International comparisons of labour markets over the coronavirus (COVID-19) pandemic

Comparing the impact of the coronavirus (COVID-19) pandemic on labour markets across the group of G7 countries.

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1. Main points

- In North America, employment fell sharply in the early stages of the coronavirus (COVID-19) pandemic, while the falls in employment in Europe were far more contained – which demonstrates the relative success of enhanced job retention schemes.

- By Quarter 4 (Oct to Dec) 2021, employment levels had recovered strongly since the start of the coronavirus pandemic in all G7 countries; however, they remain marginally below Quarter 4 2019 levels in all countries except in Canada and France, where employment levels are higher.

- There have also been significant movements into inactivity in the UK, where the coronavirus pandemic has had an impact on those who are actively seeking work and/or who are available to start work.

- Real household disposable incomes fell during 2020 in Europe but increased in North America and Japan, reflecting the impact of direct cash handouts to households.
2. Overview

This article sets out the current positions of labour markets in the G7 countries (Canada, France, Germany, Italy, Japan, the UK and the US), relative to during and before the coronavirus (COVID-19) pandemic. This is as governments scale back the substantial support made to job retention schemes and household incomes during the coronavirus pandemic.

We look at how labour markets have evolved for these countries up to Quarter 4 (Oct to Dec) 2021. At that point, a surge in new coronavirus infections, mainly because of the Delta and Omicron variants, delayed the reopening of economies. This led to an extension of labour market support policies in some countries.

Despite these events, only Germany among the G7 countries reported a decline in real gross domestic product (GDP) during Quarter 4 2021. Figure 1 shows all seven countries, after suffering a severe contraction during the first half of 2020, are now close to or already exceeding pre-coronavirus levels of GDP.

**Figure 1: The G7 countries are now close to or already exceeding pre-coronavirus pandemic levels of GDP**

GDP levels for each G7 country, Quarter 4 2019 to Quarter 1 2022

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**Source:** Organisation for Economic Co-operation and Development – Quarterly national accounts

**Notes:**

1. In Quarter 1 2022, the level of GDP was higher than in Quarter 4 2019 for Canada, France, the UK and the US.

2. For Germany, Italy and Japan, the level of GDP in Quarter 1 2022 was less than 1% smaller than it was in Quarter 4 2019.
A steady recovery in the economy and labour market through 2022 and beyond continued to be predicted in forecasts by the Organisation of Economic Co-operation and Development (OECD) in December 2021. The forecasts considered data on rapidly increasing infection rates. By the middle of 2022, all of the G7 countries were projected to be above the pre-coronavirus level of GDP. This outlook reflects the effects of COVID-19 vaccine rollouts in advanced countries and changes in business responses, as coronavirus became a more persistent factor.

More recent forecasts by the OECD and the International Monetary Fund’s (IMF) World Economic Outlook April 2022 suggest a slower recovery in 2022. However, this is not a reflection of the coronavirus pandemic, but the impact of the war in Ukraine and the sharp acceleration in consumer prices inflation across the globe. In recent months, governments have rapidly withdrawn coronavirus-related restrictions on economic and social activities. Now, two years on since the start of the coronavirus pandemic, this article takes stock of conditions in labour markets across the G7 countries.


In response to the first wave of coronavirus (COVID-19) in the spring of 2020, governments brought in unprecedented restrictions limiting social contact and physical movement. These resulted in a sharp reduction in gross domestic product (GDP) in each country. Governments responded with labour market and household income support schemes to ease the potentially harsh consequences for households. This section describes the policies implemented in each country.
Restrictions on social and economic activities

Government restrictions taken in response to the pandemic have varied across countries in terms of their focus, timing, and enforcement. The University of Oxford stringency index for each country is a summary measure of government policy in these dimensions. It can be viewed as an overall score for the strictness of government restrictions currently in place.

Figure 2 shows the stringency indices for each of the G7 countries between March 2020 and December 2021. Movements in the stringency index have varied by country. Throughout much of the coronavirus pandemic period, Japan has been subject to less stringency compared with European and North American countries, reflecting its relatively lower rates of infection. There are also some broader trends. A sharp increase in stringency in Europe and North America coincided with the first wave of COVID-19 in spring 2020. This was followed by an easing of restrictions in summer 2020. Stringency conditions were then reinforced during late 2020 and early 2021, as the second wave of COVID-19 took effect. Again, restrictions were then eased through the spring and summer of 2021, as infection rates fell and COVID-19 vaccines were rolled out.

