Taxing Wages 2022

Impact of COVID-19 on the Tax Wedge in OECD Countries

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Taxing Wages 2022

The OECD's *Taxing Wages 2022* 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 analysis of the average tax wedge in OECD countries in 2021, the changes from the previous year and the trends between 2000 and 2021 for a selection of household types.
- Presenting a brief analysis of the net personal average tax rate for a single average worker across OECD countries for 2021.

The brochure also presents the impact of tax and benefit measures in response to the COVID-19 pandemic on the above main indicators.

Box 1: The tax wedge

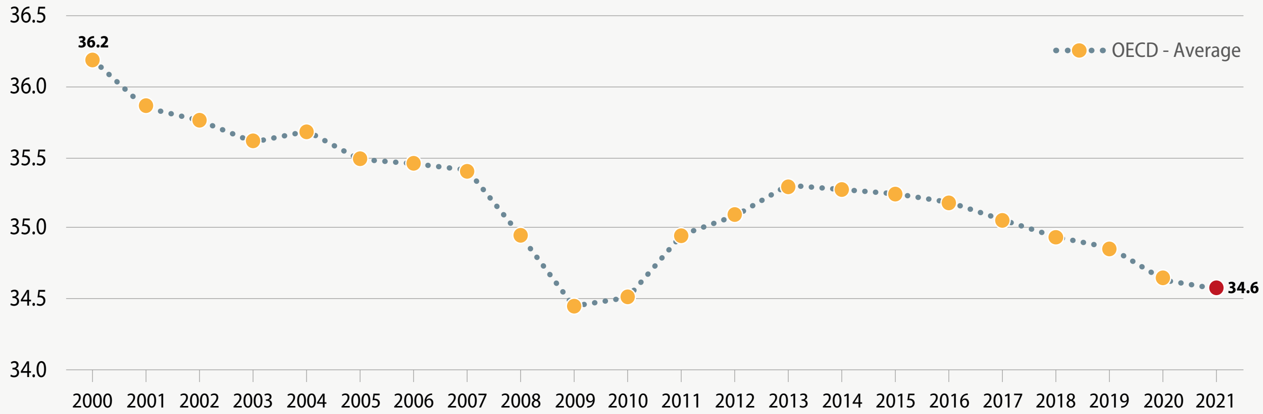
Taxing Wages 2022 presents several measures of taxation on labour. Most emphasis is given to the **tax wedge** – a measure of the difference between labour costs to the employer and the corresponding net take-home pay of the employee – which is calculated by expressing the sum of personal income tax, 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 required 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

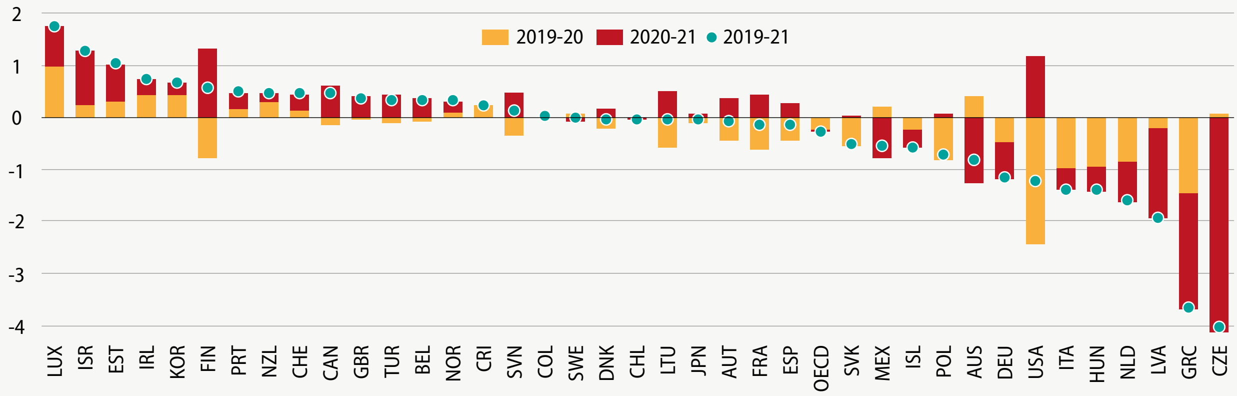
The OECD average tax wedge shrank slightly in 2021 due to large declines in a small number of countries

