Taxing Wages 2023

Indexation of Labour Taxation and Benefits in OECD Countries

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Taxing Wages 2023

The OECD's *Taxing Wages 2023* 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 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.

This brochure summarises the main results of this edition by:

- Presenting an analysis of the average tax wedge in OECD countries in 2022, the changes from the previous year and the trends between 2000 and 2022 for a selection of household types that are covered in *Taxing Wages 2023*.
- Presenting a brief analysis of the net personal average tax rate for a single average worker across OECD countries for 2022.

Box 1: **The tax wedge**

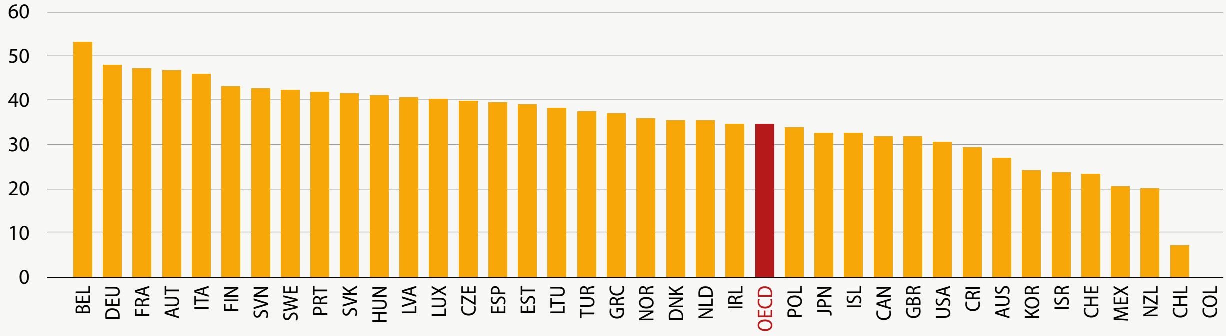
Taxing Wages 2023 presents several measures of taxation on labour. Most emphasis is given to the **tax wedge** – a measure of the difference between labour costs to the employer and the corresponding net take-home pay of the employee – which is calculated by expressing the sum of personal income tax, employee and employer social security contributions plus any payroll taxes, minus any benefits received by the employee, 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. However, it should be recognised that this measure may be less than the true labour costs faced by employers because, for example, employers may also have to make *non-tax compulsory payments*.[1] The average tax wedge measures that part of labour costs which is taken in tax and social security contributions net of cash benefits. In contrast, the marginal tax wedge measures that part of an increase of total labour costs that is paid in taxes and social security contributions less cash benefits.

1. 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/non-tax-compulsory-payments.pdf).

TRENDS IN LABOUR TAXES ACROSS OECD COUNTRIES

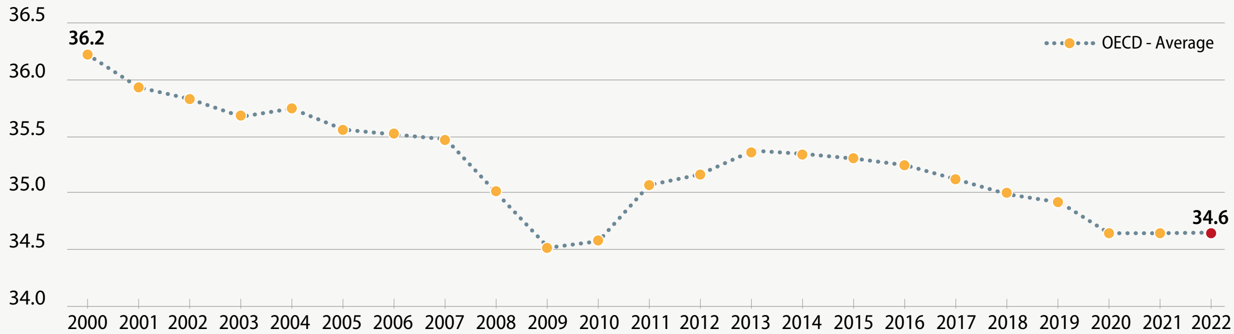
Labour taxes vary greatly across OECD countries, with the tax wedge for the average single worker ranging from 0% in Colombia to 53% in Belgium

Tax wedge (income tax plus employee and employer social security contributions, minus cash benefits) for the average single worker in OECD countries, as % of labour costs (2022)



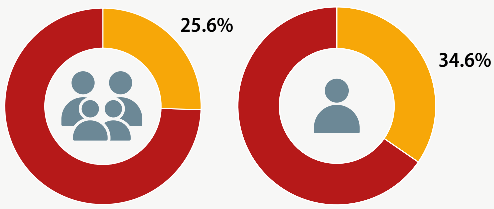
The tax wedge for the average single worker has remained steady since 2020

Tax wedge for the average single worker in OECD countries, as % of labour costs, 2000-2022



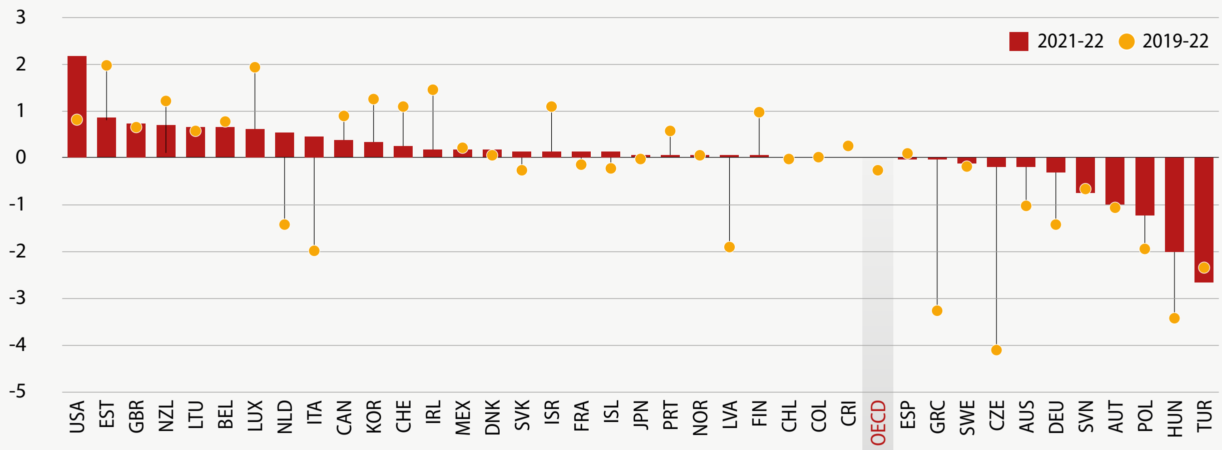
One-earner married couples with two children face a lower tax wedge than the average single worker in the OECD

Tax wedge for one-earner married couples with 2 children vs single worker, as % of labour costs (2022)



The tax wedge for the average single worker rose in 23 OECD countries from the previous year in 2022 and was higher than its pre-pandemic level in 19 countries

Change in the average tax wedge in OECD countries between 2019 and 2022, in percentage points



Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.

