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## The labour market impact of the COVID-19 crisis in the Nordic countries

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This chapter describes the labour market impact of the COVID-19 crisis in Nordic countries from an international perspective. As in most OECD countries, Nordic countries experienced a fast recovery of their labour markets. At the height of the crisis, unemployment rates increased more in Nordic countries than in many other European countries, but the increases were generally not more persistent. The contraction in employment rates in Nordic countries was similar to that of other European countries and generally short-lived. Nordic countries, however, exhibited varying degrees of resilience – with Sweden and Iceland experiencing slower recoveries. The differential impact of the crisis across industries translated into an unequal impact on groups of workers. Thanks to the robust recovery, much of the unequal impact had been reabsorbed by early 2022. Nevertheless, young people and workers without tertiary education felt the effects of the crisis more strongly and for longer across all Nordic countries.

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# In Brief

This chapter analyses the main labour market developments during the COVID-19 crisis in Nordic countries from an international perspective. The focus is on overall labour market resilience (i.e. the magnitude and length of fluctuations in labour market indicators in the wake of the crisis) and on differences in resilience across different groups of workers. Labour market resilience is crucial not only to limit short-term social costs but also to support labour market and economic performance in the medium to long term.

The analysis covers the period from the beginning of 2020 to the second quarter of 2022 and provides the following main findings:

- The COVID-19 crisis had an unprecedented impact on economic activity across the OECD. However, the subsequent recovery has been faster than expected thanks to the prompt and massive policy support for firms and households deployed by governments throughout the crisis and the rapid rollout of effective vaccines.
- Relative to the OECD as a whole, GDP fell less in the Nordic countries at the height of the COVID-19 crisis and grew more in the recovery. Indeed, the cumulative growth in GDP between Q4 2019 and Q2 2022 was larger in all Nordic countries except Iceland than for the OECD as a whole (+2.8%). The largest increases were recorded in Denmark (+5.5%) and Sweden (+5.1%).
- Like many other OECD countries, Nordic countries have seen a fast recovery of their labour markets following the COVID-19 crisis. Over the course of the crisis, the five countries, however, exhibited different degrees of resilience.
- All five countries experienced larger increases in unemployment than most other European countries that also made large use of job retentions schemes – with a particularly significant spike in Iceland. These increases were quickly reabsorbed in Norway, Denmark and Iceland, but Finland and Sweden experienced higher unemployment for longer than the OECD average.
- The falls in employment rates in Nordic countries were generally in line with those recorded in other European countries, except again for Iceland. This latter country recorded the slowest recovery in employment rate among all the OECD countries. Albeit of a smaller magnitude, the decline in employment rate was also comparatively persistent in Sweden, where a full recovery was achieved after eight quarters against an average of just over six quarters across all OECD countries.
- The differential impact of the crisis on industries has translated into an unequal impact on groups of workers, with young people, migrants and people without tertiary education generally seeing larger reductions in employment and increases in unemployment. However, thanks to the robust recovery, much of the unequal impact had been reabsorbed by early 2022.
- Nevertheless, young people and workers without tertiary education felt the effects of the crisis more strongly and for longer.
- Young people saw a longer contraction in employment than older workers in all Nordic countries except Iceland, although the latter was the country in which youth employment fell the most.
- The larger and longer decline in employment for people without tertiary education was also a common pattern across the Nordic countries. The hit for the low-educated was particularly prolonged in Sweden and Iceland – indeed one of the longest in the OECD. In the case of Iceland this was linked to the particularly large initial fall, but several countries had faster recoveries from

larger falls than Sweden. In Norway – which exhibited an overall high degree of resilience – the middle-educated suffered relatively more.

## 2.1. Introduction

**From the onset of the COVID-19 pandemic, Governments around the world quickly intervened to contain its spread and economic fallout.** A wide range of interventions were put in place in particular to cushion the labour market impact of the crisis, protecting jobs and incomes and preserving production capacity in an extremely uncertain environment (OECD, 2022<sup>[1]</sup>; OECD, 2020<sup>[2]</sup>; OECD, 2021<sup>[3]</sup>). These interventions and the subsequent recovery plans enhanced the resilience of labour markets across the OECD, fuelling a recovery from the COVID-19 crisis whose speed exceeded expectations in many cases.