Figure 2: The stringency of restrictions in response to the coronavirus pandemic has varied over time and by country

Stringency Index, monthly average, March 2020 to April 2022, G7 countries

Source: University of Oxford – COVID-19 government response tracker

Notes:

1. The stringency index for each country is a composite indicator of the responses governments have taken relating to school closures, workplace closures, cancellation of public events, restrictions on gatherings, closure of public transport, stay at home requirements, movement restrictions, international travel restrictions and public information campaigns.

2. A higher index value represents more stringent conditions on a scale from 0 to 100.
In response to the Delta and Omicron variants, Canada, France, Italy, and Germany imposed more stringency at the end of 2021. While Japan, UK, and US have not reimposed restrictions to the same extent. In the spring of 2022, stringency indices for the European countries within the G7 have eased considerably. They are the lowest levels since the start of the coronavirus pandemic. The UK is presently the country with the least stringent conditions, in contrast to having the highest reported index at the start of 2021.
The fiscal response

The G7 governments have taken substantial fiscal measures to offset the negative impact of restrictions on household incomes. The International Monetary Fund (IMF) holds a database of discretionary fiscal policy responses to COVID-19, made by each country. Spending on non-health measures and forgone revenues in response to the coronavirus pandemic are shown as a proportion of each country’s 2020 level of GDP in Figure 3. The scale of the additional spending is unprecedented in peacetime. For comparison, in response to the global financial crisis, the European Commission recommended member countries had stimulus plans of 1.2% of GDP.

These figures do not include the impact of automatic stabilisers. These are the (non-discretionary) increases in transfers and falls in tax revenues that result automatically because of a negative economic shock. Figure 3 understates the extent of government fiscal responses to the coronavirus pandemic by different amounts for each country. This is because these will differ from country-to-country depending on the relative generosity of the benefits system and the structure of the tax system.

Figure 3: The scale of the additional spending by the G7 countries is unprecedented in peacetime

Additional discretionary spending or forgone revenues (non-health related) in response to coronavirus as a percentage of 2020 GDP

Source: International Monetary Fund – Database of fiscal measures in response to COVID-19

Notes:

1. Includes non-health measures in response to coronavirus, announced up to 27 September 2021.

Fiscal responses to the coronavirus pandemic have taken two broad dimensions. The first is labour market support schemes aimed at job retention or wage subsidies. The second is direct support to household disposable incomes through extended benefit payments and tax deferrals.

One of the interesting features of the government support schemes introduced in each of the G7 countries has been the different approaches taken in Europe and North America.
European countries have favoured support through business loans and job retention schemes. In North America, and particularly the US, there has been greater use of cash handouts (known as stimulus cheques) paid directly to households. These different fiscal responses contribute to an explanation of the differences in labour market outcomes we observe across these countries.

**Job retention schemes**

All G7 countries made at least some use of job retention schemes to contain the employment fallout of the coronavirus pandemic. According to the Organisation for Economic Co-operation and Development (OECD) estimates, job retention schemes were supporting 50 million jobs across the OECD by May 2020. This is about 10 times as many as during the global financial crisis of 2008 to 2009.

The aim of job retention schemes is to prevent a surge in unemployment and offset financial hardship experienced by households following a negative economic shock. The main form of job retention scheme is short-term work (STW) that directly subsidise hours that are no longer worked, such as in Germany and France. They can also take the form of direct wage subsidies that subsidise hours worked, or top up the earnings of workers on reduced hours.

A crucial aspect of all job retention schemes is that employees keep their contracts with the employer, even if their working hours are partly or entirely suspended. These schemes aim to provide the necessary liquidity to firms to hold on to their workers. This allows them to ramp up operations quickly once economic activity recovers, without having to go through the process of hiring and training new workers. This prevents short-term shocks from leading to a more prolonged downturn and a persistent increase in unemployment.

In response to government-imposed shutdowns in business activities, many governments have modified existing job retention schemes to encourage take-up or introduced new ones altogether. These adjustments broadly fell into three categories.