Income tax plus employee and employer social security contributions minus cash benefits, as % of labour costs for a single OECD worker on the average wage, 2000-2021



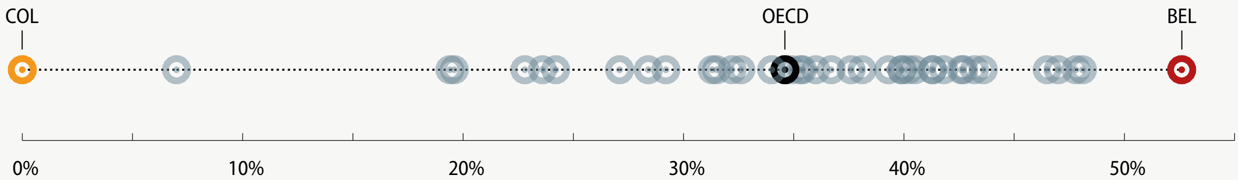
Labour taxation rebounded in most OECD countries in the second year of the COVID-19 pandemic: The tax wedge for the average single worker increased in 2/3 of OECD countries in 2021, offsetting declines in 2020

Change in the average tax wedge in OECD countries between 2019 and 2021, in percentage points



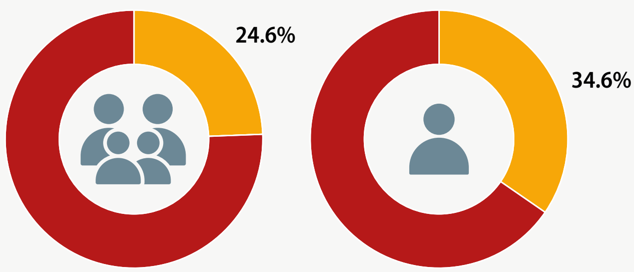
Labour taxes vary considerably across OECD countries, with the tax wedge for the average single worker ranging from 0% in Colombia to 52.6% in Belgium

Tax wedge for the average single worker in OECD countries, as % of labour costs (2021)



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

Tax wedge for one-earner married couples with 2 children vs single worker, as % of labour costs (2021)



Source: Data from *Taxing Wages 2022* (OECD), https://oe.cd/taxingwages.

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

As % of labour costs, 2021

		Annual change, 2021/20 (in percentage points)[2]			
Country[1]	Total tax wedge 2021 (1)	Tax wedge (2)	Income tax (3)	Employee SSC (4)	Employer SSC[3] (5)
Belgium	52.6	0.38	0.35	0	0.03
Germany	48.1	-0.72	-0.86	0.07	0.07
Austria	47.8	0.37	0.37	0	0
France	47	0.45	0.44	0	0.01
Italy	46.5	-0.41	-0.41	0	0
Slovenia	43.6	0.46	0.46	0	0
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	0
Portugal	41.8	0.3	0.3	0	0
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	0.7	-0.01	0.06
Czech Republic	39.9	-4.12	-4.12	0	0
Turkey	39.9	0.44	0.44	0	0
Spain	39.3	0.28	0.28	0	0
Estonia	38.1	0.73	0.73	0	0
Lithuania	37.6	0.52	0.52	0	0
Greece	36.7	-2.23	0.01	-0.93	-1.3
Norway	36	0.2	0.12	-0.01	0.08
Denmark	35.4	0.16	0.16	0	0
Netherlands	35.3	-0.76	-0.33	-0.49	0.06
Poland	34.9	0.08	0.08	0	0
OECD Average	34.6	-0.06	-0.04	0.02	-0.02
Ireland	34	0.29	0.29	0	0
Japan	32.6	0.06	0.06	0	0
Iceland	32.2	-0.36	-0.14	0	-0.22
Canada	31.5	0.6	-0.02	0.39	0.23
United Kingdom	31.3	0.4	0.21	0.09	0.1
Costa Rica	29.2	0	0	0	0
United States	28.4	1.2	0.49	0	-0.04
Australia	27.1	-1.25	-0.66	0	-0.59
Israel	24.2	1.02	0.7	0.22	0.1
Korea	23.6	0.23	0.01	0.13	0.1
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	0
Chile	7	-0.03	-0.03	0	0
Colombia	0	0	0	0	0

Notes: 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 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 2022* (OECD), https://oe.cd/taxingwages.

