

# 2 Special feature: Impact of COVID-19 on the tax wedge in OECD countries

## Introduction

In 2021, the COVID-19 pandemic continued to cause disruption around the world. However, the economic impact was not as damaging as in 2020: across the OECD, GDP grew by an estimated 5.3% in 2021 after contracting by 4.7% the previous year as countries were able to better manage the virus, aided by growing vaccination coverage over the course of the year. Unemployment fell across the OECD, although employment levels, hours worked and labour force participation generally remained below pre-crisis levels, and wage growth in many countries did not keep pace with sharp rises in consumer prices. As economies recovered, governments were able to scale back many of the measures such as job retention schemes and cash benefits introduced to protect livelihoods and incomes in 2020. Nonetheless, the recovery in 2021 was uneven between and within countries. Low-income jobs were disproportionately affected by the pandemic and many of those who lost their jobs have struggled to find new employment. Meanwhile, acute labour shortages emerged in certain sectors (OECD, 2021<sup>[1]</sup>).

This chapter makes use of the *Taxing Wages* models to examine how labour taxation has evolved during the pandemic across OECD countries. It compares key indicators, notably the size and composition of the tax wedge and average wages, in 2021 with the situation in 2019 and examines how the changes over this period contrast with long-term trends in labour taxation going back to 2000, while also allowing comparison of the impact of the COVID-19 pandemic with the impact of the Global Financial Crisis in 2008-09. This analysis is based on the results for three different types of worker:

- The single worker: a single individual with no children at 100% of the average wage;
- The one-earner couple: a married couple with one earner at 100% of the average wage and two children; and
- The single parent: a single individual with two children at 67% of the average wage.

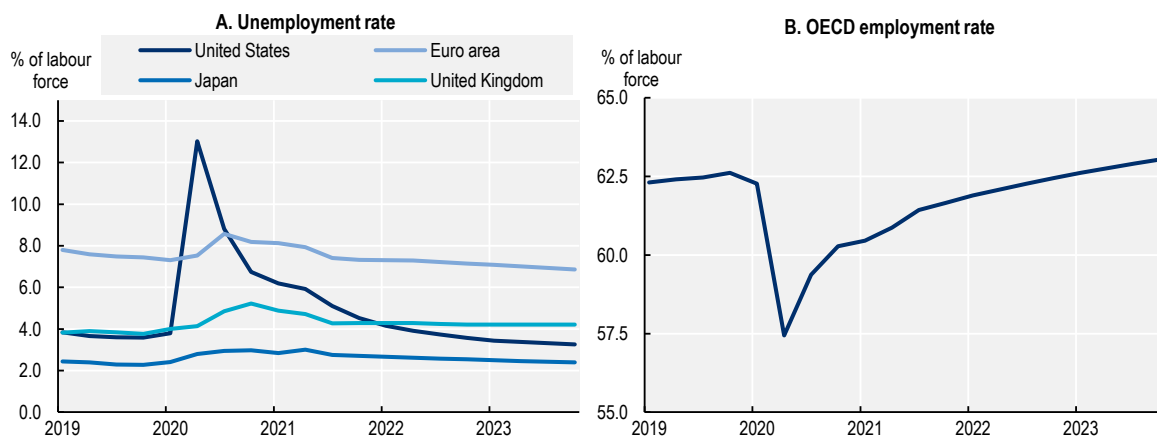
The first two of these family types correspond to the main results discussed in chapter 1. The single parent at a lower income level provides insights into the tax wedge applying to this more vulnerable family type.

The first section sets out the main policy measures enacted across the OECD in response to the COVID-19 pandemic that are included in the *Taxing Wages* models and examines the impact of the pandemic on average wages in 2020 and 2021. It also analyses the correlation between wage trends and changes to the tax wedge during the pandemic. The second section tracks annual changes in the tax wedge across OECD countries between 2019 and 2021, while the third section compares changes in the level and composition of the average tax wedge in the OECD over this period with trends observed since 2000.

## The impact of the pandemic on labour taxation and wages

Although unemployment declined and labour market participation rose in 2021, labour markets had not yet fully recovered from the sharp rise in unemployment recorded in 2020 (Figure 2.1). Employment rates are only projected to return to pre-pandemic levels by the end of 2022 (assuming no interruptions to the economic recovery), and labour market participation is expected to recover to pre-crisis levels in most parts of the OECD by the end of 2023. Even in economies where the number of people in work had recovered to its pre-pandemic level by mid 2021, total hours worked were often still lower than in late 2019 (OECD, 2021<sup>[1]</sup>). While wage growth generally returned to pre-pandemic levels in 2021, consumer prices rose more sharply; chapter 1 shows that average wages fell in real terms in eight countries.

**Figure 2.1. Impact of COVID-19 on unemployment and labour-force participation**



Source: OECD Economic Outlook, Volume 2021 Issue 2, (OECD, 2021<sup>[1]</sup>)

StatLink  <https://stat.link/o51bml>

The composition of the workforce across the OECD also changed as a result of COVID-19. According to (OECD, 2021<sup>[2]</sup>) one in ten jobs in low-paying occupations was destroyed across the OECD when the COVID-19 crisis hit and hours worked by this cohort fell by over 28%. This was eighteen percentage points larger than the fall among high-paying occupations, which were able to absorb the shock through reductions in working time, supported by job retention schemes, or by switching to teleworking. Workers who lost their jobs at the start of the pandemic have found it harder to re-enter the workforce: at the end of 2020, there were 60% more people unemployed for at least six months, a figure that continued to grow in the first quarter of 2021 (OECD, 2021<sup>[2]</sup>). The pandemic has also accelerated pre-existing labour market trends such as automation, digitalisation and increasing demand for professionals in the health care and green sectors, which might favour workers with higher skills.

Changes to the composition of the labour force, the level of employment and wage dynamics associated with the pandemic are not fully reflected in the *Taxing Wages* models. As discussed below, the *Taxing Wages* models only cover workers in certain sectors of the economy. They also exclude part-time workers, which make up a growing proportion of the labour force in OECD countries and tended to be more vulnerable to loss of employment during the pandemic (OECD, 2021<sup>[2]</sup>). Moreover, the *Taxing Wages* models are based on nominal rather than real wages and thus do not pick up the loss in workers' purchasing power caused by rising prices. Changes in the composition of the workforce might cause the

average wage in a given country to rise, even when wages of individual workers may not have changed or were only small (OECD, 2020<sup>[3]</sup>).

