200	1 200	1 200	0
7.	**Central government income tax finally paid (5-6)**		870	1 318	2 809	2 518
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		2 018	2 684	3 370	2 684
	Taxable income					
		Total	2 018	2 684	3 370	2 684
10.	**Total payments to general government (7 + 8 + 9)**		2 887	4 001	6 178	5 201
11.	**Cash transfers from general government**					
	For head of family					
	For two children		665	665	0	0
		Total	665	665	0	0
12.	**Take-home pay (1-10+11)**		16 121	21 060	24 455	19 195
13.	**Employer's compulsory social security contributions**		4 356	5 794	7 275	5 794
14.	**Average rates**					
	Income tax		4.7%	5.4%	9.2%	10.3%
	Employees' social security contributions		11.0%	11.0%	11.0%	11.0%
	Total payments less cash transfers		12.1%	13.7%	20.2%	21.3%
	Total tax wedge including employer's social security contributions		29.0%	30.2%	35.5%	36.4%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		34.0%	34.0%	39.5%	34.0%
	Total payments less cash transfers: Spouse		18.4%	34.0%	39.5%	34.0%
	Total tax wedge: Principal earner		46.7%	46.7%	51.1%	46.7%
	Total tax wedge: Spouse		34.1%	46.7%	51.1%	46.7%

The national currency is the Euro (EUR). In 2018, EUR 0.85 equalled USD 1. The Secretariat has estimated that in that same year the average worker earned EUR 18 343 (Secretariat estimate).

1. Personal income tax system

1.1. Taxes levied by central government

1.1.1. Tax unit

The standard rule is separate taxation. However, families may opt for joint taxation. 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 EUR 4 104. 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% of the taxpayer's gross income, increased by 50%. These dues are not taken into account in the calculations underlying this Report.

1.1.3. Social security contributions

Social security contributions are totally deductible if they exceed EUR 4 104.00 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 600 for each dependent child. This tax credit is increased by EUR 126 for dependent children whose age does not exceed 3 years old.
- EUR 525 for each ascendant whose income does not exceed the minimum pension benefit. When there is only one ascendant, the tax credit increases by EUR 110.

Other tax credits

- 35% of household general expenses up to a limit of EUR 250, per taxpayer; this limit is increased to 45% and EUR 335, respectively, for single parents.

- Non-reimbursed health care costs, not covered by Social Security: 15% of health care costs, with a limit of EUR 1 000
- Expenditures for educating the taxpayer or the taxpayer's dependants: 30% of outlays, up to EUR 800.
- 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% of expenses up to EUR 403.75.
- 15% of the amount spent (up to € 296,00) on interest regarding the acquisition, construction or improvement of the taxpayer's primary residence, or leasing contracts (applicable to contracts up to 31/12/2011); and 15% of the amount spent (up to € 502,00) on rents paid by a tenant for his permanent residence under an agreement typified by the law. These limits are also increased for taxpayers in the first tax rate bracket and for taxpayers with income above the first rate bracket upper limit and below € 30.000, according to the formula below.

$$296 + \left[(450 - 296) * \left(\frac{30000 - liable\ income}{30000 - 7091}\right)\right]$$

- 20% of alimony payments compulsory under court order or court-approved agreement.
- 30% of education expenditures and 25% of life insurance premiums, up to a limit of 15% of the tax liability, for handicapped taxpayers or dependents.
- 15% of VAT paid for certain services (restaurants, lodging, hairdressers, and auto-repair) up to a limit of EUR 250. This benefit is not included on the limits referred to on the next page.

Tax credits from tax benefits

- Individual Retirement Savings Plans (PPRs): 20% 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% of amounts invested, for unmarried taxpayers or for each spouse, up to a limit of EUR 350.

Donations granted on the conditions stated in the statutes governing charities (grants to central, regional or local government, special "social solidarity institutions", museums, libraries, schools, institutes, educational or research associations, public administrative bodies, etc.): 25% of donations, limited in certain cases to 15% of the donor's tax liability. However the total of tax credits related to health care costs, education and training, alimony, retirement homes, VAT paid, house expenses and tax benefits cannot exceed the values of the following amounts:

Taxable income (EUR) (R)	Limit
Up to 7 091	Without limit
Between 7 091 and 80 640	$1000 + \left[(2500 - 1000) * \left(\frac{80640 - liable\ income}{80640 - 7091}\right)\right]$
Over 80 640	EUR 1 000

Limits are increased in 5% for each dependent.

1.1.5. Family status- determination of taxable income

The default status is individual taxation. Couples can opt for joint taxation based on the income-splitting system as it is described below. In the Taxing Wages calculations, the most favourable system is chosen.

1.1.6. Tax rate schedule (applicable to 2018 income)

Taxable income (EUR) (R)	Marginal tax rate (%) (T)	Amount to deduct (EUR) (K)
Up to 7 091	14.50	---
Over 7 091 up to 10 700	23.00	503.46
Over 10 700 up to 20261	28.5037.00	994.84
Over 20 261 up to 25 000	35.00	2287.13
Over 25 000 up to 36 856	37.00	2687.13
Over 36 856 up to 80 640	45.00	5045.91
Over 80 640	48.00	6891.27

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, EUR 9006.9 that was 1.5 times the annual value of the Social Benefits Index per taxpayer in 2018.

For residents in the Autonomous Regions of the Azores, reduced tax rates are applicable. Tax calculation formula (I = Income tax due):

Unmarried taxpayers: I = R x T - K - C

Married taxpayers can opt for joint taxation based on the income splitting method (with one or two earned incomes/see Section 1.1.5):

- I = {[(R : 2) x T - K] x 2 } – C

Where:

R = Taxable income, after deduction of standard and non-standard reliefs (see Sections 1.1.2)

T = Tax rate corresponding to the taxable income bracket

K = Amount to be deducted from each bracket

C = Tax credits (see Section 1.1.4)

Surtax:

An additional solidarity tax rate surtax was introduced by the 2012 State Budget and is applicable on highest income bracket. The surtax tax rate is now 2.5% applicable to taxable income between EUR 80 640 and EUR 250 000 and 5% for taxable income above EUR 250 000.

1.1.7. Special family situations

1.1.7.1. Handicapped taxpayer/spouse, with a disability rating of 60% or more:

A tax credit corresponding to 4 times the 2010 minimum wage (EUR 1 900) is granted for each taxpayer or spouse.

1.1.7.2. Handicapped dependent children, with a disability rating of 60% or more:

A tax credit corresponding to 2.5 times the social benefits index[32] (EUR 1187.50) is granted for each dependent child.

1.1.7.3. Handicapped taxpayer/spouse or dependent children, with a disability rating of 90% or more:

An additional tax credit corresponding to 4 times the 2010 minimum wage (EUR 1 900) is granted for each taxpayer or spouse or dependent child.

1.1.8. Non liable income

- Lawfully granted family allowances;
- Living expenses per diem, up to the limits established for national civil servants;
- Meal allowances, up to the amount established for national civil servants, increased by 20% or 60% 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% of gross pay, with no ceiling.

2.2. Employer contributions

The employer's rate of social security contributions is 23.75% 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.

[32] The 2010 minimum wage (475€) until de SBI reaches that value).

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% of 14 times the reference value (i.e. under EUR 3 002.3);
- Level 2: Families whose reference income is over 50% and under 100 percent of 14 times the reference value(i.e. over EUR 3 002.3 and under EUR 6 004.6);
- Level 3: Families whose reference income is over 100% and under 150% of 14 times the reference value (i.e. over EUR 6 004.6 and under EUR 9 006.9);
- Level 4: Families whose reference income is over 150% (i.e. over EUR 9 006.9).

Each level is also divided according to the age of the dependent child. Benefits are higher during the first 12 months of a child's life.

Monthly social benefits per child are as follows:

Up to 30th June 2018

	Child under 12 months	Child over 12 months old	Additional benefit per child over 12 months and under 36 months in a family with 2 children	Additional benefit per child over 12 months and under 36 months in a family with 3 or more children	Child over 36 months old
Level 1	148.32	91.99	37.08	74.16	37.08
Level 2	122.43	75.93	30.69	61.22	30.69
Level 3	96.32	61.53	27.71	55.42	27.71
Level 4	28.61	28.61	28.61	28.61	0

From 1 July 2018

	Child under 12 months	Child over 12 months old	Additional benefit per child over 12 months and under 36 months in a family with 2 children	Additional benefit per child over 12 months and under 36 months in a family with 3 or more children	Child over 36 months old
Level 1	148.32	110.77	37.08	74.16	37.08
Level 2	122.43	91.43	30.69	61.22	30.69
Level 3	96.32	73.12	27.71	55.42	27.71
Level 4	38.31	38.31	38.31	38.31	0

Monthly social benefits per child in a single-parent family are increased by 35%.

In September, families with dependent school children aged between 6 and 16 years receiving child benefits in level 1 receive an additional amount equal to the regular monthly benefit.

An amount equal to the cash benefits for dependent children under 12 months is attributed for each unborn child after the first month following that of the 13th week of gestation.

3.2. Benefits for handicapped dependent children

There is also a special family allowance scheme for handicapped children.

The above cash benefits (in Sections 3.1 and 3.2) are not taxable.

4. Main changes in the tax/benefit system since 2006

- The relief for disabled taxpayers was restructured. Former partial exemptions and allowances were replaced by tax credits.
- Tax credits for higher income households were limited or abolished;
- 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% of their resident taxpayers' tax liability. If this rate is set below 5%, the difference will be credited against the taxpayers' tax liability.
- Tax credits for handicapped taxpayers and dependants were increased.
- Social benefits for dependent children were increased for low income families, single-parent families and families with 2 or more children.
- Introduction of social benefits for unborn children.
- A family coefficient was introduced in 2015 and abolished in 2016.
- From 2016, the tax unit is the individual. However, couples can opt for joint taxation.

5. Memorandum items

5.1. Method used to identify and compute gross wages of the average worker

The operative concept of monthly compensation is that of amounts paid to full time staff before deductions for tax and compulsory contributions. It therefore includes wages and basic salaries of staff paid by the hour, by the job, or by tasks; benefits in kind or housing, if they are considered an integral part of compensation; cash subsidies for meals, housing or transport; bonuses for regular night shifts and seniority, as well as incentive pay and rewards for diligence and productivity; family allowances, compensation for overtime and work on holidays. Benefits, subsidies and bonuses are taken into account only if paid regularly at each pay period.

Payments in kind are incorporated into the concept of compensation. The statistics record such advantages in kind at their taxable value.

All managerial and supervisory workers are included in the computations.

Average annual pay is based on the average of monthly earnings for April and October multiplied by an adjustment coefficient representing the share of annual bonuses and allowances (including vacation subsidies and the Christmas allowance), which is provided by the labour cost survey.

The following formula is applied:

- Average annual pay = Average monthly pay adjusted by the coefficient x 12.

5.2. Description of the employer's main contributions to private retirement, health insurance schemes, etc.

Outside the social security system, employers are required to insure their employees against work-related accidents (with private insurance companies). They may also provide their employees with life insurance, although this is optional.

2018 Parameter values

Average earnings/yr	Ave_earn	18 343	Secretariat estimate	
Tax allowances	perc	1		
	max_al	4 104		
Tax credits				
Married (basic)	married_cred	0		
Single (basic)	single_cred	0		
Single parent	singlepar_cred	0		
Each child credit	child_cred	600		
Tax schedule	tax_sch	0.145	7 091	
		0.23	10 700	
		0.285	20 261	
		0.35	25 000	
		0.37	36 856	
		0.45	80 640	
		0.48		
	tax_floor	na		
Surtax	surtax_rate	0.025		
	surtax_rate2	0.05		
	surtax_thrs	250 000		
Social security contributions	SSC_rate	0.11		
ceiling	SSC_empr	0.2375		
Child benefit - Schedule	ch_ben_sch	0	482.04	1st echelon
		3002.30	368.28	2nd echelon
		6004.60	332.52	3rd echelon
		9006.90	0	4th echelon
Extra child benefit for lone parents	ch_ben_lone	0.35		
Minimum Wage	MW	8120		
Minimum Disposable Income	MinDispY	9006.90		

2018 Tax equations

The equations for the Portuguese system in 2018 are calculated on individual basis. Couples can opt for joint taxation based on the income-splitting system. In the Taxing Wages calculations, the two systems are modelled and the most favourable system is chosen.

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	MAX(MIN(perc*earn, max_al), SSC)
			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		0
4.	CG taxable income	tax_inc	B	earn-tax_al
	Adjusted taxable income	tax_inc_adj	J	tax_inc/(1+Married)
5.	CG tax before credits	CG_tax_excl	B	IF(tax_inc>tax_floor,Tax(tax_inc,tax_sch),0)
			J	IF(tax_inc_adj>tax_floor,Tax(tax_inc_adj,tax_sch)*(1+Married),0)
6.	Tax credits :			
	Basic credit	basic_cr	B/J	0
	Child credit	child_cr	B	IF(AND(Married>0,earn_spouse>0),Children*child_cred/2 ,Children*child_cred)
			J	Children*child_cred
	Total	tax_cr	B/J	basic_cr+child_cr
	Surtax	surtax	B	IF(tax_inc>surtax_thrs,(surtax_rate*(surtax_thrs-TopIncBracket)+surtax_rate2*(tax_inc-surtax_thrs)),surtax_rate*Positive(tax_inc-TopIncBracket))
			J	IF(tax_inc_adj>surtax_thrs,(surtax_rate*(surtax_thrs-TopIncBracket)+surtax_rate2*(tax_inc_adj-surtax_thrs))*(1+Married),surtax_rate*Positive(tax_inc_adj-TopIncBracket)*(1+Married))
7.	CG tax	CG_tax	B	IF(earn-CG-tax-excl> MinDispY,Positive(CG_tax_excl-tax_cr),0)+surtax
				IF(earn-CG-tax-excl> MinDispY*(1+(Married*earn_spouse>0)),Positive(CG_tax_excl-tax_cr),0)+surtax
8.	State and local taxes	local_tax	B/J	0
9.	Employees' soc security	SSC	B	earn*SSC_rt
11.	Cash transfers	cash_trans	J	=IF(Married='0,' VLOOKUP(earn/(Children+1),ch_ben_sch,2,1)*Children*(1+ch_ben_lone), VLOOKUP(earn/(Children+1),ch_ben_sch,2,1)*Children)
13.	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 2018

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**	8 128	12 131	20 258	8 128
2.	**Standard tax allowances**				
	Basic allowance	3 830	3 830	3 830	3 830
	Married or head of family	0	0	0	0
	Dependent children	0	0	0	0
	Deduction for social security contributions and income taxes	1 089	1 626	2 715	1 089
	Work-related expenses				
	Other				
	Total	4 919	5 456	6 545	4 919
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	3 208	6 675	13 714	3 208
5.	**Central government income tax liability (exclusive of tax credits)**	610	1 268	2 606	610
6.	**Tax credits**				
	Basic credit	0	0	0	0
	Married or head of family	0	0	0	0
	Children	0	0	0	517
	Other (ETC)	0	0	0	0
	Total	0	0	0	517
7.	**Central government income tax finally paid (5-6)**	610	1 268	2 606	92
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 089	1 626	2 715	1 089
	Taxable income				
	Total	1 089	1 626	2 715	1 089
10.	**Total payments to general government (7 + 8 + 9)**	1 699	2 894	5 320	1 181
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	568
	Total	0	0	0	568
12.	**Take-home pay (1-10+11)**	6 429	9 237	14 938	7 515
13.	**Employers' compulsory social security contributions**	2 495	3 724	6 219	2 495
14.	**Average rates**				
	Income tax	7.5%	10.5%	12.9%	1.1%
	Employees' social security contributions	13.4%	13.4%	13.4%	13.4%
	Total payments less cash transfers	20.9%	23.9%	26.3%	7.5%
	Total tax wedge including employer's social security contributions	39.5%	41.7%	43.6%	29.3%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	29.9%	29.9%	29.9%	29.9%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	46.3%	46.3%	46.3%	46.3%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Slovak Republic 2018

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**	12 131	16 134	20 258	16 134
2.	**Standard tax allowances**				
	Basic allowance	3 830	7 457	7 660	7 457
	Married or head of family	3 830	0	0	0
	Dependent children	0	0	0	0
	Deduction for social security contributions and income taxes	1 626	2 002	2 715	2 002
	Work-related expenses				
	Other				
	Total	9 286	9 459	10 375	9 459
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	2 845	6 675	9 884	6 675
5.	**Central government income tax liability (exclusive of tax credits)**	541	1 268	1 878	1 268
6.	**Tax credits**				
	Basic credit	0	0	0	0
	Married or head of family	0	0	0	0
	Children	517	517	517	0
	Other (ETC)	0	0	0	0
	Total	517	517	517	0
7.	**Central government income tax finally paid (5-6)**	23	751	1 360	1 268
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 626	2 002	2 715	2 002
	Taxable income				
	Total	1 626	2 002	2 715	2 002
10.	**Total payments to general government (7 + 8 + 9)**	1 649	2 753	4 075	3 270
11.	**Cash transfers from general government**				
	For head of family				
	For two children	568	568	568	0
	Total	568	568	568	0
12.	**Take-home pay (1-10+11)**	11 050	13 950	16 752	12 864
13.	**Employers' compulsory social security contributions**	3 724	4 953	6 219	4 953
14.	**Average rates**				
	Income tax	0.2%	4.7%	6.7%	7.9%
	Employees' social security contributions	13.4%	12.4%	13.4%	12.4%
	Total payments less cash transfers	8.9%	13.5%	17.3%	20.3%
	Total tax wedge including employer's social security contributions	30.3%	33.8%	36.7%	39.0%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	29.9%	29.9%	29.9%	29.9%
	Total payments less cash transfers: Spouse	27.6%	9.4%	29.9%	9.4%
	Total tax wedge: Principal earner	46.3%	46.3%	46.3%	46.3%
	Total tax wedge: Spouse	44.6%	30.7%	46.3%	30.7%

As from 1 January 2009, Slovakia has joined the Euro zone; the national currency became the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year, the average worker earned EUR 12 131 (Secretariat estimate).

1. Personal Income Tax System

1.1. Central government income taxes

1.1.1. Tax unit

The tax unit is the individual.

1.1.2. Tax allowances and tax credits

1.1.2.1. Standard reliefs

- Basic relief: An allowance for all taxpayers is set at 19.2 times the minimum living standard (MLS) for a basic adult as of January 1, 2018 (EUR 3 830.02). In 2018, the basic personal allowance for taxpayers with gross earnings net of employee social security contributions in excess of the threshold of EUR 19 948 per year (19 948 = 100 x MLS, which is approximately equal to an employee's monthly gross wage of EUR 1 920) is gradually withdrawn. If gross earnings net of employee social security contributions exceed EUR 19 948, the personal allowance is calculated as 44.2 times the minimum living standard minus 0.25 times gross earnings net of employee social security contributions. The basic personal allowance reaches 0 if the gross earnings net of employee social security contributions amount to EUR 35 268.06 per year (employee's monthly gross wage of approximately EUR 3 394). The value of the basic tax allowance cannot become negative.
- The regressive tax allowance is taken into account only once a year (when the tax return is filed or when the annual clearing is performed). Monthly tax prepayments during the year are therefore not affected.
- Marital status relief: An additional allowance is given to the principal earner in respect of a spouse living in a common household if the spouse earns no more than EUR 3 830.03. As from January 1, 2008 the value of the spouse allowance depends on the gross earnings net of employee social security contributions of both principal and spouse. As of 2013, to be entitled to spouse allowance one of the following conditions should be met:
  - spouse is taking care of (not necessarily personally) children up to 3 years (or up to 6 years if child is disabled) or
  - spouse is unemployed or
  - spouse is receiving nursing allowance or
  - spouse is disabled.

If the principal's gross earnings net of employee social security contributions in 2018 are lower or equal to EUR 35 268.06 (= 176.8 times MLS) and the spouse's gross earnings net of employee social security contributions are lower than EUR 3 830.02, the spouse allowance is calculated as the difference between 19.2 times MLS and the spouse's gross earnings net of employee social security contributions. If the gross earnings net of employee social security contributions of the spouse exceed EUR 3 830.02, the spouse allowance is 0. If the principal's gross earnings net of employee social security

contributions exceed EUR 35 268.06 (= 176.8 times MLS), the spouse allowance is calculated as 63.4 times MLS minus 0.25 times the principal's gross earnings net of employee social security contributions. This amount is reduced by the spouse's gross earnings net of employee social security contributions. The value of the spouse allowance cannot become negative.

The digressive 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.

For the purposes of this Report, only families with unemployed spouse are entitled to spouse allowance (spouse income does not influence any equations of spouse allowance as of 2013). Child care up to 3 years does not affect the calculation of tax wedges as according to the Taxing wages methodology any children in the household are assumed to be aged between six and eleven inclusive.

- 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 automatically indexed by MLS growth as of 1st July when also the new amount of MLS comes into force. Since 2015 the monthly tax credit is automatically indexed by MLS growth from the previous year. Monthly tax credit in 2018 is EUR 21.56 per child for the whole year because MLS did change during the previous year. The annual amount will be EUR 258.72. 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 2018 is set at EUR 480.0 (the total annual earnings must therefore be at least EUR 2 880.0). The credit can be taken only by one partner. It can be taken by one partner for part of the tax period (year) and by the other partner for the rest of the tax period (year); this choice will have to hold for all dependent children. (For the purposes of this Report, it is assumed that the credit is claimed by the principal wage earner).
- Relief for social and health security contributions: Employee's social security contributions (see Section 2.1.) are deductible for income tax purposes.

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

Supplementary pension insurance, special-purpose savings and life insurances repealed as from January 2011. As of 2014 allowance for supplementary pension insurance has been reintroduced. Supplementary pension contributions are tax-deductible up to the maximum limit of EUR 180 per year.

1.1.2.3. Non-wastable tax credit: employee tax credit (ETC / *zamestnanecká prémia*)

Prior to 2015 low-income workers were eligible for employee tax credit. The employee tax credit was effective since 2009 and depended on employee's earnings and the number of months worked. In order to receive employee tax credit, earnings should be at least 6 times of the minimum wage and 12 times the minimum wage. The credit was than calculated as a 19% of the difference between the basic allowance and the tax base (gross earnings net of employee SSC). In 2018 the tax base (at the level of the minimum wage,

EUR 5 074.56) is higher than the basic allowance (EUR 3 830.02) the tax credit is automatically zero (so effectively anyone can be eligible).

1.1.3. Tax schedule

As from 2013 the previous flat tax rate of 19% was replaced by new tax schedule with two tax brackets. The ceiling for the first bracket is set out as 176.8 times MLS (equal to EUR 35 268.06) what secure its automatic indexation. The tax schedule is as follows:

Annual taxable income (EUR)*	Rate (%)
0–35 268.06	19
35 268.06 and over	25

* Employee's social security contributions (see 1.12.) are deductible for income tax purposes.