The highest tax wedge is observed in Belgium (52.6%) and the lowest in Colombia (0.0%). The OECD average tax wedge was 34.6% of labour costs in 2021.

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 2021 (see column 1). While in Austria, Belgium, France, Germany and Italy, the tax wedge as a percentage of labour costs was above 45%, it was below 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) and therefore are not counted as taxes in the *Taxing Wages* calculations. Table 1 shows that the average tax wedge in OECD countries was 34.6% in 2021.

The changes in the tax wedge between 2020 and 2021 for the average worker without children are described in column 2 of Table 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.

Higher average wages increase personal income tax through the progressivity of income tax systems if income tax thresholds increase by less than average earnings.

Box 2: **COVID-19 related measures in the *Taxing Wages* calculations**

Taxing Wages 2022 provides indicators for 2021, a year in which the labour market was still impacted by the COVID-19 pandemic. It pays particular attention to changes made by countries to tax and benefit systems during the pandemic (insofar as they fall within the standard *Taxing Wages* assumptions). In particular, the measures considered include changes in personal income tax (central and local/state levels), social security contributions, 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, and deferrals of tax liability are not considered.

The special feature in this year's Report examines the impact of the COVID-19 pandemic on the tax wedge for the single worker, the one-earner couple with two children, and the single parent household in 2020 and 2021. Although the tax wedge for each household type declined on average across the OECD over this period, it increased in many countries. Tax wedges registered sharp declines across the OECD in 2020 due to measures implemented in response to COVID-19. However, they rebounded in most countries in 2021 as many of these measures were scaled back, average wages rose in all but two countries, and new reforms to labour taxation were introduced. Overall, changes to the tax wedge between 2019 and 2021 were consistent with long-term trends prior to the pandemic.

Across the OECD, countries have largely chosen to provide support to households and businesses outside the labour tax system. While the *Taxing Wages* models are unable to take account of many of these policies, the results presented in this special feature include direct measures implemented through the system to address COVID-19 for 13 countries. These countries have largely delivered support through the provision of enhanced or one-off cash benefits, with a focus on supporting families with children.

Further information can be found in the *Taxing Wages 2022* Special Feature. Furthermore, detailed information on the COVID-19 related measures in each country is provided in the country chapters in Part II of *Taxing Wages 2022*.

