# 1 Overview

This chapter presents the main results of the analysis of the taxation of labour income across OECD member countries in 2021. 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 one-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 38 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 (SSCs) and payroll taxes paid by their employers. Results reported include the marginal and average tax burden for one- and two-earner households,[1] 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 complements 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 2021 are summarised in the second section below. Part I of the Report presents more detailed results for 2021, together with comparable results for 2020 and discusses the changes between the two years. Part I of the Report also reviews historical changes in tax burdens between 2000 and 2021.

The present chapter begins with an introduction to the *Taxing Wages* methodology, which is followed by a review of the results of tax burden indicators for 2021. 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.

The Report covers the period of crisis related to the COVID-19 pandemic. We pay particular attention to the changes made to tax and benefit systems in response to the pandemic. Only measures that are relevant for the *Taxing Wages* publication are considered. In particular, these measures are changes in personal income tax (central and local/state levels), SSCs, payroll taxes and cash benefits paid to workers. Consistent with the approach in *Taxing Wages*, these measures must affect the majority of full-time workers that are covered within the sectors B to N in ISIC rev 4. Further information on the methodology is given in the Special Feature. Furthermore, detailed information on the COVID-19 related measures are given within the country chapters in the Part II of the Report.

## 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).[2] 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 personal income tax, SSCs 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 – is 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 2021 are those for the tax year 2021-2022. 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 2021 in respect of Australia has been defined to mean its tax year 2020-2021.

*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 SSCs together with any payroll tax, minus benefits as a percentage of labour costs. Employer SSCs 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 SSCs 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 SSCs less cash benefits. However, it should be noted that this measure only includes payments that are classified as taxes. Employees and employers may also have to make non-tax compulsory payments (NTCPs)[3] that may increase the indicators that are presented in the *Taxing Wages* publication. An accompanying paper to *Taxing Wages* 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 personal average tax rate and the net personal average tax rate. The personal average tax rate is the term used when the personal income tax and employee SSCs are expressed as a percentage of gross wage earnings. The net personal average tax rate corresponds to the above measure net of cash benefits. 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 SSCs net of cash benefits.

## Taxation of single workers

### *Tax wedge*

Table 1.1 shows that the tax wedge between the 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 2021 (see column 1). While in Austria, Belgium, France, Germany and Italy, the tax wedge as a percentage of labour costs was more than 45%, it was lower than 20% in Chile, Colombia, Mexico and New Zealand. The highest tax wedge was observed in Belgium (52.6%) and the lowest in Colombia (0.0%). In Colombia, the single worker at the average wage level did not pay personal income taxes in 2021, while their contributions to pension, health and employment risk insurance are considered to be non-tax compulsory payments (NTCPs)[4] and therefore are not counted as taxes in the *Taxing Wages* calculations. Table 1.1 shows that the average tax wedge as a percentage of labour costs in OECD countries was 34.6% in 2021.

The changes in the tax wedge as a percentage of labour costs between 2020 and 2021 for the average worker without children are described in column 2 of Table 1.1. The OECD average decreased by 0.06 percentage points in 2021, which was 0.17 percentage points smaller than the decrease observed in 2020 (0.23 percentage points) at the height of the COVID-19 crisis. Among OECD member countries, the tax wedge increased in 24 countries and fell in twelve. The tax wedge remained at the same level for the average worker in Colombia and in Costa Rica between 2020 and 2021. The increases were comparatively small and only three of them were of one percentage point or greater: Israel (1.02 percentage points), the

United States (1.20 percentage points) and Finland (1.33 percentage points). In contrast, there were decreases exceeding one percentage point in Australia (1.25 percentage points), Latvia (1.73 percentage points), Greece (2.23 percentage points) and the Czech Republic (4.12 percentage points).

In almost all countries where the tax wedge increased, the rise was driven by higher personal income tax (see column 3 of Table 1.1). In some countries, this increase was driven by increases in the average wage between 2020 and 2021 (discussed below). Higher average wages increase personal income tax through the progressivity of income tax systems if income tax thresholds increase by less than average earnings. In other countries, higher personal income tax was primarily the result of a higher proportion of earnings becoming subject to tax as the value of tax allowances and tax credits fell relative to earnings.

In Canada, Finland and Korea, the increase in the tax wedge was due to higher employee and employer SSCs as a percentage of labour costs. In Canada, the maximum contributions for pension and unemployment insurance were increased in 2021 and the worker earning the average wage also paid a higher Ontario Health Premium compared with 2020. In Finland, total SSC rates increased for the employee (from 9.58% to 9.91%) and for the employer (from 18.69% to 20.78%) in 2021. In Korea, the contribution rate for national health insurance increased from 3.6768375% to 3.825136% in 2021. In the United States, the main factor behind the increase in the tax wedge (of 0.74 percentage points of labour costs) was the decrease in cash benefits related to COVID-19 for the single average worker between 2020 and 2021.

In seven of the twelve OECD countries where the tax wedge decreased as a percentage of labour costs, the decrease was mostly derived from lower personal income tax (Australia, Chile, the Czech Republic, Germany, Latvia, Mexico and Sweden). In Australia, the income tax schedule was reformed by enlarging the tax brackets, and the employer's payroll tax rate decreased from 5.45% to 4.85%[5] in the 2020-2021 tax year. Chile and Sweden both raised the income threshold within the tax schedules, resulting in decreases in personal income tax of less than 0.1 percentage points in both countries. In the Czech Republic, the personal income tax base was reformed to include only the employee's gross income in 2021 (in prior years, the tax base also included the employer's SSC). In Germany, the Solidarity Surcharge (a surtax) paid by the single worker earning the average wage in 2020 was not paid in 2021, as the exempt income limit was significantly increased (from EUR 972 to EUR 16 956). In Latvia, the tax allowance (the "differentiated non-taxable minimum") was substantially increased for the worker on the average wage in 2021. In Mexico, the decrease in personal income tax derived from a decline in the average wage between 2020 and 2021, while the income thresholds within the income tax schedule also increased.

In the four other OECD countries with decreasing tax wedges as a percentage of labour costs, the changes were driven by lower SSCs (Greece, Hungary, Iceland and the Netherlands). In Greece, SSCs as a percentage of labour costs decreased by 1.30 percentage points for the employer and by 0.93 percentage points for the employee. This reflects reductions from 1 January 2021 in the contribution rates for employers (from 24.33% to 22.54%) and for employees (from 15.33% to 14.12%). In Hungary, employer SSCs as a percentage of labour costs decreased by 0.72 percentage points due to a decline in the contribution rate from 17.5% to 15.5% from 1 July 2020 onwards (the reduced employer SSC rate thus applied to the whole year in 2021 but only six months of 2020). In Iceland, SSCs paid by the employer decreased due to a temporary reduction of the social security tax from 6.35% to 6.1%. In the Netherlands, the income ceiling that was applied to employee SSC calculations increased at a lower rate than the average wage in 2021.

Table 1.2 and Figure 1.1 show the components of the tax wedge in 2021: personal income tax, employee SSCs and employer SSCs (including payroll taxes where applicable), as a percentage of labour costs for the average worker without children. Labour costs in Table 1.2 are expressed in US dollars with equivalent purchasing power.

The percentage of labour costs paid in income tax varied considerably across OECD countries in 2021. The lowest figures were in Colombia, Costa Rica and Chile (all at zero), with the Czech Republic, Greece, Japan, Korea, Mexico, Poland and the Slovak Republic also below 10%. The highest share was in Denmark (35.5%), with Australia, Belgium, Iceland and Ireland also over 20%. The percentage of labour costs paid in employee SSCs also varied widely, ranging from zero in Australia, Colombia, Denmark and New Zealand to 19.0% in Slovenia and 19.2% in Lithuania. Employers in France paid 26.6% of labour costs in social security contributions, the highest amongst OECD countries. Employer SSCs were more than 20% of labour costs in nine other countries – Austria, Belgium, Costa Rica, the Czech Republic, Estonia, Italy, the Slovak Republic, Spain and Sweden.

As a percentage of labour costs, the total of employee and employer SSCs exceeded 20% in 23 OECD countries. It represented at least one-third of labour costs in five OECD countries: Austria, the Czech Republic, France, Germany and the Slovak Republic.