First, access has been simplified and coverage extended. Thresholds to access existing schemes were significantly reduced. For example, in France and Italy, any business could simply declare that they had been negatively affected by the health crisis. In Germany and Japan, lower thresholds for reductions in activity and working time were needed to be demonstrated. In Italy, the coverage of the existing scheme was extended across firm sizes and sectors. Many countries simplified procedures, encouraged online applications, and allowed the possibility of retrospective claims.

Second, it was commonplace for coverage to be extended to workers in non-standard jobs. Where not already covered, extended eligibility included temporary, agency and certain categories of self-employed workers.

Third and finally, schemes were more generous. Several countries (France, Germany and Italy) have increased replacement rates for workers in job retention schemes by raising the proportion of wages covered and/or reducing social-security contributions. Alongside the higher generosity of job retention and wage subsidy schemes, there has also been an increase in benefit generosity. This provides more direct support to household disposable incomes than indirectly through the labour market. These have been particularly substantial in the US and Japan, where cash handouts were transferred directly to households.
4. The coronavirus (COVID-19) pandemic impact on G7 labour markets

This article focuses on the impact of the coronavirus (COVID-19) pandemic on those in the population of working age. Working age is defined by the Organisation for Economic Co-operation and Development (OECD) as aged 15 to 64 years (W). Each person must have one of three labour market statuses, defined in the International Labour Organization’s glossary of statistical terms as employed (E), unemployed (U) or inactive (I), such that:

\[ W = E + U + I \]

This identity allows us to break down percentage changes in employment levels \( (E/E) \) to the contributions made by changes in the size of the working age population \( (W/E) \), unemployment levels \( (U/E) \) and inactivity levels \( (I/E) \). Each component is scaled by the level of employment, such that:

\[ \frac{\Delta E}{E} = \frac{\Delta W}{E} - \frac{\Delta U}{E} - \frac{\Delta I}{E} \]

The first bar for each country in Figure 4 shows percentage changes in employment levels from Quarter 4 (Oct to Dec) 2019 to each country’s respective trough. The trough is the lowest level of employment recorded during the coronavirus pandemic period. In Canada and the US, employment fell sharply in the early stages of the coronavirus pandemic. This reflects short-term layoffs, as business activities were curtailed and job support schemes were less encompassing. In Europe, however, the falls in employment were far more contained, demonstrating the relative success of enhanced job retention schemes. In Japan, the initial impact on the labour market was far smaller, simply because lower rates of coronavirus infections meant restrictions on economic activity were less stringent.

The fall in employment in each country is not entirely mirrored by increases in unemployment, because there have also been significant movements into inactivity. The inactive are classified as those who are not working but not recorded in the unemployment figures, because they are either not actively seeking work and/or not available to start work. Given the fine boundary between being classified as unemployed or inactive, those who are marginally attached to the labour market may fall into inactivity rather than unemployment.

Lockdown measures, particularly in Italy, the US, and Canada where the increases in inactivity were relatively large, may have discouraged job search. This is partly because coronavirus restrictions resulted in the closure of certain industries. There is also a perception that in these countries the closure of educational facilities resulted in higher female inactivity, because of the incidence of childcare and homeschooling responsibilities.

Reopening the economy and education may see these flows into inactivity reverse. Those not counted as unemployed but eventually expected to return to the labour market, are described as the unemployment halo. This suggests that when looking at the impact of the coronavirus pandemic on the labour market, it is sensible to look beyond official unemployment rates towards broader measures of joblessness.
Figure 4: In Europe, the falls in employment were more contained, showing the relative success of enhanced job retention schemes.

Change in employment levels, aged 15 to 64 years, (%) and contributions from working age population, unemployment, and inactivity, from Quarter 4 2019 to trough, and Quarter 4 2019 to Quarter 4 2021, G7 countries.
Figure 4: In Europe, the falls in employment were more contained, showing the relative success of enhanced job retention schemes.

Change in employment levels, aged 15 to 64 years, (%) and contributions from working age population, unemployment, and inactivity, from Quarter 4 2019 to trough, and Quarter 4 2019 to Quarter 4 2021, G7 countries.

The second bar for each country in Figure 4 shows the breakdown in employment changes between Quarter 4 2019, and the latest collectively available data in Quarter 4 2021. This can be thought of as a summary of how labour markets in each country compare with just before the start of the coronavirus pandemic. They implicitly capture how these labour markets have recovered since their respective troughs.