1.2. State and local income tax

Personal income tax (PIT) is redirected solely to the local governments. The share of PIT yield which is transferred to municipalities is 70%. The share of PIT yield transferred to self-governing regions is 30%.

2. Compulsory Social Security Contributions to Schemes Operated within the Government Sector

2.1. Employees' contributions

Compulsory contributions of 13.4% 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%
-- Social Insurance		9.4%
of which:		
-- Sickness	1.4%	
-- Retirement	4.0%	
-- Disability	3.0%	
-- Unemployment	1.0%	

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). As of 2013 formulae for calculation of all maximum assessment bases has been unified. Since 2017 MSSAB for health insurance contributions are abolished. As of 2018 monthly MSSAB for social insurance contributions are calculated as: 7 x AW(t-2), where AW(t-2) is the average wage two years ago (previous equation for calculating MSSAB was 5 x AW(t-2)). The average wage (AW) is determined by the Statistical Office of the Slovak Republic – for 2016 it was EUR 912 per month.

As of 2015 the health insurance contribution (HIC) allowance has been introduced. The allowance decreases the employee's and employer's assessment base for the health insurance. It amounts to EUR 380 per month (EUR 4 560 annually) and decreases with rising income up to EUR 570 (EUR 6 840 annually) when it reaches zero. With EUR 1 rise in the monthly income the monthly allowance is reduced by EUR 2. The HIC allowance is applicable only on standard employment income (not self-employed income or income based on temporary contracts). However, to determine the amount of

allowance all types of incomes are assessed, to target only low income workers. Since 2018 HIC allowance for employers was abolished.

2.2. Employers' contributions

The total contribution for employers is 35.2% of gross wages and salaries. The contribution comprises the health insurance contribution (10% of gross wages and salaries) and the social insurance contribution (25.2%). The social insurance rate reflects contributions to sickness insurance (1.4%), disability insurance (3%), retirement insurance (14%), the Guaranteed Fund (0.25%), accident insurance (0.8%), for unemployment (1%) and to the Reserve Fund (4.75%). All contributions are rounded down on two decimal places.

Since January 2005, Slovakia has introduced the privately managed fully funded pillar. This means that a given proportion (9 percentage points) of social contributions paid by the employer for retirement insurance flew directly to the private pension funds and not to the Social insurance agency as in previous years. As from September 2012 pension sharing scheme has been changed. Employer's retirement contribution rate to the fully funded pillar has been reduced from 9% to 4% (for more see pension contribution sharing scheme table below). As from 2017 contribution rate to the II. pillar automatically increases by 0.25 p.p. per year (i.e. contribution rate to the I. pillar decreases in the same volume), stopping at 6% to the II. pillar and 8% to the I. pillar in 2024. 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 in 2018 is 30.7% with contributions to the second pension pillar not included in the rate.

As of 2015 the health insurance contribution (HIC) allowance has been introduced and in 2018 it has been abolished for employers, while for employees it remains unchanged (for more see 2.1).

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		No limit
Social insurance		
of which		
-- sickness, retirement, unemployment, disability, Guarantee fund, Reserve fund	7.0 x AW (t-2)	76 608. 00
-- accident		No limit

SSC: Pension – contribution sharing in case of II. Pillar participation

Period	Percentage of gross earnings		
	I Pillar	II Pillar	Total
System up to September 2012	9% (5% employer + 4% employee contribution)	9% (employer contribution)	18%
System up to December 2016	14% (10% employer + 4% employee contribution)	4% (employer contribution)	18%
Current system from January 2017	13.75% (9.75% employer + 4% employee contribution)	4.25% (employer contribution)	18%
Current system from January 2018	13.5% (9.5% employer + 4% employee contribution)	4.5% (employer contribution)	18%

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 23.68 per month in 2018. 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 11.1. 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 2017, these amounts are:

	MLS monthly (1.1.2018 – 31.12.2018)
First adult	199.48
Second adult	139.16
Child	91.06

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 since 1st of January 2014) are:

- EUR 61.60 per month for an individual;
- EUR 117.20 per month for an individual with between one and four children;
- EUR 107.10 per month for a couple without children;
- EUR 160.40 per month for a couple with between one and four children;

- EUR 171.20 per month for an individual with more than four children;
- EUR 216.10 per month for a couple with more than four children.
- activation allowance: EUR 63.07 per month – for people who become active either by accepting qualifying employment opportunities or participating in retraining courses.
- housing allowance: EUR 55.80 per month for individual in material need, EUR 89.20 for a household in material need (if household has more than 1 person).
- protection allowance: EUR 63.07 per month for an individual in material need where employment is not possible due to such circumstances as a disability or old age, EUR 34.69 per month for individual on sick leave for at least 30 consecutive days and EUR 13.50 for a pregnant woman from 4th month of the pregnancy and lasts until the child's age of 1 year (for the purpose of this Report, protection allowance is assumed to be EUR 63.07 for each individual).
- specific allowance: EUR 63.07 per month - entitlement arise for long-term unemployed individuals who move into work for 6 months (does not affect the calculations in this Report).
- dependent child allowance: EUR 17.20 per month for a child who properly fulfils compulsory school attendance.

4. Main Changes in Tax/Benefit Systems since 2017

Main changes relates to HIC allowance. Since 2018 HIC allowance for employers was abolished. Although in 2018 employer contributions to the privately managed pension pillar (II. Pillar) has increased to 4.5% while contribution to I. pillar fell to 9.5%. Moreover, the MLS value was revised up in July 2017 which led to changes in tax system allowances, credits and brackets from January 2018.

There are also legislative changes which do not directly affect calculations of the tax wedge used in this Report. First is a new spa tax allowance for PIT. Each taxpayer who spent at least EUR 50 on domestic spa services is allowed to reduce his tax base by EUR 50.

Second change is related to support for housing mortgage interest payments for young people. Since 2018 taxpayer is allowed to deduct mortgage interest payment (maximum amount is EUR 400 per year) from its own tax liability. Previously, support for housing was in the form of a public subsidy.

Third, pensioners who earn income from special short term labour contracts (*dohoda o vykonaní práce*) benefit from SSC allowance of EUR 200 per month from July 2018.

Introduction of 13th and 14th salary. The new exemption of the 13th and 14th salaries. This measure has a negative impact on revenues, which is increasing with gradual phasing of exemption from health insurance contributions, the PIT, and from 2019 onwards also from social insurance contributions. Maximum exemption is EUR 500 per additional salary.

Overview and timing of PIT and SSC exemptions of 13th and 14th salary (Y = exemption)

	2018			2019			2020	
	SIC	HIC	PIT	SIC	HIC	PIT	SIC	HIC	PIT
13th salary (June)		Y			Y	Y		Y	Y
14th salary (December)		Y	Y	Y	Y	Y	Y	Y	Y

5. Memorandum items

5.1. Identification of AW and valuation of earnings

The Ministry of Finance of the Slovak Republic estimates the AW in the methodology used by the Statistical Office of the Slovak Republic. Earnings data (without self-employees) are based on average wage definition including industries falling under categories B to N inclusive, with reference to International Standard Industrial Classification of All Economic Activities, Revision 4.

2018 Parameter values

Average earnings/yr	Ave_earn	12 131	Secretariat estimate
Minimum living standard (MLS) 2015	basic_adult	199.48	
	basic_adult1	139.16	
	basic_child	91.06	
Basic allowance	basic_al_mult	19.2	
	basic_al	3830.02	
	basic_al_mult1	100.0	
	basic_al_mult2	44.2	
	basic_al_redn	0.25	
Spouse allowance	spouse_al_limit	3830.02	
	spouse_al_mult1	176.8	
	spouse_al_mult2	63.4	
	spouse_al_redn	0.25	
Income tax rate	tax_sch/tax_rate	0.19	35268.064
		0.25	
Tax credits - nonwastable	tax_cr	258.72	
	min_wage	480	
	minwage_mult	6	
	etc_thresh	5074.56	
Employee social security contributions	SSC_rate	0.094	
	SSC_sick	0.014	
	SSC_ret	0.04	
	SSC_dis	0.03	
	SSC_unemp	0.01	
	SSC_health	0.04	
Employer social security contributions	SSC_empr	0.199	
	SSC_empsick	0.014	
	SSC_empret	0.095	
	SSC_empdis	0.03	
	SSC_empunemp	0.01	
	SSC_emphealth	0.1	
	SSC_gua	0.0025	
	SSC_acc	0.008	
	SSC_fund	0.0475	
Health Insurance Contribution allowance	HIC_treshold	4560	
	HIC_rate	2	
Maximum assessment base	MSSAB	76608	
Cash transfers	transf_1	284.16	
	transf_indiv	739.2	
	transf_indiv_child	1406.4	
	transf_couple	1285.2	
	transf_couple_child	1924.8	
	transf_hous_indiv	669.6	
	transf_hous_couple	1070.4	
	transf_activ	756.84	
	transf_dep	206.4	

2018 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		
2.	Allowances:			
	Basic	basic_allce	B	IF(earn-SSC<=basic_al_mult1*basic_adult, basic_al,MAXA(basic_al_mult2*basic_adult-basic_al_redn*(earn-SSC),0))
	Spouse	spouse_allce	P	IF(earn_spouse=0,1,0)*Married*Positive(IF(earn_princ-SSC_princ<=spouse_al_mult1*basic_adult, basic_al_mult*basic_adult,spouse_al_mult2*basic_adult-spouse_al_redn*(earn_princ-SSC_princ)))
	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(tax_inc,tax_sch)
6.	Tax credits:			
	Employee tax credit	etc_cr	B	IF(earn>=min_wage*minwage_mult, tax_rate*Positive(basic_al-MAX(etc_thresh, earn-SSC)), 0)
	Children	child_cr	P	(earn>=min_wage*minwage_mult)*Children*tax_cr
	Total	tax_cr	B	etc_cr+child_cr
7.	CG tax	CG_tax	B	CG_tax_excl-tax_cr
8.	State and local taxes	local_tax	B	0
9.	Employees' soc security	SSC	B	MINA(earn,MSSAB)*SSC_rate+ MAX(0;(earn-MAX(0;HIC_treshold-MAX(0;(earn-HIC_treshold)*HIC_rate))))*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))+ Married*(IF(Children>0;transf_couple_child;transf_couple))+IF((Married+Children)>0;transf_hous_couple;transf_hous_indiv)+(Children*transf_dep)+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+earn*SSC_acc+earn*SSC_emphealth

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

Slovenia

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Slovenia 2018

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**	13 180	19 671	32 851	13 180
2.	**Standard tax allowances**				
	Basic allowance	3 508	3 303	3 303	3 508
	Married or head of family				
	Dependent children				5 086
	Deduction for social security contributions and income taxes	2 913	4 347	7 260	2 913
	Work-related expenses	0	0	0	0
	Other				
	Total	6 420	7 650	10 563	11 507
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	6 759	12 021	22 288	1 673
5.	**Central government income tax liability (exclusive of tax credits)**	1 082	2 363	5 268	268
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children	0	0	0	0
	Other				
	Total	0	0	0	0
7.	**Central government income tax finally paid (5-6)**	1 082	2 363	5 268	268
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	2 913	4 347	7 260	2 913
	Taxable income				
	Total	2 913	4 347	7 260	2 913
10.	**Total payments to general government (7 + 8 + 9)**	3 994	6 711	12 528	3 180
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	3 210
	Total	0	0	0	3 210
12.	**Take-home pay (1-10+11)**	9 186	12 961	20 323	13 209
13.	**Employer's wage dependent contributions and taxes**	2 122	3 167	5 289	2 122
	Employer's compulsory social security contributions	2 122	3 167	5 289	2 122
	Payroll taxes	0	0	0	0
14.	**Average rates**				
	Income tax	8.2%	12.0%	16.0%	2.0%
	Employees' social security contributions	22.1%	22.1%	22.1%	22.1%
	Total payments less cash transfers	30.3%	34.1%	38.1%	-0.2%
	Total tax wedge including employer's social security contributions	40.0%	43.3%	46.7%	13.7%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	58.5%	43.1%	48.6%	58.5%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	64.3%	51.0%	55.7%	64.3%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Slovenia 2018

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**	19 671	26 163	32 851	26 163
2.	**Standard tax allowances**				
	Basic allowance	3 303	8 360	6 810	8 360
	Married or head of family				
	Dependent children	5 086	5 086	5 086	
	Other dependent family member	2 437			
	Deduction for social security contributions and income taxes	4 347	5 782	7 260	5 782
	Work-related expenses	0	0	0	0
	Total	15 173	19 228	19 157	14 142
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	4 498	6 935	13 695	12 021
5.	**Central government income tax liability (exclusive of tax credits)**	720	1 110	2 191	2 363
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children	0	0	0	0
	Other				
	Total	0	0	0	0
7.	**Central government income tax finally paid (5-6)**	720	1 110	2 191	2 363
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	4 347	5 782	7 260	5 782
	Taxable income				
	Total	4 347	5 782	7 260	5 782
10.	**Total payments to general government (7 + 8 + 9)**	5 067	6 892	9 451	8 145
11.	**Cash transfers from general government**				
	For head of family				
	For two children	2 469	1 509	1 249	0
	Total	2 469	1 509	1 249	0
12.	**Take-home pay (1-10+11)**	17 074	20 781	24 649	18 018
13.	**Employer's wage dependent contributions and taxes**	3 167	5 760	5 289	5 760
	Employer's compulsory social security contributions	3 167	5 760	5 289	5 760
	Payroll taxes	0	0	0	0
14.	**Average rates**				
	Income tax	3.7%	4.2%	6.7%	9.0%
	Employees' social security contributions	22.1%	22.1%	22.1%	22.1%
	Total payments less cash transfers	13.2%	20.6%	25.0%	31.1%
	Total tax wedge including employer's social security contributions	25.2%	34.9%	35.4%	43.6%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	34.6%	34.6%	34.6%	43.1%
	Total payments less cash transfers: Spouse	42.9%	22.1%	58.5%	22.1%
	Total tax wedge: Principal earner	43.6%	43.6%	43.6%	51.0%
	Total tax wedge: Spouse	59.2%	0.0%	64.3%	0.0%

The Slovenian currency is the euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year, the average worker in Slovenia earned EUR 19 671 (Secretariat estimate).

1. Personal income tax system

1.1. Central government income tax

1.1.1. Tax unit

The tax unit is the individual.

1.1.2. Tax allowances

1.1.2.1. Standard tax reliefs

- A general (basic) allowance of EUR 3 302.70 is deductible from income in 2018. For lower income groups an additional general allowance of EUR 3 217.12 is deductible when taxable income is lower than EUR 11 166.37. When taxable income falls between EUR 11 166.37 and EUR 13 316.83 an additional general allowance is determined linearly by the following equation: 19 922.15 – 1.49601×total income.
- Family allowances are also deductible from the tax base in the same way as for the general allowance. The allowances for 2018 are as follows:
  - EUR 2 436.92 for the first dependent child;
  - EUR 2 649.24 for the second child;
  - EUR 4 418.54 for the third child;
  - EUR 6 187.85 for the fourth child;
  - EUR 7 957.14 for the fifth child;
  - for the sixth and all additional dependent children the allowance is higher by EUR 1 769.30 relating to the amount of allowance for the preceding maintained children;
  - EUR 8 830.00 for a dependent child who requires special care;
  - EUR 2 436.92 for any other dependent family member.
- Relief for social security contributions: Employee's compulsory contributions for the social insurance system are deductible for income tax purposes.
- Tax credits: None for employees.

1.1.2.2. Non-standard tax reliefs applicable to income from employment

- Additional voluntary pension insurance premiums: Premiums paid by a resident to the provider of a pension plan based in Slovenia or in another EU Member State according to a pension plan that is approved and entered into a special register in accordance with the pension legislation are deductible from taxable income. In 2018 such deductions are subject to an annual limit of EUR 2 819.09 or a sum equal to 24% of the employee's contribution for compulsory pension and disability insurance if that is a lower figure.
- Reimbursement of expenses associated with work, such as in-work meals, transport to and from work, in-the-field supplements (per diem when an employee works outside his or her working place) and compensation for being away from home, are exempt subject to statutory conditions and upper limits.

- Reimbursement of expenses associated with business travel such as: per diem allowances, transport costs (including the use of the employee's private vehicle for work purposes), and the costs of overnight accommodation, are exempt subject to statutory conditions and upper limits.
- The cost of purchasing and maintaining uniforms and personal protection work equipment defined in special regulations is exempt from income tax.
- Compensation for the use of an employee's own tools and other equipment (except private vehicles) necessary for the performance of work at the work place, is exempt up to a level of 2% of the monthly wage or salary of the employee, subject to an upper limit of 2% of the average gross monthly wage (AGMW).
- Long service bonuses, severance pay upon retirement and payments related to accidents, long term sickness and other unexpected events are exempt subject to statutory conditions and upper limits.
- Severance pay on redundancy is exempt subject to an upper limit of ten times the AGMW.
- Compensation for the use of an employee's own possessions and property when working at home in accordance with statutory regulations is exempt up to a level of 5% of the monthly wage or salary of the employee, subject to an upper limit of 5% of the AGMW.
- The reduction of PIT on the part of a salary paid on the basis of business performance. The income paid on the basis of business performance is exempt from the taxable base of employment income (but not from social security contributions) up to amount corresponding to 100% of the last published average monthly salary in the Republic of Slovenia. 'The part of a salary paid on the basis of business performance' is defined as income which should be paid once in a calendar year to all eligible employees at the same time, and under the condition that the right to receive such income is provided:
  - in the employer's general legal acts, with the same eligibility conditions for all employees; or
  - in the collective labour agreement including or serving as basis for eligibility criteria for receiving such income.

1.1.3. Tax schedule

The tax schedule for 2018 is as follows:

Taxable income (EUR)	Tax rate (in %)
Up to 8 021.34	16
8 021.34–20 400.00	27
20 400.00–48 000.00	34
48 000.00–70 907.20	39
Above 70 907.20	50

1.2. Regional and local income tax

There are no regional or local income taxes.

2. Compulsory social security insurance system

The compulsory social security insurance system consists of four schemes as follows:

- pension and disability insurance;

- health insurance;
- unemployment insurance;
- parental leave insurance.

2.1. Employees' contributions

The taxable base for social security insurance contributions paid by employees is the total amount of the gross wage or salary including vacation payments, fringe benefits and remuneration of expenses related to work above a certain threshold. The assessment period is the calendar month. Employees contribute an amount as a percentage of their remuneration as follows:

Scheme name	Rate of contribution (%)
Pension insurance	15.50
Health insurance	6.36
Unemployment insurance	0.14
Parental leave insurance	0.10
Total	22.10

2.2. Employers' contributions

Social security insurance contributions are also paid by employers on behalf of their employees. The taxable base and the assessment period are the same as for employees' contributions. The employers' contribution rates are as follows:

Scheme name	Rate of contribution (%)
Pension insurance	8.85
Health insurance	7.09
Unemployment insurance	0.06
Parental leave insurance	0.1
Total	16.1

The only change to these rates since 1996 has been the 0.2 percentage points increase in the employers' contribution rates for health insurance in 2002.

3. Payroll tax

None.

4. Universal cash transfers

4.1. Transfers related to marital status

None.

4.2. Transfers for dependent children

On 1 January 2012 the Exercise of Rights to Public Funds Act (ZUPJS-A) entered into force. Regarding to a new act child allowance is a supplementary benefit for maintenance, care and education of children when the family income per family member does not exceed statutorily defined percentage of the average net wage in the previous year.

The new legislation changed relevant family income which is the basis for the income classes from gross family income to net family income. Income includes taxable income

and non-taxable income defined by the Personal Income Tax Act as for instance social benefits. Income is defined as gross income plus social benefits received but excluding the normalized cost and actual cost recognized under the law governing income tax, taxes and mandatory social security contributions levied on such income.

The new legislation also reduced the age of a child's entitlement. The right to a child benefit is held only until the child reaches 18 years. Besides, the child benefit is higher for eligible students included in higher secondary education (aged less than 18 years and with an income per family member below the average net wage).

Applications for the benefit are made on an annual basis and the payments are not taxable.

- The amount of the benefit is calculated for each child separately according to the level of net family income per family member and the ranking of the child in the family. Each family is assigned to one of 8 income brackets. From 1 January 2018 the thresholds between brackets are defined in nominal terms whereas before that date the brackets were defined according to some percentage of the previous year average net wage.
- Each child is allocated in one of three ranking levels (the level of payments increases with the ranking level - the lowest for the first child, higher for the second child and the highest for the third and any subsequent child). When a child lives in a one-parent family, the amount of the allowance is increased by 30%. When a pre-school child does not attend kindergarten, the amount of the allowance is increased by 20%.
- The details for the calculation of the net income per family member have been prescribed by the Minister, as follows:
  - All income and receipts, namely net disposable income (after deduction of the normalized cost and actual cost recognized under the law governing income tax, taxes and mandatory social security contributions levied on such income) are taken into account, except those that are designed to cover the specific needs (such as allowance and attendance allowance, a large family, etc.). Property is also taken into account like immovable property, cars and other vehicles, watercraft, etc. Property is assigned a value and then it is calculated the amount of interest that would be received within one year from the value of assets deposited in a bank account in the form of time deposits.
- The monthly amounts of transfers for a child from birth to the end of primary school in a two-parent family according to the Exercise of Rights to Public Funds Act and Public Finance Balance Act were the following for the year 2018:

Number of income bracket	Net family income per family member (above – to)	1st Child Monthly (EUR)	2nd Child Monthly (EUR)	3rd and subsequent Child Monthly (EUR)
1	Up to 2 225.15	114.31	125.73	137.18
2	2 225.15 – 3708.58	97.73	108.04	118.28
3	3 708.58 – 4 450.29	74.48	83.25	91.98
4	4 450.29 – 5 192.01	58.75	67.03	75.47
5	5 192.01 – 6 551.82	48.04	56.06	64.03
6a	6 551.82 – 6 922.80	30.44	38.10	45.71
6b	6 922.80 - 7 911.60	30.44	38.10	45.71
7	7 911.60 – 10 136.76	22.83	30.44	38.10
8	10 136.76 – 12 238.32	19.88	27.50	35.11

- The monthly amounts of child benefit for a child included in the secondary school (but only for the child younger than 18) in the income brackets 6b-8 are different than those in the table above and are as follows:

Number of income bracket	Net family income per family member (above – to)	Monthly (EUR)	Monthly (EUR)	Monthly (EUR)
6b	6 922.68 - 7 911.63	43.44	51.10	71.17
7	7 911.63 – 10 136.76	28.83	36.44	49.65
8	10 136.76 – 12 238.32	22.88	30.50	39.89

In 2018, the maximum annual benefit levels for children in a two-parent family till the end of primary school were the following:

- EUR 1 371.72 for the first child;
- EUR 1 508.76 for the second child;
- EUR 1 646.16 for the third or subsequent child.

The amounts decline as the level of income per family member increases. According to the Public Finance Balance Act the benefit ceases to be available for families where the average income per member is higher than 64% of the average net wage for the year 2017.