## Table 1.1. Comparison of total tax wedge

As % of labour costs, 2021

| Country[1] | Total tax wedge 2021 (1) | Annual change, 2021/20 (in percentage points)[2] | | | |
|---|---|---|---|---|---|
| | | Tax wedge (2) | Income tax (3) | Employee SSC (4) | Employer SSC[3] (5) |
| Belgium | 52.6 | 0.38 | 0.35 | 0.00 | 0.03 |
| Germany | 48.1 | -0.72 | -0.86 | 0.07 | 0.07 |
| Austria | 47.8 | 0.37 | 0.37 | 0.00 | 0.00 |
| France | 47.0 | 0.45 | 0.44 | 0.00 | 0.01 |
| Italy | 46.5 | -0.41 | -0.41 | 0.00 | 0.00 |
| Slovenia | 43.6 | 0.46 | 0.46 | 0.00 | 0.00 |
| Hungary | 43.2 | -0.48 | 0.11 | 0.13 | -0.72 |
| Finland | 42.7 | 1.33 | -0.26 | 0.13 | 1.46 |
| Sweden | 42.6 | -0.08 | -0.08 | 0.00 | 0.00 |
| Portugal | 41.8 | 0.30 | 0.30 | 0.00 | 0.00 |
| Slovak Republic | 41.3 | 0.01 | 0.14 | 0.02 | -0.15 |
| Latvia | 40.5 | -1.73 | -1.03 | -0.37 | -0.33 |
| Luxembourg | 40.2 | 0.75 | 0.70 | -0.01 | 0.06 |
| Czech Republic | 39.9 | -4.12 | -4.12 | 0.00 | 0.00 |
| Turkey | 39.9 | 0.44 | 0.44 | 0.00 | 0.00 |
| Spain | 39.3 | 0.28 | 0.28 | 0.00 | 0.00 |
| Estonia | 38.1 | 0.73 | 0.73 | 0.00 | 0.00 |
| Lithuania | 37.6 | 0.52 | 0.52 | 0.00 | 0.00 |
| Greece | 36.7 | -2.23 | 0.01 | -0.93 | -1.30 |
| Norway | 36.0 | 0.20 | 0.12 | -0.01 | 0.08 |
| Denmark | 35.4 | 0.16 | 0.16 | 0.00 | 0.00 |
| Netherlands | 35.3 | -0.76 | -0.33 | -0.49 | 0.06 |
| Poland | 34.9 | 0.08 | 0.08 | 0.00 | 0.00 |
| Ireland | 34.0 | 0.29 | 0.29 | 0.00 | 0.00 |
| Japan | 32.6 | 0.06 | 0.06 | 0.00 | 0.00 |
| Iceland | 32.2 | -0.36 | -0.14 | 0.00 | -0.22 |
| Canada | 31.5 | 0.60 | -0.02 | 0.39 | 0.23 |
| United Kingdom | 31.3 | 0.40 | 0.21 | 0.09 | 0.10 |
| Costa Rica | 29.2 | 0.00 | 0.00 | 0.00 | 0.00 |
| United States | 28.4 | 1.20 | 0.49 | 0.00 | -0.04 |
| Australia | 27.1 | -1.25 | -0.66 | 0.00 | -0.59 |
| Israel | 24.2 | 1.02 | 0.70 | 0.22 | 0.10 |
| Korea | 23.6 | 0.23 | 0.01 | 0.13 | 0.10 |
| Switzerland | 22.8 | 0.32 | 0.27 | 0.02 | 0.02 |
| Mexico | 19.6 | -0.78 | -0.92 | -0.01 | 0.15 |
| New Zealand | 19.4 | 0.16 | 0.16 | 0.00 | 0.00 |
| Chile | 7.0 | -0.03 | -0.03 | 0.00 | 0.00 |
| Colombia | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| Unweighted average | | | | | |
| OECD Average | 34.6 | -0.06 | -0.04 | --0.02 | -0.02 |

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 and the United States, cash benefits contribute to the difference as they are not included in columns (3)-(5).
3. Includes payroll taxes where applicable.
Sources: Country submissions, (OECD[1]) Economic Outlook Volume 2021 Issue 2.

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

As % of labour costs, 2021

| Country[1] | Total tax wedge[2] (1) | Income tax (2) | Social security contributions employee (3) | Social security contributions employer[3] (4) | Labour costs[4] (5) |
|---|---|---|---|---|---|
| Switzerland | 22.8 | 10.8 | 6.0 | 6.0 | 89 841 |
| Luxembourg | 40.2 | 17.2 | 10.8 | 12.2 | 88 678 |
| Belgium | 52.6 | 20.3 | 11.0 | 21.3 | 88 663 |
| Austria | 47.8 | 11.9 | 14.0 | 21.9 | 85 480 |
| Germany | 48.1 | 14.6 | 16.9 | 16.6 | 85 370 |
| Netherlands | 35.3 | 13.9 | 10.6 | 10.8 | 82 060 |
| France | 47.0 | 12.1 | 8.3 | 26.6 | 77 248 |
| Ireland | 34.0 | 20.4 | 3.6 | 10.0 | 75 109 |
| Norway | 36.0 | 17.2 | 7.3 | 11.5 | 74 318 |
| Iceland | 32.2 | 26.3 | 0.1 | 5.7 | 73 167 |
| Sweden | 42.6 | 13.3 | 5.3 | 23.9 | 72 961 |
| United Kingdom | 31.3 | 12.9 | 8.5 | 9.9 | 71 852 |
| Denmark | 35.4 | 35.5 | 0.0 | 0.0 | 70 755 |
| Finland | 42.7 | 16.8 | 8.7 | 17.2 | 70 148 |
| Italy | 46.5 | 15.3 | 7.2 | 24.0 | 68 848 |
| United States | 28.4 | 15.9 | 7.1 | 7.5 | 68 077 |
| Australia | 27.1 | 22.1 | 0.0 | 5.0 | 65 689 |
| Canada | 31.5 | 17.0 | 5.9 | 8.5 | 64 905 |
| Korea | 23.6 | 5.5 | 8.2 | 9.8 | 61 381 |
| Japan | 32.6 | 6.8 | 12.5 | 13.3 | 59 899 |
| Spain | 39.3 | 11.3 | 4.9 | 23.0 | 57 802 |
| Israel | 24.2 | 10.8 | 7.9 | 5.5 | 52 843 |
| Slovenia | 43.6 | 10.7 | 19.0 | 13.9 | 47 438 |
| Estonia | 38.1 | 11.6 | 1.2 | 25.3 | 47 424 |
| New Zealand | 19.4 | 19.4 | 0.0 | 0.0 | 46 216 |
| Czech Republic | 39.9 | 6.4 | 8.2 | 25.3 | 45 985 |
| Portugal | 41.8 | 13.8 | 8.9 | 19.2 | 45 872 |
| Greece | 36.7 | 6.8 | 11.5 | 18.4 | 44 496 |
| Turkey | 39.9 | 12.2 | 12.8 | 14.9 | 43 664 |
| Poland | 34.9 | 5.5 | 15.3 | 14.1 | 41 867 |
| Hungary | 43.2 | 12.8 | 15.8 | 14.5 | 41 865 |
| Lithuania | 37.6 | 16.7 | 19.2 | 1.8 | 41 562 |
| Latvia | 40.5 | 12.9 | 8.5 | 19.1 | 39 245 |
| Slovak Republic | 41.3 | 8.0 | 10.3 | 23.0 | 35 430 |
| Costa Rica | 29.2 | 0.0 | 8.3 | 20.9 | 33 475 |
| Chile | 7.0 | 0.0 | 7.0 | 0.0 | 25 127 |
| Mexico | 19.6 | 7.9 | 1.2 | 10.5 | 15 619 |
| Colombia | 0.0 | 0.0 | 0.0 | 0.0 | 13 877 |
| Unweighted average | | | | | |
| OECD Average | 34.6 | 13.0 | 8.2 | 13.5 | 58 270 |

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 and the United States, cash benefits contribute to the difference as they are not included in columns (2)-(4).
3. Includes payroll taxes where applicable.
4. US dollars with equal purchasing power.
Sources: Country submissions, (OECD[1]) Economic Outlook Volume 2021 Issue 2.