TABLE 1. COMPARISON OF TOTAL TAX WEDGE FOR THE AVERAGE WORKER IN OECD COUNTRIES IN 2022

As % of labour costs

Country[1]	Total tax wedge 2022 (1)	Annual change, 2022/21 (in percentage points)[2] Tax wedge (2)	Income tax (3)	Employee SSC (4)	Employer SSC[3] (5)
Belgium	53.0	0.65	0.69	0.02	-0.06
Germany	47.8	-0.29	0.08	0.08	0.00
France	47.0	0.14	-0.05	0.08	0.11
Austria	46.8	-0.99	0.02	0.01	-0.06
Italy	45.9	0.47	1.07	-0.61	0.00
Finland	43.1	0.00	-0.04	-0.19	0.23
Slovenia	42.8	-0.75	-0.75	0.00	0.00
Sweden	42.4	-0.10	-0.11	0.00	0.00
Portugal	41.9	0.06	0.06	0.00	0.00
Slovak Republic	41.6	0.15	0.28	0.02	-0.15
Hungary	41.2	-2.01	0.45	0.56	-3.03
Latvia	40.6	0.02	0.02	0.00	0.00
Luxembourg	40.4	0.63	0.62	0.01	0.00
Czech Republic	39.8	-0.17	-0.17	0.00	0.00
Spain	39.5	-0.01	-0.01	0.00	0.00
Estonia	39.0	0.85	0.85	0.00	0.00
Lithuania	38.2	0.67	0.67	0.00	0.00
Türkiye	37.2	-2.66	-2.66	0.00	0.00
Greece	37.1	-0.02	0.18	-0.11	-0.10
Norway	35.7	0.06	0.23	-0.18	0.00
Denmark	35.5	0.16	0.07	0.00	0.00
Netherlands	35.5	0.56	0.14	-0.27	0.69
Ireland	34.7	0.19	0.19	0.00	0.00
OECD Average	34.6	0.04	0.05	0.00	-0.03
Poland	33.6	-1.23	-1.24	0.00	0.01
Japan	32.6	0.06	0.06	0.00	0.00
Iceland	32.5	0.14	-0.08	0.00	0.22
Canada	31.9	0.39	0.06	0.18	0.15
United Kingdom	31.5	0.76	0.22	0.00	0.54
United States	30.5	2.20	0.13	0.00	-0.02
Costa Rica	29.2	0.00	0.00	0.00	0.00
Australia	26.9	-0.20	-0.22	0.00	0.02
Korea	24.2	0.34	0.14	0.13	0.08
Israel	23.6	0.15	0.02	0.09	0.04
Switzerland	23.4	0.27	0.27	0.00	0.00
Mexico	20.4	0.19	0.01	-0.02	0.19
New Zealand	20.1	0.72	0.72	0.00	0.00
Chile	7.0	0.00	0.00	0.00	0.00
Colombia	0.0	0.00	0.00	0.00	0.00

Notes: Single individual without children at the income level of the average wage.

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 Canada, 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.

Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.

The highest tax wedge is observed in Belgium (53%) and the lowest in Colombia (0.0%). The OECD average tax wedge was 34.6% of labour costs in 2022.

The tax wedge

Tax wedge for the average worker in OECD countries
Table 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 2022 (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 and Colombia. The highest tax wedge was observed in Belgium (53.0%) and the lowest in Colombia (0.0%). In Colombia, the single worker at the average wage level did not pay personal income taxes in 2022, while their contributions to pension, health and employment risk insurance are considered to be non-tax compulsory payments (NTCPs) and therefore not counted as taxes in the *Taxing Wages* calculations. Table 1 shows that the average tax wedge in OECD countries was 34.6% in 2022.

The average tax wedge in OECD countries was 34.6% in 2022.

Box 2: **Indexation of labour taxation and benefits in OECD countries**

Inflation rose sharply across the OECD in 2021 and 2022, reaching its highest level since 1988. *Taxing Wages 2023* includes a special feature examining how labour tax policy in OECD countries responds to inflation, largely focusing on indexation, the mechanism by which the absolute value of thresholds, brackets, credits, and in-work benefits in a tax system are adjusted to reflect changes in prices, wages and other macroeconomic variables. These adjustments offset fiscal drag – the phenomenon whereby increases in wages result in larger tax burdens. The analysis is based on the results of a questionnaire circulated to OECD countries in 2022.

The special feature reveals significant variation between (and often within) OECD countries in terms of their indexation policies. Just under half of OECD countries automatically adjust their personal income tax systems to inflation, while a higher proportion automatically adjust social security contributions and cash benefits. Among the countries that make automatic adjustments, most base these adjustments on changes in consumer prices, although a number of countries use wage indicators as the benchmark, especially for social security contributions and cash benefits. Most OECD countries make adjustments on an annual basis, often based on lagged inflation data, meaning they are particularly exposed to fiscal drag during periods of high inflation.

The special feature also shows that households with children, especially at low-income levels, are highly vulnerable to the upwards pressure that inflation places on the tax wedge in the absence of indexation policies. This is because these households access a broad range of tax credits, benefits and exemptions that are all sensitive to changes in nominal incomes if parameters and thresholds are not adjusted to inflation.

Indexation policies in OECD countries

Number of countries, percentage of countries in brackets

	Personal income tax	Social security contributions	Benefits
Automatic indexation	17 (45%)	21 (55%)	19 (50%)
Discretionary adjustment	21 (55%)	14 (37%)	17 (45%)
Not applicable	0	3 (8%)	2 (5%)

As a percentage of labour costs, total employee and employer social security contributions exceeded 20% in 23 OECD countries.