5. Main changes in tax/benefit system since 2005

- In 2006 the taxation of income of individuals changed from global tax to a kind of a dual income tax system. Active income (from employment, business, basic agriculture and forestry, rents, royalties and other income) is taxed aggregated at progressive rates and taking into account the allowances and deductions; capital income (interest, dividends and capital gains) is taxed at proportionate rates on a scheduler basis.
- In 2007 the number of income tax brackets was reduced from five to three. At the same time, some non-standard tax reliefs for certain expenses and for interest paid on loans for housing were abolished.
- In 2008 additional general allowances were introduced for people on low incomes.
- The payroll tax was phased out at the start of 2009.
- The Exercise of Rights to Public Funds Act entered into force on 1.1.2012 changes family income which is the basis for the income classes from gross family income to net family income, which also includes social benefits received.

- Regarding to the Public Finance Balance Act which entered into force on 1.6.2012, the amounts of transfers for children in fifth and sixth income classes are reduced for 10%. Transfers for children in the seventh and eighth income classes are abolished.
- In 2013 the second bracket in the PIT schedule was broadened according to the Public Finance Balance Act. For the years 2013 and 2014 also the threshold for the third bracket (with the rate 41%) was increased and a new, top bracket with a rate of 50% was introduced for incomes above EUR 70 907.20.
- For the year 2013 the special relief for students was reduced by 25 % compared to the tax relief in 2012 (the tax relief for 2014 amounts to EUR 2 477.03).
- Concerning rental income deriving renting of immovable and movable property a new scheduler principle of taxation was introduced in the year 2013 with proportional rate of 25%. The standardised costs were reduced from 40% to 10% of the rental income.
- The main and most important substantive change for the year 2014 and beyond eliminates the automatic adjustment of tax credits and net annual tax basis in the scale for assessing personal income tax with the growth in consumer prices.
- For the year 2014 another amendments were also introduced to the personal income tax, that is the abolishment of the tax benefits to certain groups of taxpayers (special relief for daily migrants, relief for the residents over 65 years of age).
- In 2014, the amendments to the Law on Parenthood and Family Incomes increased child benefit for each child who lives in a single-parent family. Namely, the uplift of child benefit was increased from 10 to 30%. In this year were also introduced the different amounts of transfers for children included in the secondary school in the sixth income bracket.
- The scale of assessment for income tax as a temporary measure that applies to 2013 and 2014, with the addition of a fourth class tax rate of 50% was extended for the year 2015.
- In 2015 the annual threshold between 2nd and 3rd tax bracket (above which the income tax is paid at the rate of 41%) was increased to EUR 20 400 (from EUR 18 960) for the years 2016 and 2017. The corresponding tax rate remained unchanged (i.e. 27%). The validity of the tax rate of 50% for the fourth tax bracket (for incomes above EUR 70 907) is extended also for tax years 2016 and 2017.
- In 2016 for the year 2017 the additional tax bracket between previous second and third tax brackets with the rate of 34% has been introduced, and the second highest tax rate has been lowered from 41% to 39%. The highest rate of 50 %, which used to be a temporary measure, has been maintained. The threshold for the additional basic allowance has been increased from EUR 10 866 to EUR 11 166.
- In 2016 and valid from 2017 the reduced taxation on performance bonuses (13th salary) was introduced meaning that salary paid on the basis of business performance is exempt from the income tax up to 70% of the average wage.
- From 2018 the additional general tax allowance for incomes between EUR 11 166.67 and EUR 13 316.83 is determined linearly.
- From 2018 the PIT exemption for the income paid as a reward for the business performance was increased from 70% to 100% of the latest known average monthly wage in the Republic of Slovenia.

- From 2018 the thresholds of the income brackets used for the calculation of child benefits are defined nominally; before that the thresholds were defined as percentage of the previous year average net wage. In addition, child benefits have been re-introduced also for income brackets 7 and 8.

6. Memorandum items

6.1. Average gross annual wage earnings calculation

In Slovenia the gross earnings figures cover wages and salaries paid to individuals in formal employment including payment for overtime. They also include bonus payments and other payments such as pay for annual leave, paid leave up to seven days, public holidays, absences due to sickness for up to 30 days, job training, and slowdown through no fault of the person in formal employment.

The average gross wage earnings figures of all adult workers covering industry sectors B–N are provided by the Statistical Office of the Republic of Slovenia.

6.2. Employer contributions to private pension and health schemes

Some employer contributions are made to private health and pension schemes but there is no relevant information available on the amounts that are paid.

2018 Parameter values

Ave_earn	19 671	Secretariat estimate					
Ave_earn_1	18 839						
Ave_net_earnfam	12 744						
Ave_gross_earnSSC	19 523.4						
Basic_al1	3302.70						
Basic_al2	3217.12						
Income_lim	11166.37						
Add_al	19922.15						
Red_rate	1.49601						
Child_al1	2 436.92						
Child_al2	5 086.16						
Child_al3	9 504.70						
Child_al4	15 692.55						
Child_al5	23 649.69						
Depend_al	2 436.92						
Tax_sch	0.16	8 021.34					
	0.27	20 400.00					
	0.34	48 000.00					
	0.39	70 907.20					
	0.50						
SSC_rate1	0.221						
SSC_minbase	10542.64						
SSC_rate2	0.161						
		1st child monthly	2nd child monthly	3rd child monthly	1 child-total annual	2 children-total annual	3 children-total annual
Fam_allow_mc	0	114.31	125.73	137.18	1 371.72	2 880.48	4 526.64
	2 225.15	97.73	108.04	118.28	1 172.76	2 469.24	3 888.60
	3 705.58	74.48	83.25	91.98	893.76	1 892.76	2 996.52
	4 450.29	58.75	67.03	75.47	705.00	1 509.36	2 415.00
	5 192.01	48.04	56.06	64.03	576.48	1 249.20	2 017.56
	6 551.82	30.44	38.10	45.71	365.28	822.48	1 371.00
	7 911.60	22.83	30.44	38.10	273.96	639.24	1 096.44
	10 136.76	19.88	27.50	35.11	238.56	568.56	989.88
	12 238.32	0.00	0.00	0.00	0.00	0.00	0.00
Fam_allow_spup	0.3						
		1st child monthly	2nd child monthly	3rd child monthly	1 child-total annual	2 children-total annual	3 children-total annual
Fam_allow_sp	0	148.60	163.45	178.33	1 783.24	3 744.62	5 884.63
	2 225.15	127.05	140.45	153.76	1 524.59	3 210.01	5 055.18
	3 705.58	96.82	108.23	119.57	1 161.89	2 460.59	3 895.48
	4 450.29	76.38	87.14	98.11	916.50	1 962.17	3 139.50
	5 192.01	62.45	72.88	83.24	749.42	1 623.96	2 622.83
	6 551.82	39.57	49.53	59.42	474.86	1 069.22	1 782.30
	7 911.60	29.68	39.57	49.53	356.15	831.01	1 425.37
	10 136.76	25.84	35.75	45.64	310.13	739.13	1 286.84
	12 238.32	0.00	0.00	0.00	0.00	0.00	0.00
numdays	365						

2018 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			
	Current year	earn		
	Net earnings Year-1	net_earn_1		
2.	Allowances:			
	Principal	tax_al_princ	P	Basic_al1+IF(earn<Income_lim,Basic_al2,Positive(add_al-red_rate*earn))+SSC+IF(children=0,0,IF(children=1,child_al1,IF(children=2,child_al2,child_al3)+IF(Married=0,0,IF(S_earn=0,Depend_al,0))
	Spouse	Tax_al_ spouse	S	MINA(Basic_al1+IF(AD7<Income_lim,Basic_al2,Positive(add_al-red_rate*AD7))+SSC, 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 (nonwastable)	Tax_cr	B	0
7.	CG tax	CG_tax	B	CG_tax_excl
8.	State and local taxes	local_tax	B	0
9.	Employees' soc security	SSC	B	earn* SSC_rate1
11.	Cash transfers	cash_trans	J	IF(Children='0,0;VLOOKUP((net_earn_1)'/(1+married+children),IF(Married=0;Fam_allow_sp,Fam_allow_mc),IF(Children=1,5,IF(Children=2,6,7))))
13.	Employer's wage dependent			
	contributions and taxes			
	Employer's soc security	SSC_empr	B	earn*SSC_rate2++IF(earn<SSC_minbase,(SSC_rate2*(SSC_minbase-earn))+(SSC_rate1*(SSC_minbase-earn)),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.

Spain

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in t-he 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 2018

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
1.	**Gross wage earnings**	18 038	26 923	44 961	18 038
2.	**Standard tax allowances:**				
	Basic allowance				
	Married or head of family	0	0	0	2 150
	Dependent children				
	Deduction for social security contributions and income taxes	1 145	1 710	2 855	1 145
	Work-related expenses	2 000	2 000	2 000	2 000
	Other				
	Total	3 145	3 710	4 855	5 295
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central and state government taxable income (1 - 2 + 3)**	14 893	23 213	40 106	12 743
5.	**Central and state government income tax liability (exclusive of tax credit**	2 932	5 069	10 347	2 433
6.	**Central and state government tax credits**				
	Basic credit	1 055	1 055	1 055	3 224
	Married or head of family				
	Children				
	Other				
	Total	1 055	1 055	1 055	3 224
7.	**Central government income tax finally paid (5-6)**	949	2 037	4 743	- 994
8.	**State and local taxes**	929	1 977	4 550	204
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 145	1 710	2 855	1 145
	Taxable income				
	Total	1 145	1 710	2 855	1 145
10.	**Total payments to general government (7 + 8 + 9)**	3 023	5 724	12 148	355
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)**	15 015	21 199	32 813	17 683
13.	**Employer's compulsory social security contributions**	5 393	8 050	13 443	5 393
14.	**Average rates**				
	Income tax	10.4%	14.9%	20.7%	-4.4%
	Employees' social security contributions	6.35%	6.35%	6.35%	6.35%
	Total payments less cash transfers	16.8%	21.3%	27.0%	2.0%
	Total tax wedge including employer's social security contributions	35.9%	39.4%	43.8%	24.5%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	28.1%	32.9%	40.4%	28.1%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	44.6%	48.3%	54.1%	44.6%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Spain 2018

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**	26 923	35 807	44 961	35 807
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family	3 400	0	0	0
	Dependent children				
	Deduction for social security contributions and income taxes	1 710	2 274	2 855	2 274
	Work-related expenses	2 000	8 633	4 000	8 633
	Other				
	Total	7 110	10 906	6 855	10 906
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central and state government taxable income (1 - 2 + 3)**	19 813	24 901	38 106	24 901
5.	**Central and state government income tax liability (exclusive of tax credits**	4 118	5 389	8 001	5 389
6.	**Central and state government tax credits**				
	Basic credit	2 024	1 860	3 078	1 375
	Married or head of family				
	Children				
	Other				
	Total	2 024	1 860	3 078	1 375
7.	**Central government income tax finally paid (5-6)**	1 055	1 795	2 502	2 037
8.	**State and local taxes**	1 040	1 734	2 421	1 977
9.	**Employees' compulsory social security contributions**				
	Gross earnings	1 710	2 274	2 855	2 274
	Taxable income				
	Total	1 710	2 274	2 855	2 274
10.	**Total payments to general government (7 + 8 + 9)**	3 804	5 803	7 778	6 288
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)**	23 119	30 004	37 183	29 519
13.	**Employer's compulsory social security contributions**	8 050	10 706	13 443	10 706
14.	**Average rates**				
	Income tax	7.8%	9.9%	10.9%	11.2%
	Employees' social security contributions	6.35%	6.35%	6.35%	6.35%
	Total payments less cash transfers	14.1%	16.2%	17.3%	17.6%
	Total tax wedge including employer's social security contributions	33.9%	35.5%	36.3%	36.5%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	30.0%	32.9%	32.9%	32.9%
	Total payments less cash transfers: Spouse	22.5%	6.4%	28.1%	6.4%
	Total tax wedge: Principal earner	46.1%	48.3%	48.3%	48.3%
	Total tax wedge: Spouse	40.3%	27.9%	44.6%	27.9%

The national currency is the Euro (EUR). In 2018, EUR 0.85 was equal to USD 1. In that year the average worker earned EUR 26 923 (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 2 150 for heads of single-parent households.
- Maternity tax credit: a non-wastable tax credit addressed to working females with children under 3 years of age up to EUR 1 200,which may be increased by EUR 1 000 where the taxpayer has incurred qualifying expenses related to nursery schools/kindergartens
- Large families (3 or more children) or dependent family members with disabilities tax credits: this additional non-wastable tax credit (up to EUR 1 200, in general, or EUR 2 400 for special large families, with 5 or more children) has been raised by EUR 600 for each child exceeding the minimum number of children required for both large families types listed above. It also may be claimed (within the Taxing Wages framework) by single-parent households with two children.
- Relief for social security contributions: All social security payments are fully deductible.
- Other expenses allowance: up to EUR 2 000, which may be increased by the same amount in case of accepting a job in a different location implying a change of residence.
- Employment related allowance: Net employment income (gross income - employee social security contributions) may be reduced according to the following rules:
  - Taxpayers with net employment income equal or less than EUR 13 115: EUR 5 565.
  - Taxpayers with a net employment income between EUR 13 115 and EUR 16 825: EUR 5 565 less the result of multiplying by 1.5 the difference between net employment income and EUR 13 115.

In 2018, however, the employment related allowance is computed as the sum of the amount in force in 2017 plus half the positive difference between the amount estimated with the new parameters set out above and the amount in force for 2017.

- Disabled workers allowance: an allowance of EUR 3 500 for disabled salary earners. Those with reduced mobility may claim an augmented allowance of EUR 7 750.

As a result of the application of the above rules, net income cannot become negative.

1.1.2.2. Main non-standard reliefs applicable to an AW

- Contributions to Pension Plans. Contributions made by each member of the household may reduce taxable income up to the lower of the following amounts:
  - 30% of the sum of labour and economic activities net incomes;
  - EUR 8 000.

Moreover, those households whose second earner has net labour income below EUR 8 000 may reduce taxable income up to a maximum of EUR 2 500 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: With effect from 1 January 2013, the tax credit has been abolished. Nevertheless, grandfathering rules apply for those taxpayers who before 1 January 2013 had acquired their main residence; had made some payments for it to be built; had made some payments for restoration/enlargement of their main residence or had made some payments to carry out the adaptation of the main residence of disabled people. However, in the latter two cases the works performed should be completed before 1 January 2017.

Gifts: 75% of the amounts (below EUR 150) donated to non-profit entities, public administration, public universities and other qualifying institutions. For larger gifts, 30% on the excess, which may be increased to 35% when meeting certain conditions (for fidelity cases) and 10% of the amount donated non-qualifying foundations or associations.

- Investments and expenses in goods of cultural interest: 15% of the amounts granted to the importation, restoration, exhibition, etc. of certain goods listed in the General Register of Goods of Cultural Interest.

Each of these last two amounts cannot exceed 10% of taxable income.

1.1.2.3. Exempt Income

- The base amount is EUR 5 550 per taxpayer. The same amount is granted for family units filing jointly. Taxpayers aged over 65 years may add EUR 1 150 to the former amount. Those aged over 75 years may claim additionally EUR 1 400.
- Dependent children (under 25 years, in general; for each age, in case of disability): EUR 2 400 for the first dependent child; EUR 2 700 for the second one; EUR 4 000 for the third, and EUR 4 500 for any additional child.
- Child care allowance: an additional allowance of EUR 2 800 for each of the above dependent children under 3 years of age.

- In case of disabled workers and additional amount of EUR 3 000 also applies. In case of great disability prior amount reaches EUR 9 000.

Child allowances have to be shared equally between spouses when they file separately.

1.1.3. Tax schedule

General rates of tax – resident individuals:

Taxable income (EUR)	Tax at the lower limit (EUR)	Tax rate on taxable income in excess of the lower limit (%)
0–12 450	0	9.50
12 450–20 200	1 182.75	12.00
20 200–35 200	2 112.75	15.00
35 200–60 000	4 362.75	18.50
Over 60 000	8 950.75	22.50

1.2. State and local income taxes

The Autonomous Communities (Regional Governments) are liable to set up their own personal income tax schedule to tax the general income tax base. For 2018, those tax rate schedules vary from five to ten brackets and their marginal rates from 9.5 to 25.5%. Up to 2009, the tax autonomous share (regional share of the tax) on the general tax base was determined by applying a progressive tax ladder with default values laid down by the Law regulating this tax, and fixed by Government. However, the Autonomous Communities (Regional Governments) were competent to modify these values under certain limitations. The complementary tax scale, fixed by the Central Government and applied in default as explained, was removed in 2010, which leaves a State-level ladder and each Autonomous Community determining their own tax scale, subject only to the progressivity requirement. From that moment on, by exercising their legislative competences, the Autonomous Community have been approving their tax scales that, although identical to the State-level tax scale in the beginning, as time elapsed they became increasingly different. These differences have grown since 2015, coinciding with the entry into force of the reform of this tax, up to the point that in 2016 and 2017 each Autonomous Community applies a different tax scale, with currently only one matching the Central Government tax scale.

Therefore, instead of taking into account a tax rate determined by an Autonomous Community equal to that applied by the Central Government, as past years, the new criteria followed since 2017 is to consider that of the Autonomous Community of Madrid (Madrid Region), which is thought as the most representative tax scale on different grounds, among which it is worth mentioning that this Autonomous Community comprises the Spain capital city and its relative significance as regards this tax, both in terms of number of taxpayers, income level and income tax roughly amounting to one quarter of the total revenues. All these make of it a potential stable criteria over time.

Madrid Schedule for general tax base in 2018

Taxable income (EUR)	Tax at the lower limit (EUR)	Tax rate on taxable income in excess of the lower limit (%)
0–12 450	0	9.50
12 450–17 707.20	1 182.75	11.20
17 707.20–33 007.20	1 771.56	13.30
33 007.20-53 407.20	3 806.46	17.90
Over 53 407.20	7 458.06	21.00

Now, there isn't any local tax rate or schedule in the Spanish PIT. However, some Local Governments (the bigger and province capital cities) receive a fixed percentage of the PIT revenues.

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 2018, these ceilings are:

- Lower ceiling: EUR 10 303.20
- Upper Ceiling: EUR 45 014.40 (EUR 45 644.4 from August 2018).

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%
- Unemployment: 1.55%
- Professional Training: 0.1%

2.2. Employers' contributions

- Old age pension/sickness and disability: 23.6%
- Unemployment/Work injuries: 5.50%
- Wages fund: 0.2%
- Professional Training: 0.6%

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 11 953.94; the child transfer decreases with income between EUR 11 953.94 and EUR 12 244.94; the value is 0 for gross earnings exceeding EUR 12 244.94. EUR 582 for families with 2 children with annual gross earnings below EUR 13 747.03; the child transfer decreases with

income between EUR 13 747.03 and EUR 14 329.03; the value is 0 for gross earnings exceeding EUR 14 329.03.

4. Main Changes in Tax/Benefit Systems in 2017

None

5. Memorandum Items

5.1. Identification of an AW and calculation of earnings

Refer to the information provided in the Annex of this Report.

2018 Parameter values

Average earnings/yr	Ave_earn	26 923	Secretariat estimate	
Work related allowance	wr_rate	1.15625		
	wr_rate19	1.5000		
	wr_lim_max	14 450		
	wr_lim_max19	16 852		
	wr_lim_min	11 250		
	wr_lim_min19	13 115		
	wr_allow_max	3 700		
	wr_allow_max19	5 565		
Other deductible expenses	oth_ded_exp	2 000		
Personal & family exempt income	Per_fam_exempt_inc	5 550		
Joint taxation allowance	Joint_tax_allow_fam1	3 400		
	Joint_tax_allow_fam2	2 150		
Dependent children	dep_child	2 400		
	dep_child2	2 700		
	dep_child3	4 000		
	dep_child4	4 500		
Single parent tax credit (chld>=2)	SP_tax_credit	1 200		
Tax Schedule	tax_sch_sg	0	0	9.50%
		12 450	1 182.75	12.00%
		20 200	2 112.75	15.00%
		35 200	4 362.75	18.50%
		60 000	8 950.75	22.50%
	tax_sch_sa (Madrid)	0	0	9.50%
		12 450	1 182.75	11.20%
		17 707.20	1 771.56	13.30%
		33 007.20	3 806.40	17.90%
		53 407.20	7 458.06	21.00%
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	10,303.20	
	top_lim	45 276.90		
Child benefit	SS_child_benefit	291		
	SS_child_table	1	11 953.94	12 244.94
		2	13 747.03	14 329.03
		3	17 991.42	18 864.42
		4	20 905.54	22 069.54
		5	23819.66	25 274.66

2018 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+oth_ded_exp,IF(earn-SSC<=wr_lim_max,wr_allow_max-wr_rate*((earn-SSC)-(wr_lim_min))+oth_ded_exp,oth_ded_exp))
	Work related, family	work_fam	J	IF(AND(earn_sp=0,married=0,children=0),0,IF(earn_total-SSC_fam<=wr_lim_min,wr_allow_max+oth_ded_exp,IF(earn_total-SSC_fam=wr_lim_max,wr_allow_max-wr_rate*((earn_total-SSC_fam)-(wr_lim_min))+oth_ded_exp,oth_ded_exp)))
	Joint taxation allowance	joint_allow_fam	J	IF(AND(Married=0,Children=0),0,IF(AND(Married=0,Children>0),joint_tax_allow_fam2,joint_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,' (children>0)*(dep_child+(children>1)*dep_child2+(children>2)*dep_child3+(children>3)*(children-3)*dep_child4), (children>0)*(dep_child+(children>1)*dep_child2+(children>2)*dep_child3+(children>3)*(children-3)*dep_child4)/2)
			S	IF(earn_sp='0,' 0, (children>0)*(dep_child+(children>1)*dep_child2+(children>2)*dep_child3+(children>3)*(children-3)*dep_child4)/2)
	Children exempt income, family	child_ex_inc_fam	J	(children>0)*(dep_child+(children>1)*dep_child2+(children>2)*dep_child3+(children>3)*(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_ind-VLOOKUP(tax_inc_ind, tax_sch_sg, 1))*VLOOKUP(tax_inc_ind, tax_sch_sg, 3))
		CG_tax_fam_excl	J	MAXA(0, VLOOKUP(tax_inc_fam, tax_sch_sg, 2)+(tax_inc_fam-VLOOKUP(tax_inc_fam, tax_sch_sg, 1))*VLOOKUP(tax_inc_fam, tax_sch_sg, 3))
6.	CG tax credits :	CG_tax_cr_ind	B	MAXA(0,VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sg,2)+((ex_inc_ind+child_ex_inc_ind)-VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sg,1))*VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sg,3)+IF(AND(earn>0,married=0,children>=2),MIN(SP_tax_credit,(SSC+SSC_empr)),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)-VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sg,1))*VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sg,3)+IF(AND(earn_total>0,married=0,children>=2),MIN(SP_tax_credit,(SSC_fam+SSC_empr_fam)),0)
7.	CG tax	CG_tax_ind	B	CG_tax_ind_excl-CG_tax_cr_ind
		CG_tax_fam	J	CG_tax_fam_excl-CG_tax_cr_fam
8.	State and local tax before credits	local_tax_ind_excl	B	MAXA(0, VLOOKUP(tax_inc_ind, tax_sch_sa, 2)+(tax_inc_ind-VLOOKUP(tax_inc_ind, tax_sch_sa, 1))*VLOOKUP(tax_inc_ind, tax_sch_sa, 3))
		local_tax_fam_excl	J	MAXA(0, VLOOKUP(tax_inc_fam, tax_sch_sa, 2)+(tax_inc_fam-VLOOKUP(tax_inc_fam, tax_sch_sa, 1))*VLOOKUP(tax_inc_fam, tax_sch_sa, 3))
	local tax credits	local_tax_cr_ind	B	MAXA(0,VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sa,2)+((ex_inc_ind+child_ex_inc_ind)-VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sa,1))*VLOOKUP(ex_inc_ind+child_ex_inc_ind,tax_sch_sa,3))
		local_tax_cr_fam	J	MAXA(0,VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sa,2)+((ex_inc_fam+child_ex_inc_fam)-VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sa,1))*VLOOKUP(ex_inc_fam+child_ex_inc_fam,tax_sch_sa,3))
	State and local tax	local_tax_ind	B	Positive(local_tax_ind_excl-local_tax_cr_ind)
		local_tax_fam	J	Positive(local_tax_fam_excl-local_tax_cr_fam)
9.	Employees' soc security	SSC	B	IF(AND(earn>0, earn<='min_lim),' min_lim*(pension_rate+unemp_rate+oth_rate), IF(earn>='top_lim,' top_lim*(pension_rate+unemp_rate+oth_rate), earn*(pension_rate+unemp_rate+oth_rate)))
		SSC_fam	J	SSC_princ+SSC_sp
11.	Cash transfers	Child_transf		IF(Children=0,0,IF(earn<='VLOOKUP(Children,' SS_child_table,2),SS_child_benefit*Children, IF(earn<='VLOOKUP(Children,' SS_child_table, 3), VLOOKUP(Children, SS_child_table, 3)-earn, 0)))
13.	Employer's SSC	SSC_empr		IF(AND(earn>0, earn<='min_lim),' min_lim*(pension_empr+unemp_empr+ oth_umpr), IF(earn>='top_lim,' top_lim*(pension_empr+unemp_empr+oth_empr), earn*(pension_empr+unemp_empr+oth_empr)))

Key to range of equation B calculated separately for both principal earner and spouse P calculated for principal only S calculated for spouse only J calculated once only on a joint basis.