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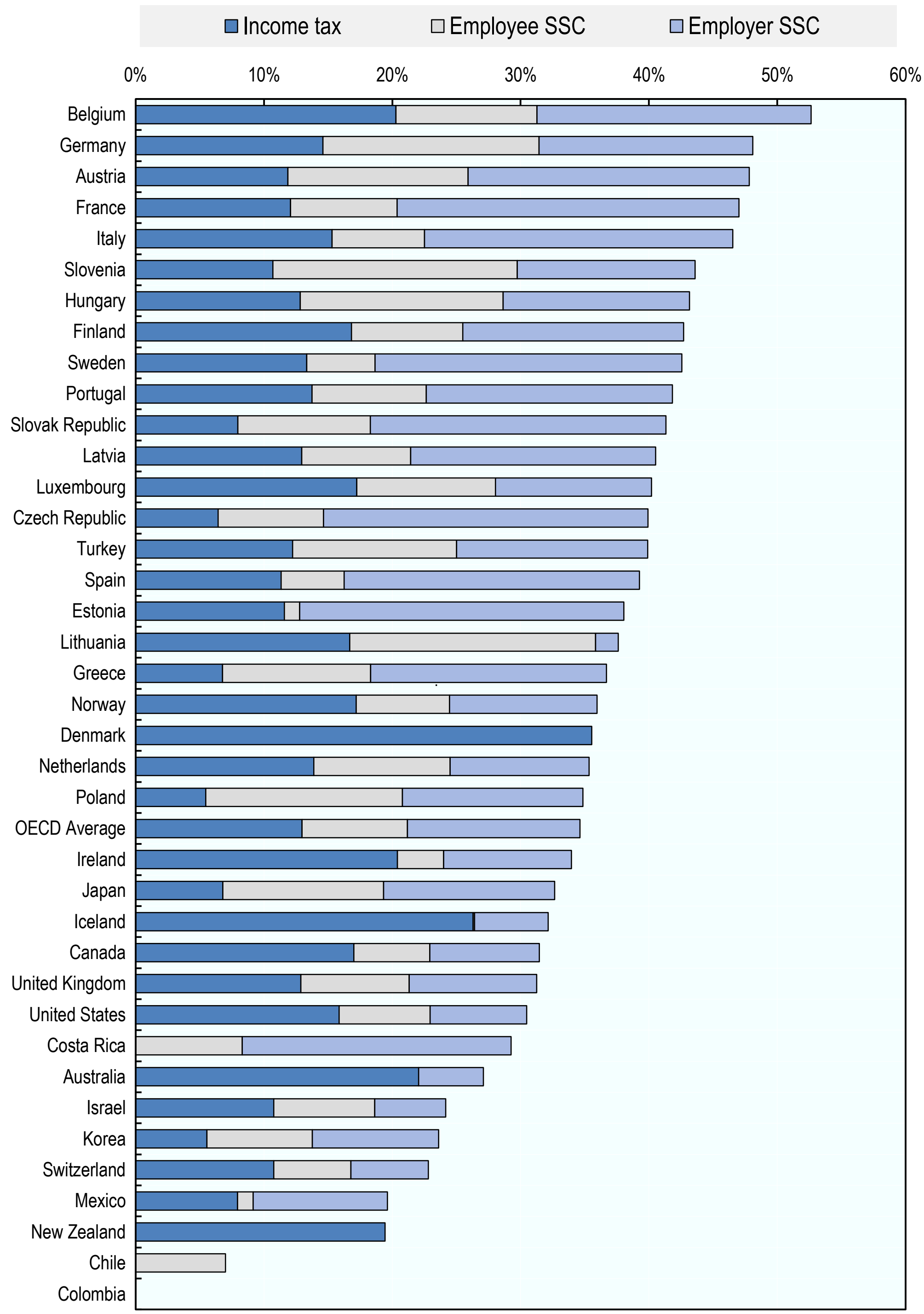
## Figure 1.1. Income tax plus employee and employer social security contributions, 2021

As a % of labour costs




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

StatLink https://stat.link/cdpn6h

### *Personal average tax rates*

The personal average tax rate is defined as income tax plus employee SSCs as a percentage of gross wage earnings. Table 1.3 and Figure 1.2 show the personal average tax rates in 2021 for a single worker without children at the average wage 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 SSCs.

Table 1.3 and Figure 1.2 show that on average, the personal average tax rate for a single worker at average earnings in OECD countries was 24.6% in 2021. Belgium had the highest rate at 39.8% of gross wage earnings; Denmark, Germany and Lithuania were the only other countries with rates above 35%. The lowest personal average tax rates were in Mexico (10.2%), Costa Rica (10.5%), Chile (7.0%) and Colombia (0.0%). The personal average tax rate was zero for Colombia as the single worker did not pay personal income tax at the average wage level in 2021. Moreover, contributions to pension, health and employment risk insurance in Colombia are considered to be non-tax compulsory payments (NTCPs)[6] and are not counted as taxes in the *Taxing Wages* calculations.

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, in part, reflect 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 SSCs paid out of gross wage earnings also varies greatly between countries, as illustrated in Figure 1.2.

In 2021, the share of income tax within the personal average tax rate was higher than the share of the employee SSCs for 23 of the 38 OECD member countries. No employee SSCs were levied in Australia, Colombia, Denmark and New Zealand and their levels were at 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 in employee SSCs than in personal income tax (i.e., more than six percentage points) in five countries – Chile, Costa Rica, Japan, Poland and Slovenia. In six countries – the Czech Republic, Germany, Israel, Korea, Lithuania and Turkey – the shares of personal income tax and employee SSCs as a percentage 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, 2021

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 | 17.9 | 11.5 | 6.4 | 84 437 |
| Luxembourg | 31.9 | 19.6 | 12.3 | 77 897 |
| Netherlands | 27.5 | 15.6 | 11.9 | 73 185 |
| Germany | 37.7 | 17.5 | 20.2 | 71 157 |
| Denmark | 35.5 | 35.5 | 0.0 | 70 755 |
| Belgium | 39.8 | 25.8 | 14.0 | 69 734 |
| Iceland | 28.0 | 27.9 | 0.1 | 68 960 |
| Ireland | 26.7 | 22.7 | 4.0 | 67 635 |
| Austria | 33.2 | 15.2 | 18.0 | 66 751 |
| Norway | 27.6 | 19.4 | 8.2 | 65 769 |
| United Kingdom | 23.7 | 14.3 | 9.4 | 64 716 |
| United States | 24.8 | 17.2 | 7.7 | 62 954 |
| Australia | 23.2 | 23.2 | 0.0 | 62 376 |
| Canada | 25.1 | 18.6 | 6.5 | 59 377 |
| Finland | 30.8 | 20.3 | 10.5 | 58 079 |
| France | 27.8 | 16.5 | 11.3 | 56 677 |
| Sweden | 24.5 | 17.5 | 7.0 | 55 518 |
| Korea | 15.3 | 6.2 | 9.1 | 55 346 |
| Italy | 29.6 | 20.1 | 9.5 | 52 324 |
| Japan | 22.3 | 7.8 | 14.5 | 51 923 |
| Israel | 19.7 | 11.4 | 8.3 | 49 921 |
| New Zealand | 19.4 | 19.4 | 0.0 | 46 216 |
| Spain | 21.1 | 14.7 | 6.4 | 44 497 |
| Slovenia | 34.5 | 12.4 | 22.1 | 40 860 |
| Lithuania | 36.5 | 17.0 | 19.5 | 40 831 |
| Turkey | 29.4 | 14.4 | 15.0 | 37 161 |
| Portugal | 28.0 | 17.0 | 11.0 | 37 068 |
| Greece | 22.4 | 8.3 | 14.1 | 36 311 |
| Poland | 24.2 | 6.4 | 17.8 | 35 981 |
| Hungary | 33.5 | 15.0 | 18.5 | 35 782 |
| Estonia | 17.1 | 15.5 | 1.6 | 35 444 |
| Czech Republic | 19.6 | 8.6 | 11.0 | 34 369 |
| Latvia | 26.5 | 16.0 | 10.5 | 31 747 |
| Slovak Republic | 23.8 | 10.4 | 13.4 | 27 264 |
| Costa Rica | 10.5 | 0.0 | 10.5 | 26 462 |
| Chile | 7.0 | 0.0 | 7.0 | 25 127 |
| Mexico | 10.2 | 8.9 | 1.4 | 13 984 |
| Colombia | 0.0 | 0.0 | 0.0 | 13 877 |
| Unweighted average | | | | |
| OECD Average | 24.6 | 14.9 | 9.7 | 50 223 |

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[1]) Economic Outlook Volume 2021 Issue 2.

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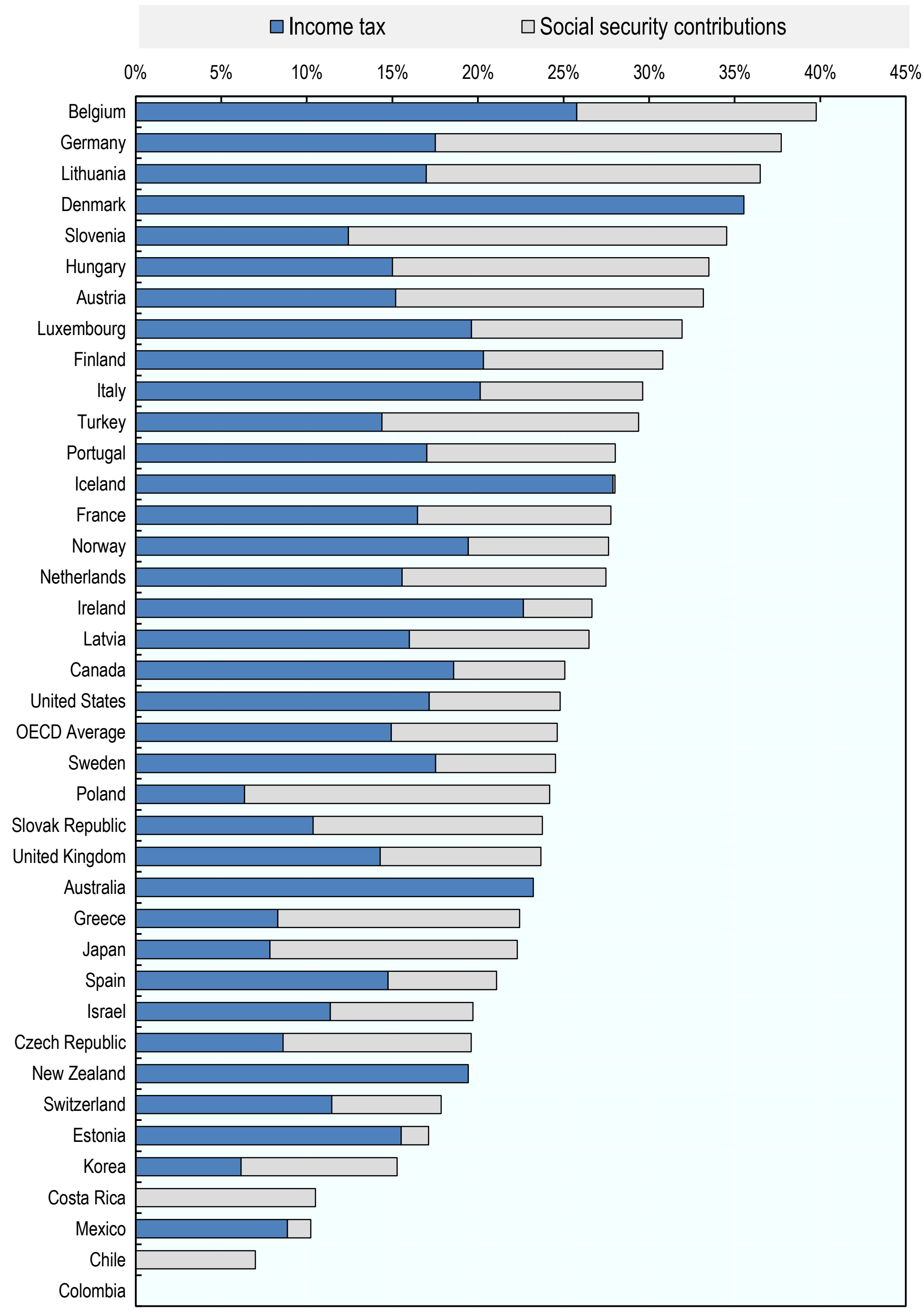
**Figure 1.2. Percentage of gross wage earnings paid in income tax and employee social security contributions, 2021**