The changes in the tax wedge between 2021 and 2022 for the average worker without children are described in column 2 of Table 1. The OECD average increased by 0.04 percentage points in 2022, having decreased by 0.1 percentage points in 2021, the second year of the COVID-19 pandemic. Between 2021 and 2022, the tax wedge increased in 23 OECD countries, fell in eleven countries and remained at the same level for the average worker in Chile, Colombia, Costa Rica and Finland. Increases in the tax wedge ranged from 0.02 p.p. in Latvia to 2.2 p.p. in the United States. The increase in the tax wedge was larger than 0.5 p.p. in 8 countries, while only the United States recorded an increase larger than 1 p.p., which was due to the withdrawal of COVID-19 benefits. Decreases ranged from -0.01 p.p. in Spain to -2.66 p.p. in Türkiye. In Hungary and Poland, the decrease in the average tax wedge also exceeded 1 percentage point (-2.01 p.p. and -1.23 p.p., respectively).

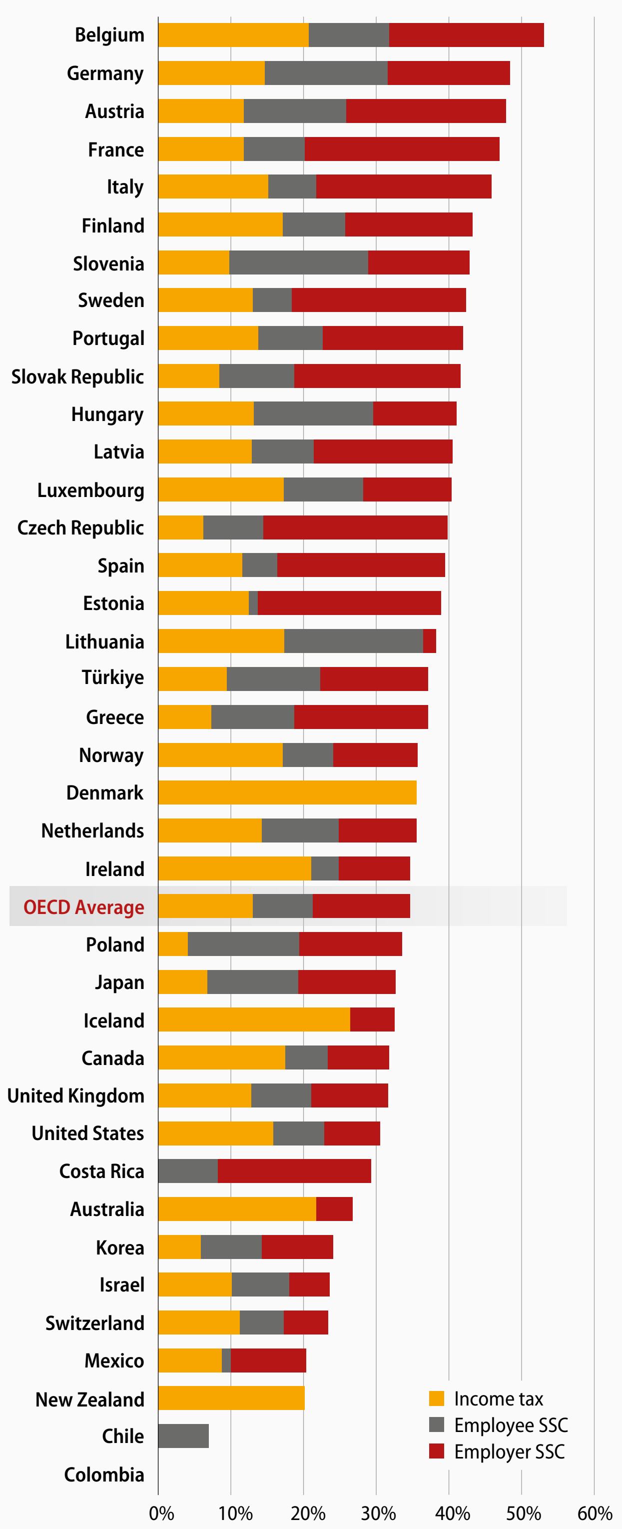
In almost all countries where the tax wedge increased, the rise was driven by higher personal income tax (column 3 of Table 1). In some countries, this increase was driven by increases in the average wage between 2021 and 2022. Higher average wages increase personal income tax through the progressivity 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, Iceland, Israel, Korea, Mexico, the Netherlands and the United Kingdom, the increase in the tax wedge was due to higher employee and/or employer social security contributions (SSCs) as a percentage of labour costs. In Canada, the maximum contributions for pension and unemployment insurance were increased in 2022. In Iceland, the temporary reduction of the employer SSC rate in 2021 expired and the rate went back to 6.35%. In Korea, the contribution rate for national health insurance at the average wage level increased from 3.825136% in 2021 to 3.923836% in 2022. In Mexico, the tax wedge increased due to an update of the Unit of Measure and Update as well as due to a higher average wage. In the Netherlands and the United Kingdom, there was an increase in the employer SSC rate.

In eight of the eleven OECD countries where the tax wedge decreased as a percentage of labour costs, the decrease was mostly derived from lower personal income tax (Australia, the Czech Republic, Hungary, Poland, Slovenia, Sweden, Spain and Türkiye). The minor decreases in the tax wedge (smaller than 0.25 p.p.) observed in Australia, the Czech Republic, Sweden and Spain were due to changes in tax reliefs, tax credits and/or tax schedules. In Slovenia, the basic allowance was increased from EUR 3 500 in 2021 to EUR 4 500 in

FIGURE 1. **INCOME TAX PLUS EMPLOYEE AND EMPLOYER SOCIAL SECURITY CONTRIBUTIONS, OECD COUNTRIES, 2022**

As % of labour costs



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

Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.

2022, leading to a decrease of 0.75 p.p. in the tax wedge. In Poland, the introduction of a non-refundable tax credit without upper limit led to a decrease of the tax wedge of 1.23 p.p. In Türkiye, the introduction of the Minimum Wage tax exemption led to a decrease in the tax wedge of 2.66 p.p.

In two other OECD countries with decreasing tax wedges as a percentage of labour costs – Greece and Hungary – the changes were driven by lower SSCs. In Greece, the social security rate for supplementary insurance of employees was reduced for both employers and employees, leading to a decrease of the average tax wedge of -0.02 p.p. In Hungary, the average tax wedge decreased by -2.01 p.p. due to the lowering of the social contribution tax by 2.5 p.p. and the elimination of the training levy in 2022.

In Austria, the average tax wedge decreased by -0.99 p.p. due to the climate bonus, the anti-inflation bonus and the energy cost credit. In Germany, the tax wedge decreased by -0.29 p.p. because of the Euro 300 lump-sum energy price allowance, which was subject to income tax.