The stark contrast of this experience with the slow recovery from the global financial crisis of 2008-09 highlights the importance of **labour market resilience, i.e. limiting fluctuations in employment and ensuring a quick rebound in the wake of economic shocks**. Labour market resilience is crucial not only to limit short-term social costs but also to support labour market and economic performance in the medium to long term (OECD, 2018<sup>[4]</sup>).

**On the eve of the COVID-19 crisis, the Nordic countries had some of the best-performing labour markets across the OECD.** In December 2019, the unemployment rate was below the OECD average of 6.1% in Norway, Iceland and Denmark, and only slightly above that level in Finland and Sweden. The Nordic countries had some of the highest indicators for resilience and inclusiveness across the OECD (OECD, 2018<sup>[4]</sup>). They also had good quality labour relations, high collective bargaining coverage rates and, except for Iceland, sectoral framework agreements with margins of flexibility to possibly derogate at lower level – the so-called organised decentralised and co-ordinated bargaining systems – that had helped enhance the resilience of their labour markets to previous crises (Box 2.1).

This chapter analyses the main labour market developments during the COVID-19 crisis in Nordic countries from an international perspective, covering the period from the beginning of 2020 to the second quarter of 2022. The focus of the analysis is on the overall resilience of the labour markets, as well as on the differential impact of the crisis across different demographic groups.

Section 2.2 describes the evolution of GDP in the Nordic countries over the crisis, while Section 2.3 looks at the evolution of unemployment and employment rates and their resilience, as captured by the length and magnitudes of deviations from pre-crisis levels. Section 2.4 moves to consider how the crisis has impacted different demographic groups and the resilience of their respective labour markets. Finally, Section 2.5 looks at the evolution of teleworking use and the policy challenges likely to arise from its structural increase.

### Box 2.1. How do Collective Bargaining systems compare in the Nordic countries?

In order to map out collective bargaining systems across countries, it is important to look at different features of the systems, notably the predominant level of bargaining where parties negotiate, but also the degree of flexibility of the system, which is determined by the rules governing the hierarchy between the different levels of bargaining and the possibility for firm to derogate or opt out in case of economic difficulties. In particular, systems based on sectoral-level and national/cross-sectoral level bargaining can be decentralised but in an organised way when firm-level agreements have a significant role in determining the terms of employment, but they are subject to specific conditions set either by law or social partners themselves. Moreover, the presence and degree of some mechanisms of co-ordination is key to prevent totally independent and atomised negotiations, but rather some synchronisation of different bargaining units when setting their strategy and targets. Finally, the quality of labour relations, in particular the level of trust between social partners, is another key aspect of collective bargaining systems.


All Nordic countries except Iceland (and Finland until 2015) have an organised decentralised and co-ordinated bargaining system (Table 2.1). In these countries, sectoral agreements, even in the case of extensions, leave significant room for lower-level agreements to set the terms of employment by leaving up to bargaining parties the design of the hierarchy of agreements. In these countries, co-ordination is relatively strong and usually takes the form of pattern bargaining, where a leading sector sets the targets first and others follow (OECD, 2019<sup>[5]</sup>). By contrast in Iceland, collective bargaining is rather centralised, sectoral agreements play a strong role and there is rather limited room for lower-level agreements to derogate from higher-level ones; moreover co-ordination is weak, partly due to the lack of significant pattern bargaining (OECD, 2017<sup>[6]</sup>).