The pandemic elicited an unprecedented policy response that has included measures to protect employment and workers, as well as to support household incomes through sharp declines in economic activity. This section begins by outlining the COVID-19 measures identified by countries in Part II of this Report and identifies which of them are included in the *Taxing Wages* models. It then views changes in average wages during the pandemic against longer-term wage trends. Finally, it compares changes in the tax wedge with changes in average wages between 2019 and 2021 to understand the extent to which the impact of wage changes on the tax wedge might have been offset by changes in the policy settings.

When interpreting these results, it is important to note that the *Taxing Wages* models do not include the full range of policies introduced across the OECD to protect workers and jobs during the pandemic. Moreover, not all policies implemented in 2020 and 2021 and included in the models were related to the pandemic.

### ***The policy response to COVID-19 in 2020-21***

During the COVID-19 crisis, governments have introduced a range of measures, both within and beyond the tax system, to support businesses and households. For the 2020 and 2021 editions of *Taxing Wages*, countries were asked to provide a short summary of labour tax measures implemented in response to the COVID-19 pandemic, which are included in the country chapters in Part II. Table 2.1 provides an overview of these tax and benefit measures implemented for workers employed within sectors B-N in ISIC rev.4, differentiating between provisions that are included in the *Taxing Wages* models and those that are not.

The *Taxing Wages* models for 2020 and 2021 include the support measures for businesses and households that are consistent with the general *Taxing Wages* assumptions, as detailed in the introduction of chapter 1 and in Annex A.<sup>1</sup> Therefore, support measures included in the *Taxing Wages* models for 2020 and 2021 are those that:

- apply to labour income (including changes to the rates, thresholds, allowances or credits allowable under personal income taxes, social security contributions (employee or employer) and cash benefits);
- apply to the majority of full-time workers in sectors B to N in ISIC rev 4 (i.e. sector-specific or other targeted measures are not included, nor are measures for the self-employed, who are not covered by the models);
- do not vary based on taxpayer circumstances other than income level and family status, as in the case of a universal cash benefit or a standard tax relief (i.e. non-standard tax reliefs, or benefits applying based on employment status are not included); and
- represent a variation in the taxpayer's liabilities in 2020 or 2021, rather than a timing difference (i.e. deferrals of tax liabilities are not included whereas temporary measures and one-off payments are).

Measures are not included for one of the following reasons: (i) because they applied to less than the majority of private sector workers; (ii) because they were not standard; or (iii) because they amounted to a deferral rather than the reduction or removal of a tax liability. Across OECD countries, measures in response to the COVID-19 crisis were less widespread in 2021 than in 2020, reflecting the pandemic's diminished impact on the economy in 2021.

**Table 2.1. Summary of tax and benefit measures in response to COVID-19 within sectors B to N in ISIC rev. 4**

	Personal income taxes						Social security contributions						Cash benefits			
	Changes in tax reliefs		Changes in PIT rate or thresholds		Deferred PIT payments		Changes in SSC rates or thresholds		Discount or tax credit in SSC payments		Cancelled SSC payments		Deferred SSC payments		Changes in cash benefits	
	20	21	20	21	20	21	20	21	20	21	20	21	20	21	20	21
Australia		■		■											■	■
Austria			■		■								■		■	
Belgium													■			
Canada															■	■
Chile																■
Colombia													■			
Denmark													■			
Estonia												■	■			
Finland						■										
France												■	■	■	■	
Germany	■	■														
Greece															■	
Hungary							■					■	■			
Iceland						■							■		■	■
Ireland															■	■
Israel	■															
Italy					■								■			
Korea															■	
Lithuania	■														■	
Luxembourg	■					■										
Mexico					■	■			■							
Netherlands													■			
New Zealand	■														■	
Norway													■			
Poland					■							■				
Portugal															■	■
Slovak Republic												■				
Slovenia												■				
Sweden		■							■	■			■			
United Kingdom	■	■														
United States									■				■		■	■

Note: This table shows the tax and benefit measures that were introduced by countries to respond to the COVID-19 crisis and that are described in the country chapters in Part II of the Report. They include only measures relating to labour income. Measures shown in dark blue are included in the *Taxing Wages* model; measures in green were not modelled as they do not meet the assumptions outlined above.

Source: OECD, based on the description of country measures in each country chapter in Part II of the Report.

In total, specific tax and benefit provisions that were implemented in response to COVID-19 were included in the *Taxing Wages* models for 13 countries (Table 2.2). These largely related to one-off payments or increases in cash benefit provisions (Australia, Austria, Canada, Chile, Iceland, Korea, Lithuania and the United States), particularly for families with children; and increases in tax reliefs under personal income taxes (Australia, Germany, Israel, Lithuania, Sweden, and the United Kingdom). The tax relief in Australia was a result of higher income tax thresholds that had initially been planned for July 2022 but whose implementation was brought forward to July 2020 in response to the pandemic. In addition, Austria made

a change to its marginal tax rate schedule, and Hungary reduced its employer SSC rate. The *Taxing Wages* models take into account the duration of these measures when calculating their impact on key indicators.

**Table 2.2. Summary of country COVID-19 measures included in the Taxing Wages models**

Country	Description of COVID-19 related measure included in <i>Taxing Wages</i> models
Australia	Increases to income thresholds within income tax brackets and a non-taxable one-off Economic Support Payment paid in March 2020 (AUD 750), July 2020 (AUD 750), December 2020 (AUD 250) and March 2021 (AUD 250).
Austria	Change in the income tax schedule and extra child benefit payments in 2020
Canada	Additional payments under the Canada Child Benefit and the Goods and Services Tax Credit in May 2020
Chile	Temporary Emergency Family Income (Ingreso Familiar de Emergencia), dependent on the number of household members, paid from June to November 2021, including a half-payment in September
Germany	One-time bonus benefit payment per child and a temporary increase in the tax allowance for single parents (in both cases, in 2020 and 2021)
Hungary	Employer SSC rate decreased by 2 p.p., from 18.5% to 16.5%, in 2020
Iceland	Special one-off child benefit supplements paid in 2020 and 2021 (in 2021 only if households are entitled other child benefits)
Israel	Temporary bonus to the Earned Income Tax Credit in April to December 2020
Korea	Extra childcare coupons paid to families with children in March 2020
Lithuania	Increase in tax-exempt income and one-off child benefit payment in 2020
Sweden	Introduction of a temporary earned income tax credit in 2021
United Kingdom	Additional temporary increases to Universal Credit and the Working Tax Credit in 2020 and 2021
United States	Advance payment of the Economic Impact Payment as a part of the Coronavirus Aid, Relief and Economic Security Act in 2020. The American Rescue Plan Act provided a Recovery Rebate Credit and made the Child Tax Credit fully refundable in 2021.