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

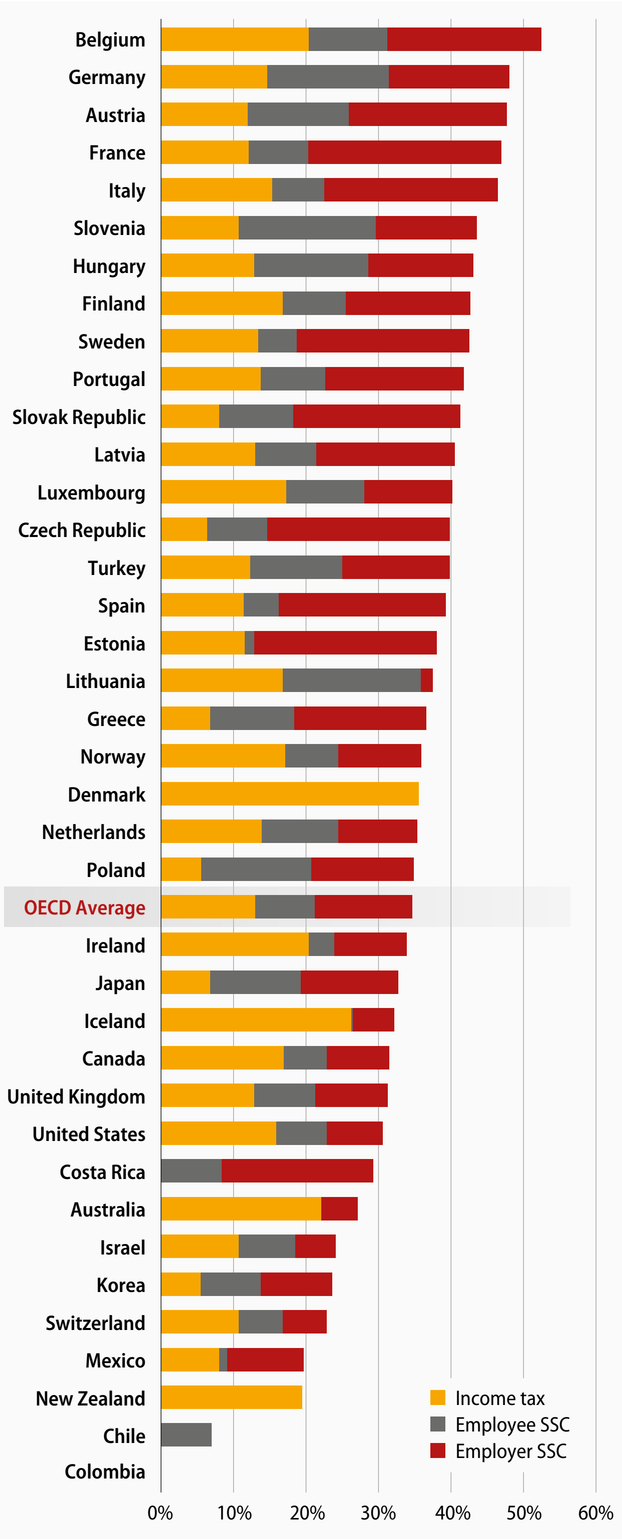
Between 2020 and 2021, the tax wedge increased in 24 OECD countries, fell in 12 countries and remained at the same level for the average single worker in Colombia and Costa Rica. The increases were comparatively small and only two of them were of one percentage point or greater: the United States (1.20 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 Canada, Finland and Korea, the increase in the tax wedge was due to higher employee and employer social security contributions (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 7 of the 12 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%[1] 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

FIGURE 1. **INCOME TAX PLUS EMPLOYEE AND EMPLOYER SOCIAL SECURITY CONTRIBUTIONS, OECD COUNTRIES, 2021**

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 2022* (OECD), https://oe.cd/taxingwages.

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. 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 6.5% to 6.25%. In the Netherlands, the income ceiling that was applied to employee SSC calculations increased at a lower rate than the average wage in 2021.

Figure 1 shows the components of the tax wedge in 2021, 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 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 SSCs, 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, total 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 2. **COMPARISON OF TOTAL TAX WEDGE FOR SINGLE AND ONE-EARNER COUPLE TAXPAYERS, 2021**

As % of labour costs

			Annual change, 2021/20 (in percentage points)		
Country[1]	Family[2] total tax wedge 2021 (1)	Single[3] total tax wedge 2021 (2)	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	-0.2
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	-0.2
Belgium	37.3	52.6	0.89	0.38	-0.51
Austria	34.1	47.8	1.9	0.37	-1.53
Spain	33.8	39.3	0.38	0.28	-0.1
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	0.37	0.2	-0.17
Latvia	31.4	40.5	-0.69	-1.73	-1.04
Portugal	30.9	41.8	0.51	0.3	-0.21
Hungary	30.5	43.2	0.3	-0.48	-0.78
Slovak Republic	29.6	41.3	-0.8	0.01	0.81
Slovenia	29.5	43.6	0.96	0.46	-0.51
Costa Rica	29.2	29.2	0	0	0
Netherlands	29.1	35.3	-0.5	-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	31.3	0.6	0.4	-0.2
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	0.6	-1.18
Iceland	20	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
Korea	19.6	23.6	1.03	0.23	-0.8
Australia	19.1	27.1	-1.73	-1.25	0.48
Ireland	19	34	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	1.2	2.78
New Zealand	6.5	19.4	0.74	0.16	-0.58
Colombia	-5	0	-0.29	0	0.29
Chile	-18.5	7	-25.52	-0.03	25.49
Unweighted average					
OECD Average	24.6	34.6	-0.42	-0.06	0.36

Notes:
1. Countries ranked by decreasing tax wedge of the family.
2. One-earner married couple with two children and earnings at the average wage level.
3. Single individual without children and earnings at the average wage level.