**Table 2.1. Dashboard of collective bargaining systems in the Nordic countries, 2018**

	Predominant bargaining level	Degree of (de-) centralisation	Co-ordination	Trade union density in the private sector	Employers' organisation density	Collective bargaining coverage rate	Quality of labour relations
Norway	Sectoral	Organised decentralised	High	40-50%	70-80%	60-70%	High
Finland	Sectoral	Organised decentralised	High	50-60%	60-70%	80-90%	Medium
Denmark	Sectoral	Organised decentralised	High	60-70%	60-70%	80-90%	High
Sweden	Sectoral	Organised decentralised	High	60-70%	80-90%	80-90%	High
Iceland	Sectoral	Centralised	Low	90% or more	70-80%	80-90%	High

Note: The Quality of Labour Relations is an indicator based on the assessment of senior executives in The Global Competitiveness Index Historical Dataset © 2005-14 and © 2007-17 World Economic Forum.

Source: OECD/AIAS ICTWSS Database on collective bargaining and workers' voice, <http://www.oecd.org/employment/ictwss-database.htm>.

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Representative unions and employers' organisations as well as high quality relations between the social partners are preconditions for co-ordination and for a well-functioning collective bargaining system

(OECD, 2019<sup>[7]</sup>). In all Nordic countries, indicators of representativeness and quality of relations are generally high in international standards, but some differences emerge. While Denmark, Finland, Sweden and particularly Iceland have the highest trade union density across OECD countries, Norway has a comparatively low level (40-50%). The employers' organisation density is particularly high in Sweden where it reaches 80-90% but remains between 60% and 80% in the other Nordic countries.

Beyond collective bargaining, Nordic countries also differ in the extent to which social partners are engaged in broader social dialogue arrangements, which can supplement collective bargaining in crisis responses and contribute to the quality of labour relations. Social dialogue can be informal, such as ad hoc discussions with social partners initiated by the government or simple exchange of information, but also formal, such as social partners' involvement in systematic working groups or advisory bodies. Through informal and formal social dialogue, social partners can for instance raise voice regarding workers' and firms' interests, advise policy, participate in decision-making (not only at the national but also firm- and workplace levels) and manage schemes like unemployment benefits or training (although this is usually covered by collective agreements and thus collective bargaining).

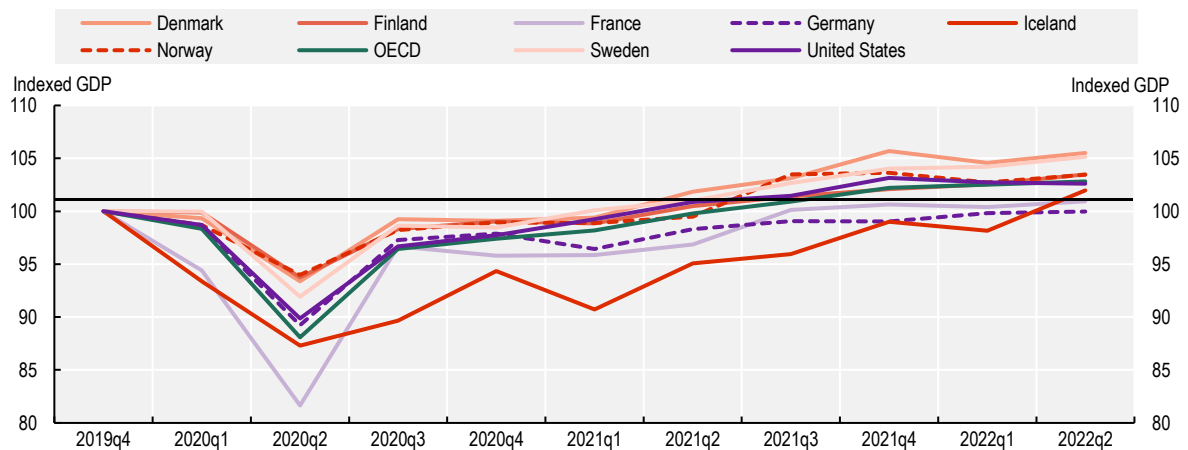
## 2.2. Relative to the OECD, GDP fell less in the Nordic countries at the height of the COVID-19 crisis and grew more in the recovery

**The COVID-19 crisis had an unprecedented impact on economic activity across the OECD. However, the subsequent recovery has been faster than expected thanks to the prompt and massive policy support for firms and households deployed by governments** throughout the crisis and the rapid rollout of effective vaccines (OECD, 2021<sup>[8]</sup>). In the second quarter of 2020, GDP for the OECD as a whole was 12% lower than in the last quarter of 2019. By Q3 2021, output had fully recovered and then continued to grow – albeit at slower pace – into the second quarter of 2022, climbing to 3.4 percentage points above its Q4 2019 level (Figure 2.1).