Sweden

This chapter includes data on the income taxes paid by workers, their social security contributions, the family benefits they receive in the form of cash transfers as well as the social security contributions and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for eight different family types.

Methodological information is available for personal income tax systems, compulsory social security contributions to schemes operated within the government sector, universal cash transfers as well as recent changes in the tax/benefit system. The methodology also includes the parameter values and tax equations underlying the data.

Sweden 2018

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**	303 871	453 539	757 411	303 871
2.	**Standard tax allowances**				
	Basic allowance	18 900	13 400	13 400	18 900
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes	0	0	0	0
	Work-related expenses				
	Other				
	Total	18 900	13 400	13 400	18 900
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	284 900	440 100	744 000	284 900
5.	**Central government income tax liability (exclusive of tax credits)**	0	0	61 825	0
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children				
	Other	44 440	58 890	58 250	44 440
	Total	44 440	58 890	58 250	44 440
7.	**Central government income tax finally paid (5-6)**	- 44 440	- 58 890	3 575	- 44 440
8.	**State and local taxes**	91 509	141 360	238 972	91 509
9.	**Employees' compulsory social security contributions**				
	Gross earnings	21 300	31 700	35 300	21 300
	Taxable income				
	Total	21 300	31 700	35 300	21 300
10.	**Total payments to general government (7 + 8 + 9)**	68 369	114 170	277 847	68 369
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	31 000
	Total	0	0	0	31 000
12.	**Take-home pay (1-10+11)**	235 502	339 369	479 564	266 502
13.	**Employer's wage dependent contributions and taxes**				
	Employer's compulsory social security contributions	62 901	93 883	156 784	62 901
	payroll taxes	32 575	48 619	81 194	32 575
	Total	95 476	142 502	237 978	95 476
14.	**Average rates**				
	Income tax	15.5%	18.2%	32.0%	15.5%
	Employees' social security contributions	7.0%	7.0%	4.7%	7.0%
	Total payments less cash transfers	22.5%	25.2%	36.7%	12.3%
	Total tax wedge including employer's social security contributions	41.0%	43.1%	51.8%	33.3%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	28.6%	32.1%	60.1%	28.6%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	45.6%	48.3%	69.7%	45.6%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

Sweden 2018

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**		453 539	603 207	757 411	603 207
2.	**Standard tax allowances:**					
	Basic allowance		13 400	47 700	32 300	47 700
	Married or head of family					
	Dependent children					
	Deduction for social security contributions and income taxes		0	0	0	0
	Work-related expenses					
	Other					
		Total	13 400	47 700	32 300	47 700
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		440 100	555 400	725 000	555 400
5.	**Central government income tax liability (exclusive of tax credits)**		0	0	0	0
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children					
	Other		58 890	82 086	103 330	82 086
		Total	58 890	82 086	103 330	82 086
7.	**Central government income tax finally paid (5-6)**		- 58 890	- 82 086	- 103 330	- 82 086
8.	**State and local taxes**		141 360	178 394	232 869	178 394
9.	**Employees' compulsory social security contributions**					
	Gross earnings		31 700	42 200	53 000	42 200
	Taxable income					
		Total	31 700	42 200	53 000	42 200
10.	**Total payments to general government (7 + 8 + 9)**		114 170	138 508	182 539	138 508
11.	**Cash transfers from general government**					
	For head of family					
	For two children		31 000	31 000	31 000	0
		Total	31 000	31 000	31 000	0
12.	**Take-home pay (1-10+11)**		370 369	495 699	605 872	464 699
13.	**Employer's wage dependent contributions and taxes**					
	Employer's compulsory social security contributions		93 883	124 864	156 784	124 864
	payroll taxes		48 619	64 663	81 194	64 663
		Total	142 502	189 527	237 978	189 527
14.	**Average rates**					
	Income tax		18.2%	16.0%	17.1%	16.0%
	Employees' social security contributions		7.0%	7.0%	7.0%	7.0%
	Total payments less cash transfers		18.3%	17.8%	20.0%	23.0%
	Total tax wedge including employer's social security contributions		37.9%	37.5%	39.1%	41.4%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		32.1%	32.1%	32.1%	32.1%
	Total payments less cash transfers: Spouse		16.3%	28.6%	28.6%	28.6%
	Total tax wedge: Principal earner		48.3%	48.3%	48.3%	48.3%
	Total tax wedge: Spouse		36.3%	45.6%	45.6%	45.6%

The national currency is the Swedish Kronor (SEK). In 2018, SEK 8.69 was equal to USD 1. In that year, the average worker earned SEK 453 539 (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 13 400 and SEK 35 100, depending on income. When individuals pay central government income tax, the basic allowance is at its lowest level, which equals SEK 13 400. The basic allowance depends on the assessed earned income and the basic amount, which equals SEK 45 500 in 2018.

Assessed-Earned- Income (SEK) Relative to Basic Amount (BA)	Share of BA at lower bracket	For exceeding income
—0.99	0.423	
0.99—2.72	0.423	+0.2
2.72—3.11	0.77	
3.11—7.88	0.77	-0.1
7.88—	0.293	

For taxpayers older than 65, the basic relief is calculated differently:

Assessed-Earned- Income (SEK) Relative to Basic Amount (BA)	Share of BA at lower bracket	For exceeding income
—1.11	1.11	
1.11—2.72	1.11	+0.249
2.72—2.94	1.511	+0.332
2.94-4.45	1.584	+0.113
4.45—9.15	1.754	-0.158
9.15—12.43	1.011	-0.09
12.43—	0.715	

- Standard marital status reliefs: None.
- Relief(s) for children: None.
- Work-related expenses: None.
- Other: None.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Interest on qualifying loans: Interest payments are offset against capital income. The resulting net capital income is the tax base. A tax credit is given in the case of negative capital income.
- Medical expenses: None. Other allowances are given for:
- the amount of commuting expenses exceeding SEK 11 000;

- other types of work-related expenses exceeding SEK 5 000; examples are the costs of tools, work-related phone calls using the taxpayer's private telephone;
- increased living expenses while on business trips, e.g. such as the use of a private car if these costs are not reimbursed by the employer;
- double housing expenses due to temporary work at other geographical locations (too far from home for commuting), or if the family for some reason can't move, even if the job is of a permanent nature;
- travelling expenses for travelling home if the taxpayer works in another place than his/her place of residence.

1.1.3. Tax schedule

Taxable Income (SEK)	Tax (SEK) at lower bracket	For exceeding income, %
0—455 300	0	0
455 300—662 300	0	20
over 662 300	41400	25

1.1.4. Tax credits

A tax credit equal to 100% of the compulsory social security contributions paid by the employee is granted.

For a person aged 65 or less, an annual Earned Income Tax Credit (EITC) worth up to SEK 27 200 at the average local tax rate is granted on labour income. For those older than 65, a higher credit worth up to SEK 30 000 is granted. For a person aged 65 or less the EITC is connected to the basic allowance (BAL), the basic amount (BA) and the local tax rate (LTR). For those older than 65 a simplified EITC was introduced in 2009 which is not connected to the local tax rate, the basic allowance or the basic amount. The Basic Allowance is determined in Section 1.121; the local tax rate is discussed in Section 1.2. The Basic Amount (BA) in 2018 is SEK 45 500. The Special Amount is based on the taxpayer's (gross) earned income. A phase-out of the EITC for those with incomes above around SEK 600 000 a year was introduced in 2016.

The tax credits are wastable in the sense that they cannot reduce the individual's tax payments to less than zero. The EITC is deducted from the local government income tax, whereas the tax credit for the social security contributions is deducted from other taxes as well. However the central government covers the expenses for the tax credits.

For taxpayers younger than 65, the EITC is calculated as follows:

Earned Income (EI)	EITC
—0.91 BA	(EI—BAL)*LTR
0.91 BA—2.94 BA	(0.91 BA + 0.332 * (EI—0.91 BA)—BAL)*LTR
2.94 BA—8.08 BA	(1.584 BA + 0.111 * (EI—2.94 BA)—BAL)*LTR
8.08 BA—13.54 BA	(2.155 BA—BAL)*LTR
13.54 BA-	(2.155 BA—BAL)*LTR—0.03*(EI—13.54 BA)

For taxpayers older than 65, the EITC is calculated differently:

Earned Income (EI)	EITC
– 100 000 SEK	0.2*EI
100 001—300 000 SEK	15 000 SEK + 0.05*EI
300 001—600 000 SEK	30 000 SEK
600 001—1 600 000 SEK	30 000 –0,03*(EI-600 000)
1 600 001 SEK -	0

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 13 400 and SEK 35 100; it depends on the taxpayer's income. For a taxpayer earning the AW, this basic allowance amounts to SEK 13 400 (based on an AW equal to SEK 427 905 - 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 32.12% in 2018, with the maximum and minimum rates being 35.15% and 29.19%, respectively.

2. Compulsory Social Security Contributions to Schemes Operated within the Government Sector

2.1. Employees' contributions

A general pension contribution of 7% of personal income is paid by employees and the self-employed when income is equal to or greater than 42.3% of the basic amount underlying the basic allowance (see Section 1.121). The contribution cannot exceed SEK 35 300 since the general pension contributions are not paid for income over SEK 504 375 (=8.07*62 500). 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 2018 are listed below.

Program	Employer (%)	Self-employed (%)
Retirement pension	10.21	10.21
Survivor's pension	0.70	0.70
Parental insurance	2.60	2.60
Health insurance	4.35	4.44
Labour market	2.64	0.10
Occupational health	0.20	0.20
General wage tax	10.72	10.72
Total	31.42	28.97

In certain regions, a reduction of 10% of the base, maximum SEK 7 100 per month, is granted (SEK 18 000 per year for self-employed) (it is not included in the calculations underlying this Report). For employees who are over 65 years old and born after 1937 only the retirement pension contribution (10.21%) and a special wage tax (6.15%) is applicable. For persons born in 1937 or earlier no employers' social security contributions, but a special wage tax (6.15%) is applied. On premiums for occupational pensions paid by the employer a special wage tax (24.26%) is applied.

For self-employed a general reduction of 7.5% on the SSC is applicable if the income exceeds SEK 40 000 per year. The maximal reduction is SEK 15 000 per year.

3. Universal Cash Transfers

3.1. Transfers related to marital status

None.

3.2. Transfers for dependent children

The transfers are tax exempt and independent of the parents' income. The transfers for each child are as follows:

	Until 1st of March 2018	As of 1st of March 2018
First child	12 600	15 000
Second child	14 400	16 800
Third child	19 560	21 960
Fourth child	24 720	27 120
Fifth and subsequent child	27 600	30000

4. Main Changes in Tax/Benefit Systems Since 1998

A tax credit of SEK 1 320 was introduced for low- and average income earners in 1999. The credit is reduced by 1.2% of taxable income above SEK 135 000. This reduction was abolished in 2003 and was replaced by an increase in the basic allowance.

A tax credit of 25% 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% 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%. However, in 2004, 2005 and 2006 the central government income tax bracket was restricted to be indexed with the

consumer price index plus 1%. In order to reduce the number of people paying the central income tax, there was an additional increase of the tax bracket in 2009. In 2016 the central government income tax bracket was restricted to be at the same level as 2015. In 2017 both central government income tax brackets were restricted to be indexed with the consumer price index plus 1%.

The child allowance was raised by SEK 1 200 per year in 2000, 2001, 2006 and in 2010 the child allowance for multiple children was raised by SEK 50 for the second child, SEK 100 for the third, SEK 150 for fourth and SEK 200 for the fifth and subsequent children. In 2017 the child allowance for the third child was raised by SEK 1 512. In 2018 the child allowance was raised by SEK 2 400 per child per year.

The basic allowance has been increased in 2001, 2002, 2003, 2005 and 2006. For older people the basic allowance was increased in 2009, 2010, 2011, 2013, 2014, 2016 and 2018.

An earned income tax credit was introduced in 2007 with the purpose of making work economically more rewarding relative to unemployment or inactivity. The earned income tax credit was increased in 2008, 2009, 2010 and 2014. In 2016 a phase-out of the EITC was introduced for persons with incomes above around SEK 600 000.

In 2018 a tax credit for income from sickness and activity compensation (corresponding to disability pension) was introduced.

In 2007, the social security contributions for 18-24-year-old employees and self-employed were reduced. In 2009 the reduction were increased and expanded to include all aged under 26. From 1st August 2015 the reduction was reduced by half and the 1st of June 2016 the reduction was abolished. 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. In 2016 the special wage tax for older persons was reintroduced at a rate of 6.15%.

A general reduction on the SSC for self-employed was introduced in 2010 and increased in 2014.

The deduction for premiums paid to private pension arrangements was lowered in 2015 from SEK 12 000 to SEK 1 800 and abolished in 2016.

5. Memorandum Items

5.1. Identification of an AW and calculation of earnings

Basic data for gross earnings are taken from the series Official Statistics of Sweden, published by Statistics Sweden. The calculation is based upon total average monthly or hourly earnings, primarily in September of the calendar year. To arrive at the annual earnings, data have been multiplied by the normal amount of hours worked during the year or the stipulated monthly salary has been multiplied by a factor of 12.2. The figures are representative for the country as a whole. The branch classification is NACE Rev.2 B-N according to the OECD recommendation.

5.2. Employer contributions to private health, pension, etc. schemes

There are a handful of widespread private social security schemes. The employers' contributions to these systems for the blue-collar workers in the private sector equalled to 6.3% of wage earnings in 2007. For white-collar workers in the private sector the employers' contributions to private social security schemes were 14% in 2007. These figures are based on the statistics of labour costs in the private sector, published by Statistics Sweden.

2018 Parameter values

Average earnings/yr	Ave_earn	453 539	Secretariat estimate
Central income tax			
	tax_rate	0.2	
	tax_rate2	0.05	
	tax_thrsh	438 900	
	tax_thrsh2	638 500	
Basic Allowance			
	gr1	0.99	
	gr2	2.72	
	gr3	3.11	
	gr4	7.88	
	gp1	0.423	
	gp2	0.2	
	gp3	0.1	
	gp4	0.293	
	gp5	0.77	
Local income tax			
	local_rate	0.3212	
	min_taxl	0	
Soc. security amount			
	basic_amt	45 500	
	basic_ant	62 500	
Soc. security contributions			
employee	SSC_rate	0.07	
employer	SSC_empr	0.3142	
ceiling	SSCC	8.07	
Child benefit			
	Child 1	14 600	
	Child 2	16 400	
	CB	15 500	
Tax credits			
	TC1	0	
	TC1gr1	0	
	TC1gp1	0	
	TC2gp1	1	
EITC	er_1	0.91	
	er_2	2.94	
	er_3	8.08	
	er_4	13.54	
	ep_1	1.584	
	ep_2	0.332	
	ep_3	0.111	
	ep_4	2.155	
	ep_5	0.03	
Employer payroll tax	PRT	0.1072	

2018 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.

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
		truncearn	B	TRUNC(earn, -2)
2.	Allowances:	basic_al	B	IF(truncearn<=gr_2*basic_amt, MINA(ROUNDUP(MAXA(gp_1*basic_amt, (gp_1+gp_2*(gr_2-gr_1))*basic_amt-gp_2*MAXA(gr_2*basic_amt-truncearn, 0)), -2), truncearn), MINA(ROUNDUP(MAXA(gp_4*basic_amt, gp_5*basic_amt-gp_2*MAXA(gr_2*basic_amt-truncearn, 0)-gp_3*MAXA(truncearn-gr_3*basic_amt, 0)), -2), truncearn))
		ssc_al	B	0
	Total	tax_al	B	basic_al
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	Positive(earn-basic_al)
5.	CG tax before credits	CG_tax_excl	B	tax_rate*Positive(tax_inc-tax_thrsh)+ tax_rate2* Positive(tax_inc-tax_thrsh2)
6.	Tax credits :	ssc_credit	B	Trunc(SSC, -2)
		localtax_credit	B	0
		eitc	B	=TRUNC(MAX((((TRUNC(IF(earned_income >er_2*basic_amt; IF(earned_income>er_3*basic_amt;ep_4*basic_amt;ep_1*basic_amt+ep_3*(earned_income-er_2*basic_amt));MIN(earned_income;er_1*basic_amt+ep_2*(earned_income-er_1*basic_amt)));0))-basic_allowance)*local_rate)-(IF(earned_income>er_4*basic_amt;ep_5*(earned_income-er_4*basic_amt);0));0);0)
		Final_eitc	B	MIN(eitc, CG_tax_excl+ local_tax- ssc_credit)
		tax_cr	B	ssc_credit+localtax_credit+final_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	

Line in country table and intermediate steps	Variable name	Range	Equation
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 2018

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**		60 908	90 908	151 816	60 908
2.	**Standard tax allowances**					
	Basic allowance					
	Married or head of family		0	0	0	0
	Dependent children		0	0	0	13 000
	Deduction for social security contributions and income taxes		6 600	10 792	19 282	6 600
	Work-related expenses		2 000	2 557	4 000	2 000
	Other		1 700	1 700	1 700	3 100
		Total	10 300	15 050	24 982	24 700
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	6 000
4.	**Central government taxable income (1 - 2 + 3)**		50 600	75 800	126 800	42 200
5.	**Central government income tax liability (exclusive of tax credits)**		461	1 292	5 153	139
6.	**Tax credits**					
	Basic credit					
	Married or head of family					
	Children		0	0	0	502
	Other					
		Total	0	0	0	502
7.	**Central government income tax finally paid (5-6)**		461	1 292	5 153	0
8.	**State and local taxes**		4 549	8 865	19 364	1 480
9.	**Employees' compulsory social security contributions**					
	Gross earnings		3 792	5 659	9 429	3 792
	Taxable income					
		Total	3 792	5 659	9 429	3 792
10.	**Total payments to general government (7 + 8 + 9)**		8 801	15 816	33 946	5 272
11.	**Cash transfers from general government**					
	For head of family					
	For two children		0	0	0	6 000
		Total	0	0	0	6 000
12.	**Take-home pay (1-10+11)**		52 107	75 092	117 870	61 636
13.	**Employer's compulsory social security contributions**		3 792	5 659	9 429	3 792
14.	**Average rates**					
	Income tax		8.2%	11.2%	16.1%	2.4%
	Employees' social security contributions		6.2%	6.2%	6.2%	6.2%
	Total payments less cash transfers		14.4%	17.4%	22.4%	-1.2%
	Total tax wedge including employer's social security contributions		19.5%	22.2%	26.9%	4.7%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		21.7%	27.6%	32.2%	13.8%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		26.3%	31.8%	35.8%	18.8%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Switzerland 2018

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**	90 908	120 907	151 816	120 907
2.	**Standard tax allowances**				
	Basic allowance				
	Married or head of family	2 600	15 666	16 000	15 666
	Dependent children	13 000	13 000	13 000	0
	Deduction for social security contributions and income taxes	10 792	15 072	19 392	15 072
	Work-related expenses	2 557	2 557	2 557	2 557
	Other	4 900	4 900	4 900	3 500
	Total	33 850	51 196	55 849	36 796
3.	**Tax credits or cash transfers included in taxable income**	6 000	6 000	6 000	0
4.	**Central government taxable income (1 - 2 + 3)**	63 000	75 700	101 900	84 100
5.	**Central government income tax liability (exclusive of tax credits)**	514	899	2 063	1 235
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children	502	502	502	0
	Other				
	Total	502	502	502	0
7.	**Central government income tax finally paid (5-6)**	12	397	1 561	1 235
8.	**State and local taxes**	4 170	7 126	11 467	9 364
9.	**Employees' compulsory social security contributions**				
	Gross earnings	5 659	7 526	9 451	7 526
	Taxable income				
	Total	5 659	7 526	9 451	7 526
10.	**Total payments to general government (7 + 8 + 9)**	9 841	15 050	22 478	18 126
11.	**Cash transfers from general government**				
	For head of family				
	For two children	6 000	6 000	6 000	0
	Total	6 000	6 000	6 000	0
12.	**Take-home pay (1-10+11)**	87 067	111 858	135 338	102 782
13.	**Employer's compulsory social security contributions**	5 659	7 526	9 451	7 526
14.	**Average rates**				
	Income tax	4.6%	6.2%	8.6%	8.8%
	Employees' social security contributions	6.2%	6.2%	6.2%	6.2%
	Total payments less cash transfers	4.2%	7.5%	10.9%	15.0%
	Total tax wedge including employer's social security contributions	9.8%	12.9%	16.1%	20.0%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	19.7%	22.3%	25.0%	24.1%
	Total payments less cash transfers: Spouse	17.4%	21.0%	25.6%	22.9%
	Total tax wedge: Principal earner	24.4%	26.9%	29.4%	28.6%
	Total tax wedge: Spouse	22.2%	25.6%	30.0%	27.4%

The national currency is the Swiss franc (CHF). In 2018, CHF 0.98 equalled USD 1. The Secretariat has estimated that in that same year the average worker earned CHF 90 908 (Secretariat estimate).