Source: Data from *Taxing Wages 2022* (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

Table 2 compares the tax wedges for a one-earner married couple with two children and a single individual without children, both at average wage levels (columns 1 and 2). The size of the tax wedge for the couple with children is generally lower than the one observed for the single individual without children, since many OECD countries provide a fiscal benefit to households with children through advantageous tax treatment and/or cash benefits. The OECD average tax wedge for the one-earner couple with two children was 24.6% in 2021 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 and Poland, and they exceeded 15% of labour costs in four other countries: Belgium, the Czech Republic, 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 declined by -0.42 percentage points between 2020 and 2021 (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, these payments are not included in the *Taxing Wages* calculations for 2021 since they 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 France (1.32 percentage points), the increase in the tax wedge was derived from lower in-work benefit payments 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.

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 2. The fiscal preference for families increased in eight OECD countries in 2021 versus 27 countries in 2020. These were 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 in 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 to the tax system on the tax wedge were of similar magnitude for both household types in Costa Rica and Mexico.

The fiscal preference for families increased in eight OECD countries in 2021 versus 27 countries in 2020.

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

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

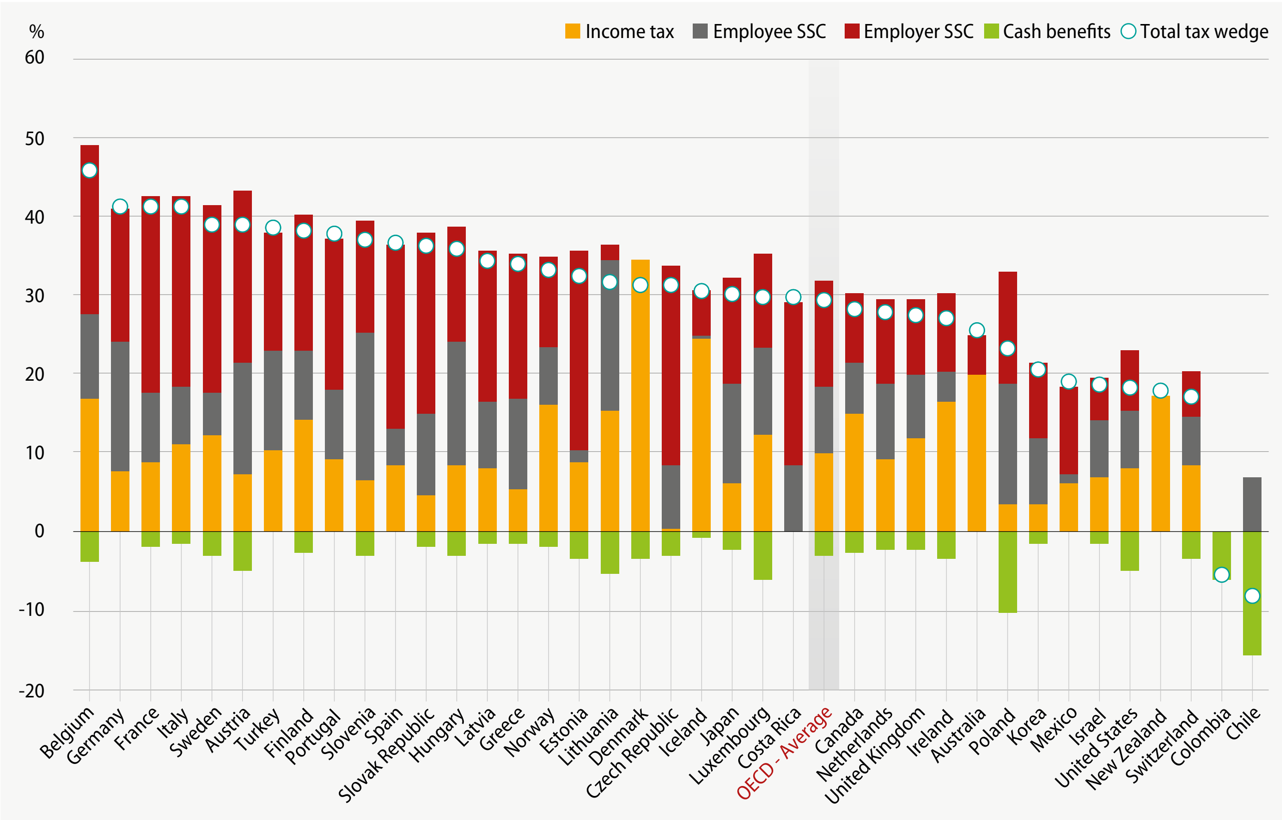
1. Countries ranked by decreasing total tax wedge.
2. Due to rounding, the changes in tax wedge in column (2) may differ by one hundredth of a percentage point from the sum of columns (3)-(6).
3. Includes payroll taxes where applicable.