Although employment levels have recovered strongly from their troughs, they remain below Quarter 4 2019 levels in all countries except Canada and France. Unemployment levels also remain higher in all countries except France and Italy. However, this needs to be considered in the context of the severity of the coronavirus pandemic-induced fall in economic activity. The increase in unemployment experienced by the G7 was both much lower and less persistent than in the aftermath of the global financial crisis. This was despite the larger contraction in gross domestic product (GDP).

Increases in inactivity levels seen towards the start of the coronavirus pandemic have largely been reversed, except in the UK, where the increases in inactivity have been more persistent. Analysis by the Office for National Statistics finds that this is partly a reflection of older workers leaving the labour market since the start of the coronavirus pandemic. For more information, see our Movements out of work for those aged over 50 years since the start of the coronavirus pandemic article, published 14 March 2022.

In all countries except for Canada, a fall in employment levels of those aged 15 to 64 years is partly accounted for by a fall in the size of the working age population. This is especially the case in Germany, Italy, and Japan. This might reflect ongoing natural population ageing but is also likely to reflect lower levels of net-immigration because of restrictions on international travel.

Figure 5 provides a good summary of how government policies in terms of restrictions and policy supports affected labour markets and household incomes during 2020.
The impact of job retention schemes and household income support policies in 2020, G7 countries

The largest falls in employment in 2020 were in the US and Canada, where job retention schemes were less widespread than in Europe. Japan’s government imposed less stringency, in part because of lower infection rates, so recorded a relatively small fall in employment levels.

The change in hours actually worked show similar falls to employment in the US and Canada. In European countries, the large falls relative to employment demonstrate the impact of job retention schemes in subsidising the hours that are no longer worked. Where active job retention schemes were in place, falls in average hours were relatively large compared with employment.

Changes in real household disposable incomes show relatively large increases in North America – reflecting the impact of cash handouts in Canada and the US. In Europe, real disposable incomes declined because of higher unemployment and inactivity, and because job retention schemes do not fully replace lost wages. There was also significant growth in real disposable incomes in Japan. Here, like in North America, there were also sizeable cash transfers made directly to households during the coronavirus pandemic.
5 . International comparisons of labour markets over the coronavirus (COVID-19) pandemic data

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<tr>
<th>Short-term labour market statistics</th>
<th>Dataset</th>
<th>Released 12 April 2022</th>
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<td>This dataset contains predominantly quarterly labour statistics, and associated statistical methodological information, for the 38 Organisation for Economic Co-operation Development (OECD) member countries and selected other economies. It covers countries that compile labour statistics from sample household surveys on a monthly or quarterly basis.</td>
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6 . Glossary

Employment

Employment measures the number of people in paid work or who had a job that they were temporarily away from (for example, because they were on holiday or off sick).

Unemployment

Unemployment measures people without a job who have been actively seeking work within the last four weeks and are available to start work within the next two weeks.

Inactivity

People not in the labour force (also known as economically inactive) are not in employment but do not meet the internationally accepted definition of unemployment. Either because they have not been seeking work within the last four weeks and/or they are unable to start work in the next two weeks.

Real household disposable income

Household income after the deduction of taxes and the addition of benefits and adjusted for inflation.

7 . Data sources and quality


Since Quarter 1 (Jan to Mar) 2020, National Statistics Institutes (NSIs) have faced difficulties in conducting labour market surveys because of restrictions to face-to-face interviews and operating call centres. Those that relied on these approaches have switched to alternative forms of data collection. However, this has also created challenges by lowering response rates and changing the composition of respondents. Data users have been warned that labour market statistics published during the coronavirus (COVID-19) pandemic may be subject to greater uncertainty and lower international comparability than usual.
8. Related links

A10: International comparisons of employment and unemployment rates
Dataset | Released 17 May 2022
International comparisons of employment, unemployment and economic inactivity. The table contains data from the Organisation for Economic Co-operation and Development (OECD).

A01: Summary of labour market statistics
Dataset | Released 17 May 2022
Labour market statistics summary data tables. Table 17 presents comparisons of employment and unemployment rates for the group of G7 countries.

Movements out of work for those aged over 50 years since the start of the coronavirus pandemic
Article | Released 14 March 2022
The movement of people in the UK aged 50 to 70 years leaving the labour market during the coronavirus (COVID-19) pandemic and how this has changed for different sectors and demographic groups. Data from the Labour Force Survey.