Figure 1 shows the components of the tax wedge in 2022, i.e. income tax, employee and employer SSCs (including payroll taxes where applicable), as a percentage of labour costs for the average worker without children.

The percentage of labour costs paid in income tax varied considerably across OECD countries in 2022. The lowest figures were in Colombia, Costa Rica and Chile (all at zero), with the Czech Republic, Greece, Japan, Korea, Mexico, Poland, the Slovak Republic, Slovenia and Türkiye also below 10%. The highest share was in Denmark (35.5%), with Australia, Belgium, Iceland, Ireland and New Zealand 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 26.7% of labour costs in social security contributions, the highest amongst OECD countries. Employer SSCs were more than 20% of labour costs in 9 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 Austria, the Czech Republic, France and Germany.

TABLE 2. **COMPARISON OF TOTAL TAX WEDGE FOR SINGLE AND ONE-EARNER COUPLE TAXPAYERS, OECD COUNTRIES, 2022**

As % of labour costs

Country[1]	Family[2] Total Tax wedge 2022 (1)	Single[3] Total Tax wedge 2022 (2)	Fiscal preference for families (1)-(2) (3)	Annual change, 2022/21 (in percentage points): Family Tax wedge (3)	Single Tax wedge (4)	Difference between single and family (4)-(3) (5)
Poland	11.9	33.6	-21.7	-2.35	-1.23	1.12
Luxembourg	20.1	40.4	-20.3	1.08	0.63	-0.45
Czech Republic	22.7	39.8	-17.1	0.75	-0.17	-0.92
Austria	30.2	46.8	-16.6	-3.93	-0.99	2.94
Belgium	37.8	53.0	-15.2	1.34	0.65	-0.69
Germany	32.9	47.8	-15.0	0.04	-0.29	-0.33
Slovak Republic	26.8	41.6	-14.8	-3.18	0.15	3.33
Ireland	20.8	34.7	-13.9	0.78	0.19	-0.59
Slovenia	28.9	42.8	-13.9	-0.43	-0.75	-0.32
New Zealand	7.9	20.1	-12.2	1.48	0.72	-0.76
Switzerland	11.6	23.4	-11.8	0.45	0.27	-0.18
Latvia	29.0	40.6	-11.6	-2.41	0.02	2.43
Iceland	21.2	32.5	-11.3	0.49	0.14	-0.35
Hungary	30.0	41.2	-11.2	-0.61	-2.01	-1.40
Italy	34.9	45.9	-11.0	-0.91	0.47	1.37
United States	19.8	30.5	-10.6	11.62	2.20	-9.42
Portugal	31.6	41.9	-10.3	0.67	0.06	-0.61
Canada	21.8	31.9	-10.1	0.62	0.39	-0.23
Denmark	26.0	35.5	-9.5	0.52	0.16	-0.36
Lithuania	29.5	38.2	-8.8	6.03	0.67	-5.36
Estonia	30.6	39.0	-8.4	1.54	0.85	-0.68
France	39.2	47.0	-7.8	0.24	0.14	-0.10
Australia	20.2	26.9	-6.7	1.12	-0.20	-1.32
Netherlands	29.6	35.5	-5.9	0.81	0.56	-0.26
Israel	18.3	23.6	-5.2	-2.78	0.15	2.93
Japan	27.4	32.6	-5.2	0.13	0.06	-0.07
Spain	34.4	39.5	-5.1	0.25	-0.01	-0.26
Sweden	37.5	42.4	-4.9	0.08	-0.10	-0.19
Colombia	-4.8	0.0	-4.8	0.26	0.00	-0.26
United Kingdom	27.2	31.5	-4.3	0.91	0.76	-0.15
Finland	39.2	43.1	-3.9	0.11	0.00	-0.11
Korea	20.4	24.2	-3.8	0.44	0.34	-0.10
Norway	32.3	35.7	-3.4	0.20	0.06	-0.14
Greece	33.7	37.1	-3.4	0.03	-0.02	-0.05
Türkiye	37.2	37.2	0.0	-1.08	-2.66	-1.58
Mexico	20.4	20.4	0.0	0.19	0.19	0.00
Costa Rica	29.2	29.2	0.0	0.00	0.00	0.00
Chile	7.0	7.0	0.0	25.48	0.00	-25.48
Unweighted average						
OECD Average	25.6	34.6	-8.9	1.05	0.04	-1.02

Notes:
1. Countries ranked by fiscal preference for families.
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.

Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.

In all OECD countries, the tax wedge for families on average wage with children was lower than (or in Mexico, the same as) the tax wedge for the average single earner without children.

Single compared to one-earner couple taxpayers in OECD countries

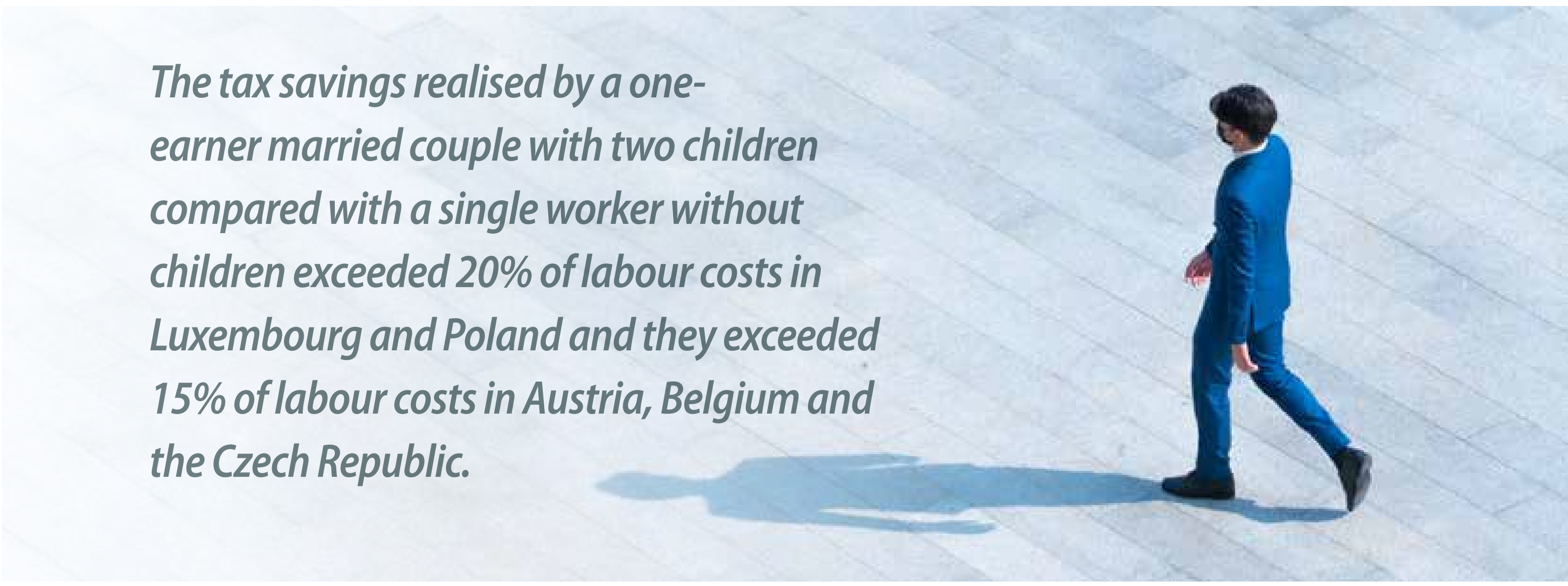
Many OECD countries provide a fiscal benefit to households with children through advantageous tax treatment and/or cash benefits. Table 2 compares the tax wedge as a percentage of labour costs for a one-earner married couple with two children with that of a single individual without children, at average wage levels (see columns 1 and 2). The tax wedge for the couple with children is generally smaller than that observed for the single individual without children: the OECD average tax wedge for the one-earner married couple with two children was 25.6% compared to 34.6% for the single average worker. This gap narrowed by 1.02 p.p. between 2021 and 2022.