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 2 600 for married couples for direct federal tax.
- Deduction for children

A CHF 6 500 deduction is allowed for each child under 18 years of age; the deduction is allowed for older children if they are apprentices or still in school.

- Tax credit for children

A CHF 251 deduction from the tax liability is allowed for each child under 18 years, the deduction is allowed for older children if they are apprentices or still in school.

- Deductions for social insurance contributions and other taxes

Premiums for old age and disability insurance (5.125% of gross earned income) and for unemployment insurance (1.1% for income up to CHF 148 200, 0.5% for income over CHF 148 200) are deductible in full. Compulsory contributions of approximately 7.75% to private pension funds are also fully deductible. Health and life insurance premiums are deductible from federal income tax up to CHF 3 500 for married persons and CHF 1 700 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 2 000 and no more than CHF 4 000.

- Deduction for two-income couples

50% of the smaller income can be deducted, but no less than CHF 8 100 and no more than CHF 13 400.

1.1.2.2. Main non-standard reliefs available to the average worker

- Interest payments on qualifying loans

This is the main non-standard relief available to the average worker. It is allowed for all sorts of loans.

- Medical expenses

Expenses incurred as a result of illness, accidents or disability of the taxpayer or one of its dependants are deductible if the taxpayer bears the expenses personally and they exceed 5% of his or her net income.

1.1.3. Tax base

Allowable deductions from gross income	Single taxpayer (CHF)	Married taxpayer, 2 children (CHF)
Work-related expenses1	2 000-4 000	2 000–4 000
Personal deduction	--	2 600
Deduction for 2 dependent children	--	13 000 (6 500*2)
Social contributions		
Old age insurance	5.13%	5.13%
Unemployment insurance	1.1%2	1.1%2
Pension fund	7.75%	7.75%
Maximum deductions for health insurance premiums and loan interest3	1 700 plus 700 per child	3 500 plus 700 per child
Deduction for two-income couples4		8 100–13 400

Notes:
1. 3% of net income, minimum CHF 2 000, maximum CHF 4 000.
2. 1.1% of income up to CHF 148 200; 0.5% of income beyond CHF 148 200.
3. For the purposes of this publication, taxpayers are assumed to always receive the relevant maximum deduction.
4. 50% of smaller income, minimum the lower of CHF 8 100 or adjusted smaller income, maximum CHF 13 400.

In addition, for the married taxpayer with 2 children, there is a tax credit for 2 dependent children amounting to CHF 502, thus reducing the tax liability by CHF 502.

1.1.4. Tax schedules

1.1.4.1. Rates for persons living alone

Taxable income (CHF)1	Base amount (CHF)	Plus % of excess (CHF)	
Up to 14 500	--	--	--
14 500 to 31 600		0.77	14 500
31 600 to 41 400	131.65	0.88	31 600
41 400 to 55 200	217.90	2.64	41 400
55 200 to 72 500	582.20	2.97	55 200
72 500 to 78 100	1 096.00	5.94	72 500
778 100 to 103 600	1 428.60	6.60	78 100
103 600 to 134 600	3 111.60	8.80	103 600
134 600 to 176 000	5 839.60	11.00	134 600
176 000 to 755 200	10 393.60	13.20	176 000
Over 755 200[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)[1]	Base amount (CHF)	Plus % of the excess (CHF)	
Up to 28 300	--	--	--
28 300 to 50 900		1	28 300
50 900 to 58 400	223	2	50 900
58 400 to 75 300	373	3	58 400
75 300 to 90 300	877	4	75 300
90 300 to 103 400	1 477	5	90 300
103 400 to 114 700	2 127	6	103 400
114 700 to 124 200	2 799	7	114 700
124 200 to 131 700	3 457	8	124 200
131 700 to 137 300	4 057	9	131 700
137 300 to 141 200	4 552	10	137 300
141 200 to 143 100	4 942	11	141 200
143 100 to 145 000	5 151	12	143 100
145 000 to 895 800	5 379	13	145 000
For 895 900	103 028.50		
Over 895 900[2]	--	11.5 of total income	

Notes:
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 2012, 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	2 000–4 000
Personal deduction	--	--
Deduction for 2 dependent children	--	18 000 (9 000*2)
Social contributions		
-- Old age insurance	5.125%	5.125%
-- Unemployment insurance	1.1%[2]	1.1%[2]
-- Pension fund	7.75%	7.75%
Maximum deductions for health insurance premiums and loan interest[3]	2 600 plus 1 300 per child	5 200 plus 1 300 per child
Deduction for two-income couples		5 900

Notes:
1. 3% of net income, minimum CHF 2 000 CHF, maximum CHF 4 000.
2. 1.1% of income up to CHF 148 200; 0.5% of income beyond CHF 148 200.
3. For the purposes of this publication, taxpayers are assumed to always receive the relevant maximum deduction.

1.2.3. Postnumerando tax rates

Cantonal income tax (Zurich)

a) Basic income tax rates for married, divorced, widowed or single taxpayers living with children:

Taxable income (CHF)[1]	Base amount (CHF)	Plus % of the excess (CHF)	
Up to 13 500	--	0	--
13 500 to 19 600	--	2	13 500
19 160 to 27 300	122	3	19 600
27 300 to 36 700	353	4	27 300
36 700 to 47 400	729	5	36 700
47 400 to 61 300	1 264	6	47 400
61 300 to 92 100	2 098	7	61 300
92 100 to 122 900	4 254	8	92 100
122 900 to 169 300	6 718	9	122 900
169 300 to 224 700	10 984	10	169 300
224 700 to 284 800	16 434	11	224 700
284 800 to 354 100	23 045	12	284 800
Over 354 100	31 361	13	354 100

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 6 700	--	0	--
6 700 to 11 400	--	2	6 700
11 400 to 16 100	94	3	11 400
16 100 to 23 700	235	4	16 100
23 700 to 33 000	539	5	23 700
33 000 to 43 700	1 004	6	33 000
43 700 to 56 100	1 646	7	43 700
56 100 to 73 000	2 514	8	56 100
73 000 to 105 500	3 866	9	73 000
105 500 to 137 700	6 791	10	105 500
137 700 to 188 700	10 011	11	137 700
188 700 to 254 900	15 621	12	188 700
Over 254 900	23 565	13	254 900

Notes:
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	10 (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

5.125% of gross income for old age insurance.

2.1.2. Health insurance

--

2.1.3. Unemployment

1.1% on the portion of income up to CHF 148 200; 0.5% for income over CHF 148 200.

2.1.4. Work-related accidents

--

2.1.5. Family allowances

--

2.1.6. Other

--

2.2. Employer contributions

2.2.1. Retirement pensions

5.125% of gross income for old age insurance.

2.2.2. Health insurance

--

2.2.3. Unemployment

1.1% on the portion of income up to CHF 148 200; 0.5% for income over CHF 148 200.

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 2 400 (for children up to 16 years of age and CHF 3 000 for children in education between 16 and 25 years of age) has been established. In most cases, the benefit paid exceeds this minimum. The average family benefit is estimated to amount to CHF 3 000 per child per year.

This benefit is taxable along with other components of income.

The family allowance contributions are not included in the Taxing Wages results either as they are paid to a privately-managed fund. These contributions therefore qualify as non-tax compulsory payments (see also section 5.3).

2.2.6. Other

--

3. Universal cash benefits

3.1. Benefits linked to marital status

No such benefits are paid.

3.2. Benefits for dependent children

The employer pays a benefit of, on average, approximately CHF 3 000 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 praenumerando taxation to annual postnumerando taxation on individual income. As a result, the direct federal tax is based on annual postnumerando taxation as well.

As of 1 January 2008, the basic deduction for married couples and the deduction for two-income couples were introduced. These measures are intended to minimise the marriage penalty and to reduce the high taxation of secondary earners, thereby increasing labour force participation of skilled secondary earners.

As of 1 January 2012, the tax credit for children reduces the tax liability by CHF 251 per child.

5. Memorandum item

5.1. Identification of the average worker

The population includes men and women working in industry, arts and crafts. The stated income is for the average of workers in the same sector. The geographical scope is the entire country, whereas the amount of tax is computed in respect of the canton and commune of Zurich.

5.2. Method of calculation used

- Unemployment benefits: not included;
- Sick leave payments: not included;
- Paid leave allowances: included;
- Overtime: included;
- Periodic cash bonuses: included;
- Fringe benefits: not included;
- Basic method used for calculation: monthly wages are multiplied by 12;
- Close of the income tax year: 31 December;
- Reference period for computing wages: from 1 January to 31 December of the year in question.

5.3. Calculation of non-tax compulsory payments

Switzerland imposes some important non-tax compulsory payments (NTCPs). These NTPCs are not included in the Taxing Wages models except when they qualify as standard personal income tax reliefs. Compulsory payments indicators, which combine the effect of taxes and NTCPs, are calculated by the OECD Secretariat and presented in the OECD Tax Database (See: www.oecd.org/ctp/taxdatabase). Switzerland levies the following employee and/ or employer NTCPs:

- Contributions to the second pillar of the pension system (occupational pension funds): Occupational pension funds are mandatory for salaried persons earning at least CHF 21 150 annually. Old age insurance is based on individual savings. The savings assets accumulated by the insured person on his individual savings account over the years serve to finance the old age pension. The constituted capital is converted into an annual old age pension on the basis of a conversion factor. Contribution rates depend on the occupation and the pension fund. An

estimated representative rate amounted to 7.75% for employees and 10.52% for employers in 2015.

- Health insurance is compulsory for all persons domiciled in Switzerland. Every family member is insured individually, regardless of age. Health insurance contributions are lump sum contributions per capita depending on age, sex, canton of residence and insurer. The national average rates for 2018 amount to CHF 5 584 for adults and CHF 1 326 for children per year. Health insurance premiums can be reduced depending on the contributor's income level and his family situation. Each canton has its own definition of the income thresholds and the reduction regime. The health insurance premium and reduction rates of the Canton of Zurich are used in the calculations.
- Family allowance: Employers have to make family allowance contributions. The contribution rates differ among cantons and family contribution funds. A representative rate has to be estimated, for 2018 it amounts to 1.2%.
- Accident insurance: Accident insurance is compulsory for every employee. Employees are automatically insured by their employer, whereas the employers are more or less automatically assigned to a particular insurance company depending on their branch of trade. The risk and associated costs of the respective business activity determines the insurance premiums. A representative rate would have to be estimated.

2018 Parameter values

Average earnings/yr	Ave_earn	90 908	Secretariat estimate
Tax allowances	fed_child_al	6 500	
Tax credit	fed_child_cred	251	
Partner Allowance	partner_rate_fed	0.5	
	partner_min_fed	8 100	
	partner_max_fed	13 400	
Basic deduction for married couples	Married_ded_fed	2 600	
Partner income local	partner_local	5 900	
Single parent	sing_par_al	0	
Workrelated	work_exp	0.03	
	work_exp_min	2 000	
	work_exp_max	4 000	
Allowances for local tax	local_basic	0	
	local_child	9 000	
Federal tax	IFD_min_s	-	
Single	IFD_sch_s	0	14 500
		0.0077	31 600
		0.0088	41 400
		0.0264	55 200
		0.0297	72 500
		0.0594	78 100
		0.066	103 600
		0.088	134 600
		0.11	176 000
		0.132	752 200
		0.115	
Married	IFD_min_m	-	
	IFD_sch_m	0	28 300
		0.01	50 900
		0.02	58 400
		0.03	75 300
		0.04	90 300
		0.05	103 400
		0.06	114 700
		0.07	124 200
		0.08	131 700
		0.09	137 300
		0.1	141 200
		0.11	143 100
		0.12	145 000
		0.13	895 900
		0.115	
Cantonal tax	Zurich_min	24	
Single	Zurich_sch_s	0	6 700
		0.02	11 400
		0.03	16 100
		0.04	23 700
		0.05	33 000
		0.06	43 700
		0.07	56 100
		0.08	73 000
		0.09	105 500

		0.1	137 700
		0.11	188 700
		0.12	254 900
		0.13	
Married	Zurich_sch_m	0	13 500
		0.02	19 600
		0.03	27 300
		0.04	36 700
		0.05	47 400
		0.06	61 300
		0.07	92 100
		0.08	122 900
		0.09	169 300
		0.1	224 700
		0.11	284 800
		0.12	354 100
		0.13	
Canton and Commune Tax Mutiple	statetax_mult	2.19	
Social security contributions	old_age	0.05125	
Pension	pension_rate	0	
Pillar 2 pension	NTCP_old_age_max	28 200	
	NTCP_pension_ee	0.0782	
Unemployment	unemp_rate	0.011	
	unemp_rate2	0.005	
income ceiling	unemp_ciel	148 200	
Cantonal deductible limit	local_dedn	2 600	
deductible extra for child	local_dedn_c	1 300	
Max other insurance deduction			
single	max_dedn_s	1 700	
married couples	max_dedn_m	3 500	
child	max_dedn_c	700	
Child cash transfer	child_ben	3 000	

2018 Tax equations

The equations for the Swiss system in 2018 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-work_al_spouse-SSC_spouse>partner_min_fed,(Married*MAX(partner_min_fed,MIN(partner_max_fed,partner_rate_fed*(earn_spouse-work_al_spouse-SSC_spouse)))),earn_spouse-work_al_spouse-SSC_spouse)+Married*Married_ded_fed
	Children	children_al	J	Children*fed_child_al+ (Children>0)*(Married=0)*sing_par_al
	Soc sec contributions	SSC_al	B	SSC + NTCP_pension_ee*IF(earn_princ>0.75*NTCP_old_age_max,MAX(0.125*NTCP_old_age_max,earn_princ-0.875*NTCP_old_age_max),0)+NTCP_pension_ee*IF(earn_spouse>0.75*NTCP_old_age_max,MAX(0.125*NTCP_old_age_max,earn_spouse-0.875*NTCP_old_age_max),0)
	Work related	work_al	B	IF(earn-SSC>work_exp_min,MAX(work_exp_min,MIN(work_exp_max,work_exp*(earn-SSC))),earn-SSC)
	Other	oth_al	J	IF(Married,IF(Children>0,max_dedn_m+Children*fed_dedn_c,max_dedn_m),IF(Children>0,max_dedn_s+Children*fed_dedn_c,max_dedn_s))
	Total	tax_al	J	partner_al+children_al+SSC_al+work_al+oth_al
3.	Credits in taxable income	taxbl_cr	J	Cash_tran
4.	CG taxable income	tax_inc	J	positive(earn_total-tax_al+taxbl_cr)
5.	CG tax before credits	CG_tax_excl	J	IF(Married+Children='0,' Tax(tax_inc, IFD_sch_s)+IFD_min_s*(Tax(tax_inc, IFD_sch_s)>0), Tax(tax_inc, IFD_sch_m)+IFD_min_m*(Tax(tax_inc, IFD_sch_m)>0))
6.	Tax credits :	Children_cred	J	Child_cred*Children
7.	CG tax	CG_tax	J	Positive(CG_tax_excl- Children_cred)
8.	State and local taxes	local_tax_inc	J	MAX(earn_total+taxbl_cr-local_basic*(1+Married)-Children*local_child-work_al_total-SSC_total-(local_dedn*(1+Married)+Children*local_dedn_c)-(earn_spouse>0)*partner_local,0)
		local_tax		IF((Married+Children)>0, Tax(local_tax_inc, Zurich_sch_m)*statetax_mult+(1+Married)*Zurich_min*(Tax(local_tax_inc, Zurich_sch_m)>0), Tax(local_tax_inc, Zurich_sch_s)*statetax_mult+(Tax(local_tax_inc, Zurich_sch_s)>0)*Zurich_min)
9.	Employees' soc security	SSC	B	(old_age)*earn+IF(earn<=unemp_ciel,earn*unemp_rate,unemp_ciel*unemp_rate+(earn-unemp_ciel)*unemp_rate2)
11.	Cash transfers	Cash_tra	J	Children*child_ben

	Line in country table and intermediate steps	Variable name	Range	Equation
		n		
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 2018

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**		31 437	46 921	78 358	31 437
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		4 716	7 038	11 754	4 716
	Work-related expenses					
	Other					
		Total	4 716	7 038	11 754	4 716
3.	**Tax credits or cash transfers included in taxable income**		0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**		26 722	39 883	66 604	26 722
5.	**Central government income tax liability (exclusive of tax credits)**		4 604	7 648	14 863	4 604
	Stamp tax		239	356	595	239
		Total	4 843	8 004	15 458	4 843
6.	**Tax credits**					
	Basic credit		1 827	1 827	1 827	2 375
	Married or head of family					
	Children					
	Other					
		Total	1 827	1 827	1 827	2 375
7.	**Central government income tax finally paid (5-6)**		3 016	6 178	13 631	2 468
8.	**State and local taxes**		0	0	0	0
9.	**Employees' compulsory social security contributions**					
	Gross earnings		4 716	7 038	11 754	4 716
	Taxable income					
		Total	4 716	7 038	11 754	4 716
10.	**Total payments to general government (7 + 8 + 9)**		7 732	13 216	25 385	7 184
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)**		23 705	33 705	52 973	24 253
13.	**Employer's compulsory social security contributions**		4 601	8 211	13 713	4 601
14.	**Average rates**					
	Income tax		9.6%	13.2%	17.4%	7.9%
	Employees' social security contributions		15.0%	15.0%	15.0%	15.0%
	Total payments less cash transfers		24.6%	28.2%	32.4%	22.9%
	Total tax wedge including employer's social security contributions		34.2%	38.9%	42.5%	32.7%
15.	**Marginal rates**					
	Total payments less cash transfers: Principal earner		32.8%	38.7%	38.7%	32.8%
	Total payments less cash transfers: Spouse		n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner		42.8%	47.8%	47.8%	42.8%
	Total tax wedge: Spouse		n.a.	n.a.	n.a.	n.a.

Turkey 2018

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**	46 921	62 405	78 358	62 405
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	7 038	9 361	11 754	9 361
	Work-related expenses				
	Other				
	Total	7 038	9 361	11 754	9 361
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	39 883	53 044	66 604	53 044
5.	**Central government income tax liability (exclusive of tax credits)**	7 648	9 623	12 253	9 623
	Stamp tax	356	356	356	356
	Total	8 004	9 979	12 609	9 979
6.	**Tax credits**				
	Basic credit	2 740	4 201	4 201	3 653
	Married or head of family				
	Children				
	Other				
	Total	2 740	4 201	4 201	3 653
7.	**Central government income tax finally paid (5-6)**	5 265	5 895	8 646	6 443
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	7 038	9 361	11 754	9 361
	Taxable income				
	Total	7 038	9 361	11 754	9 361
10.	**Total payments to general government (7 + 8 + 9)**	12 303	15 256	20 400	15 804
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)**	34 618	47 149	57 958	46 601
13.	**Employer's compulsory social security contributions**	8 211	10 021	12 813	10 021
14.	**Average rates**				
	Income tax	11.2%	9.4%	11.0%	10.3%
	Employees' social security contributions	15.0%	15.0%	15.0%	15.0%
	Total payments less cash transfers	26.2%	24.4%	26.0%	25.3%
	Total tax wedge including employer's social security contributions	37.2%	34.9%	36.4%	35.7%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	38.7%	38.7%	38.7%	38.7%
	Total payments less cash transfers: Spouse	16.7%	28.5%	32.8%	28.5%
	Total tax wedge: Principal earner	47.8%	47.8%	47.8%	47.8%
	Total tax wedge: Spouse	25.4%	39.2%	42.8%	39.2%

The national currency unit is the "Türk Lirası" (TL). In 2018, TL 4.84 was equal to USD 1. In that year, the average worker earned TL 46.921 (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 been applied since 1 January 1999.

1.1.2. Tax allowances and tax credits

1.1.2.1. Standard reliefs:

- Reliefs for social security contributions: Employee's social security contributions are deductible from gross earnings. These contributions are 15% of gross income as stated by the Social Insurance Act. The contribution to the unemployment fund is included in this amount and equals 1% of gross income.
- Contributions to public pension funds established by law are deductible.
- Work related expenses: None.
- Minimum Living Relief: The calculation of the minimum living allowance is based on the annual gross amount of the minimum wage for employees older than 16 at the beginning of the calendar year in which the income is obtained, multiplied by the following rates:
  - 50% for the taxpayer him or herself;
  - 10% for the spouse who neither works nor has an income;
  - 7.5% for each of the first two children;
  - 10% for third child;
  - 5% for each additional child.

This total amount is then multiplied by the rate (15%) 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.

According to Article 6 of Law No: 7103 (dated: 21.03.2018) when the net wages of minimum wage earners fall below the amount determined for the month of January of the current year because of moving into the second tax bracket (rate: 20%), minimum living relief will be increased by the same amount for the months when the net wage falls below net minimum wage determined for the month of January.

1.1.2.2. Main non-standard tax reliefs applicable to an AW

- Reliefs for disabled: Article 31 of PIT Law (implemented in 01.01.2004 by the law 4842) regulates tax relief for disabled persons. The employee who lost his/her working capacity with at least 80% is considered to be disabled in the 1st degree; employees are disabled in the 2nd respectively 3rd degree if they lost their working capacity with at least 60% respectively 40%. In these cases, the following amounts are deductible from monthly wages:
  - Disabled in the 1st degree: TL 1 000

  - Disabled in the 2nd degree: TL 530
  - Disabled in the 3rd degree: TL 240
- Legal deductions for public institutions such as OYAK (Social Aid Institution for Military Officers).
- 50% of the premiums paid by the wage-earner for life insurance policies which belong to himself (or herself), the spouse and dependent children and all of the premiums paid by the wage- earner for personal insurance policies including death, accident, health, illness, disablement, unemployment, maturity, birth, education, etc. provided that the insurance is contracted with a company establishment in or with a main office in Turkey. (The total amount of deductible premiums cannot exceed 15% of the wage that is earned in the current month. The annual amount cannot exceed the annual minimum wage.
- Membership payments made to labour unions.

1.1.3. Tax schedule

The tax schedule in 2018 is as follows:

Taxable income (TL)	Tax on lower threshold (TL)	Tax on excess amount above lower threshold (%)
Up to 14 800		15
14 800 up to 34 000	2 220	20
34 000 up to 120 000	6 060	27
Over 120 000	29 280	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 0.759% in 2018.