Source: Data from *Taxing Wages 2022* (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, 2021**

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 2022* (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 for the household was 28.8% in 2021 (Figure 2 and Table 3). 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[2]) 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 (16.3%).

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

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 3 (column 2). For this

household type, the tax wedge decreased in 14 out of 38 OECD countries, increased in 23 and remained at the same level in Costa Rica.

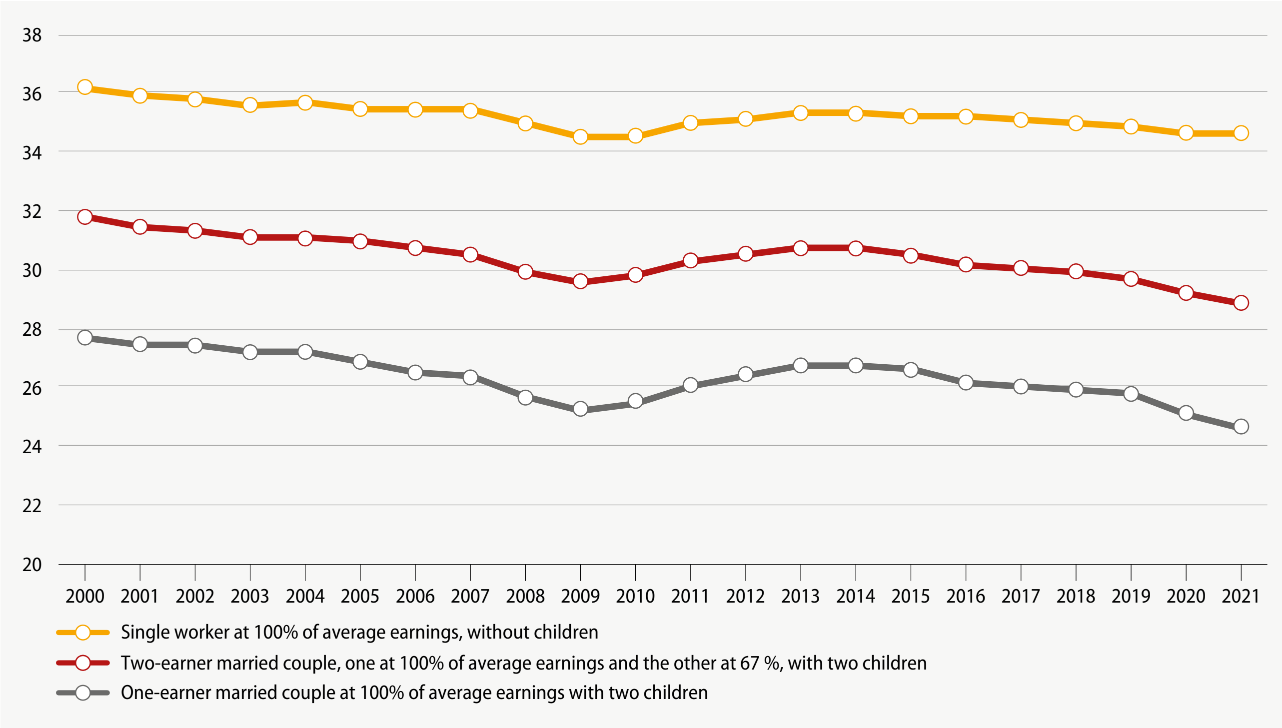
In Luxembourg, the increase was a result of higher income taxes due to the progressivity of the income tax schedule and the tax credit. In Canada, the increase occurred as the household no longer received cash benefits that were paid out in 2020 in response to the COVID-19 pandemic. In Lithuania, the 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 the tax wedge increased for two-earner couples with children in 2021, the increase in income tax as a percentage of labour costs accounted for the bulk of the increase in 17 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 wedge 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). The decreases in the tax wedge resulted from a reformed income tax schedule in Australia and Mexico; from a reformed personal income tax base in the Czech Republic along with a strong increase in child benefits; and from reduced employee and employer SSC rates in Greece.