The tax savings realised by a one-earner married couple with two children compared with a single worker without children exceeded 20% of labour costs in Luxembourg and Poland and they exceeded 15% of labour costs in Austria, Belgium and the Czech Republic. The tax burdens of one-earner married couples and single workers on the average wage were the same in Chile, Costa Rica, Mexico and Türkiye.

The tax wedge of a one-earner married couple with two children earning the average wage increased by 1.05 p.p. between 2021 and 2022 (see column 3). In 23 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 eight countries: Australia, Belgium, Chile, Estonia, Lithuania, Luxembourg, New Zealand and the United States.

In Australia, the increase of 1.12 p.p. in the tax wedge of an average one-earner married couple was related to the removal of the COVID-19 economic support payment. In Belgium (1.34 p.p.), the average tax wedge increased because the average wage increased more strongly than tax allowances and the income threshold within the tax schedule, leading to a larger proportion of the income being taxed at a higher rate. In Chile, the tax wedge increased by 25.48 p.p. due the removal of the Emergency Family Income, a COVID-19 support measure introduced in 2021. In Estonia (1.54 p.p.), the increase was due to the progressivity of the tax allowance. In Lithuania (6.03 p.p.), the tax wedge increased because the one-earner family was no longer eligible for the needs-based family benefit as the average wage was just above the eligibility threshold. In Luxembourg (1.08 p.p.), the average tax wedge increased due to the progressivity of the tax system and higher employee and employer SSCs as a result of an increased average wage, while cash benefits for children remained unchanged. In New Zealand (1.48 p.p.), a higher taper rate for the Family Tax Credit as well as an increase in the average wage caused the increase in the tax wedge. In the United States (10.6 p.p.), the tax wedge increased due to the removal of the child tax credit support measures and cash benefits introduced during the COVID-19 pandemic.

A comparison of the changes in tax wedges between 2021 and 2022 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 2. The fiscal preference for families increased in six OECD countries in 2022: Austria, Israel, Italy, Latvia, Poland and the Slovak Republic, in each case by more than one percentage point.



The tax savings realised by a one-earner married couple with two children compared with a single worker without children exceeded 20% of labour costs in Luxembourg and Poland and they exceeded 15% of labour costs in Austria, Belgium and the Czech Republic.

TABLE 3. COMPARISON OF TOTAL TAX WEDGE FOR TWO-EARNER COUPLES WITH CHILDREN, OECD COUNTRIES, 2022

As % of labour costs

Country[1]	Total Tax wedge 2022 (1)	Annual change, 2022/21 (in percentage points)[2]				
		Tax wedge (2)	Income tax (3)	Employee SSC (4)	Employer SSC[3] (5)	Cash benefits (6)
Belgium	45.5	0.74	0.84	-0.13	0.00	-0.03
Germany	40.8	-0.15	0.39	0.00	0.00	0.54
France	40.7	0.15	-0.02	0.05	0.08	-0.04
Sweden	38.3	-0.04	-0.16	0.01	0.00	-0.11
Finland	38.2	0.05	-0.06	-0.18	0.23	-0.07
Portugal	37.5	0.31	0.31	0.00	0.00	0.00
Italy	37.4	-2.09	2.89	-0.61	0.00	4.37
Spain	36.6	0.09	0.09	0.00	0.00	0.00
Austria	36.1	-2.33	-0.70	0.01	-0.06	1.59
Greece	35.7	1.52	0.20	-0.11	-0.10	-1.52
Slovenia	35.6	-0.63	-0.62	0.00	0.00	0.00
Türkiye	35.1	-2.76	-2.76	0.00	0.00	0.00
Hungary	34.5	-1.17	0.96	0.56	-3.03	-0.33
Slovak Republic	34.3	-1.93	-1.32	0.02	-0.15	0.48
Czech Republic	33.8	0.06	0.06	0.00	0.00	0.00
Estonia	33.1	1.06	0.80	0.00	0.00	-0.26
Norway	32.4	0.02	0.11	-0.18	0.00	-0.09
Latvia	32.3	-1.74	0.05	0.00	0.00	1.79
Lithuania	31.2	0.27	0.20	0.00	0.00	-0.07
Denmark	31.0	0.31	0.13	0.00	0.00	-0.18
Iceland	30.2	-0.13	-0.09	0.00	0.22	0.27
Luxembourg	29.9	1.20	0.79	0.01	0.00	-0.41
Japan	29.6	0.08	0.05	0.00	0.00	-0.03
Costa Rica	29.2	0.00	0.00	0.00	0.00	0.00
Canada	28.9	0.52	0.09	0.18	0.15	-0.11
Netherlands	28.0	0.97	0.33	-0.03	0.69	0.03
Ireland	27.7	0.39	0.23	0.00	0.00	-0.16
United Kingdom	27.3	0.78	0.29	-0.12	0.53	-0.07
United States	24.7	6.94	1.98	0.00	-0.02	-4.98
Australia	24.6	-0.26	-0.28	0.00	0.02	0.00
Poland	22.2	-0.43	-1.67	0.00	0.01	-1.23
Korea	20.9	0.41	0.18	0.13	0.08	-0.03
Mexico	20.0	0.21	0.00	-0.02	0.24	0.00
New Zealand	18.0	0.64	0.94	0.00	0.00	0.30
Switzerland	17.7	0.39	0.29	0.00	0.00	-0.10
Israel	15.3	-1.80	-1.95	0.11	0.05	0.00
Chile	6.6	15.25	0.00	0.00	0.00	-15.25
Colombia	-5.7	0.32	0.00	0.00	0.00	-0.32
Unweighted average						
OECD Average	29.4	0.45	0.07	-0.01	-0.03	-0.42