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%

2.1.2. Sickness: 5%

2.1.3. Unemployment: 1%

2.2. Employers' contributions

2.2.1. Pensions (disability, old age and death insurance): 11%

2.2.2. Sickness: 7.5%

2.2.3. Unemployment: 2%

2.2.4. Pensions (for short term insurance branches): 2%

In order to increase employment and reduce regional imbalances in Turkey; various incentives policies have been implemented by state, by laws 4447, 4857, 5084, 5225, 5510, 5746, 6111, 6486 by Council of Minister's Decree of 2012/3305(Unemployment Law No: 4447, Labour Law No: 4857, Investment and Employment Promotion Law No: 5084, Investment Incentives and The Law of Cultural Initiatives Law No: 5225, Social Security General Health Insurance Law No: 5510, Promotion Research and Development Activities Law No: 5746, Law On The Restricting Of Certain Receivables and Amendment To The Law Of Social Insurance and General Health Insurance and Certain Other Laws And Decree Laws No: 6111, Amendment To The Law Of Social Insurance and General Health Insurance and Certain Other Laws No: 6486, Council of Minister's Decree No: 2012/3305 on Government Subsidies for Investments, Law On Amendments To Tax Laws And Certain Other Laws And Decrees: 7103).

One of the various incentives is reduction of premiums. If disability, old age and death insurance premiums paid regularly by employers as stated law 5510 article of 81 (Social Security and General Health Insurance Law), 5% of total 11% premiums are paid by state on behalf of employers. (5% discount applied in employers share). In addition to 5% discount, 6% discount is implemented from 2013 in the working places located in 51 provinces, Gökçeada and Bozcaada determined by taking into account the social-development index.

With Law no: 6661 (dated: 14.01.2016) Provisional Article 68 has been added to Social Security and General Health Insurance Law (Law no.5510). According to this article 100 TL (3.33TL per day) of Employers SSC will be covered by Government for employees whose daily gross earnings are below 85 TL in 2016.

According to Council of Ministers Decree 2017/9865 (dated 06.02.2017) 100 TL (3.33TL per day) of Employers SSC will be covered by Government for employees whose daily gross earnings are below 110 TL in 2017.

According to Council of Ministers Decree 2017/10326 (dated 16.05.2017) 100 TL (3.33TL per day) of Employers SSC will be covered by Government for employees whose daily gross earnings are below 164,70 TL in private sector workplaces with collective bargaining agreements. 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.

With law no:7103 (dated:21.03.2018) Provisional Article 75 has been added to Social Security and General Health Insurance Law (Law no.5510). According to this article, the incentive (SSC Government support) application period has been extended to 2018 (January – September).

According to Council of Ministers Decree 2018/11668 (dated 20 June 2018) 100 TL (3.33TL per day) of Employers SSC will be covered by Government for employees whose daily gross earnings are below 120 TL in 2018.

According to Council of Ministers Decree 2018/11668 (dated 20 June 2018) 100 TL (3.33TL per day) of Employers SSC will be covered by Government for employees whose daily gross earnings are below 180 TL in private sector workplaces with collective bargaining agreements. 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.

With law no: 7103 (dated: 21 March 2018) Provisional Article 19 has been added to Unemployment Law (Law no: 4447). Additional employment incentive is being implemented in order to increase the employment rate. This incentive's objective group consists of unemployed persons who have no more than 10 insured days in last three months.

The incentive targets private sector and the amount of support will be calculated differently according to the sector in which the workplace operates. The incentive provides SSC support up to TL 2029.50 (for employees with gross wages of TL 5 412) and income and stamp tax support of TL 121.95 for every additional employee in establishments operating in the manufacturing or information technologies sectors. For other sectors; the support is 761.06 TL for SSC premiums, and TL 121.95 for income and stamp tax (TL 883.01 in total).

The support will be applied until December 2020 and benefiting period for each employee, consists of 12 months (if the insured is disabled, or if the insured is woman older than 18 years old or man between 18-25 years old, it is 18 months).

With law no:7103 (dated:21 March 2018) Provisional Article 20 has been added to Unemployment Law (Law no: 4447). According to this Article; in manufacturing sector, if persons who are between 18-25 years old are hired, the insurance premiums are paid by government and employer respectively for every month. For example, if a person is employed in January; the insurance premiums which belong to the months February, April, June, August, October, and December will be within scope of support, while the insurance premiums for remaining months will be paid by employer. The incentive will be applied until December 2018. The incentive can only be applied for up to two employees in addition to average employee number employed in the workplace in 2017.

For employees whose gross earnings are below the base or above ceiling earnings, which are determined once in a year, these contribution rates are applied to the base or ceiling amounts respectively. In 2018, the base amount is approximately TL 24 354 and the ceiling amount is approximately TL 182 655. Under the Law No. 5510 (Social Security and General Health Insurance Law), the base wage for social security contributions is equal to the minimum wage. Because employees cannot be 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

Personal Income Tax Law (No: 193) which is about income tax, Social Security and General Health Insurance Law (No: 5510) which is about social security contributions and Unemployment Insurance Law (No: 4447) which is about unemployment insurance fund are the main laws about tax/benefit system.

The main changes have been made to the following laws 5615, 6009, 6327 and 6645 which are as follows:

- According to Act No: 5615, the new application "Minimum Living Relief" began to be implemented. (See the section 1.1.2).
- According to Act No: 6009, the taxation of the wages are differentiated than the taxation of the other taxable revenue resources like trading income, income from immovable property or income from investments. By this way, it is ensured that wages (comparative to other income items) are later entered into the 3rd bracket on the income tax schedule.
- According to Act No: 6327, (published in the Official Gazette issue 28338 on 29 June 2012) there are important amendments in the Private Pension System Regulations. According to this law, any citizen of the Republic of Turkey will have the right for state subsidy for his/her paid contributions to the Private Pension Account. The contribution upper limit to favour this incentive is the annual amount of minimum wage 25% of this amount shall be transferred to the account of the insured party as a state subsidy. The state subsidy shall be earned in proportion to the amount of time within the system.
- According to Act No: 6645, "Minimum Living Relief" rate is changed from 5% to 10% which is used for third child's rate.

5. Memorandum Items

5.1. Identification of an AW

Weighted mean, by the number of employees, of the monthly average wage[33] information obtained from 'Structure of Earnings Survey, 2010', published by TURKSTAT, according to NACE Rev.2 classification for B-N sections is calculated[34] and B-N aggregated data is gained. (The annual average wage data is calculated by multiplying the monthly average wage values by 12).

The data from 2011-2017 is reached by using 2010=100 base year 'Hourly Earnings Index' and 2010 annual average wage data.

5.2. Contribution to private pension and health schemes

Business enterprises (employers) are permitted to make additional contributions for pension savings of their employees. However, these amounts of additional premiums are limited by main tax laws. Such additional pension arrangements, which are optional, are not widely used.

[33] Monthly wage: Include the sum of monthly basic wages, over time payments, payments for shift work/night work and other regular payments paid to employees in November 2010 by employers.

[34] The average wage amount from 2010 is calculated as a result of a joint working performed by authorities from TURKSTAT and Ministry of Finance.

2018 Parameter values

Average earnings/yr.	Ave_earn	46.921	Country estimate
Income tax	Tax_sch	0.15	14 800
		0.20	34 000
		0.27	120 000
		0.35	
Stamp tax	Stamp_rate	0.00759	
Employees SSC	SSC_rate	0.15	
	SSC_ceil	182 655	
	SSC_support	900	
	SSC_supp_lim	43 200	
Employers SSC	SSC_empr	0.175	
Minimum living relief			
	credit_rate	0.15	
	basic_allow	0.5	
	spouse_allow	0.1	
	child_allow	0.075	
	third_child_allow	0.1	
	add_child_allow	0.05	
	min_wage	24 354	

2018 Tax equations

The equations for the Turkish system are on an individual basis.

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

	Line in country table and intermediate steps	Variable name	Range	Equation
1.	Earnings	earn		
2.	Allowances:	tax_al	B	SSC
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	Positive(earn-tax_al)
	Stamp tax	stamp_tax	B	earn*stamp_rate
5.	CG tax before credits	CG_tax_excl	B	Tax(tax_inc,tax_sch)
6.	Tax credits :	tax_cr	P	=credit_rate*min_wage*(basic_allow+spouse_allow*(IF(Wife=0;Married;0))+ IF(OR(Children=1;Children=2); Children*child_allow;0)+IF(Children='3;(2*child_allow)' +(Children-2)*third_child_allow;0)+IF(Children>3;(2*child_allow) +(1*third_child_allow)+(1*add_child_allow);0))+IF(AND(earn<=min_wage;tax_inc>1st_inc_tax_thrsld);(tax_inc-1st_inc_tax_thrsld)*(2nd_inc_tax_rate-1st_inc_tax_rate);0)
			S*	IF(spouse_earn>0,credit_rate*min_wage*basic_allow,0)
7.	CG tax	CG_tax	B	positive(CG_tax_excl-tax_cr)+stamp_tax
8.	State and local taxes	local_tax	B	0
9.	Employees' soc security	SSC	B	Min(earn,SSC_ceil)*SSC_rate
11.	Cash transfers	cash_trans	B	0
13.	Employer's soc security	SSC_empr	B	Positive(Min(earn,SSC_ceil)*SSC_empr-IF(earn<SSC_supp_lim,SSC_support,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.
*In the case where the spouse earns 33% of the average wage: Taxing Wages assumption on the working spouse earning 33% of the AW does not comply with the Turkish legislation. 33% of AW in Turkey is below the minimum wage and a person cannot be employed below minimum wage. According to the Turkish legislation, it is assumed that (because he/she doesn't obtain "wage") the spouse should not obtain income in the calculation for this case, and another minimum living allowance is not also calculated for the spouse. Minimum living allowance should be only calculated for the principle earner.

United Kingdom
(2018-19 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 2018

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**	26 350	39 328	65 678	26 350
2.	**Standard tax allowances**				
	Basic allowance	11 850	11 850	11 850	11 850
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	11 850	11 850	11 850	11 850
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	14 500	27 478	53 828	14 500
5.	**Central government income tax liability (exclusive of tax credits)**	2 900	5 496	14 631	2 900
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children	0	0	0	2 720
	Other				
	Total	0	0	0	2 720
7.	**Central government income tax finally paid (5-6)**	2 900	5 496	14 631	180
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	2 151	3 709	4 938	2 151
	Taxable income				
	Total	2 151	3 709	4 938	2 151
10.	**Total payments to general government (7 + 8 + 9)**	5 051	9 204	19 569	2 331
11.	**Cash transfers from general government**				
	For head of family				
	For two children	0	0	0	1 794
	Total	0	0	0	1 794
12.	**Take-home pay (1-10+11)**	21 299	30 124	46 109	25 813
13.	**Employer's compulsory social security contributions**	2 474	4 265	7 901	2 474
14.	**Average rates**				
	Income tax	11.0%	14.0%	22.3%	0.7%
	Employees' social security contributions	8.2%	9.4%	7.5%	8.2%
	Total payments less cash transfers	19.2%	23.4%	29.8%	2.0%
	Total tax wedge including employer's social security contributions	26.1%	30.9%	37.3%	10.4%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	32.0%	32.0%	42.0%	73.0%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	40.2%	40.2%	49.0%	76.3%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

United Kingdom 2018

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**	39 328	52 307	65 678	52 307
2.	**Standard tax allowances**				
	Basic allowance	13 040	23 700	23 700	23 700
	Married or head of family				
	Dependent children				
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	13 040	23 700	23 700	23 700
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	26 288	28 607	41 978	28 607
5.	**Central government income tax liability (exclusive of tax credits)**	5 258	5 721	8 396	5 721
6.	**Tax credits**				
	Basic credit				
	Married or head of family				
	Children	0	0	0	0
	Other				
	Total	0	0	0	0
7.	**Central government income tax finally paid (5-6)**	5 258	5 721	8 396	5 721
8.	**State and local taxes**	0	0	0	0
9.	**Employees' compulsory social security contributions**				
	Gross earnings	3 709	4 255	5 860	4 255
	Taxable income				
	Total	3 709	4 255	5 860	4 255
10.	**Total payments to general government (7 + 8 + 9)**	8 966	9 976	14 255	9 976
11.	**Cash transfers from general government**				
	For head of family				
	For two children	1 794	1 794	1 794	0
	Total	1 794	1 794	1 794	0
12.	**Take-home pay (1-10+11)**	32 156	44 124	53 217	42 330
13.	**Employer's compulsory social security contributions**	4 265	4 893	6 739	4 893
14.	**Average rates**				
	Income tax	13.4%	10.9%	12.8%	10.9%
	Employees' social security contributions	9.4%	8.1%	8.9%	8.1%
	Total payments less cash transfers	18.2%	15.6%	19.0%	19.1%
	Total tax wedge including employer's social security contributions	26.2%	22.9%	26.5%	26.0%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	32.0%	32.0%	32.0%	32.0%
	Total payments less cash transfers: Spouse	7.8%	32.0%	32.0%	32.0%
	Total tax wedge: Principal earner	40.2%	40.2%	40.2%	40.2%
	Total tax wedge: Spouse	12.0%	40.2%	40.2%	40.2%

The national currency is the Pound Sterling (GBP). In 2018, GBP 0.75 was equal to USD 1. In 2018-2019, the Average Worker is estimated to earn GBP 39 328 (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 11 850 is granted to each individual with income below GBP 100 000. The personal allowance is then tapered away by GBP 1 for every GBP 2 of income above GBP 100 000.
- Standard marital status reliefs: Marriage Allowance – Allows the transfer of 10% of an individual's personal allowance to their husband, wife or civil partner. The allowance is restricted to couples where the higher earner is a basic rate taxpayer and is only beneficial if the lower earner owes below the personal allowance. The allowance has to be claimed and is given only to those who meet the eligibility criteria.
- 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 (though hours must be at least 24 overall for a couple). 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 4 780 per year (assuming neither the adult(s) nor the child were disabled) before taking into account eligible childcare costs[35]. This credit is reduced by 41 pence for each GBP 1 of net income above a threshold of GBP 6 420 per year. WTC was introduced on 6th April 2003.
- Relief for social security contributions and other taxes: None.
- Child Tax Credit (CTC): A non-wastable tax credit available to low and middle income families with children. It provides support for children until 1st September following their 16th birthday, and beyond that date to the age of 19 for

[35] 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.

those who continue in full-time non-advanced education. The amount depends on gross income, the number and age of the children and whether a family is making a new claim for CTC or already claiming CTC. A family with two eligible children would get a maximum credit GBP 6 105 per year, which is reduced by 41 pence for each GBP 1 of gross income above a threshold of GBP 16 105 if the family is not working. A lower threshold applies if the family is working; their CTC is reduced at the same rate once their WTC has been tapered to zero. CTC was introduced on 6th April 2003.

1.1.2.2. Main non-standard tax reliefs applicable to an AW.

- Work-related expenses: Flat rate expenses for tools and special clothing are allowed to certain occupational categories. Since this provision is not applicable to all manufacturing occupations, and hence average workers, and because the rates vary slightly across categories, this relief is considered here as non-standard;
- Contributions to approved superannuation schemes or personal pension schemes are deducted when calculating taxable income. Premiums on approved life assurance policies payable to life assurance companies attract 12.5% tax relief for policies entered into force before 13 March 1984.

1.1.3. Tax schedule

In 2018-19 all taxpayers are liable on taxable income other than savings and dividend income at the basic rate of 20% on the first GBP 34 500, 40% over the basic rate limit of GBP 34 500 and 45% over the higher rate limit of GBP 150 000. (Taxable Income is defined as gross income for income tax purposes less allowances and reliefs available at the marginal rate.) Dividend income is charged at 7.5% up to the basic rate limit of GBP 34 500, 32.5% above GBP 34 500 and 38.1% above GBP 150 000. The Dividend Allowance introduced in 2017-18 is reduced to GBP 2 000 from 2018-19, meaning that dividend taxpayers won't have to pay tax on the first GBP 2 000 of their dividend income, no matter what non-dividend income they have. Savings income is charged at 0% up to the starting rate limit on the first GBP 5 000, at 20% up to GBP 34 500, 40% above GBP 34 500 and 45% above GBP 150 000. From 2016-17, a new Personal Savings Allowance was introduced giving GBP 1 000 of savings income tax free for taxpayers with total income below the basic rate limit or GBP 500 for those with total income below the higher rate limit.

Taxable income (GBP)	Rate %
0–34 500	20
34 500–150 000	40
Over 150 000	45

1.2. State and local income tax

From 2018-19 the Scottish Government has introduced a starter rate band for non-savings non-dividend income of Scottish taxpayers from GBP 11 850 to GBP 13 850. The basic rate band for non-savings non-dividend income is set from GBP 13 850 to GBP 24 000. The Scottish Government has introduced an intermediate rate band for non-savings non-dividend income of Scottish taxpayers from GBP 24 000 to GBP 43 430. The higher rate band for non-savings non-dividend income of Scottish taxpayers in 2018-19 is from GBP 43 430 to GBP 150 000. In 2018-19 all Scottish taxpayers are liable on taxable income other than savings and dividend income at the starter rate of 19% on the first GBP 2 000,

20% over the starter rate limit of GBP 2 000, 21% over the basic rate limit of GBP 12 150, 41% over the intermediate rate limit of GBP 31 580 and 46% over the higher rate limit of GBP 150 000. (Taxable Income is defined as gross income for income tax purposes less allowances and reliefs available at the marginal rate.)

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 162 in any week. These are 12% of earnings between GBP 162 and GBP 892 and 2% of earnings above GBP 892. Depending on eligibility, members of the National Insurance scheme qualify for pensions, sickness, industrial injury, unemployment benefits, etc. All employees earning under GBP 162 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 116 and GBP 162 to protect benefit entitlement.

2.2. Employers' contributions

Employer's contributions are not payable for employees earning less than GBP 162 per week. The rate of employers' contributions for employees not contracted out of the additional (earnings related) scheme is 13.8% of earnings above GBP 162 per week.

The apprenticeship levy was introduced in April 2017. The apprenticeship levy is charged at a rate of 0.5% on the gross pay bill of employers. Employers will receive an allowance of GBP 15 000 per year to offset against the levy meaning that only employers with a gross pay bill of over GBP 3m will end up paying the levy. Due to the fact that the apprenticeship levy does not apply to all employers, it is not included in the Taxing Wages calculations

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 20.70 per week is paid in respect of the first child in the family up to the age of 19 (if the child aged 16-19 is in education or training) with GBP 13.70 per week paid for each subsequent child.

From January 2013, a new tax charge has been introduced for a taxpayer who has income over GBP 50 000 and either they or their partner are in receipt of Child Benefit. For those with income between GBP 50 000 and GBP 60 000, the amount of the charge will be 1% of the Child Benefit for every GBP 100 of income over GBP 50 000. For those with income over GBP 60 000, the amount of the charge will equal the amount of Child Benefit. Where both adults are over the threshold, the liability falls on the adult with the highest adjusted net income (ANI).

4. Memorandum Items

4.1. Identification of AW and valuation of earnings

A new Annual Survey of Hours and Earnings (ASHE) has been developed to replace the New Earnings Survey (NES) (results of which are published in Labour Market Trends) and shows the average weekly earnings of full-time employees in April each year. It covers men and women at adult rates in the United Kingdom (excluding Northern Ireland). The annual figure used for the gross earnings of the AW in the United Kingdom is the annual equivalent of the arithmetic average of the weekly earnings figures for April at the beginning and end of the fiscal year, as published in Labour Market Trends.

The earnings figures exclude the earnings of those whose pay was affected by absence (due to sickness etc.). They include overtime, payment by results and shift payments. But they do not include benefits in kind (which could in some circumstances be included in the employee's taxable income in the United Kingdom).

4.2. Employers' contributions to private pension, health etc. schemes

In 2008, there were 9.0 million active members of occupational pension schemes with two or more members in the UK, of whom 3.6 million were in the private sector and 5.4 million in the public sector.

2018 Parameter values

Average earnings/yr	Ave_earn	39 328	Secretariat Estimate	
Allowances	Basic_al	11 850		
	PA taper start	100 000		
	Married_al	1 190		
	Married_rate	0		
Income tax	Tax_sch	0.2	34 500	
		0.4	150 000	
		0.45		
Employees SSC				
Primary threshold	SSC_sch	0	8 424	PT
Upper earnings limit		0.12	46 350	UEL
		0.02		
Employers SSC	SSC_rate2	0.138		
	ST	8 424		
Child benefit (first)	CB_first	20.70		
Child benefit (others)	CB_others	13.70		
	CB_1st_thres	50 000.00		
	CB_2nd_thres	60 000.00		
	CB_taper1	0.01		
	CB_taper2	100.00		
NEW TAX CREDITS				
WTC				
Basic element	WTC_Basic	1 960		
Couple/Lone parent	WTC_couple_or_lone	2 010		
30 Hour element	WTC_30hr	810		
CTC				
Family element	CTC_family	545		
Child element	CTC_child	2 780		
Baby element	CTC_baby			
Threshold	NTC_1st_thres	6 420		
	NTC_1st_taper	0.41		
Days in tax year	Numdays	365		

2018 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	Tax_al IF(earn<PA_taper,IF(AND(earn<(BRL+Basic_al),earn_spouse<Basic_al,Married='1'),IF(earn>earn_spouse,Basic_al+Married_al,Basic_al-Married_al),Basic_al),IF(earn>(PA_taper+(Basic_al*2)),0,MAX(0,(Basic_al-((earn-PA_taper)'/2)))))
3.	Credits in taxable income	taxbl_cr	B	0
4.	CG taxable income	tax_inc	B	Positive(earn-tax_al)
5.	CG tax before credits	CG_tax_excl	B	Tax(tax_inc, tax_sch)
6.	Tax credits (nonwastable)	tax_cr	J	IF(Children>0, (Taper(ROUNDUP(CTC_family/numdays, 2)*numdays+Children*ROUNDUP(CTC_child/numdays, 2)*numdays+ROUNDUP(WTC_Basic/numdays, 2)*numdays+ROUNDUP(WTC_30hr/numdays, 2)*numdays+ROUNDUP(WTC_couple_or_lone/numdays, 2)*numdays, earn_total, NTC_1st_thres, NTC_1st_taper), Taper(ROUNDUP(WTC_Basic/numdays, 2)*numdays+ROUNDUP(WTC_30hr/numdays, 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	='IF(princ_earn>CB_1st_thres,IF(princ_earn>CB_2nd_thres,0,((1-(AA7-CB_1st_thres)'/(CB_taper2/CB_taper1)))*(numdays/7*((Children>0)*CB_first+CB_others*Positive(Children-1))),(numdays/7*((Children>0)*CB_first+CB_others*Positive(Children-1))))
13.	Employer's soc security	SSC_empr	B	(earn>ST)*(earn-ST)*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 2018

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**	36 817	54 951	91 769	36 817
2.	**Standard tax allowances**				
	Basic allowance	12 000	12 000	12 000	18 000
	Married or head of family				
	Dependent children	0	0	0	0
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	12 000	12 000	12 000	18 000
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	24 817	42 951	79 769	18 817
5.	**Central government income tax liability (exclusive of tax credits)**	2 788	5 389	13 489	1 986
6.	**Tax credits**				
	Basic credit	0	0	0	1 892
	Married or head of family				
	Children	0	0	0	4 000
	Other				
	Total	0	0	0	5 892
7.	**Central government income tax finally paid (5-6)**	2 788	5 389	13 489	- 3 906
8.	**State and local taxes**	2 264	3 470	5 918	1 782
9.	**Employees' compulsory social security contributions**				
	Gross earnings	2 817	4 204	7 020	2 817
	Taxable income				
	Total	2 817	4 204	7 020	2 817
10.	**Total payments to general government (7 + 8 + 9)**	7 868	13 062	26 427	692
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)**	28 949	41 889	65 342	36 125
13.	**Employer's compulsory social security contributions**	3 147	4 534	7 350	3 147
14.	**Average rates**				
	Income tax	13.7%	16.1%	21.1%	-5.8%
	Employees' social security contributions	7.7%	7.7%	7.7%	7.7%
	Total payments less cash transfers	21.4%	23.8%	28.8%	1.9%
	Total tax wedge including employer's social security contributions	27.6%	29.6%	34.1%	9.6%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	26.3%	36.3%	36.3%	48.6%
	Total payments less cash transfers: Spouse	n.a.	n.a.	n.a.	n.a.
	Total tax wedge: Principal earner	31.5%	40.8%	40.8%	52.3%
	Total tax wedge: Spouse	n.a.	n.a.	n.a.	n.a.