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

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## Single versus one-earner couple taxpayers

Table 1.4 compares the tax wedges as a percentage of labour costs for a one-earner married couple with two children and a single individual without children, at average wage levels. These tax wedges varied widely across OECD countries in 2021 (see columns 1 and 2). The tax wedge for the couple with children is generally smaller than that 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 as a percentage of labour costs for the one-earner couple with two children was 24.6% compared to 34.6% for the single average worker. This gap increased slightly (by 0.36 percentage points) between 2020 and 2021.

The tax savings realised by a one-earner married couple with two children compared with a single worker without children were greater than 20% of labour costs in Chile, Luxembourg, Poland, and they exceeded 15% of labour costs in four other countries: Belgium, the Czech Republic, and Germany and the United States. The tax burdens of one-earner married couples and single workers on the average wage were the same in Costa Rica and Mexico, and they differed by less than three percentage points in Israel and Turkey (see columns 1 and 2).

The tax wedge of an average one-earner married couple with two children declined by -0.42 percentage points between 2020 and 2021 (see column 3). In 22 of the 38 OECD countries, there was only a small change (not exceeding plus or minus one percentage point), and there was no change in Costa Rica. There were increases of more than one percentage point in ten countries: Austria, Canada, Estonia, Finland, France, Israel, Korea, Lithuania, Luxembourg and Poland.

In a number of cases, these increases were caused by the scaling back of COVID-19 measures implemented in 2020. In Lithuania (2.87 percentage points), a one-off extra benefit payment in response to COVID-19 paid in 2020 was not repeated in 2021. In Austria (1.90 percentage points), the extra child benefit that was paid in response to the COVID-19 crisis in 2020 was limited to specific social benefit recipients in 2021; as a result, it was not included in the *Taxing Wages* calculations for 2021 since it did not cover the majority of workers. In Canada (1.78 percentage points), the one-earner couple with two children benefited from increases in cash benefits in response to the COVID-19 crisis in 2020 that were not paid in 2021. In Israel (1.17 percentage points), the average tax wedge for the one-earner family increased due to the removal of the earned tax income credit, a temporary COVID-19 measure introduced in 2020. In Korea (1.03 percentage points), a temporary childcare coupon introduced in response to the COVID-19 crisis was paid in 2020 but not in 2021.

In other cases, the increase was not directly linked to COVID-19 measures. In Finland (1.53 percentage points), cash benefit payments remained at the same level in 2021 as in 2020 while employee and employer SSC rates increased over this period. In Estonia (1.32 percentage points), the one-earner couple received a lower basic tax allowance, which is progressive and diminishes as salaries increase. In France (1.32 percentage points), the increase in the tax wedge was derived from lower in-work benefit payments in 2021. In Luxembourg (1.02 percentage points), the higher tax wedge can be explained by an increase in income taxes due to a higher average wage combined with the progressivity of the tax credit, which decreases as income increases. In Poland (1.22 percentage points), the tax schedule and basic tax relief amounts remained unchanged between 2020 and 2021, leading to a higher proportion of income being taxed away and thus an increase in the tax wedge.

There were decreases of one percentage point or more in five countries: Australia, Chile, the Czech Republic, Greece and the United States. In Australia (1.73 percentage points), the decrease mainly resulted from the aforementioned reform of the income tax schedule and reduced employer's payroll tax rate.[7] In addition, the one-earner couple with two children who were eligible for the Family Tax Benefit in Australia also received three one-off cash benefit payments in response to the COVID-19 crisis during the 2020-2021 tax year. One payment of this extra benefit was made during the 2019-2020 tax year. In

Chile, the average tax wedge decreased by 25.52 percentage points for the one-earner married couple with two children. This sharp decrease was due to the introduction of a temporary Emergency Family Income (*Ingreso Familiar de Emergencia)* paid from June to November 2021, a cash transfer which increased with the number of household members. In the Czech Republic (5.04 percentage points), as mentioned in the previous section, the personal income tax base was reformed and only included the worker's gross income in 2021. In addition, a large increase in the value of child benefits contributed to the decline of the tax wedge for the family. In Greece (2.38 percentage points), as previously mentioned, employee and the employer SSC rates decreased in 2021. In the United States (1.59 percentage points), the American Rescue Plan Act (ARP) enacted on 21 March 2021 made the Child Tax Credit fully refundable and increased the maximum value of the credit. Detailed explanations on COVID-19 related measures are provided in the country chapters in Part II of the Report.

A comparison of the changes in tax wedges between 2020 and 2021 for 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 eight of the 38 OECD countries: Australia, Chile, Colombia, the Czech Republic, Greece, the Slovak Republic, Turkey and the United States. The fiscal preference increased by more than one percentage point for the United States (2.78 percentage points) and Chile (25.49 percentage points) due the temporary Emergency Family Income, while Turkey experienced a very small increase, of 0.03 percentage points. Additionally, the effect of changes in the tax system on the tax wedge were of similar magnitude for both household types in Costa Rica and Mexico.