Notes: Two-earner married couple, one at 100% and the other at 67% of the average wage, with 2 children.

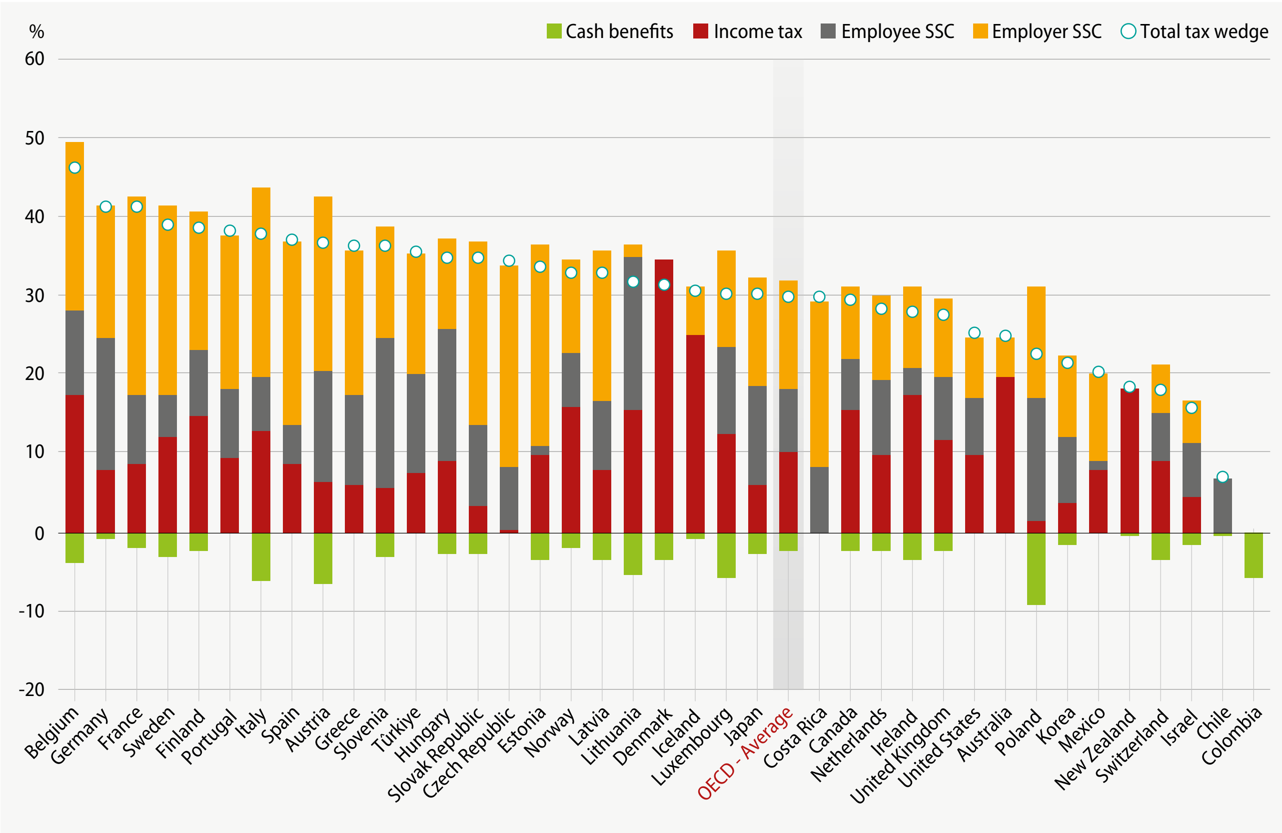
1. Countries ranked by decreasing total tax wedge.
2. Due to rounding, the changes in tax wedge in column (2) may differ by one hundredth of a percentage point from the sum of columns (3)-(6).
3. Includes payroll taxes where applicable.

Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.

In OECD countries, most of the increases in income tax or social security contributions were augmented or alleviated by changes in cash benefits.

FIGURE 2. INCOME TAX PLUS EMPLOYEE AND EMPLOYER SOCIAL SECURITY CONTRIBUTIONS LESS CASH BENEFITS, 2022

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.

Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.

Tax wedge for two-earner couples in OECD countries

For a two-earner married couple, earning 100% and 67% of the average wage, with two children, the OECD average tax wedge as a percentage of labour costs was 29.4% in 2022 (Figure 2 and Table 3). Belgium had a tax wedge of 45.5%, which was the highest among OECD countries for this household type. The other countries with a tax wedge exceeding 40% were Germany and France (40.8% and 40.7% respectively). The lowest tax wedge was observed in Colombia, where it was negative (-5.7%) 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) and received cash benefits that were paid on top of their wages. The other countries where the tax wedge for this household type was below 20% were New Zealand (18.0%), Switzerland (17.7%), Israel (15.3%) and Chile (6.6%).

Figure 2 shows the average tax wedge and its components as a percentage of labour costs for the two-earner married couple in 2022. On average across OECD

For a two-earner married couple, earning 100% and 67% of the average wage, with two children, the OECD average tax wedge for the household was 29.4% in 2022.

countries, income tax represented 10.2% of labour costs and the sum of the employees' and employers' SSCs represented 21.5%. The OECD tax wedge is net of cash benefits, which represented 2.4% of labour costs in 2022.

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.

Compared to 2021, the OECD average tax wedge of the two-earner couple decreased by 0.45 p.p. in 2022, as indicated in Table 3 (column 2). For this household type, the tax wedge increased in 24 out of 38 OECD countries, decreased in thirteen and remained at the same level in Costa Rica. Increases exceeded one percentage point in five countries: Estonia (1.06 p.p.), Luxembourg (1.2 p.p.), Greece (1.52 p.p.), the United States (6.94 p.p.) and Chile (15.25 p.p.).