United States 2018

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**	54 951	73 085	91 769	73 085
2.	**Standard tax allowances**				
	Basic allowance	24 000	24 000	24 000	24 000
	Married or head of family				
	Dependent children	0	0	0	0
	Deduction for social security contributions and income taxes				
	Work-related expenses				
	Other				
	Total	24 000	24 000	24 000	24 000
3.	**Tax credits or cash transfers included in taxable income**	0	0	0	0
4.	**Central government taxable income (1 - 2 + 3)**	30 951	49 085	67 769	49 085
5.	**Central government income tax liability (exclusive of tax credits)**	3 333	5 509	7 751	5 509
6.	**Tax credits**				
	Basic credit	0	0	0	0
	Married or head of family				
	Children	4 000	4 000	4 000	0
	Other				
	Total	4 000	4 000	4 000	0
7.	**Central government income tax finally paid (5-6)**	- 667	1 509	3 751	5 509
8.	**State and local taxes**	2 917	4 123	5 365	4 491
9.	**Employees' compulsory social security contributions**				
	Gross earnings	4 204	5 591	7 020	5 591
	Taxable income				
	Total	4 204	5 591	7 020	5 591
10.	**Total payments to general government (7 + 8 + 9)**	6 454	11 223	16 137	15 592
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)**	48 498	61 862	75 632	57 494
13.	**Employer's compulsory social security contributions**	4 534	6 251	7 680	6 251
14.	**Average rates**				
	Income tax	4.1%	7.7%	9.9%	13.7%
	Employees' social security contributions	7.7%	7.7%	7.7%	7.7%
	Total payments less cash transfers	11.7%	15.4%	17.6%	21.3%
	Total tax wedge including employer's social security contributions	18.5%	22.0%	23.9%	27.5%
15.	**Marginal rates**				
	Total payments less cash transfers: Principal earner	26.3%	26.3%	26.3%	26.3%
	Total payments less cash transfers: Spouse	26.3%	26.3%	26.3%	26.3%
	Total tax wedge: Principal earner	31.5%	31.5%	31.5%	31.5%
	Total tax wedge: Spouse	32.7%	31.5%	31.5%	31.5%

The national currency is the dollar (USD). In 2018, the average worker earned USD 54 951 (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 2018 a married couple filing a joint tax return is entitled to a standard deduction of USD 24 000. The standard deduction is USD 18 000 for heads of households and USD 12 000 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.
- Standard marital status reliefs: Married couples generally benefit from a more favourable schedule of tax rates for joint returns of spouses (see Section 1.1.3). There are no other general tax reliefs for marriage.
- Relief for children: Low income workers with dependents are allowed a refundable (non-wastable) earned income credit. For taxpayers with one child, the credit is 34% of up to USD 10 180 of earned income in 2018. The credit phases down when income exceeds USD 18 660 (24 350 for married taxpayers) and phases out when it reaches USD 40 320 (46 010 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% of up to USD 14 290 of earned income in 2018. The credit phases down when income exceeds USD 18 660 (24 350 for married taxpayers) and phases out when it reaches USD 45 802 (51 492 for married taxpayers). For taxpayers with three or more children the credit is 45% of up to USD 14 290 of earned income. The credit phases down when income exceeds USD 18 660 (24 350 for married taxpayers) and phases out when it reaches USD 49 194 (54 884 for married taxpayers).
- Since 1998, taxpayers are permitted a tax credit for each qualifying child under the age of 17. In 2018 the maximum credit is USD 2 000. The refundable (non-wastable) child credit is the lesser of 15% of earned income in excess of USD 2 500 and USD 1 400 per child. The refundable portion of the credit (USD 1 400) is indexed for inflation and rounds down to the next lowest multiple of USD 100 but is capped at USD 2 000.

- Other dependent tax credit: For qualifying dependents other than qualifying children for whom a child tax credit was claimed, there is a USD 500 nonrefundable credit. The Taxing Wages calculations do not include the other dependent tax credit.
- Phase out of child tax credit and other dependent tax credit: The maximum credit is reduced for taxpayers with income in excess of certain thresholds. The total of the child tax credit and other dependent tax credit is reduced by USD 50 for each USD 1 000 by which modified aggregate gross income exceeds USD 400 000 for married taxpayers filing jointly (USD 200 000 for single and head of household taxpayers). These threshold amounts are indexed for inflation.
- Relief for low income workers without children: In 1994 and thereafter, low income workers without children are eligible for the earned income credit. In 2018 low income workers without children are permitted a non-wastable earned income credit of 7.65% of up to USD 6 780 of earned income. The credit phases down when income exceeds USD 8 490 (14 170 for married taxpayers) and phases out when income reaches USD 15 270 (20 950 for married taxpayers). This credit is available for taxpayers at least 25 years old and under 65 years old.
- Relief for social security and other taxes. In 2018, the withholding rate for Social Security taxes for employees is 6.2%. The earned income credits described above are sometimes considered an offset to social security contributions made by eligible employees. Furthermore, only a portion of social security benefits are subject to tax.

1.1.2.2. Main non-standard reliefs applicable to an AW

- The basic non-standard relief is the deduction of certain expenses to the extent that, when itemised, they exceed in aggregate the standard deduction. For the purposes of this Report, it is assumed that workers claim the standard deduction. The principal itemised deductions claimed by individuals where the standard deduction is not being claimed are:
- Medical and dental expenses that exceed 7.5% of income (in 2017 and 2018, 10% thereafter);
- State and local income taxes, real property taxes, and personal property taxes are capped at USD 10 000 per return..
- Home mortgage interest on USD 750 000 of qualified residence loans;
- 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% 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% of income.
- In 2016, the most recent year for which such statistics are available, the 38% of taxpayers with income between USD 50 000 and USD 75 000 (the AW range) who itemised their deductions claimed average deductions as follows: taxes paid, USD 5 600; charitable contributions, USD 3 137; home mortgage interest expense, USD 6 519.

- 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)[1]			Marginal Tax Rate (%)
Single Individual	Joint Return of Married Couple	Head of Household	
0 to 9 525	0 to 19 050	0 to 13 600	10
9 526 to 38 700	19 051 to 77 400	13 601 to 51 800	12
38 701 to 82 500	77 401 to 165 000	51 801 to 82 500	22
82 501 to 157 500	165 001 to 315 000	82 501 to 157 500	24
157 501 to 200 000	315 001 to 400 000	157 501 to 200 000	32
200 001 to 500 000	400 001 to 600 000	200 001 to 500 000	35
500 001 and over	600 001 and over	500 001 and over	37

1. The taxable income brackets are indexed for inflation.

There is a 3.8% tax on certain net investment income of individuals if their income exceeds USD 200 000 (USD 250 000 for joint returns). Net investment income includes interest, dividends, capital gains, rental and royalty income, and income from businesses trading financial instruments.

1.2. State and local income taxes

1.2.1. General description of the system

The District of Columbia and 41 of the 50 States impose some form of individual income tax.[36] 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 4 000 for the taxpayer, the taxpayer's spouse and each child, and taxes income at the rate of 4.25%. Michigan allows taxpayers who are eligible to claim the federal earned income tax credit to claim a Michigan earned income tax credit. The Michigan earned income tax credit is a refundable (non-wastable) credit equal to 6% of the federal earned income tax credit.

The city of Detroit permits a personal exemption of USD 600 and taxes income at the rate of 2.4%.

[36] New Hampshire and Tennessee tax only interest and dividend income received by individuals.

2. Compulsory Social Security Contributions to Schemes Operated within the Government Sector

2.1. Employees' contributions

2.1.1. Pensions

In 2018, the rate for employee contributions is 7.65% (6.2% for old age, survivors, and disability insurance, and 1.45% for old age hospital insurance). The 6.2% rate applies to earnings up to USD 128 400. Beginning in 1994, there is no limit on the amount of earnings subject to the 1.45% rate. There is an additional 0.9% tax on employee wages and salaries that exceed USD 200 000 (USD 250 000 for joint returns) as the additional hospital insurance tax on high-income taxpayers. The additional tax on wages and salaries is subject to withholding (but without regard to the earnings of the spouse) when wages from a particular job exceed USD 200 000 per year. These thresholds are not indexed for inflation.

There is no distinction by marital status or sex.

2.1.2. Other

No compulsory employee contributions exist.

2.2. Employers' contributions

2.2.1. Pensions

The rate for employers' contributions is 6.2% on earnings up to USD 128 400 and 1.45% of all earnings (without limit).

2.2.2. Unemployment

Employers are required by the federal government to pay unemployment tax of 6% 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 2018 the estimated average unemployment insurance tax rate in Michigan was 3.20% of the first USD 9 000 of wages. The model considers that the Federal government allows employers to take a credit for state unemployment taxes of up to 5.4%, resulting in a net Federal tax of 0.6% on earnings up to USD 7 000.

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 2017

In December 2017, Congress passed and the President signed the Tax Cuts and Jobs Act – the most significant change in U.S. tax law in a generation, incorporating change to the taxation of individuals and businesses. For individuals, the Act temporarily lowers income tax rates, increases the standard deduction, increases the child tax credit, and adds a credit for other dependents. The Act also temporarily eliminates some deductions, credits and exemptions for individuals. In addition the individual alternative minimum tax (AMT) exemption and phase-out thresholds are temporarily increased so that fewer taxpayers are subject to the AMT. Pass-through entities that are generally taxed at the individual level only and may be eligible for a new temporary deduction. These temporary provisions expire at the end of 2025. In addition, inflation adjustments of amounts and thresholds are changed to be determined by the chained consumer price index. Finally, there are substantial changes in business taxation, many that are permanent, such as lowering the top corporate tax rate from 35 to 21 percent and moving the U.S. international tax system towards a territorial system.

5. Memorandum Items

5.1. Identification of an AW at the wage calculation

The AW is identified from monthly data compiled from establishment questionnaires covering more than 40 million non-agricultural full- and part-time workers. Beginning in March 2006, data on average weekly hours and average hourly earnings cover all employees rather than solely production or non-supervisory workers. To obtain average annual wages, the product of average weekly hours (including overtime) and average hourly earnings (including overtime) is multiplied by 52 and is adjusted to reflect a full-time equivalent worker. The AW is estimated to be USD 53 376 for 2017.

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 2017 for employees in private industry:

	Pension	Health	Life
% of workers covered	50	54	54
USD employer portion per covered employee	n.a.	8 524 (family) 4 113 (single)	n.a.

2018 Parameter values

Average earnings/yr	Ave_earn	54 951	Secretariat estimate			
Standard deductions	Married_al	24000				
	hh_al	18000				
	single_al	12000				
Federal tax schedules	Fed_sch_s	0.1	9525			
		0.12	38700			
Single individuals		0.22	82500			
		0.24	157500			
		0.32	200000			
		0.35	500000			
		0.37				
Married filing jointly	Fed_sch_m	0.1	19050			
		0.12	77400			
		0.22	165000			
		0.24	315000			
		0.32	400000			
		0.35	600000			
		0.37				
Head of household	Fed_sch_h	0.1	13600			
		0.12	51800			
		0.22	82500			
		0.24	157500			
		0.32	200000			
		0.35	500000			
		0.37				
Earned income credit	EIC_sch	rate	income limit	threshold	thresh-married	phase-out
	no children	0.0765	6780	8490	14170	0.0765
	1 child	0.34	10180	18660	24350	0.1598
	2 children	0.4	14290	18660	24350	0.2106
	3 or more children	0.45	14290	18660	24350	0.2106
Child credit	chcrd_max	2 000				
	Chcrd_lim	1400				
	chcrd_rdn	50				
	chcrd_thrsh_m	400 000				
	chcrd_thrsh_oth	200 000				
	chcrd_ref_perct	0.15				
	chcrd_ref_thresh	2500				
Detroit	Detroit_ex	600				
	Detroit_rate	0.024				
Michigan	Mich_ex	4 000				
	Mich_ex_child	0				
	Mich_rate	0.0425				
Michigan's earned income tax credit	Mich_EIC_rate	0.06				
credit schedule on city tax	Mich_cr_sch	0				
		0				
		0				
maximum	Mich_cr_max	0				
Pension contributions	pens_rate_er	0.062				
	pens_rate_ee	0.062				

	hosp_rate	0.0145
	add_hosp_rate	0.009
Ceiling for employers and employees	pens_ceil	1284200
	add_hosp_thresh_m	250 000
	add_hosp_thresh_oth	200 000
Unemployment insurance tax	Unemp_rate	0.006
	Unemp_dedn_rate	0.054
	Unemp_max	7 000
Michigan unemploy insur	Mich_unemp_rate	0.0320
	Mich_unemp_max	9 000

2018 Tax equations

The equations for the US system in 2018 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))
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.	6. Tax credits :	EIC	J	EIC(Children, earn_total, EIC_sch)
		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(MIN(ch_crd_max-ch_crd_tax,chcrd_lim*children), MAX(chcrd_ref_perct*(earn-chcrd_ref_thresh), 0)), 0)
		tax_cr	J	EIC+ch_crd_tax+ch_crd_ref
7.	CG tax	CG_tax	J	CG_tax_excl-tax_cr
8.	State and local taxes	local_tax	J	Detroit_rate* Positive(earn_total-Detroit_ex*(1+Married+Children))+ Mich_rate*Positive(earn_total - Mich_ex*(1+Married+Children) - Mich_ex_child*Children) -MIN(Mich_cr_max, Tax(AJ7, Mich_cr_sch)) -Mich_EIC_rate*EIC
9.	Employees' soc security	SSC	B	pens_rate_ee*MIN(earn, pens_ceil)+hosp_rate*earn+add_hosp_rate*Positive(earn-IF(Married,add_hosp_thresh_m,add_hosp_thresh_oth))
11.	Cash transfers	Cash_tran	J	
13.	Employer's soc security	SSC_empr	B	pens_rate_er*MIN(earn, pens_ceil) +hosp_rate*earn+MIN(earn,Unemp_max)*Unemp_rate +MIN(earn,Mich_unemp_max)*Mich_unemp_rate
	Memorandum item: non-wastable tax credits			
	tax expenditure component	taxexp		(rate_rd_crd+EIC)-transfer
	cash transfer component	transfer		IF(CG_tax<0, -CG_tax, 0)

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

ANNEX. Methodology and limitations

Methodology

Introduction

The personal circumstances of taxpayers vary greatly. This Report therefore adopts a specific methodology to produce comparative statistics covering taxes, benefits and labour costs across OECD member countries[1]. The framework of the methodology is as follows:

- The Report focuses on eight different household types which vary by composition and level of earnings.
- Each household contains a full-time adult employee working in one of a broad range of industry sectors of each OECD economy. Some of the households also have a spouse working less than full-time.
- The annual income from employment is assumed to be equal to a given fraction of the average gross wage earnings of these workers.
- Additional assumptions are also made regarding other relevant personal circumstances of these wage earners in order to calculate their tax/benefit position.

The guidelines described in the following paragraphs form the basis for the calculations shown in Parts I and II. Annex Table 1 sets out the terminology that is used. Where a country has had to depart from the guidelines, this is noted in the text and/or in the country chapters contained in Part II of the Report. The number of taxpayers with the defined characteristics and the wage level of the average workers differ between OECD economies.

Taxpayer characteristics

The eight household types identified in the Report are set out in Annex Table 2. Any children in the household are assumed to be aged between six and eleven inclusive.

The household is assumed to have no income source other than from employment and cash benefits.

The range of industries covered

The standard assumption for calculating average wage earnings is based on Sectors B-N of the International Standard Industrial Classification of All Economic Activities (ISIC Revision 4, United Nations)[2] (see Annex Table 3). Many countries (for more detailed country information, see Table 1.8) have now adopted this approach

Annex Table 1. Terminology

General terms	
Average worker (AW)	An adult full-time worker in the industry sectors covered whose wage earnings represent the average for workers.
Single persons	Unmarried men and women.
Couple with two children	Married couple with two dependent children between six to eleven years of age inclusive.
Labour costs	The sum of gross wage earnings, employers' social security contributions and payroll taxes.
Net take-home pay	Gross wage earnings less the sum of personal income tax and employee social security contributions plus cash transfers received from general government.
Personal average tax rate (tax burden)	The sum of personal income tax and employee social security contributions expressed as a percentage of gross wage earnings.
Tax wedge	The sum of personal income tax, employee and employer social security contributions plus any payroll tax less cash transfers expressed as a percentage of labour costs.
Elasticity of income after tax	Percentage change in 'after-tax' income following an increase in one currency unit of income before 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 potential taxpayers.
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. These also include deductions for compulsory social security contributions.
Basic relief	Any standard tax relief 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.

StatLink http://dx.doi.org/10.1787/888933925614

Annex Table 2. 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

StatLink http://dx.doi.org/10.1787/888933925633

Annex Table 3. 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 organisations and bodies
	Revision 4 (ISIC Rev.4)
A	Agriculture, forestry and fishing
B	Mining and quarrying
C	Manufacturing
D	Electricity, gas, steam and air conditioning supply
E	Water supply; sewerage, waste management and remediation activities
F	Construction
G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Transportation and storage
I	Accommodation and food service activities
J	Information and communication
K	Financial and insurance activities
L	Real estate activities
M	Professional, scientific and technical activities
N	Administrative and support service activities
O	Public administration and defence; compulsory social security
P	Education
Q	Human health and social work activities
R	Arts, entertainment and recreation
S	Other service activities
T	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
U	Activities of extraterritorial organizations and bodies

StatLink http://dx.doi.org/10.1787/888933925652

This approach broadly corresponds to the previous calculation based on sectors C-K incl. defined in the International Standard Industrial Classification of All Economic Activities (ISIC Revision 3.1, United Nations) which was adopted in the 2005 edition of Taxing Wages. The reasons for moving to a broadened average wage definition were set out in the Special Feature of Taxing Wages 2003-2004.

Defining gross wage earnings

This section sets out the assumptions underlying the calculation of the average earnings figures for 'the average worker'. The gross wage earnings data have been established using statistical data and the methodologies for calculating the earnings data in each country are set out in Annex Table 4. Further information on the calculation of the earnings figures is provided in the country chapters in Part II. The sources of the statistical data for each country are set out in Annex Table 5.

The main assumptions are as follows:

- The data relate to the average earnings in the relevant industry sectors for the country as a whole.
- The calculations are based on the earnings of a full-time adult worker (including both manual and non-manual). They relate to the average earnings of all workers in the industry sectors covered. No account is taken of variation between males and females or due to age or region.
- The worker is assumed to be full-time employed during the entire year without breaks for sickness or unemployment. However, several countries are unable to separate and exclude part-time workers from the earnings figures (see Annex Table 4). Most of them report full-time equivalent wages in these cases. In four countries (Chile, Ireland, Slovak Republic and Turkey), the wages of part-time workers can be neither excluded nor converted into full-time equivalents because of the ways in which the earnings samples are constructed. As a result, average wages reported for these countries will be lower than an average of full-time workers (for example, an OECD Secretariat analysis of available Eurostat earnings data for selected European countries has shown that full-time employees' earnings in 2014 were on average 12% higher than earnings of all employees and 4% higher than earnings of all employees expressed in full-time equivalent units). Also, 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.
- Two of the household types include a second earner at 33% of average earnings. Such individuals are more likely to be working part-time rather than full-time (as shown in the Special Feature of the 2005 edition). However, the Special Feature also showed that the assumption of all employees working full-time does not significantly affect the tax rates calculated in Taxing Wages, except in the case of Belgium for married couples where the spouse is earning 33% of the average wage level. This is because any special provisions made for part-time workers tend to be either of minor importance or not applicable for the household types currently presented in Taxing Wages.
- The earnings calculation includes all cash remuneration paid to workers in the industries covered taking into account average amounts of overtime, cash supplements (e.g. Christmas bonuses, thirteenth month) and vacation payments typically paid to workers in the covered industry sectors. However, not all countries are able to include overtime pay, vacation payments and cash bonuses according to the definition.

- The earnings figures include supervisory and/or management employees, though some countries are not able to do this. In such countries, the reported averages are lower than would otherwise be the case (for example, an OECD Secretariat analysis of available Eurostat earnings data for selected European countries has shown that excluding this type of workers can reduce average earnings by 10% to 18%).
- 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 could affect comparability of tax wedges – as the reliance on fringe benefits may vary between countries and over time. However, the lack of comparability is limited as fringe benefits rarely account for more than 1-2% 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). Annex Table 4 shows that some Member countries are not able to exclude fringe benefits from the earnings figures reported and used in Taxing Wages. The decision to exclude was been taken because:
  - these types of benefits are difficult to evaluate in a consistent way (they may be valued at the actual cost to the employer, their value to the employee or their fair market value).
  - in most countries, they are of minimal importance for workers at the average wage level.
  - the tax calculations would be significantly more complicated if the tax treatment of fringe benefits were to be incorporated.
- Employers' contributions to private pension, family allowance or health and life insurance schemes are excluded from the calculations, though the amounts involved can be significant. In the United States, for example, these contributions can account for more than 5% of the earnings of employees. The country chapters in Part II indicate of the existence of schemes which may be relevant for an average worker.