## Table 1.4. Comparison of total tax wedge for single and one-earner couple taxpayers, 2021

As % of labour costs

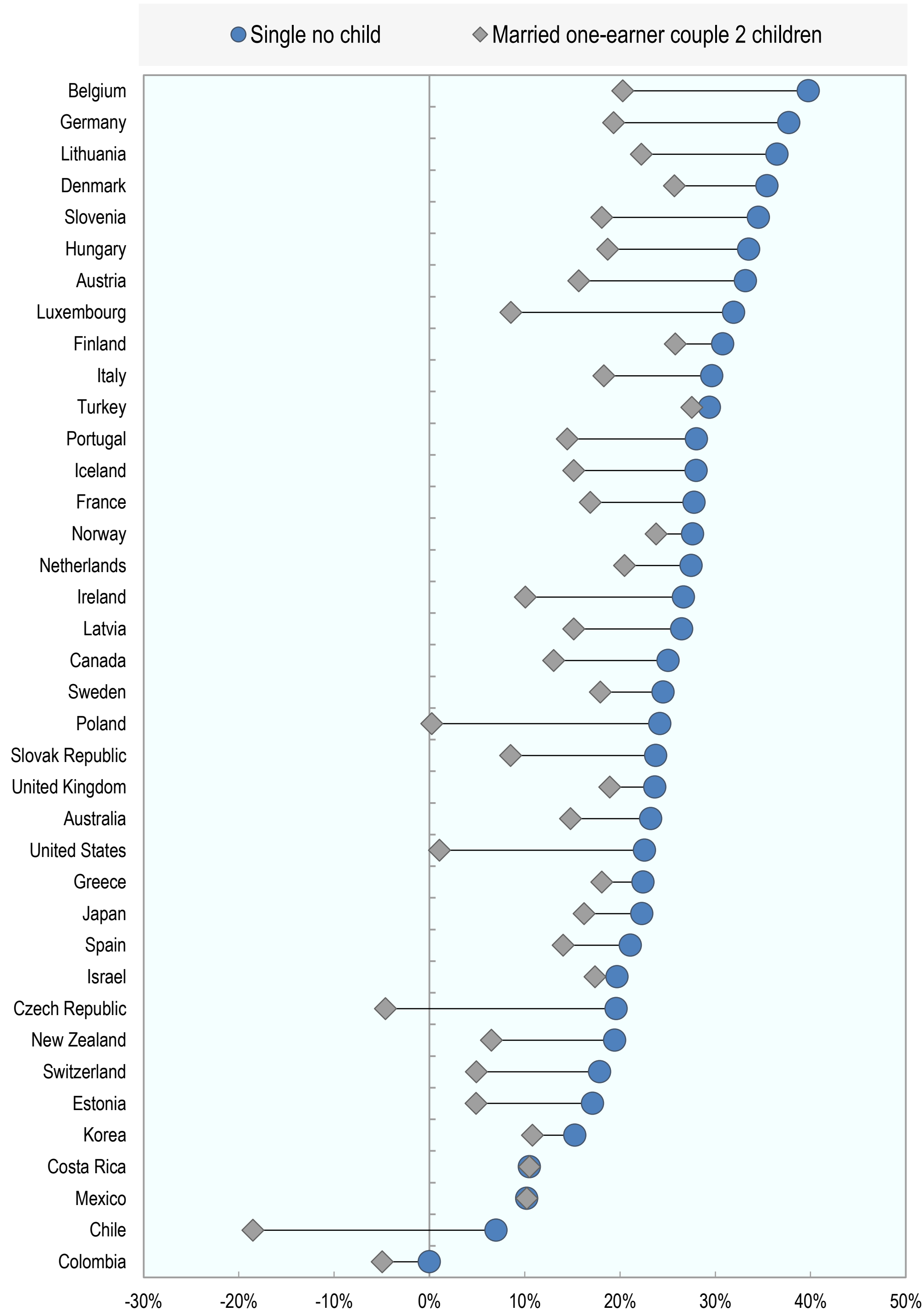
| Country[1] | Family[2] Total tax wedge 2021 (1) | Single[3] Total tax wedge 2021 (2) | Annual change, 2021/20 (in percentage points) | | |
|---|---|---|---|---|---|
| | | | Family tax wedge (3) | Single tax wedge (4) | Difference between single and family (4)-(3) (5) |
| France | 39.0 | 47.0 | 1.32 | 0.45 | -0.87 |
| Finland | 38.6 | 42.7 | 1.53 | 1.33 | -0.20 |
| Turkey | 38.3 | 39.9 | 0.42 | 0.44 | 0.03 |
| Italy | 37.9 | 46.5 | 0.53 | -0.41 | -0.94 |
| Sweden | 37.6 | 42.6 | 0.12 | -0.08 | -0.20 |
| Belgium | 37.3 | 52.6 | 0.89 | 0.38 | -0.51 |
| Austria | 34.1 | 47.8 | 1.90 | 0.37 | -1.53 |
| Spain | 33.8 | 39.3 | 0.38 | 0.28 | -0.10 |
| Greece | 33.2 | 36.7 | -2.38 | -2.23 | 0.16 |
| Germany | 32.7 | 48.1 | 0.25 | -0.72 | -0.97 |
| Norway | 32.6 | 36.0 | 0.37 | 0.20 | -0.17 |
| Latvia | 31.4 | 40.5 | -0.69 | -1.73 | -1.04 |
| Portugal | 30.9 | 41.8 | 0.51 | 0.30 | -0.21 |
| Hungary | 30.5 | 43.2 | 0.30 | -0.48 | -0.78 |
| Slovak Republic | 29.6 | 41.3 | -0.80 | 0.01 | 0.81 |
| Slovenia | 29.5 | 43.6 | 0.96 | 0.46 | -0.51 |
| Costa Rica | 29.2 | 29.2 | 0.00 | 0.00 | 0.00 |
| Netherlands | 29.1 | 35.3 | -0.50 | -0.76 | -0.26 |
| Estonia | 28.9 | 38.1 | 1.32 | 0.73 | -0.59 |
| Japan | 27.4 | 32.6 | 0.13 | 0.06 | -0.07 |
| United Kingdom | 27.0 | 31.3 | 0.60 | 0.40 | -0.20 |
| Denmark | 25.7 | 35.4 | 0.49 | 0.16 | -0.33 |
| Lithuania | 23.6 | 37.6 | 2.87 | 0.52 | -2.35 |
| Israel | 21.9 | 24.2 | 1.17 | 1.02 | -0.15 |
| Czech Republic | 21.8 | 39.9 | -5.04 | -4.12 | 0.92 |
| Canada | 20.4 | 31.5 | 1.78 | 0.60 | -1.18 |
| Iceland | 20.0 | 32.2 | 0.54 | -0.36 | -0.91 |
| Luxembourg | 19.7 | 40.2 | 1.02 | 0.75 | -0.27 |
| Mexico | 19.6 | 19.6 | -0.78 | -0.78 | 0.00 |
| Korea | 19.6 | 23.6 | 1.03 | 0.23 | -0.80 |
| Australia | 19.1 | 27.1 | -1.73 | -1.25 | 0.48 |
| Ireland | 19.0 | 34.0 | 0.52 | 0.29 | -0.23 |
| Poland | 14.3 | 34.9 | 1.22 | 0.08 | -1.14 |
| Switzerland | 10.6 | 22.8 | 0.49 | 0.32 | -0.17 |
| United States | 8.5 | 28.4 | -1.59 | 1.20 | 2.78 |
| New Zealand | 6.5 | 19.4 | 0.74 | 0.16 | -0.58 |
| Colombia | -5.0 | 0.0 | -0.29 | 0.00 | 0.29 |
| Chile | -18.5 | 7.0 | -25.52 | -0.03 | 25.49 |
| Unweighted average | | | | | |
| OECD Average | 24.6 | 34.6 | -0.42 | -0.06 | 0.36 |

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[1]) Economic Outlook Volume 2021 Issue 2.

StatLink https://stat.link/meft2g

**Figure 1.3. Income tax plus employee contributions less cash benefits, 2021**

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




Notes: Countries ranked by decreasing rates for single taxpayer without children.
The household type 'single no child' corresponds to a wage level of 100% of average wage and 'married one earner couple 2 children' corresponds to a combined wage level of 100%-0% of average wage

StatLink https://stat.link/n21i5c

Figure 1.3 compares the net personal average tax rate for the average worker between a single individual and a one-earner married couple with two children at the same income level. 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 was higher than the single individual's by more than 20% of earnings in five countries: Chile (25.5%), the Czech Republic (24.2%), Luxembourg (23.4%), Poland (24.0%) and the United States (21.5%). At the lower end of the spectrum, the disposable income of the one-earner married couple was higher than the single individual by less than 10% of earnings in fourteen countries: Denmark (9.7%), Australia (8.43%), Spain (7.1%), the Netherlands (7.0%), Sweden (6.6%), Japan (6.1%), Finland (5.0%), Colombia (4.97%), the United Kingdom (4.74%), Korea (4.48%), Greece (4.3%), Norway (3.8%), Israel (2.4%) and Turkey (1.9%). The disposable income was the same for both household types in Costa Rica and Mexico, as their net personal average tax rates were identical.

## Taxation of two-earner couples

The preceding analysis focuses on two households with comparable levels of income: the single worker at 100% of the average wage and the married couple with one earner at 100% of the 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 the average wage, with two children.

### *Tax wedge*

For this household type, the OECD average tax wedge as a percentage of labour costs for the household was 28.8% in 2021 (Figure 1.4 and Table 1.5). Belgium had a tax wedge of 45.2%, which was the highest among OECD countries. The other countries with tax wedges exceeding 40% were Italy, France and Germany (all three at 40.9%). At the other extreme, the lowest tax wedges were observed in Colombia (- 6.0%) and Chile (-8.6%). In Colombia, the tax wedge was negative because this household type did not pay income taxes at that level of earnings (although it paid contributions that are not considered to be taxes)[8] and received cash benefits that were paid on top of their wages. In Chile, the tax wedge was negative due to the introduction of the temporary Emergency Family Income. Similar to Colombia, households received cash benefits on top of their wages. The other countries with tax wedges of less than 20% were Mexico (18.5%), Israel (18.1%), the United States (17.9%), New Zealand (17.3%) and Switzerland (16.8%).

Figure 1.4 shows the average tax wedge and its components as a percentage of labour costs for the two-earner couple for 2021. On average across OECD countries, income tax represented 10.1% of labour costs and the sum of the employees' and employers' SSCs represented 21.6%. The OECD tax wedge is net of cash benefits, which represented 2.9% of labour costs in 2021.

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. In response to the COVID-19 crisis, workers without children also received cash benefits in the United States as observed in the previous section on the tax wedge for the average single worker.

Compared to 2020, the OECD average tax wedge of the two-earner couple decreased by 0.36 percentage points in 2021, as indicated in Table 1.5 (column 2). For this household type, the tax wedge decreased in fourteen out of 38 OECD countries, increased in 23 and remained at the same level in Costa Rica.

Increases exceeded one percentage point in six countries: Luxembourg and Canada (1.14 percentage points), Lithuania (1.25 percentage points), Austria (1.28 percentage points), Israel (1.4 percentage points) and Finland (1.49 percentage points).