Source: OECD, based on the description of country measures in each country chapter in Part II of the Report.

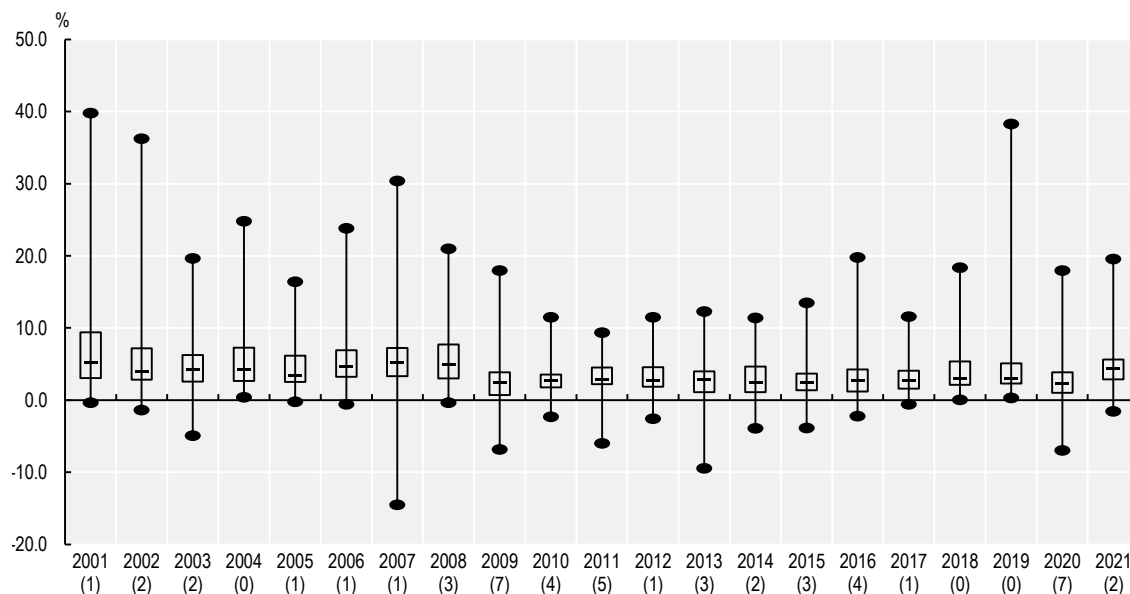
Although the COVID-19 pandemic has prompted governments to implement a large number of policies that affected labour taxation, not all the measures that were implemented in this area in 2020 and 2021 were directly related to the pandemic. A number of policies that were planned prior to the pandemic took effect during the period under analysis. These policies, which are discussed in chapter 1 and the country chapters in Part II of the Report, contributed to variations (both positive and negative) in the tax wedge between 2020 and 2021.

### ***Average wage trends during the pandemic and since 2001***


Changes to average wages have been another key factor behind changes to the tax wedge across OECD countries during the pandemic. Unlike the measures outlined in the previous section, changes in average wages are a constant feature of the *Taxing Wages* models. However, given the turbulence in labour markets in 2020 and 2021, it is important to understand how the interaction of wage dynamics and policy measures affected the tax wedge. The special feature of the 2021 edition of *Taxing Wages* examined the extent to which decreases in the tax wedge recorded across many OECD countries in 2020 were attributable to decreases in the average wage or the policy response (OECD, 2021<sup>[4]</sup>).

This section shows trends in average wages in the OECD between 2001 and 2021. Wage changes affect the tax wedge primarily through the progressivity of tax systems (discussed in chapter 3). An increase in average wages tends to increase the tax wedge (absent offsetting policy measures), while a decline has the opposite effect. It is important to note that *Taxing Wages* models are based on nominal wages. While inflation tended to be mild in most OECD countries prior to the pandemic, consumer prices rose sharply in 2021 while wage inflation was in line with pre-pandemic trends, meaning that wages declined in real terms in a number of countries where they increased in nominal terms. In these cases, higher tax wedges and lower real wages combined to reduce workers' purchasing power.

**Figure 2.2. Distribution of year-on-year changes in nominal average wages across OECD countries**



Note: The figures show maximum and minimum changes in OECD countries (dots); the upper and lower quartile of changes (in the boxes) and the median change (bars). The figure in brackets on the horizontal axis indicate the number of countries with a year-on-year fall in nominal wages. Wages for 2000-2020 have been provided by countries for full-time workers in sectors B-N of ISIC rev. 4 under the assumptions noted in the Annex. The average wage estimates for 2021 have been produced using the percentage changes in compensation per employee from the OECD Economic Outlook Volume 2021, Issue 2.

StatLink  <https://stat.link/98d2zl>

As discussed in chapter 1, average wages rose in all but two OECD countries between 2020 and 2021, having fallen in seven countries between 2019 and 2020. Revised data for 2020 showed that the falls in average wages were not as extensive as shown in the previous edition of this Report, which indicated that they fell in 16 countries between 2019 and 2020 (OECD, 2021<sup>[4]</sup>).

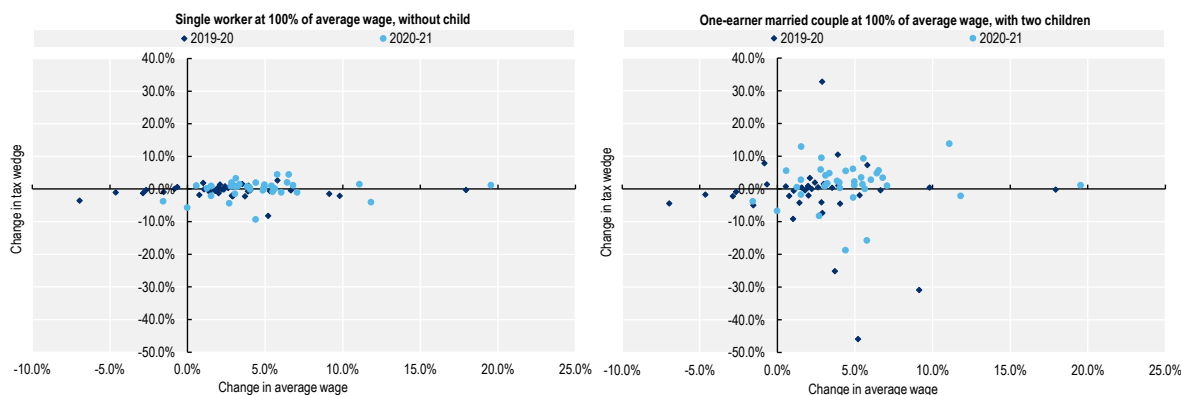
Figure 2.2 compares changes to the average wage between 2019 and 2021 with those recorded since 2001. The revised wage data for 2020 indicate that the changes between 2019 and 2020 were in line with the changes between 2008 and 2009, during the Global Financial Crisis when wages also declined in seven countries. Wage growth remained relatively weak in the wake of that crisis, falling in four countries and five countries in 2010 and 2011 respectively, with median wage growth lower in both years than it was in 2021. Although the number of countries that experienced a decline in average wages in 2020 was relatively large compared with the years before and after 2009, the wage changes recorded in 2021 were not inconsistent with trends observed prior to the pandemic.