FIGURE 3. **OECD TAX WEDGES, 2000-2021**

For three household types, as % of labour costs



Source: Data from *Taxing Wages 2022* (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 in the context of the Global Financial Crisis and in 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 and then steadily declined to 34.6% in 2021. For the one-earner married couple on the average wage with two children, the tax wedge declined between 2000 and 2009, from 27.7% to 25.2%, increased to 26.7% in 2014 and then declined to its lowest level of 24.6% in 2021. Finally, for the two-earner married couple on 167% of the average wage with two children, the tax wedge changed from 31.8% in 2000 to 28.8% in 2021, with the second lowest rate being 29.5% in 2009.

For the one-earner married couple on the average wage with two children, the tax wedge declined to its lowest level of 24.6% in 2021.

The net personal average tax rate in OECD countries

Taxing Wages 2022 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 24.6% in 2021 (see Figure 4). In other words, disposable or after-tax income[2] represented 75.4% of the gross wage earnings for the single average worker. 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 Costa Rica (10.5%), Mexico (10.2%), Chile (7.0%) and Colombia (0.0%). In Colombia, the net personal average tax rate was zero for the single worker at the average wage level, who did not pay personal income taxes in 2021, while their contributions to pension, health and employment risk insurances are considered to be non-tax compulsory payments (NTCPs)[3] and therefore are not included as taxes in the *Taxing Wages* calculations. *Taxing Wages* 2022 also shows the net personal average tax rates for other household types with or without children.

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.

3. See note 2.

Box 3: **Methodology**

The analysis in *Taxing Wages 2022* 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**.