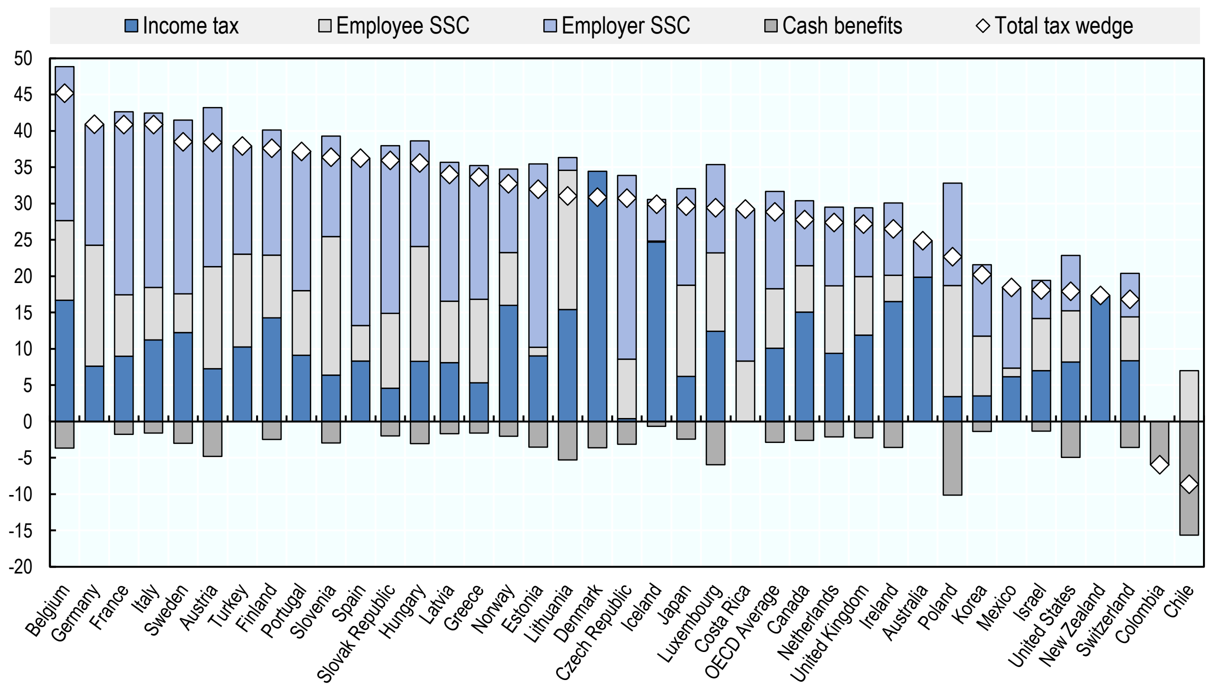
In Luxembourg, the increase was a result of higher income taxes due to the progressivity of the income tax schedule and the tax credit. In Canada, the increase occurred as the household no longer received cash benefits that were paid out in 2020 in response to the COVID-19 pandemic. In Lithuania, the one-off extra benefit payments in response to COVID-19 were paid only in 2020. In Austria, a decline in cash benefits underpinned the increase of the tax wedge: the extra child benefit that was paid in response to the COVID-19 crisis in 2020 was limited to specific social benefit recipients in 2021 and thus not included in *Taxing Wages* calculations for that year. In Israel, the average tax wedge increased because of higher income taxes resulting from lower tax credits due to the removal of the earned tax income credit, which was introduced as a temporary COVID-19 measure in 2020. In Finland, SSC rates increased for the employee and employer while cash benefits decreased as a percentage of labour costs.

Among the countries where tax wedges increased for two-earner couples with children in 2021, the increase in income tax as a percentage of labour costs represented the bulk of the increase in seventeen of them – Austria, Belgium, Denmark, Estonia, Ireland, Israel, Japan, Lithuania, Luxembourg, New Zealand, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and Turkey. Meanwhile, an increase in SSCs was the main factor responsible for higher tax wedges in three countries in 2021: Canada, Finland and France. In Korea and the United Kingdom, personal income tax and SSCs increased evenly.

In most countries with decreasing tax wedges for families with children between 2020 and 2021, the lower tax wedges resulted from changes in income tax systems and SSCs, as observed for the single workers, and also from increased cash benefits or tax provisions for dependent children between the two years. Decreases of more than one percentage point were observed in five countries: Chile (-15.28 percentage points), the Czech Republic (-4.8 percentage points), Greece (-2.2 percentage points), Mexico (-1.54 percentage points) and Australia (-1.43 percentage points). As observed in previous sections, the decreases in the tax wedge resulted from a reformed income tax schedule in Australia, Iceland and Mexico (in Mexico,a decrease in average wage enhanced the decline of the tax wedges); from a reformed personal income tax base in the Czech Republic along with a strong increase in child benefits; from increased income tax relief in Latvia and the United States; and from reduced employee and employer SSC rates in Greece.

## Figure 1.4. Income tax plus employee and employer social security contributions less cash benefits, 2021

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




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

StatLink https://stat.link/bdew0y

## Table 1.5. Comparison of total tax wedge for two-earner couples with children, 2021

As % of labour costs

| Country[1] | Total tax wedge 2021 (1) | Annual change, 2021/20 (in percentage points)[2] | | | | |
|---|---|---|---|---|---|---|
| | | Tax wedge (2) | Income tax (3) | Employee SSC (4) | Employer SSC[3] (5) | Cash benefits (6) |
| Belgium | 45.2 | 0.64 | 0.44 | -0.05 | 0.15 | -0.09 |
| Germany | 40.9 | -0.26 | -0.40 | 0.07 | 0.07 | 0.00 |
| France | 40.9 | 0.80 | 0.21 | -0.06 | 0.54 | -0.11 |
| Italy | 40.9 | 0.21 | 0.02 | 0.00 | 0.00 | -0.19 |
| Sweden | 38.5 | -0.20 | -0.31 | -0.01 | 0.00 | -0.12 |
| Austria | 38.4 | 1.28 | 0.46 | 0.00 | 0.00 | -0.82 |
| Turkey | 37.9 | 0.29 | 0.29 | 0.00 | 0.00 | 0.00 |
| Finland | 37.6 | 1.49 | -0.22 | 0.13 | 1.46 | -0.12 |
| Portugal | 37.2 | 0.45 | 0.45 | 0.00 | 0.00 | 0.00 |
| Slovenia | 36.4 | 0.60 | 0.40 | 0.00 | 0.00 | -0.20 |
| Spain | 36.2 | 0.63 | 0.63 | 0.00 | 0.00 | 0.00 |
| Slovak Republic | 35.9 | -0.51 | -0.43 | 0.02 | -0.15 | -0.05 |
| Hungary | 35.6 | -0.01 | 0.39 | 0.13 | -0.72 | -0.19 |
| Latvia | 34.0 | -0.71 | -0.20 | -0.37 | -0.33 | -0.19 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Greece | 33.6 | -2.20 | 0.06 | -0.93 | -1.30 | 0.03 |
| Norway | 32.7 | 0.30 | 0.12 | -0.01 | 0.08 | -0.10 |
| Estonia | 32.0 | 0.91 | 0.68 | 0.00 | 0.00 | -0.23 |
| Lithuania | 31.0 | 1.25 | 0.66 | 0.00 | 0.00 | -0.59 |
| Denmark | 30.9 | 0.28 | 0.16 | 0.00 | 0.00 | -0.12 |
| Czech Republic | 30.7 | -4.80 | -4.01 | 0.00 | 0.00 | 0.79 |
| Iceland | 29.9 | -0.48 | -0.32 | 0.00 | -0.22 | -0.06 |
| Japan | 29.6 | 0.08 | 0.05 | 0.00 | 0.00 | -0.03 |
| Luxembourg | 29.4 | 1.14 | 0.82 | -0.01 | 0.06 | -0.27 |
| Costa Rica | 29.2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Canada | 27.8 | 1.14 | -0.01 | 0.38 | 0.20 | -0.57 |
| Netherlands | 27.4 | -0.78 | -0.29 | -0.55 | 0.06 | 0.00 |
| United Kingdom | 27.2 | 0.59 | 0.26 | 0.11 | 0.12 | -0.11 |
| Ireland | 26.5 | 0.40 | 0.35 | 0.00 | 0.00 | -0.05 |
| Australia | 24.9 | -1.43 | -0.84 | 0.00 | -0.59 | 0.00 |
| Poland | 22.7 | 0.75 | 0.19 | 0.00 | 0.00 | -0.56 |
| Korea | 20.2 | 0.72 | 0.02 | 0.13 | 0.10 | -0.47 |
| Mexico | 18.5 | -1.54 | -1.73 | -0.01 | 0.20 | 0.00 |
| Israel | 18.1 | 1.40 | 0.92 | 0.26 | 0.12 | -0.09 |
| United States | 17.9 | -0.97 | -1.39 | 0.00 | -0.05 | -0.47 |
| New Zealand | 17.3 | 0.15 | 0.15 | 0.00 | 0.00 | 0.00 |
| Switzerland | 16.8 | 0.47 | 0.30 | 0.02 | 0.02 | -0.12 |
| Colombia | -6.0 | -0.34 | 0.00 | 0.00 | 0.00 | 0.34 |
| Chile | -8.6 | -15.28 | 0.00 | 0.00 | 0.00 | 15.28 |
| Unweighted average | | | | | | |
| OECD Average | 28.8 | -0.36 | -0.06 | -0.02 | 0.00 | 0.28 |

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[1]) Economic Outlook Volume 2021 Issue 2.