The revised wage data for 2020 reaffirms one of the key findings from last year's Report (OECD, 2021<sup>[4]</sup>), namely that falls in nominal average wages across the OECD were not the primary cause of the decrease in the average tax wedge in 2020 (OECD, 2021<sup>[4]</sup>). Rather, decreases in the tax wedge were primarily caused by changes in tax policy settings, which (except in a very small number of cases) caused a reduction in the tax wedge, regardless of whether average wages rose or fell. Indeed, the tax wedge for all family types decreased in many of the countries in which wages increased, as the decrease due to policy changes more than offset the impact of higher wages.

## Comparing changes to the tax wedge and average wages

To illustrate the combined impact of the tax policy response to COVID-19 and changes to the average wage described in this section, Figure 2.3 shows the correlation between changes to average wages and changes to the tax wedge for the 38 OECD countries. It does so for two household types: the single worker (left-hand panel) and the one-earner couple (right-hand panel). In both panels, each dark blue diamond represents a single country and shows changes to both variables between 2019 and 2020. Each light blue circle also represents a single country, and shows changes to both variables between 2020 and 2021.

**Figure 2.3. Correlation between changes to the tax wedge and in average wages in 2020 and 2021**



Note: Chile has been omitted from the one-earner couple panel as the tax wedge decreased by over 350%.

StatLink  <https://stat.link/1sabl5>

For both household types, the tax wedge increased in more countries between 2020 and 2021 than it did between 2019 and 2020, while average wages also increased in more countries in 2021 than in 2020. Although the average wage increased in 31 countries between 2019 and 2020, the tax wedge for the single worker fell in 23 countries and in 21 countries for the one-earner couple over this period, demonstrating the extent to which policy measures in 2020 offset the upwards pressure of the tax wedge resulting from higher wages. In both panels, the correlation between changes to the tax wedge and in average wages between 2019 and 2020 was relatively weak. For the single earner, the changes in the tax wedge were clustered just above or below zero while changes in the average wage were distributed more widely.

Between 2020 and 2021, the positive correlation between changes in average wages and the size of the tax wedge is clearer for both household types, reflecting the scaling-back of COVID-19 support measures captured by the *Taxing Wages* models. It is notable that while the average wage increased in 36 countries, the tax wedge still decreased in eleven countries for the single earner and in nine countries for the one-earner couple. The difference between the two household types reflects the fact that the COVID-19 responses discussed earlier were predominantly directed at households with children; the absence of these measures in 2021 was an important factor behind the rises in the tax wedge in certain countries observed here. Policy changes in 2021 that were not directly related to COVID-19 (as described in chapter 1) also influenced these results.

The two panels demonstrate that the small decline in the average tax wedge for both household types across the OECD between 2020 and 2021 was driven primarily by the size of the declines registered in a few countries. As discussed in chapter 1, the largest declines for the single worker between 2020 and 2021 were recorded by the Czech Republic and Greece, while for the single-earner couple, the largest declines occurred in the same two countries as well as Chile.

## Changes to the tax wedge between 2019 and 2021

To understand better the overall impact of policy measures and changes in average wages on the three household types examined in this chapter, this section shows how the tax wedge changed for each type across every OECD country between 2019 and 2020 and between 2020 and 2021. It also examines the changes recorded by the *Taxing Wages* models during the two pandemic years with longer-term trends, starting in 2000, which allows for a comparison with the impact of the Global Financial Crisis of 2008-09.

The labour taxes that apply to workers in the *Taxing Wages* models include personal income taxes, their social security contributions (SSCs) and those of their employer, and cash benefits that apply to all workers based on their financial and family circumstances. Tax provisions or benefits targeted at particular sectors or based on other individual circumstances are not included; nor are non-standard tax reliefs. The tax wedge calculated in *Taxing Wages* shows the combined impact of taxes and SSCs paid, less cash benefits received, divided by labour costs (gross wage earnings plus employer SSCs).