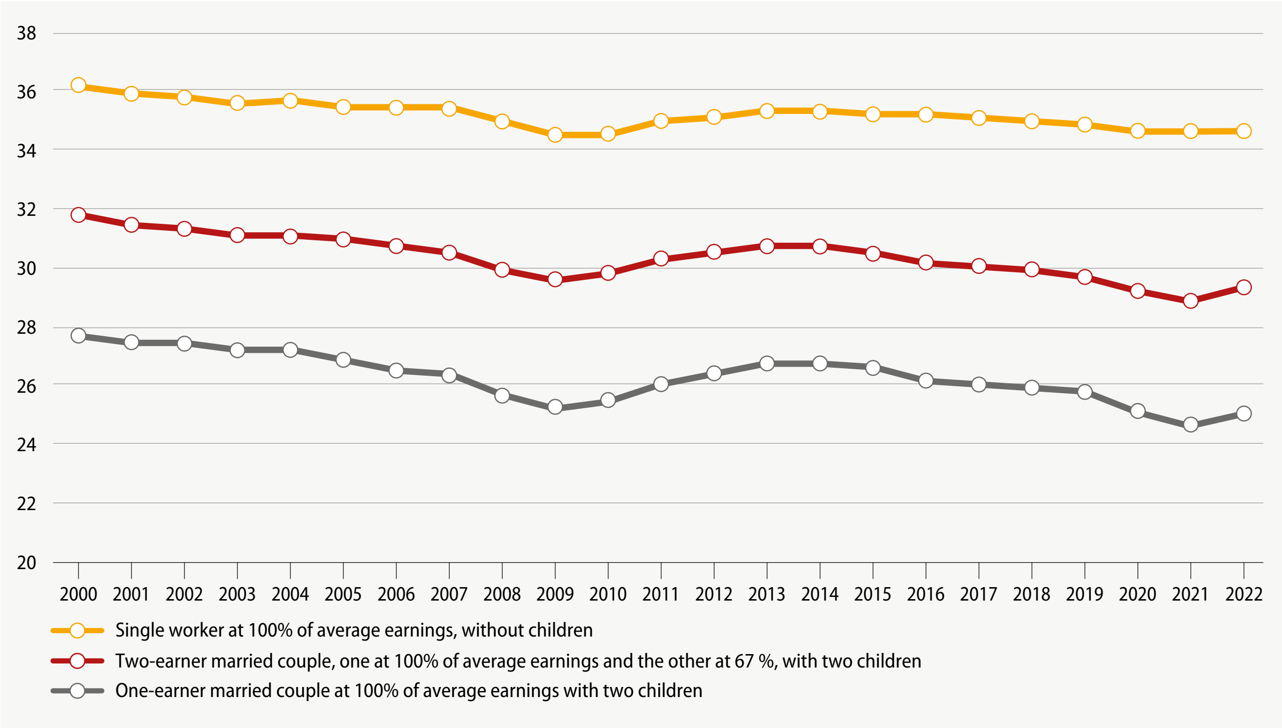
In Estonia, Luxembourg and Greece, the increase in the tax wedge was the result of higher wages interacting with the progressivity of the tax system. In the United States, the removal of the child support tax credit and cash transfers, both COVID-19 support measures, led to an increase in the average tax wedge. In Chile, the increase was the result of the suspension of the Emergency Family Income, a COVID-19 support measure introduced in 2021.

Among the countries where tax wedges increased for two-earner couples with children in 2022, the increase in income tax as a percentage of labour costs represented the bulk of the increase in twelve: Belgium, the Czech Republic, Estonia, Ireland, Japan, Lithuania, Luxembourg, New Zealand, Norway, Portugal, Spain and Switzerland. Meanwhile, an increase in SSCs was the main factor responsible for higher tax wedges in seven countries in 2022: Canada, Finland, France, Korea, Mexico, the Netherlands and the United Kingdom. In Chile and the United States, the elimination of cash benefits that were paid in 2021 but not 2022 was the main driver of increases in the tax wedge.

In most countries with decreasing tax wedges for families with children between 2021 and 2022, the lower tax wedges resulted from changes in income tax systems and SSCs, as observed for the single workers, as well as from increased cash benefits or tax provisions for dependent children between the two years. Decreases of more than one percentage point were observed in seven countries: Hungary (-1.17 p.p.), Latvia (-1.74 p.p.), Israel (-1.8 p.p.), the Slovak Republic (-1.93 p.p.), Italy (-2.09 p.p.), Austria (-2.33 p.p.) and Türkiye (-2.76 p.p.). The decreases in the tax wedge resulted from reforms of the employer SSC rate and the scrapping of the training levy in Hungary, reforms of tax credits in Israel, Türkiye and the Slovak Republic, increases in the family state benefit in Latvia, the introduction of a universal allowance in Italy, and the introduction of cash benefits and tax credits in Austria.

FIGURE 3. **OECD TAX WEDGES, 2000-2022**

For three household types, as % of labour costs



Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.

OECD tax wedge trends since 2000

The OECD tax wedge for the single average worker, the one-earner married couple on the average wage with two children and the two-earner married couple with total wage earnings at 167% of the average wage and two children have declined since 2000 (Figure 3). Tax burdens for the three household types have followed a similar trend over this period, with the lowest tax wedges for each observed in 2009 during the Global Financial Crisis and in 2020 and 2021 due to the COVID-19 pandemic. For the average single worker, the OECD average tax wedge decreased from 36.2% in 2000 to 34.4% in 2009, increased to 35.3% in 2013 then declined to 34.6% in 2020, remaining at that level in 2021 and 2022. For the one-earner married couple on the average wage with two children, the tax wedge declined between from 27.7% in 2000 to 25.2% in 2009, increased to 26.7% in 2014 then declined to its lowest level in 2021, before rising by 1.0 p.p. to 25.6% in 2022. Finally, for the two-earner married couple on 167% of the average wage with two children, the tax wedge fell from 31.8% in 2000 to 28.9% in 2021, then rose by 0.5 p.p. to 29.4% in 2022.

For the one-earner married couple on the average wage with two children, the tax wedge was 25.6% in 2022, a 1% increase compared with 2021.