StatLink https://stat.link/8dl9tg

## Table 1.6. Income tax plus employee social security contributions less cash benefits, 2021

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 | 11.5 | 8.9 | 6.4 | 3.8 | 141 010 |
| Luxembourg | 19.6 | 14.1 | 12.3 | 6.8 | 130 088 |
| Netherlands | 18.6 | 10.5 | 10.4 | 2.4 | 122 219 |
| Germany | 29.1 | 9.1 | 20.0 | 0.0 | 118 832 |
| Denmark | 30.9 | 34.5 | 0.0 | 3.6 | 118 161 |
| Belgium | 30.5 | 21.2 | 13.9 | 4.6 | 116 456 |
| Iceland | 25.6 | 26.2 | 0.1 | 0.7 | 115 163 |
| Ireland | 18.4 | 18.3 | 4.0 | 4.0 | 112 951 |
| Austria | 21.1 | 9.3 | 18.0 | 6.1 | 111 474 |
| Norway | 24.0 | 18.1 | 8.2 | 2.3 | 109 833 |
| United Kingdom | 19.5 | 13.2 | 8.9 | 2.5 | 108 076 |
| United States | 11.2 | 8.9 | 7.7 | 5.3 | 105 134 |
| Australia | 20.9 | 20.9 | 0.0 | 0.0 | 104 168 |

| | | | | | |
|---|---|---|---|---|---|
| Canada | 20.7 | 16.5 | 7.0 | 2.9 | 99 160 |
| Finland | 24.7 | 17.2 | 10.4 | 3.0 | 96 992 |
| France | 21.0 | 12.0 | 11.3 | 2.4 | 94 650 |
| Sweden | 19.1 | 16.1 | 7.0 | 3.9 | 92 715 |
| Korea | 11.5 | 3.9 | 9.1 | 1.5 | 92 427 |
| Italy | 22.2 | 14.8 | 9.5 | 2.1 | 87 381 |
| Japan | 18.8 | 7.2 | 14.5 | 2.8 | 86 712 |
| Israel | 13.6 | 7.4 | 7.6 | 1.4 | 83 368 |
| New Zealand | 17.3 | 17.3 | 0.0 | 0.0 | 77 181 |
| Spain | 17.2 | 10.8 | 6.4 | 0.0 | 74 311 |
| Slovenia | 26.1 | 7.4 | 22.1 | 3.4 | 68 236 |
| Lithuania | 29.8 | 15.7 | 19.5 | 5.4 | 68 188 |
| Greece | 18.7 | 6.5 | 14.1 | 1.9 | 66 704 |
| Turkey | 27.0 | 12.0 | 15.0 | 0.0 | 62 059 |
| Portugal | 22.3 | 11.3 | 11.0 | 0.0 | 61 904 |
| Poland | 10.0 | 4.0 | 17.8 | 11.8 | 60 088 |
| Hungary | 24.6 | 9.7 | 18.5 | 3.5 | 59 755 |
| Estonia | 9.0 | 12.1 | 1.6 | 4.7 | 59 192 |
| Czech Republic | 7.3 | 0.5 | 11.0 | 4.2 | 57 395 |
| Latvia | 18.4 | 10.0 | 10.5 | 2.1 | 53 017 |
| Slovak Republic | 16.8 | 6.0 | 13.4 | 2.6 | 45 531 |
| Costa Rica | 10.5 | 0.0 | 10.5 | 0.0 | 44 192 |
| Chile | -8.6 | 0.0 | 7.0 | 15.6 | 41 963 |
| Mexico | 8.3 | 6.9 | 1.3 | 0.0 | 23 353 |
| Colombia | -6.0 | 0.0 | 0.0 | 6.0 | 23 175 |
| Unweighted average | | | | | |
| OECD Average | 17.9 | 11.5 | 9.6 | 3.2 | 84 032 |

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[1]) Economic Outlook Volume 2021 Issue 2.

StatLink https://stat.link/iwtruk

### *Personal average tax rates*

Regarding the net personal average tax rate as a percentage of gross wage earnings, the OECD average was 17.9% in 2021 for the two-earner couple with two children where one spouse earns the average wage and the other earns 67% thereof. Table 1.6 shows the net personal average tax rates for the OECD countries and their components as a percentage of gross wage earnings. 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, cash benefits are taken into account in Table 1.6 and reduce the impact of the employees' income taxes and SSCs (column 2 plus column 3, minus column 4).

The net personal average tax rate on the two-earner couple varied greatly among OECD countries in 2021, ranging from -8.6% in Chile and -6.0% in Colombia to 30.9% in Denmark. In Chile, the tax wedge was negative as the household did not pay income taxes at this level of income and received a temporary cash benefit, the Emergency Family Income mentioned previously. In Colombia, the tax wedge was negative as the household did not pay income taxes at that level of earnings, paid contributions that are not considered to be taxes[9] and received cash benefits that were paid on top of their wages. The disposable income of the household after tax represented 108.5% of the couple's gross wage earnings in Chile and 106.0% in

Colombia while it represented 69.1% in Denmark. The net personal average tax rate was equal to or less than 10% in Poland (10.0%), Estonia (9.0%), Mexico (8.3%) and the Czech Republic (7.3%).

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). Non-tax compulsory payments that affect households' disposable incomes are not included in the calculations presented in the publication, but further analysis of those payments is presented in the online report: [http://www.oecd.org/tax/tax-policy/non-tax-compulsory-payments.pdf](http://www.oecd.org/tax/tax-policy/non-tax-compulsory-payments.pdf).

## Wages

Table 1.7 shows the gross wage earnings in national currency of the average worker in each OECD member country for 2020 and 2021. The figures for 2021 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 2021 Issue 2) 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 gross wages in 2021 – shown in column 3 – ranged from -1.6% in Mexico to 19.5% in Turkey. To a large extent, the changes in wage levels in 36 OECD countries reflect inflation trends, although they went in opposite directions in Japan and Mexico (see column 4 of Table 1.7). The annual change in real wage levels (before personal income tax and employee social security contributions) was within the range of -2% to +2% for 23 countries; see column 5 of Table 1.7. Fifteen countries showed changes outside this range. Among these countries, increases exceeded 2% in Denmark (2.2%), Estonia and Slovak Republic (both at 2.3%), Portugal (2.4%), the United Kingdom (2.5%), Switzerland (2.8%), France (3.3%), Italy (3.7%), Costa Rica (4.0%), Israel (4.9%), Slovenia (5.0%), Lithuania (7.1%) and Latvia (8.7%). The declines were larger than -2% in New Zealand (-2.2%) and Mexico (-6.8%).

In 25 out of the 38 OECD countries, the average single worker without children had higher real post-tax income in 2021 than in 2020, either because real wages before tax increased more or decreased less than personal average tax rates, or because personal average tax rates decreased or remained unchanged while real wages before tax increased (see column 6). The real post-tax income remained unchanged in Finland as the personal tax rate and the real wage before tax increased at the same rate.

In contrast, the average single worker without children had lower real post-tax income in 2021 in Austria, Belgium, Canada, Estonia, Ireland, Israel, Korea, Luxembourg, New Zealand, Spain, Turkey and the United States:

- The real wage before tax decreased whereas the personal average tax rate increased in Austria, Canada, Ireland, Korea and New Zealand.
- The personal average tax rate increased more than the real wage before tax in Belgium, Estonia, Israel, Luxembourg, Spain, Turkey and the United States.

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 or do not 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 2021 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 since 2008 or earlier. 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 years back to 2000 for Australia, 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 (from 2004 onwards) 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 Costa Rica(all years), the Netherlands (from 2012 onwards) and Mexico (all years).