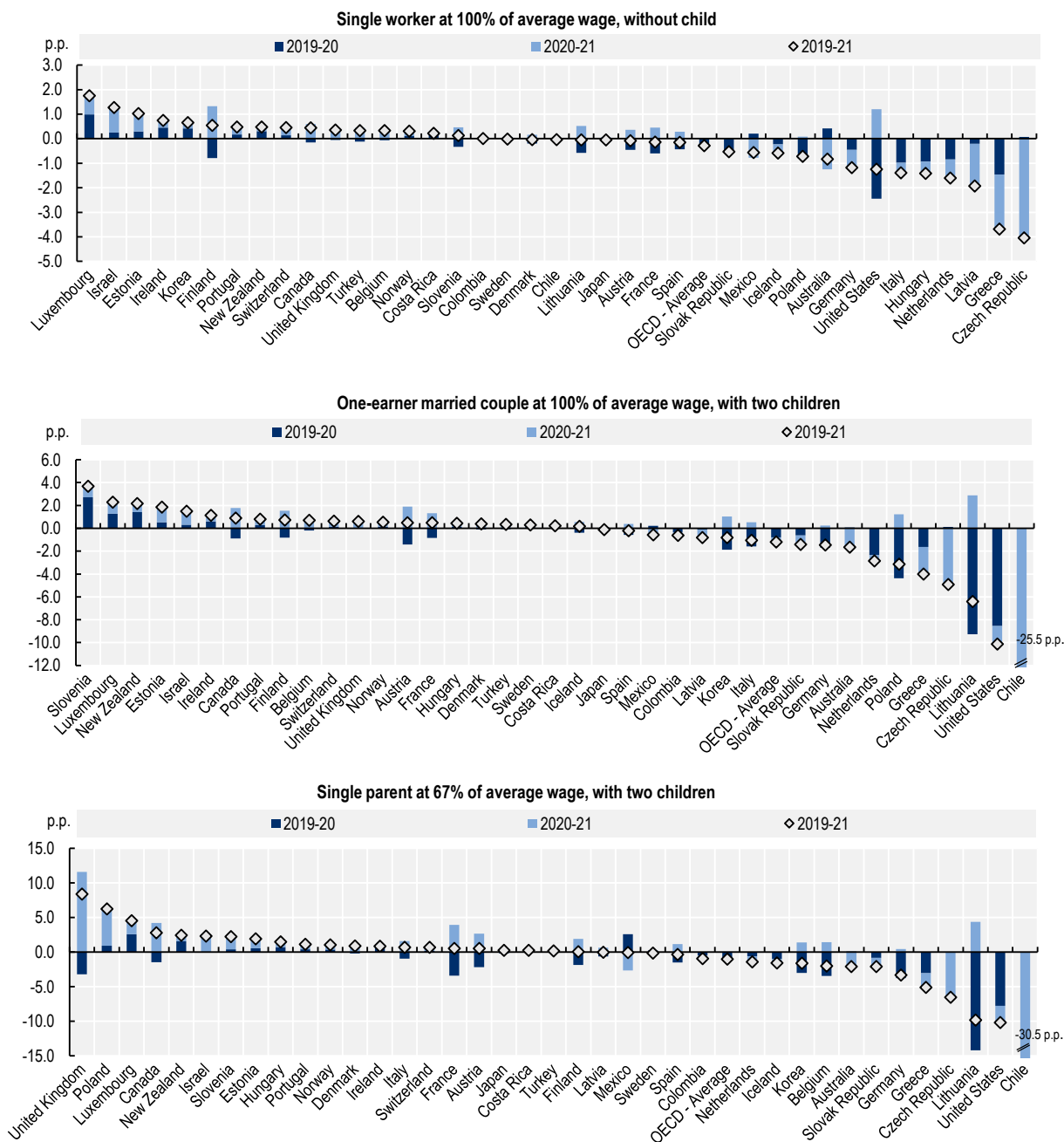
Figure 2.4 shows changes in the tax wedge between 2019 and 2021 for the three households examined in this chapter. For two of the three household types, the average tax wedge decreased between 2000 and 2021. In the case of the single worker, the average tax wedge declined by 0.05 percentage points, while for a one-earner couple it declined by 0.4 percentage points. For the single parent, it increased by 0.1 percentage points. However, the average tax wedge for this latter household type fell by more than for the other two in 2020 across the OECD, underlining the need to compare changes in both years to understand the overall impact of the pandemic on labour taxation.

The tax wedge for the single worker decreased by 0.3 percentage points on average across the OECD between 2019 and 2021. It increased in sixteen countries, declined in 21 and remained unchanged at 0% in Colombia. It increased by more than one percentage point in three countries: Luxembourg (1.7), Israel (1.3) and Estonia (1.0). It decreased by more than that amount in eight countries: the Czech Republic (-4.0), Greece (-3.7), Latvia (-1.9), the Netherlands (-1.6), Hungary, Italy (both -1.4), the United States and Germany (both -1.2).

The tax wedge for the one-earner couple decreased by -1.2 percentage points on average across the OECD between 2019 and 2021. It increased in 21 countries, and declined in seventeen. It increased by more than one percentage point in six countries: Slovenia (3.7), Luxembourg (2.3), New Zealand (2.2), Estonia (1.8), Israel (1.5) and Ireland (1.1). It decreased by more than that amount in twelve countries: Chile (-25.5), the United States (-10.1), Lithuania (-6.4), the Czech Republic (-4.9), Greece (-4.0), Poland (-3.2), the Netherlands (-2.9), Australia (-1.7), Germany (-1.5), Slovakia (-1.4) and Italy (-1.1).



Figure 2.4. Tax wedge changes 2019-2021



StatLink <https://stat.link/kn8mpy>

The tax wedge for the single parent decreased by -1.0 percentage point on average between 2019 and 2021. It increased in 21 countries and declined in seventeen over this period. The tax wedge increased by more than 1 percentage point between 2019 and 2021 in eleven countries: the United Kingdom (8.4), Poland (6.2), Luxembourg (4.5), Canada (2.8), New Zealand (2.4), Israel (2.3), Slovenia (2.2), Estonia (1.9), Hungary (1.5), Portugal, and Norway (1.0). It decreased by the same amount or more in twelve countries: Chile (-30.5), the United States (-10.2), Lithuania (-9.8), the Czech Republic (-6.5), Greece (-

5.1), Germany (-3.3), Slovakia, Australia (both -2.1), Belgium (-2.0), Korea and Israel (both -1.6) and the Netherlands (-1.4).

The tax wedge for the single worker increased from the previous year in both 2020 and 2021 in nine countries. For the one-earner couple and for a single parent, it increased in eleven countries in both years. Decreases in the tax wedge over both years were recorded in seven countries for the single parent and for the one-earner couple. For the single worker, the tax wedge declined in both years in eight countries.

Eight of the 22 countries where the tax wedge for the single worker declined in 2020 recorded an increase in 2021 that exceeded the decline in the previous year. The equivalent figure was nine out of 21 countries for the one-earner couple, and ten out of 22 countries for the single parent.

The large decline in the tax wedge for the household types with children in Chile, which is attributable to the Emergency Family Income programme implemented in 2021, has a significant impact on the OECD average for both. When Chile is excluded, the size of the decline in the OECD average tax wedge for the single-earner couple between 2019 and 2021 narrows from -1.2 percentage points to -0.5 percentage points; for the single parent, the decline narrows from -1.0 percentage points to -0.2 percentage points.