The net personal average tax rate in OECD countries

Taxing Wages 2023 presents a second main indicator, which measures income tax plus employee SSCs less cash benefits as a percentage of gross wage earnings; i.e. the **net personal average tax rate**. On average, the net personal average tax rate for a single worker at average earnings in OECD countries was 24.7% in 2022 (see Figure 4). In other words, disposable or after-tax income[2] represented 75.3% of the gross wage earnings for the single average worker. Belgium had the highest rate, at 40.3% 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 (11.3%), Costa Rica (10.5%), Chile (7.0%) and Colombia (0.0%). *Taxing Wages 2023* also shows the net personal average tax rates for other household types with or without children.

Box 3: **Methodology**

The analysis in *Taxing Wages 2023* focuses on full-time private sector 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.

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 benefits included are those paid by general government as cash transfers, usually in respect of dependent children.

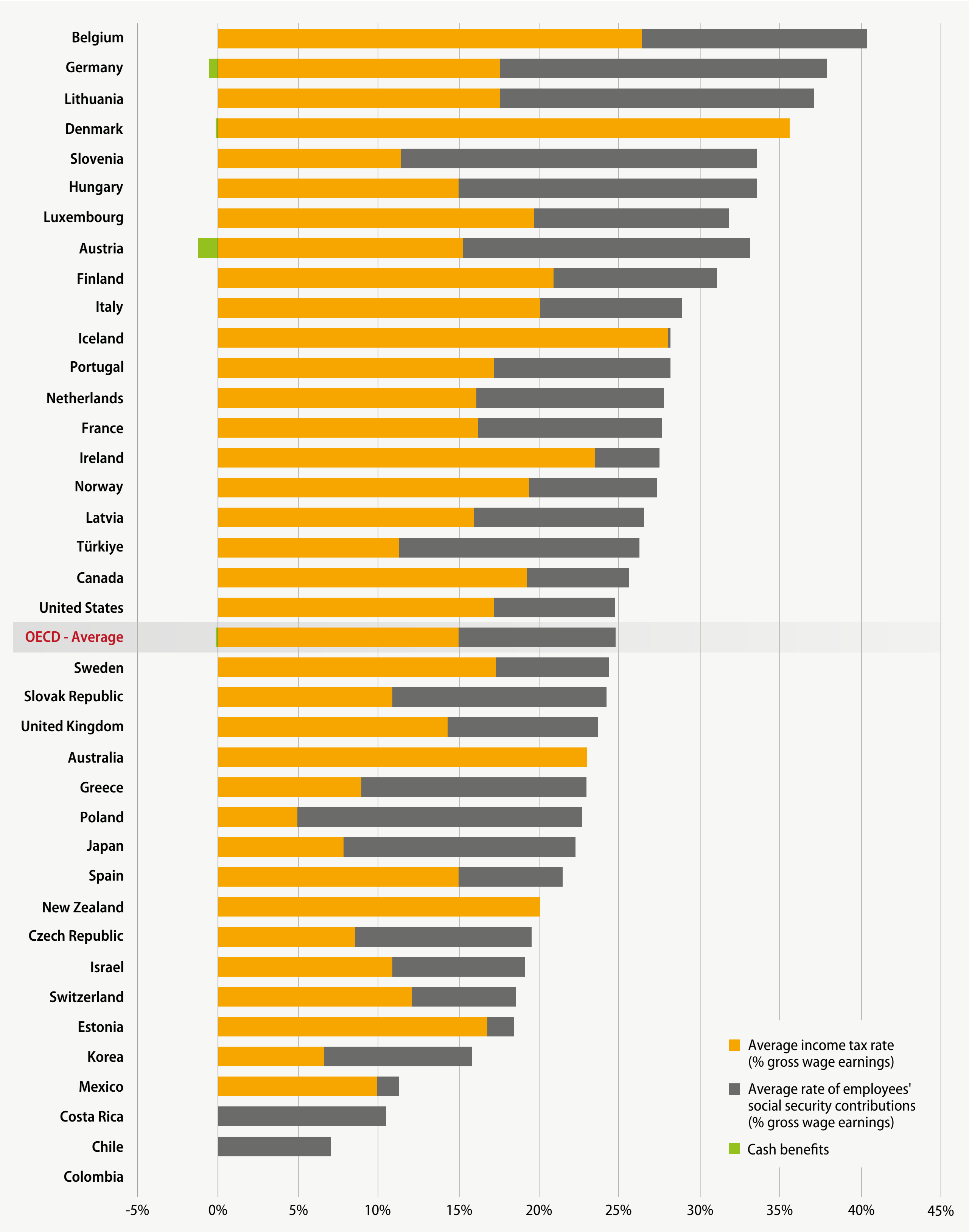
For most OECD countries, the tax year is equivalent to the calendar year, the exceptions being Australia, New Zealand and the United Kingdom. In the case of New Zealand and the United Kingdom, where the tax year starts in April, the calculations apply a 'forward-looking' approach. This implies that, for example, the tax rates reported for 2022 are those for the tax year 2022-23. 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 2022 in respect of Australia has been defined to mean its tax year 2021-22.

For information on the tax burden on other household types, please see *Taxing Wages 2023*. A full description of the methodology is set at in the *Taxing Wages 2023* Annex.

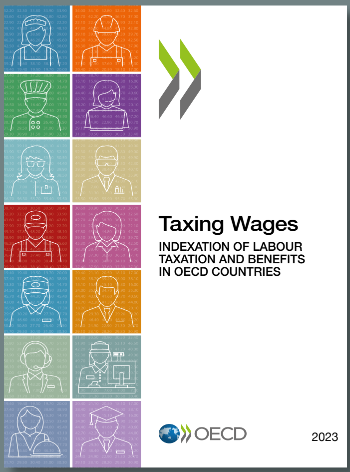
2. The *Taxing Wages* indicators focus on the structure of income tax systems on disposable income. To assess the overall impact of the government sector on people's welfare other factors such as indirect taxes (e.g. VAT) should also be taken into account, as should other forms of income (e.g. capital 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: www.oecd.org/tax/tax-policy/tax-database/non-tax-compulsory-payments.pdf.

FIGURE 4. **INCOME TAX AND EMPLOYEE SOCIAL SECURITY CONTRIBUTIONS LESS CASH BENEFITS, OECD COUNTRIES, 2022**

For a single worker on average wage, as % of gross wage earnings



Source: Data from *Taxing Wages 2023* (OECD), https://oe.cd/taxingwages.



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OTHER STATISTICAL SOURCES

OECD Tax Database, https://oe.cd/tax-database.

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