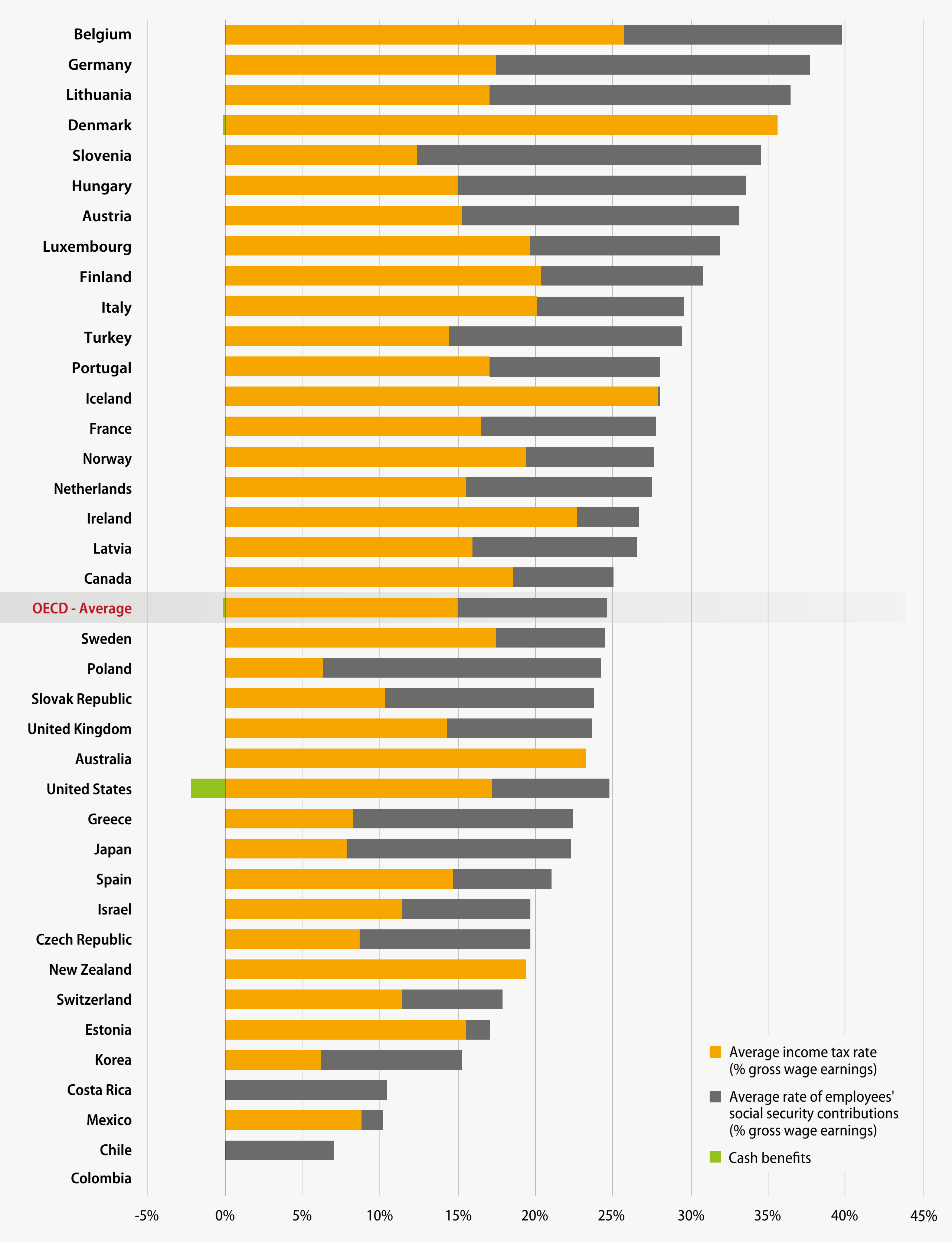
The term **tax** includes the personal income tax, social security contributions and payroll taxes (which are aggregated with employer social contributions in the calculation of tax rates) payable on gross wage earnings. Consequently, any income tax that might be due on non-wage income and other kinds 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 2021 are those for the tax year 2021-22. 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 2020-21.

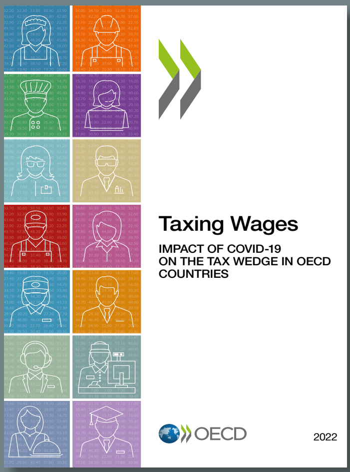
For information on the tax burden on other household types, please see *Taxing Wages 2022*. A full description of the methodology is set in the Annex of *Taxing Wages 2022*.

FIGURE 4. **INCOME TAX AND EMPLOYEE SOCIAL SECURITY CONTRIBUTIONS LESS CASH BENEFITS, 2021**

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



Source: Data from *Taxing Wages 2022* (OECD), https://oe.cd/taxingwages.



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FURTHER READING

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OTHER STATISTICAL SOURCES

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

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