## Changes to the tax wedge since 2000

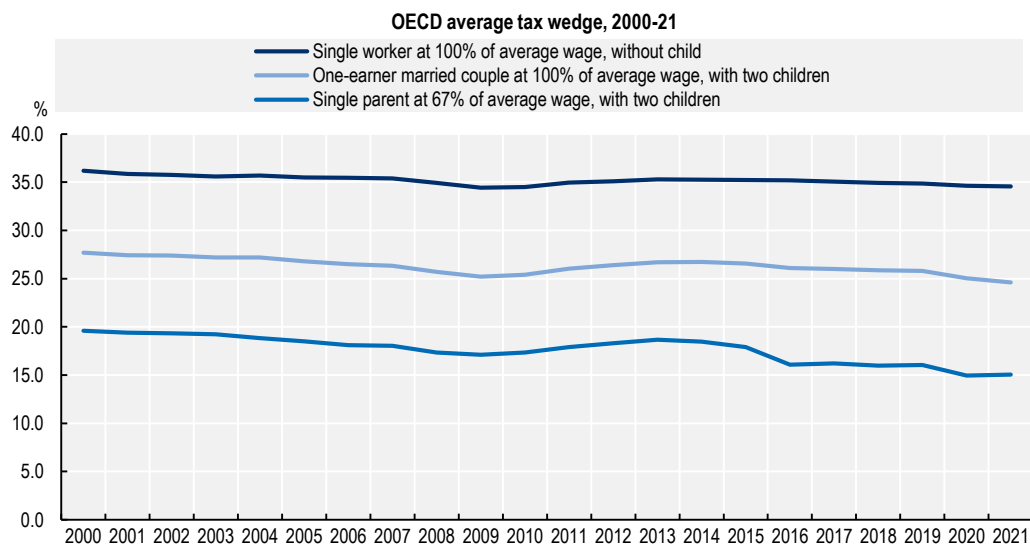
This section compares the changes to the tax wedge in OECD countries in 2020 and 2021 with longer-term trends dating back to 2000, with reference to both the level and composition of the tax wedge for the household types covered by this chapter. By doing so, it sheds light on the extent to which labour taxation during the pandemic has aligned to, accelerated or disrupted trends seen previously.

### ***Changes to the level of the tax wedge***

Figure 2.5 compares the changes to the average tax wedge across the OECD seen in 2020 and 2021 with longer-term trends shown by the *Taxing Wages* models since 2000. A clear decline is evident for the two household types with children between 2019 and 2020, with the tax wedge for the single parent recording the larger drop. In both cases, the declines in 2020 continued downward trends recorded since the middle of the 2010s, although it is notable that, for the single parent, the largest decline in the average tax wedge since 2009 was recorded between 2015 and 2016 rather than during the COVID-19 pandemic. The tax wedge for both categories had been on a downward trajectory prior to 2009 but increased significantly in the years immediately after the Global Financial Crisis.

For the single worker, the small decline (relative to the household types with children) recorded in the average tax wedge in 2020 and 2021 did not represent a significant deviation from the trend seen prior to the pandemic. Between 2000 and 2021, the average tax wedge for this category decreased by -1.6 percentage points. The sharpest decline in the average tax wedge was between 2008 and 2009, when it fell by -0.5 percentage points to 34.4%. The tax wedge increased from 2010 to 2013 then gradually declined. In 2021, it stood at 34.6%, above the level recorded in 2010. During the pandemic, the difference grew between the tax wedge for the single worker and the two households with children, while the difference between the single-earner couple and the single parent narrowed slightly.

Figure 2.5. Average OECD tax wedge for different family types, 2000-2021




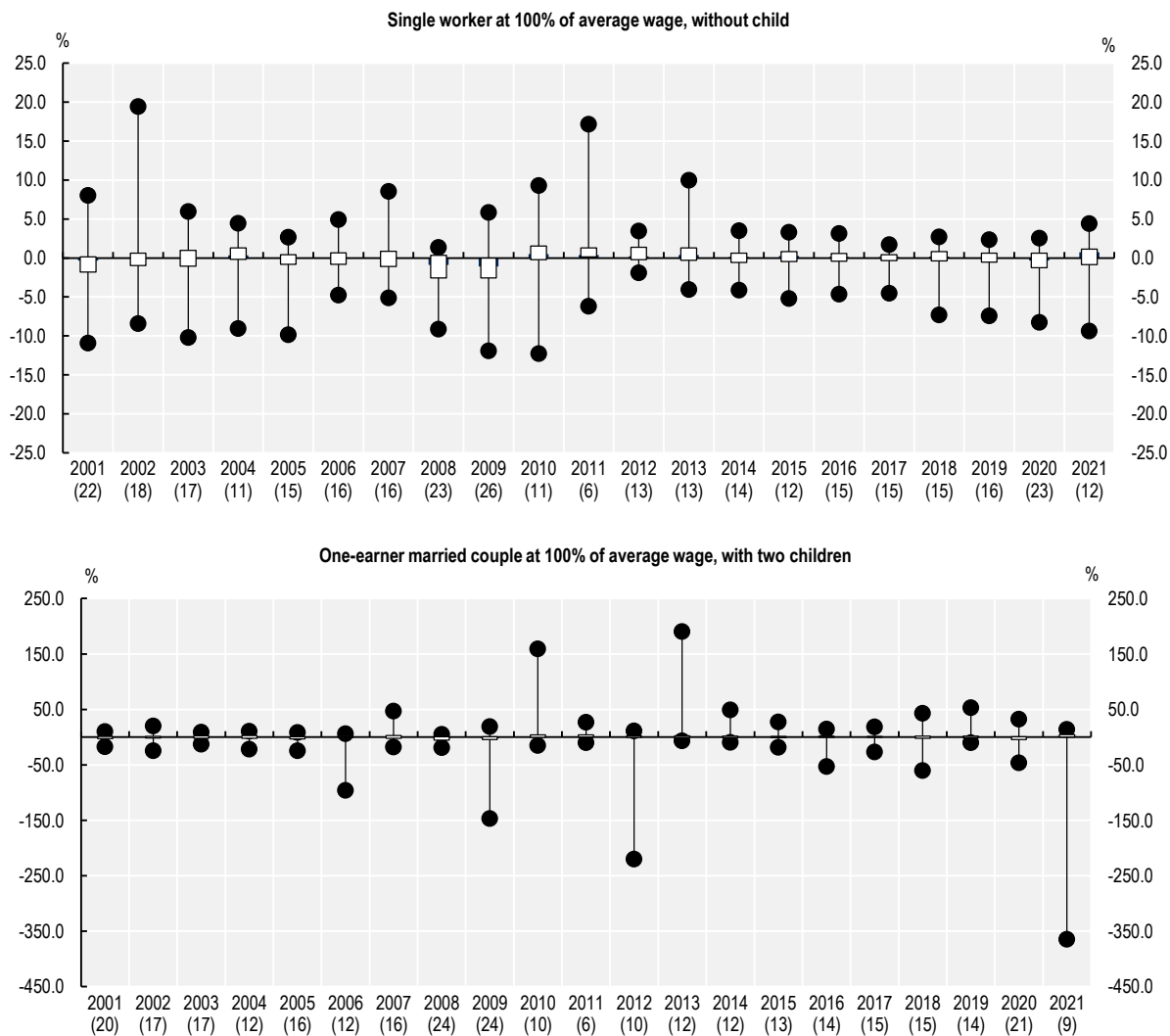
StatLink  <https://stat.link/9xfa34>

Figure 2.6 provides a more detailed picture of how the changes in 2020 and 2021 compare with those in other years by showing the variation in changes to the tax wedge among OECD countries in each year since 2001. It focuses on the single worker (Panel A) and the one-earner couple (Panel B).<sup>2</sup> Care should be taken when comparing the two graphs, as they have different scales.