Annex Table 4. Method used to calculate average earning

	Items included and excluded from the earnings base					Types of worker included and excluded in the average wage measure			Basic method of calculation used	Income tax year ends	Period to which the earnings calculation refers
	Sickness [1]	Vacations	Overtime	Recurring cash payments	Fringe Benefits	Supervisory workers	Managerial workers	part-time workers			
Australia	Inc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Average weekly earnings 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	Average annual earnings	31st December	Calendar year
Canada	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Inc 6	Average weekly hours x average hourly earnings x 52	31st December	Calendar year
Chile	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Inc	Hourly earnings x hours worked	31st December	Calendar year
Czech Republic	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Inc 6	Average monthly earnings x 12	31st December	Calendar year
Denmark	Exc	Inc	Exc	Inc	Exc	Inc	Inc	Inc 6	Hourly earnings x hours worked	31st December	Calendar year
Estonia	Inc	Inc	Inc	Inc	Exc	Inc	Inc	Inc	Average earnings	31st December	Calendar year
Finland	Exc	Inc	Inc	Inc	Exc	Inc	Inc 5	Exc	Hourly wages x usual working time or (monthly earnings x months) + vacation payments+ end of year bonuses	31st December	Calendar year
France	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Annual earnings	31st December	Calendar year
Germany	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Annual earnings	31st December	Calendar year
Greece	Exc	Inc	Inc	Inc 2	Inc	Inc	Inc	Exc	Hourly earnings x hours worked	31st December	Calendar year
Hungary	Exc	Inc	Inc	Inc	Exc	Inc	Inc 5	Exc	Average monthly earnings x 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	Inc	Inc	Exc	Average Annual Earnings	31st December	Calendar year
Israel	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Average earnings	31st December	Calendar year
Italy	Exc3	Inc	Inc	Inc	Exc 4	Inc	Inc	Inc 6	Average monthly earnings x 12	31st December	Calendar year
Japan	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Monthly earnings in June x 12	31st December	Calendar year
Korea	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Average monthly earnings x 12	31st December	Calendar year
Latvia	Inc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Average monthly earnings x 12	31st December	Calendar year
Lithuania	Inc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Average monthly earnings x 12	31st December	Calendar year
Luxembourg	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Aggregate annual earnings divided by annual average number of full-time employees. Any parts of earnings that exceed the upper social contribution limit (7 times the minimum wage) are not recorded.	31st December	Calendar year
Mexico	Exc	Inc	Exc	Inc	Exc	Inc	Inc	Exc	Average monthly earnings x 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 x 12	31st December	Calendar year

	Items included and excluded from the earnings base					Types of worker included and excluded in the average wage measure			Basic method of calculation used	Income tax year ends	Period to which the earnings calculation refers
	Sickness [1]	Vacations	Overtime	Recurring cash payments	Fringe Benefits	Supervisory workers	Managerial workers	part-time workers			
Portugal	Exc	Inc	Inc	Inc	Inc	Inc	Inc	Exc	Weighted monthly average x 12	31st December	Calendar year
Slovak Republic	Exc	Inc	Inc	Inc	Inc	Inc	Inc	Inc	Average monthly earnings x 12	31st December	Calendar year
Slovenia	Inc	Inc	Inc	Inc	Exc	Inc	Inc	Inc	Average monthly earnings * 12	31st December	Calendar year
Spain	Exc	Inc	Inc	Inc	Exc	Inc	Inc	Exc	Weighted monthly average x 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 x 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	Inc 2	Exc	Inc	Inc	Inc 6	Average weekly earnings x 52	31st December	Calendar year

Notes: Exc = Excluded, Inc = Included, '-' = information not available.

1. Usually includes compensation paid by employer whether paid on behalf of the government or as part of a private sickness scheme.
2. Excludes profit sharing bonuses in Greece and the United States plus end of year bonuses in the United States.
3. Sickness payments are only included to the extent that they are paid by the employer. For manual workers, this is only the case during the first three days of sick leave, while payments for the fourth day onwards are made by INPS.
4. Partly: the (small) taxable part of fringe benefits is included.
5. Except for top management (Finland); except if income from profits exceeds 50% of total income (Hungary); except for proprietors (New Zealand).
6. .Part-time wages are converted to full-time equivalents before calculating the average wage measure.

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Annex Table 5. Source of earnings data, 2018

Country	Type of sample	Source
Australia	Quarterly survey of firms resulting in a representative sample of wage and salary earners in each industry.	Australian Bureau of Statistics "Average Weekly Earnings, Australia" and "Labour Force, Australia".
Austria	Annual Wage Tax Statistics.	"Lohnsteuerstatistik".
Belgium	Data collected or estimated on the basis of an annual establishment survey and social insurance registers of employees.	Statistics Division of the Ministry of Economy (Federal Public Service, Economy, SMEs, Self-employed and Energy). Same source as for Eurostat "Annual gross earnings" data.
Canada	Monthly survey of all firms.	Statistics Canada, "Survey of Employment Payrolls and Hours".
Chile	Monthly sample of businesse with 10+ employees.	National Statistics Institute of Chile (INE).
Czech Republic	Employer survey data.	National Statistical Office.
Denmark	Danish Employers Confederation survey of earnings.	Annual Report Danish Employers Confederation (Dansk Arbejds Giverforening).
Estonia	-	Statistics Estonia/Ministry of Finance.
Finland	(1) Finnish Employers Federation survey of hourly and monthly earnings; (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.
Israel	-	Central Bureau of Statistics.
Italy	Quarterly indicators of wages in industry and services (OROS).	National Institute of Statistics.
Japan	Basic survey on wage structure of all establishments with more than 10 employees.	Ministry of Health, Labour and Welfare, Annual Report.
Korea	Labour Force Survey at Establishments.	Ministry of Employment and Labour.
Latvia	Average monthly wages and salaries (DSG01)	The Latvian Central Statistical Bureau.
Lithuania	-	Statistics Lithuania.
Luxembourg	Monthly aggregated files of Social security services.	National Statistical Office and Social Security Services.
Mexico	Administrative data from the Mexican Social Security Institute (Instituto Mexicano del Seguro Social (IMSS)).	The National Minimum Wage Commission (Comisión Nacional de Salarios Mínimos (CONASAMI)).
Netherlands	Survey "Employment and Wages".	Central Bureau of Statistics, Statline.
New Zealand	The quarterly employment survey is a sample survey of significant business with an employment count of 1 or more.	Statistics New Zealand INFOS.
Norway	Sample of enterprises based on published sector statistics for 3rd quarter – except agriculture, forestry and fishing and private households.	Statistics Norway Wage.
Portugal	April and October survey of earnings carried out by the Ministry of Labour.	Ministry of Labour.
Poland	Estimates for different sectors.	Monthly Statistical Bulletin.
Slovak republic	Quarterly and annual statistical data.	Slovak Statistical Office.
Slovenia	Monthly survey of employees.	Statistical Office of the Republic of Slovenia.
Spain	Quarterly survey of firms.	Instituto Nacional de Estadistica "Encuesta Trimestral de Coste Laboral" (Labour Cost Survey).
Sweden	September survey of Swedish employers.	Statistics Sweden.

Switzerland	Swiss Statistics Office. Personnes actives occupées selon la branche économique.	La vie économique, SECO (Secrétariat d'État à l'économie) table B.8.1, http://www.bfs.admin.ch/bfs/portal/fr/index/themen/03/04.html.
Turkey	Annual Manufacturing Industry Survey.	Turkish Statistical Institute.
United Kingdom	1% sample of PAYE earnings.	Office for National Statistics, Annual Survey of Hours and Earnings (ASHE).
United States	Monthly surveys by Department of Labour on the basis of a questionnaire covering more than 40 million non-agricultural wage and salary-workers.	Employment, Hours, and Earnings from the Current Employment Statistics Survey.

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Calculating average gross wage earnings

Annex Table 4 indicates the basic calculation method used in each country while more details are, where relevant, provided in the country chapters in Part II. In principle, countries are recommended to calculate annual earnings by referring to the average of hourly earnings in each week, month or quarter, weighted by the hours worked during each period, and multiplied by the average number of hours worked during the year, assuming that the worker is neither unemployed nor sick and including periods of paid vacation. A similar procedure was recommended to calculate overtime earnings. For countries unable to separate out part-time employees from the data, it is recommended that earnings of part-time employees should if possible be converted into their full-time equivalents.

Statistical data on average gross wage earnings in 2018 are generally not available at present. For most countries, estimates of gross wage earnings of average workers in 2018 were therefore derived by the Secretariat on the basis of a uniform approach: year 2017 earnings levels are multiplied by the country-specific annual percentage change of wages for the whole economy reported in the most recently published edition of the OECD *Economic Outlook*[3]. This transparent procedure is intended to avoid any bias in the results. In some countries, there were varying different approaches;

- The final 2018 average gross wage earnings was used for Australia.
- National estimates were used for the Chile, New Zealand and Turkey as the OECD Economic Outlook does not provide percentages changes in wages for those countries.
- In some countries, average wage earnings were also estimated for prior years - Finland (2017), France (from 2015 to 2017), the Netherlands (2017), Poland (2017), Portugal (from 2013 to 2017) and Switzerland (2007, 2009, 2011, 2013, 2015 and 2017) as no country information on average wage earnings levels was available for these years in these particular countries.

Thirteen OECD member countries have opted to provide national estimates of the level of gross wage earnings of average workers in 2018. These estimates were not used in the Taxing Wages calculations (except for the countries listed above) because of potential inconsistency with the Secretariat estimates derived for other countries. However they are included in Annex Table 6 to enable comparisons to be made between the estimates obtained by applying the Secretariat formula and those from national sources. In most cases, the two categories are fairly close.

Annex Table 6. Estimated gross wage earnings, 2017-2018 (in national currency)

	Average wage 2017	Average wage 2018 (Secret. estimates)	Average wage 2018 (country estimates)	EO 2018 (issue 2) forecasted rates for 2018[1]
Australia[2]	83 336	84 533	85 778	1.4
Austria	46 002	47 120	47 152	2.4
Belgium	47 527	48 455		2.0
Canada	51 626	53 350		3.3
Chile[2]	9 348 496		9 669 058	
Czech Republic	355 633	383 304	371 636	7.8
Denmark	412 045	421 547	422 346	2.3
Estonia	14 992	16 103	16 044	7.4
Finland	43 245	43 984		1.7
France	38 600	39 436		2.2
Germany	49 100	50 546		2.9
Greece	20 841	21 214		1.8
Hungary	3 730 608	4 138 492		10.9
Iceland	8 760 000	9 152 462		4.5
Ireland	45 500	46 774		2.8
Israel	147 912	153 221	152 124	3.6
Italy	30 755	31 292		1.7
Japan	5 145 307	5 188 742		0.8
Korea	45 853 704	48 166 599	48 723 012	5.0
Latvia	10 980	11 881	11 856	8.2
Lithuania	10 216	11 121	10 890	8.9
Luxembourg	58 238	59 497		2.2
Mexico	116 276	122 208	123 018	5.1
Netherlands	50 730	51 567		1.6
New Zealand[2]	58 824		60 360	
Norway	578 745	596 477		3.1
Poland	50 573	54 191		7.2
Portugal	17 998	18 343		1.9
Slovak Republic	11 419	12 131		6.2
Slovenia	18 839	19 671	19 230	4.4
Spain	26 550	26 923		1.4
Sweden	435 821	453 539		4.1
Switzerland	89 599	90 908		1.5
Turkey[2]	41 843		46 921	
United Kingdom	38 575	39 328		2.0
United States	53 376	54 951		3.0

1. Increase of compensation per employee in the total economy (Economic Outlook No 102).
2. The country AW estimate is used instead of the OECD Secretariat's AW estimate in the Taxing Wages calculations.

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Annex Table 7 indicates the exchange rates and purchasing power parities of national currencies for 2018 that are used to calculate comparative earnings figures across countries in the report.

Annex Table 7. Purchasing power parities and exchange rates for 2018

	Monetary unit	Exchange rates1	Purchasing power parities
Australia	AUD	1.34	1.43
Austria	EUR	0.85	0.78
Belgium	EUR	0.85	0.78
Canada	CAD	1.30	1.25
Chile	CLP	641.90	403.86
Czech Republic	CZK	21.73	12.48
Denmark	DKK	6.31	6.82
Estonia	EUR	0.85	0.54
Finland	EUR	0.85	0.87
France	EUR	0.85	0.77
Germany	EUR	0.85	0.75
Greece	EUR	0.85	0.58
Hungary	HUF	270.22	139.03
Iceland	ISK	108.27	137.62
Ireland	EUR	0.85	0.78
Israel	ILS	3.60	3.66
Italy	EUR	0.85	0.69
Japan	JPY	110.44	100.07
Korea	KRW	1100.19	852.69
Latvia	EUR	0.85	0.50
Lithuania	EUR	0.85	0.45
Luxembourg	EUR	0.85	0.87
Mexico	MXN	19.18	9.34
Netherlands	EUR	0.85	0.79
New Zealand	NZD	1.45	1.45
Norway	NOK	8.13	10.43
Poland	PLN	3.61	1.72
Portugal	EUR	0.85	0.58
Slovak Republic	EUR	0.85	0.48
Slovenia	EUR	0.85	0.57
Spain	EUR	0.85	0.63
Sweden	SEK	8.69	8.85
Switzerland	CHF	0.98	1.17
Turkey	TRL	4.84	1.56
United Kingdom	GBP	0.75	0.69
United States	USD	1.00	1.00

1. Average of 12 months daily rates.

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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 on Payroll taxes) are included in the calculation of the total wedge between labour costs to the employer and the corresponding net take-home pay of the employee.

The calculation of the after-tax income includes family benefits paid by general government as cash transfers (see section on Family cash benefits from general government). 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.

In this Report, 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.

Calculation of personal income taxes

The method by which income tax payments are calculated is described in the country chapters in Part II. First, the tax allowances applicable to a taxpayer with the characteristics and income level related to gross annual wage earnings of an average worker are determined. Next, the schedule of tax rates is applied and the resulting tax liability is reduced by any relevant tax credits. An important issue arising in the calculation of the personal income tax liability involves determining which tax reliefs should be taken into account. Two broad categories of reliefs may be distinguished:

- Standard tax reliefs: reliefs which are unrelated to actual expenditures incurred by the taxpayer and are automatically available to all taxpayers who satisfy the eligibility rules specified in the legislation. Standard tax reliefs are usually fixed amounts or fixed percentages of income and are typically the most important set of reliefs in the determination of the income tax paid by workers. These reliefs are taken into account in the calculations – they include:
  - The basic relief which is fixed and is available to all taxpayers or all wage earners, irrespective of their marital or family status;
  - The standard relief which is available to taxpayers depending on their marital status;
  - The standard child relief granted to a family with two children between the ages of six to eleven inclusive;
  - The standard relief in respect of work expenses, which is usually a fixed amount or fixed percentage of (gross) wage earnings; and,
  - Tax reliefs allowed for social security contributions and other (sub-central government) income taxes are also considered as standard reliefs since they apply to all wage earners and relate to compulsory payments to general government.[4]
- Non-standard tax reliefs: These are reliefs which are wholly determined by reference to actual expenses incurred. They are therefore neither fixed amounts nor fixed percentages of income. Examples of non-standard tax reliefs include reliefs for interest on qualifying loans (e.g. for the purchase of a house), private insurance premiums, contributions to private pension schemes, and charitable donations. These are not taken into account in calculating the tax position of employees.

Standard reliefs are separately identified and their impact on average tax rates is calculated in the results tables shown in the Country chapters. The latter include a brief description of the main non-standard reliefs in most cases.

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. Except for Canada, 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 and the income taxes (and benefits) applicable in this area are presented. This is the procedure followed in Canada, Italy, Switzerland and the United States where the tax base and tax rates vary very widely throughout the country. Belgium, Denmark, Finland, Iceland and Sweden have preferred to select the average rate of sub-central government income taxes for the country as a whole. The local rates do not vary in practice in Korea and Norway. Japan and Spain have used the widely prevalent standard schedule.

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, Denmark and New Zealand do not levy social security contributions.

Contributions to social security schemes outside the general government sector are not included in the calculations. However, information on "non-tax compulsory payments" as well as "compulsory payment indicators" is included in the OECD Tax Database, which is accessible at www.oecd.org/ctp/tax-database.htm

Payroll taxes

Payroll taxes have a tax base that 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. Fifteen OECD countries report revenue from payroll taxes: Australia, Austria, Canada, Denmark, France, Hungary, Iceland, Ireland, Israel, Korea, Latvia, Lithuania, Mexico, Poland, Slovenia 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 can be – 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.

Six of the OECD member countries include payroll taxes in the Taxing Wages calculations: Australia, Austria, Hungary, Latvia, Lithuania and Sweden. The other countries reporting payroll tax revenue in Revenue Statistics have not included these taxes in the calculations for the present Report for a variety of reasons.

Family cash benefits from general government

Tax reliefs and family cash transfers universally paid in respect of dependent children between the ages of six to eleven inclusive who are attending school are included in the scope of the study. If tax reliefs or cash transfers vary within this age range, the most generous provisions are adopted, except that the case of twins is explicitly disregarded. The implications of this are illustrated below - 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 (given that children are between 6 and 11) 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 as children grow older. The calculations assume that the children have been born on 1 January so the annual amount received in child benefits may be calculated from the benefit schedule that is in place at the start of the year with any revisions to these amounts during the year being taken into account.

Relevant cash payments are those received from general government. In some cases, the cash benefits include amounts that are paid without consideration to the number of children.

Payable tax credits

Payable (non-wastable) 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. The Special Feature in the 2016 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. It also provides figures which show the impact of different treatments on tax to GDP ratios.[5]

Based on this review, 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)[6] 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 the taxpayer (the 'cash transfer' component) should be treated as an expenditure item and not deducted in the reporting of tax revenues.

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.[7]

In Taxing Wages, the situation is different as the full amount of the payable tax credit is taken into account in the income tax calculation.

Strict consistency with the Revenue Statistics would require that only the tax expenditure component 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 Taxing Wages. 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 'cash transfers from general government' item of the country tables permits greater transparency of the latter which focuses on 'pure' cash transfers only.

However, 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 represent aggregates covering all the programs. Total program costs in each of the household cases considered can be derived by adding the tax expenditure and cash transfer amounts.

The calculation of marginal tax rates

In all except one case, 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. The exception is the case of a non-working spouse where the move from 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% of the average wage.

Limitations

General limitations

The simple approach of comparing the tax/benefit position for eight model 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. It would also require that consideration be given to the effect on welfare of services provided by the state, either free or below cost, and the incidence of corporate and other direct taxes on earnings and prices. Such a broad coverage is not possible in an international comparison of all OECD countries. The differences between the results shown here and those of a full study of the overall impact on employees of government interventions in the economy would vary from one country to another. They would depend on the relative shares of different kinds of taxes in government revenues and on the scope and nature of government social expenditures.

The Report shows only the formal incidence of taxes on employees and employers. The final, economic incidence of taxes may be quite different, because the tax burden may be shifted from employers onto employees and vice versa by market adjustments to gross wages.

The income left at the disposal of a taxpayer may represent different standards of living in various countries because the range of goods and services on which the income is spent and their relative prices differ as between countries. In those countries where the general government sector provides a wide range of goods and services (generous basic old age pension, free health services, public housing, university education, etcetera), 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.

Some specific limitations on the income tax calculation

The exclusion of non-wage income and the limited number of tax reliefs covered mean that the average rates of income tax in the tables in this publication do not necessarily reflect the actual rates confronting taxpayers at these levels of earnings. Actual rates may be lower than the calculated rates because the latter do not take into account non-standard expense-related reliefs. On the other hand, actual rates may be higher than calculated rates because the latter do not take into account tax on non-wage income received by employees.

The decision not to calculate separately average rates of income tax taking into account the effect of non-standard tax reliefs was taken because:

- In many cases, expense-related reliefs are substitutes for direct cash subsidies. To take into account these reliefs while ignoring any corresponding direct subsidies would distort comparisons of take-home pay plus cash transfers;
- The special tax treatment of certain expenses may be linked to special treatment of any income associated with these expenses (e.g. the tax treatment of social security contributions and pension income) which is beyond the scope of this study;
- A few countries were unable to estimate the value of these reliefs and even those countries which could do so could not limit their estimates to taxpayers with the characteristics assumed in the above part on methodology; and,
- Not all countries could calculate separately the reliefs available to different household 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.

Limitations to time-series comparisons

The calculations of the tax burden on labour income in OECD countries reported in the 2004 and previous editions of Taxing Wages, are based on an average earnings measure for manual full-time workers in the manufacturing sector (the 'average production worker').

Any analysis of the results over time 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.

There have been changing definitions of the average worker over time. From the 2005 edition, Taxing Wages has reported tax calculations under a broadened average worker definition that includes all full-time employees covering industry sectors C-K (reference to ISIC Rev.3.1). The implications of adopting this new definition for time-series comparisons are discussed in the 2005 edition of Taxing Wages. As of the 2010 edition of the Taxing Wages Report, many countries have started reporting average wage earnings for full-time employees covering industry sectors B-N of the ISIC Rev.4 industry classification (which broadly corresponds to sectors C-K in ISIC Rev.3.1).

A Note on the Tax Equations

Each country chapter contains a section describing in a standard format the equations under-pinning the calculations required to derive the amounts of income tax, social security contributions and cash transfers. These algorithms represent in algebraic form the legal provisions described in the chapter and are consistent with the figures shown in the country and comparative tables. This section describes the conventions used in the definition of the equations and how they could be used by those wishing to implement the equations for their own research.

The earlier sections of the country chapters describe how the tax and other systems work and present the values of the parameters of those systems such as the levels of allowances and credits, and the schedule of tax rates.

In the first part of the equations section is a table showing a brief description of each parameter (such as "Basic tax credit"), the name of the parameter as used in the algebraic equation ("Basic_cred") and the actual value for the relevant year (such as "1098"). Where there is a table of values – for example a schedule of tax rates and the associated thresholds of taxable income – a name is given to the entire table (for example "tax_sch"). These variable names are those used in the equations.

After each 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 household 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 have the value 1 if the household 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, MAX(X,Y) and MIN(X,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, CB_2,0).

There are also three special functions commonly used which denote calculations often required in tax and social security systems. These are:

- Tax (taxinc, tax_sch): This calculates the result of applying the schedule of tax rates and thresholds in "tax_sch" to the value of taxable income represented by "taxinc". This function may be used in any part of the equations, not just in the income tax calculation. For some countries it is used for social security contributions or even for allowance levels which may be income dependent.
- Positive (X): This gives the result X when this value is positive and zero otherwise. It is therefore equivalent to MAX(0,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 II. 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] The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

[2] Not all national statistical agencies use ISIC Rev.3.1 or ISIC Rev.4 to classify industries. However, the Statistical Classification of Economic Activities in the European Community (NACE), the North American Industry Classification System (NAICS) and the Australian and New Zealand Standard Industrial Classification (ANZSIC) include a classification which is broadly in accordance with industries C-K in ISIC Rev.3.1 or industries B-N in ISIC Rev.4.

[3] The wage estimates reported in the Economic Outlook are prepared by the Economics Department (ECO) of the OECD. They are consistent with the December 2018 issue of the Economic Outlook.

[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 Statistics1965–2017*, p. 62.

[6] 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.

[7] See Table 1.6 in *OECD Revenue Statistics 2018*.

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