## Table 1.7. Comparison of wage levels

| Country | Gross wage in national currency | | Annual change, 2021/20 (percentage) | | | |
|---|---|---|---|---|---|---|
| | 2020 (1) | 2021 (2) | Gross wage (3) | Inflation[1] (4) | Real wage before tax (5) | Change in personal average tax rate[2] (6) |
| Australia | 90 866 | 93 313 | 2.7 | 2.7 | 0.0 | -3.5 |
| Austria | 49 087 | 50 460 | 2.8 | 2.8 | -0.1 | 1.4 |
| Belgium | 50 312 | 52 248 | 3.8 | 2.9 | 0.9 | 1.2 |
| Canada | 71 994 | 74 037 | 2.8 | 3.3 | -0.4 | 1.9 |
| Chile | 10 277 863 | 10 776 819 | 4.9 | 4.3 | 0.5 | -0.5 |
| Colombia | 18 345 584 | 19 240 596 | 4.9 | 3.5 | 1.3 | 0.0 |
| Costa Rica | 8 294 100 | 8 761 423 | 5.6 | 1.6 | 4.0 | 0.0 |
| Czech Republic | 416 997 | 435 312 | 4.4 | 3.8 | 0.6 | -21.9 |
| Denmark | 440 000 | 457 613 | 4.0 | 1.8 | 2.2 | 0.5 |
| Estonia | 17 224 | 18 329 | 6.4 | 4.1 | 2.3 | 6.1 |
| Finland | 46 470 | 47 915 | 3.1 | 1.9 | 1.2 | 1.2 |
| France | 37 922 | 39 971 | 5.4 | 2.1 | 3.3 | 2.2 |
| Germany | 51 000 | 52 556 | 3.1 | 3.1 | 0.0 | -2.4 |
| Greece | 18 834 | 18 831 | 0.0 | 0.4 | -0.4 | -6.3 |
| Hungary | 5 043 851 | 5 400 419 | 7.1 | 5.0 | 2.0 | 0.0 |
| Iceland | 9 528 000 | 10 103 366 | 6.0 | 4.3 | 1.6 | -0.8 |
| Ireland | 49 876 | 50 636 | 1.5 | 2.1 | -0.5 | 1.2 |
| Israel | 165 240 | 176 029 | 6.5 | 1.5 | 4.9 | 5.3 |
| Italy | 32 262 | 34 032 | 5.5 | 1.8 | 3.7 | -1.8 |
| Japan | 5 082 722 | 5 146 879 | 1.3 | -0.2 | 1.4 | 0.3 |
| Korea | 46 753 752 | 47 021 176 | 0.6 | 2.4 | -1.7 | 1.1 |
| Latvia | 13 656 | 15 270 | 11.8 | 2.9 | 8.7 | -6.5 |
| Lithuania | 16 844 | 18 711 | 11.1 | 3.8 | 7.1 | 1.5 |
| Luxembourg | 64 424 | 67 263 | 4.4 | 3.2 | 1.2 | 2.6 |
| Mexico | 138 349 | 136 170 | -1.6 | 5.6 | -6.8 | -9.1 |
| Netherlands | 54 510 | 55 339 | 1.5 | 2.4 | -0.9 | -3.2 |
| New Zealand | 65 079 | 66 077 | 1.5 | 3.8 | -2.2 | 0.8 |
| Norway | 628 685 | 659 902 | 5.0 | 3.4 | 1.5 | 0.6 |
| Poland | 60 723 | 64 093 | 5.5 | 4.8 | 0.7 | 0.4 |
| Portugal | 19 959 | 20 602 | 3.2 | 0.8 | 2.4 | 1.3 |
| Slovak Republic | 13 418 | 14 075 | 4.9 | 2.6 | 2.3 | 0.7 |
| Slovenia | 21 054 | 22 485 | 6.8 | 1.7 | 5.0 | 1.6 |
| Spain | 26 028 | 26 832 | 3.1 | 2.9 | 0.2 | 1.8 |
| Sweden | 464 186 | 482 897 | 4.0 | 2.0 | 1.9 | -0.4 |
| Switzerland | 91 427 | 94 489 | 3.3 | 0.6 | 2.8 | 1.8 |
| Turkey | 72 933 | 87 187 | 19.5 | 18.7 | 0.7 | 1.8 |
| United Kingdom | 41 897 | 43 978 | 5.0 | 2.4 | 2.5 | 1.5 |
| United States | 59 517 | 62 954 | 5.8 | 4.6 | 1.1 | 6.2 |

1. Estimated percentage change in the total consumer price index.
2. Percentage change in the personal average tax rate of the average worker (single without children) between 2020 and 2021.
Sources: Country submissions, (OECD[1]) Economic Outlook Volume 2021 Issue 2.

StatLink https://stat.link/kgv3zy

## 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] | | 2000-2021 |
| Austria[2] | 2004-2007 | 2008-2021 |
| Belgium | 2000-2007 | 2008-2021 |
| Canada | 2000-2021 | |
| Chile[3] | 2000-2008 | 2009-2021 |
| Colombia[4] | 2000-2021 | |
| Costa Rica[5] | | |
| Czech Republic | | 2000-2021 |
| Denmark[6] | 2000-2007 | 2008-2021 |
| Estonia | | 2000-2021 |
| Finland | | 2000-2021 |
| France | 2000-2007 | 2008-2021 |
| Germany | 2000-2005 | 2006-2021 |
| Greece[7] | | 2000-2021 |
| Hungary | | 2000-2021 |
| Iceland[8] | | 2000-2021 |
| Ireland[9] | 2000-2007 | 2008-2021 |
| Israel[10] | 2000-2012 | 2013-2021 |
| Italy | | 2000-2021 |
| Japan | | 2000-2021 |
| Korea[11] | 2000-2007 | 2008-2021 |
| Latvia[12] | | 2000-2021 |
| Lithuania | | 2000-2021 |
| Luxembourg | 2000-2004 | 2005-2021 |
| Mexico[13] | | |
| Netherlands[14] | 2000-2007 | 2008-2011 |
| New Zealand[15] | 2000-2003 | 2004-2021 |
| Norway | 2000-2008 | 2009-2021 |
| Poland | 2000-2006 | 2007-2021 |
| Portugal | 2000-2005 | 2006-2021 |
| Slovak Republic[16] | | 2000-2021 |
| Slovenia | | 2000-2021 |
| Spain | | 2000-2021 |
| Sweden | 2000-2007 | 2008-2021 |
| Switzerland | | 2000-2021 |
| Turkey[17] | | 2007-2021 |
| United Kingdom | 2000-2007 | 2008-2021 |
| United States | 2000-2006 | 2007-2021 |

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 to R, excluding O (8422) "Defense Activities" and O (8423) "Public order and safety activities".
4. Colombia: average wage values based on ISIC rev. 3. The "Agriculture, hunting and forestry", "Other community, social and personal service activities" and "Activities not adequately defined" sectors are excluded.
5. Costa Rica: the average wages from 2000 onwards refer to the earnings of workers within the formal sector. The average worker's wage was calculated based on data from CCSS.
6. Denmark: average wage values are based on sectors B-N and R-S (NACE rev 2).
7. 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.

8. Iceland: using national classification system that corresponds with the NACE rev. 2 classification system.
9. 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.
10. Israel: information on data for Israel: http://oe.cd/israel-disclaimer.
11. 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. Average wage data of 2008 to 2010 is based on the 9th KISC B-N (samples of firms with five or more permanent employees). Average wage data of 2011 to 2019 is based on the 9th KISC B-N (samples of firms with one or more permanent employees). Average wage data of 2020 and the estimate for 2021 are based on the 10th KISC B-N (samples of firms with one or more permanent employees).
12. 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.
13. Mexico: 2000-2021 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.
14. 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.
15. New Zealand: see the note for Australia, which applies from 2004.
16. Slovak Republic: average wage values based on SK NACE Rev. 2 classification (B to N) without the earnings of the self-employed. However, employment data used for the calculation of the weighted mean still include the self-employed.
17. Turkey: the average wage is based on the average production worker wage ISIC rev. 3.1 sector D for years 2000 to 2006.

## References

OECD (2021), *OECD Economic Outlook, Volume 2021 Issue 2*, OECD Publishing, Paris, https://dx.doi.org/10.1787/66c5ac2c-en. [1]

## Notes

[1] From the 2020 edition of *Taxing Wages*, the household types including spouses earning 33% of the average wage were replaced with household types where both spouses are at the average wage level and where one spouse is at the average wage level and the other at 67% of it.

[2] 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.

[3] 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 (https://www.oecd.org/tax/tax-policy/tax-database/).

[4] In Colombia, the general social security system for healthcare is financed by public and private funds. The pension system is a hybrid of two different systems: a defined contribution, fully-funded pension system; and a pay-as-you-go system. Each of those contributions are mandatory and more than 50% of total contributions are made to privately managed funds. Therefore, they are considered to be non-tax compulsory payments (NTCPs) (further information is available in the country details in Part II of the report). In addition, in Colombia, all payments for employment risk are made to privately managed funds and are considered to be NTCPs. Other countries also have NTCPs (please see https://www.oecd.org/tax/tax-policy/tax-database/).

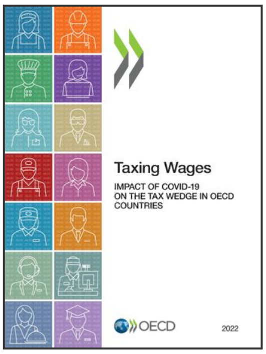
[5] In Australia, the employer pay-roll tax rates, thresholds and deductions differ between States. The payroll tax rate that is applied in the State of New South Wales is used in the *Taxing Wages* calculations.

[6] See note 4.

[7] See note 6.

[8] See note 4.

[9] See note 4.



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