For the single worker, variation in the tax wedge in 2020 across the OECD resembled 2018 and 2019, with the difference that the tax wedge declined in twenty-three countries in 2020 versus sixteen in 2019 and fifteen in the previous three years. Although the variation in the tax wedge for this household type was slightly greater in 2021 than in 2020, it was not as great as that recorded during the Global Financial Crisis, and the number of countries that recorded a decline in the tax wedge in 2021 was the lowest since 2011.

For the one-earner couple household, variation in the tax wedge in 2020 was not notably different from that recorded in the six preceding years. The number of countries where the tax wedge declined was significantly higher in 2020, at twenty-two versus fourteen in 2019. In 2021, Chile recorded the largest decline in the tax wedge for this household type experienced by any OECD country at any point since 2001. However, the median change in 2021 was in line with previous years, and the number of countries where the tax wedge decreased was the lowest since 2011.

**Figure 2.6. Year-on-year change in the average tax wedge across the OECD, 2001-2021**



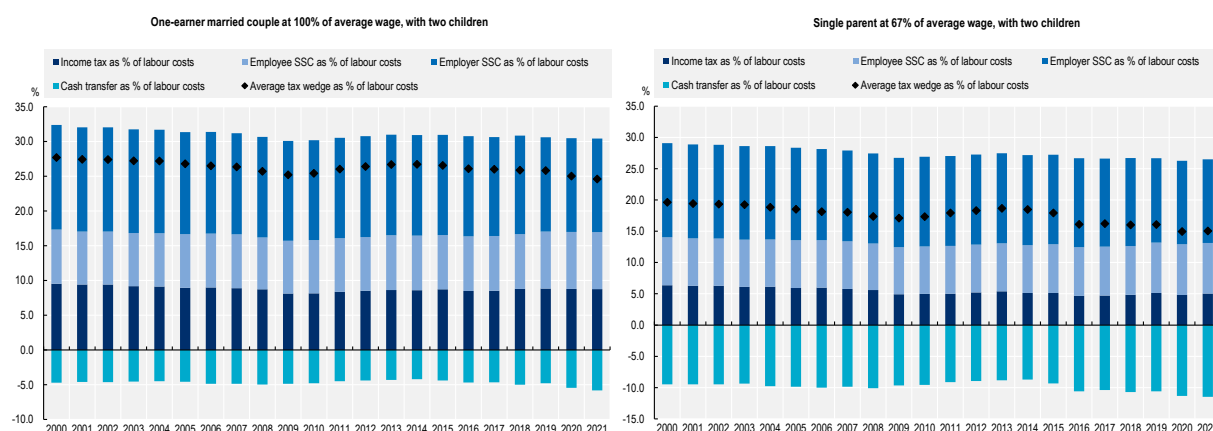
Note: The figures show maximum and minimum changes in the average tax wedge in OECD countries (dots); the upper and lower quartile of changes (in the boxes) and the median change (bars). Figures in brackets under years are the number of countries in which the tax wedge decreased in a given year.

StatLink  <https://stat.link/myioqc>

### **Changes to the composition of the tax wedge**

The *Taxing Wages* models allow for comparison of the composition of the tax wedge for different households across OECD countries and over time. Figure 2.7 demonstrates the evolution of the average OECD tax wedge for the two different household types with children examined in this chapter between 2000 and 2021. The single worker is not analysed here because the cash benefits they received are negligible on average across the OECD.

Figure 2.7. Composition of the tax wedge, 2000-2021



StatLink  <https://stat.link/fdrxvi>

For both the one-earner couple and the single parent, the decline in the tax wedge between 2019 and 2021 was attributable to increases in cash transfers as a percentage of labour costs, of 1.0 percentage point in the case of the single-earner couple and of 0.9 percentage points in the case of the single parent. The other components of the tax wedge were largely unchanged as a percentage of labour for these two household types in 2020 and 2021, with the exception of income tax for the single parent. For this household type, income tax as a percentage of labour costs increased by 0.25 percentage points, more than offsetting the increase of 0.15 percentage points in cash transfers over this period.

Changes to the composition of the average OECD tax wedge in 2020 and 2021 were in line with trends for each component since 2000. Having declined gradually for the two household types examined here between 2000 and 2008, income tax as a percentage of labour costs fell sharply in 2009 (by -0.6 percentage points for the one-earner couple and by -0.7 percentage points for the single parent). For the single-earner couple, income tax as a percentage of labour costs then increased from 2010 onwards; by 2021, it stood at 8.8% of labour costs, the same level as in 2008. For the single parent, income tax as a percentage of labour costs increased until 2014, then declined until 2017 before trending upwards once more; by 2021, it stood at 5.0% of labour costs, 0.6 percentage points below its level in 2008.

On a combined basis, employer and employee SSCs gradually declined as a percentage of labour costs between 2000 and 2021, falling by -1.2 percentage points for both household types. In 2021, they stood at 21.7% of labour costs for the one-earner household and at 21.5% of labour costs for the single parent. However, employee SSCs and employer SSCs have followed opposite trajectories over this period for both household types. For each, employee SSCs increased by 0.4 percentage points, while employer SSCs declined by -1.6 percentage points. It is notable that the largest annual change in both employer and employee SSCs was recorded between 2018 and 2019, before the COVID-19 pandemic: for both household types, employee SSCs rose by 0.3 percentage points and employer contributions declined by -0.6 percentage points between the two years.

Finally, cash benefits generally increased as a percentage of total labour costs for both household types between 2000 and 2021, except during the period from 2012-2014 (inclusive), when they declined in each of the three years. For the single-earner couple, cash benefits increased by 1.1 percentage points between 2000 and 2021 to 5.8% of total labour costs, while for the single parent, they increased by 2.0 percentage points to 11.5%.

## Conclusion

The COVID-19 pandemic has caused major disruption and accelerated long-term changes to labour markets in OECD countries. It has affected both the level of employment and the composition of the workforce. This chapter examines how labour taxation, including benefits administered through the tax system, responded to the impact of the pandemic across the OECD in 2020 and 2021. It does so with reference to three household types included in the *Taxing Wages* models: a single worker on the average wage, a single-earner married couple earning the average wage with two children, and a single parent earning 67% of the average wage with two children.

While chapter 1 of this Report examines changes in the tax wedge for different household types between 2020 and 2021, this chapter analyses the changes that occurred between 2019 and 2021, so as to show the overall impact of the COVID-19 pandemic on labour taxation across the OECD. The chapter also examines these changes against the evolution of labour taxation during the two decades prior to the pandemic, including those that coincided with the Global Financial Crisis in 2008-09, to compare the scale of the changes associated with COVID-19 and the extent to which these align with longer-term trends.

Between 2019 and 2020, the average tax wedge decreased for the three household types on average and in a majority of countries. This was largely due to the policies enacted by governments in response to the pandemic: the tax wedge declined even in a number of countries where average wages increased. Between 2020 and 2021, the tax wedge continued to decline on average for two of the three household types (the exception being the single parent on 67% of the average wage). However, it increased in the majority of countries as wages increased in all but two OECD countries and most governments discontinued COVID-19 support measures implemented in 2020 as the economic recovery took hold and countries were able to better mitigate the impact of the virus.

For both household types with children, 21 OECD countries recorded a higher tax wedge in 2021 than in 2019, prior to the pandemic. For the single earner, 16 countries recorded a higher tax wedge in 2019 than in 2021. The increases in the tax wedge observed across these countries contrasts with the overall decline in the average OECD tax wedge between 2019 and 2021 for all three household types. It is also notable that increases in the tax wedge were more widespread across the OECD for households with children even though many of the policy measures identified in this chapter were directed at this household type.

This chapter identifies two key factors behind changes to the tax wedge between 2019 and 2021. First, declines in the average tax wedge were driven by a small number of countries that recorded relatively large declines, notably Chile. Second, many of the COVID-19 measures were temporary and (in most cases) limited to 2020. Over the course of the two years, the impact of higher wages experienced in a majority of countries (31 in 2020, 36 in 2021) on the tax wedge was larger than the reductions caused by the policy response. It is also important to recall that a number of countries introduced policies in 2021 that were not related to the pandemic and which affected the tax wedge in that year.

The chapter underlines that the tax wedge is influenced by the combination of changes in average wages and policy measures. Regarding wage changes, it is notable that wage growth in 2021 was not inconsistent with trends observed prior to the pandemic, although the number of countries that experienced a decline in average wages in 2020 was relatively large compared with the years before and after 2009, during the Global Financial Crisis.

The changes to the tax wedge between 2019 and 2021 aligned with long-term trends: the tax wedge for both household types with children had declined appreciably in the years immediately prior to the pandemic (having increased in the wake of the Global Financial Crisis) while the tax wedge for the single worker declined very gradually between 2000 and 2021. Looking at the different components within the tax wedge, the decrease in the tax wedge was primarily due to the increase in cash benefits as a percentage of labour costs, with the contribution of personal income tax and SSCs largely unchanged between 2019 and 2021

on average. Cash benefits increased as a percentage of labour costs throughout the period from 2000 to 2021, except between 2012 and 2014.

The changes to labour taxation associated with the COVID-19 pandemic have (so far) been no larger than those observed around the time of the Global Financial Crisis. The tax wedge declined in more countries in 2008 and 2009, while the distribution of changes in average wages across the OECD in 2020 was very similar to that in 2009, with the same number of countries – seven – experiencing declines in both years. The Global Financial Crisis had a more widespread impact on the different components of the tax wedge as a proportion of total labour costs, on average, across the OECD than the pandemic.

Overall, these findings suggest that, in many cases, changes to labour taxation may have been a relatively minor component of governments' response to the economic impact of the pandemic. Cash benefits for children accounted for the majority of COVID-19 responses included in the *Taxing Wages* models in 2020 and 2021. Other policies not included here, such as job retention schemes or unemployment benefits, are likely to have been equally or more important. It is also worth recalling that certain parts of the economy have been affected more than others by the pandemic: specific support measures for these sectors are not included in the *Taxing Wages* models.

Looking ahead, the labour market faces further instability in 2022. The rise of inflationary pressures across the OECD in 2021 and into 2022 might have a significant impact on average wages in nominal and real terms. Employment prospects might weaken as the conflict in Ukraine undermines the economic recovery. At the same time, the ongoing COVID-19 pandemic retains the potential to cause major disruption. Future editions of *Taxing Wages* will monitor the impact of these large-scale phenomena on the taxation of the labour incomes of different family types, together with further changes in the labour market.

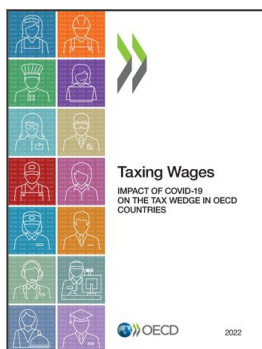
## References

- OECD (2021), *OECD Economic Outlook, Volume 2021 Issue 2*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/66c5ac2c-en>. [1]
- OECD (2021), *OECD Employment Outlook 2021: Navigating the COVID-19 Crisis and Recovery*, OECD Publishing, Paris, <https://doi.org/10.1787/5a700c4b-en>. [2]
- OECD (2021), *Taxing Wages 2021*, OECD Publishing, Paris, <https://doi.org/10.1787/83a87978-en>. [4]
- OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/1686c758-en>. [3]

## Notes

<sup>1</sup> The special feature of (OECD, 2021<sup>[4]</sup>) provides greater detail on the extent to which some of the most widespread responses to the pandemic, including job-retention schemes, sickness benefits and teleworking are captured by the *Taxing Wages* models.

<sup>2</sup> The single parent category is not described in this section due to the impact of the large variation for Chile's tax wedge on the graph.



From:

## Taxing Wages 2022

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

Access the complete publication at:

<https://doi.org/10.1787/f7f1e68a-en>

### Please cite this chapter as:

OECD (2022), “Special feature: Impact of COVID-19 on the tax wedge in OECD countries”, in *Taxing Wages 2022: Impact of COVID-19 on the Tax Wedge in OECD Countries*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/8485b823-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.