With the exception of Iceland, **Nordic countries generally saw a smaller initial decline in GDP compared to the OECD as a whole.** In Iceland, GDP fell 13% below pre-crisis levels in Q2 2020 and only fully recovered in Q2 2022. Denmark, Finland, and Norway saw an initial fall of GDP between 6% and 7%. Norway then achieved a full recovery at the same time as the OECD as a whole, while Denmark and Finland did so one quarter earlier, in Q2 2021. Sweden saw an initial GDP decline of just over 8% and experienced a faster recovery than most other OECD countries – with GDP already returning to pre-crisis levels by Q1 2021.

## Figure 2.1. GDP fell less in Nordic countries than for the OECD as a whole

Seasonally adjusted real GDP indexed to 100 in Q4 2019, selected OECD countries, Q4 2019 to Q2 2022



Note: OECD is the unweighted average of the 38 member countries.

Source: OECD calculations based on data from the (OECD, 2023<sup>[9]</sup>), *OECD National Accounts Database*, <https://stats.oecd.org/index.aspx?r=194170>.

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The economic disruptions from the wave of the pandemic driven by the Omicron variant in late 2021 and the early months of 2022 caused a slowdown in growth for the OECD as a whole, and even a contraction in some countries, including Denmark, Iceland and Norway. Nevertheless, the cumulative growth in GDP between Q4 2019 and Q2 2022 was larger in all the Nordic countries except Iceland than for the OECD as a whole (+2.8%). The largest increases were recorded in Denmark (+5.5%) and Sweden (+5.1%).<sup>1</sup>

A number of factors explain the variation in the magnitude of the economic impact of the crisis and in the speed of the subsequent recovery across countries, but their relative contributions are difficult to disentangle rigorously in the data. These factors include the size of the sectors more directly affected by (mandated or voluntary) limitations to inter-personal contact, the nature and length of the health restrictions adopted by countries and of the behavioural responses by consumers and firms, the timing and size of different waves of the pandemic, and the speed and scope of vaccination campaigns. For example, the particularly large decline in GDP in Iceland has been linked to the significant relative size of the tourism sector in the country, and that of Sweden to the fall in activity in its large, export-oriented manufacturing, while the relatively quick recovery in Denmark to the early adoption of vaccination passports and the consequential early lifting of restrictions in September 2021 (Norlén et al., 2022<sup>[10]</sup>; Statistics Finland et al., 2022<sup>[11]</sup>; OECD, 2021<sup>[3]</sup>). In a cross-country analysis, Rustichelli and Turner (2021<sup>[12]</sup>) find that the pre-crisis size of the travel and tourism sector is found to better explain cross-country differences in GDP growth in 2020, than exposure to any of the other sectors considered most vulnerable to COVID-19, or the average stringency of wider country lockdown measures during 2020.

## 2.3. Labour markets in Nordic countries recovered quickly from the crisis, but less so in Sweden and Iceland

### 2.3.1. Unemployment rates increased more in the Nordic countries than in many European countries, but the increase was generally not more persistent

As the crisis struck, the OECD unemployment rate increased to 8.2% in April 2020 from 5.3% in December 2019 (Figure 2.2, Panel A). Some countries – like the United States, Colombia and Costa Rica – saw very large and rapid increases in unemployment, but in the vast majority of countries that made significant use of job retention schemes (including the Nordic countries), the initial impact of the crisis was largely absorbed through a reduction in hours (OECD, 2021<sup>[8]</sup>). However, as the crisis lingered on, the burden of adjustment moved to the extensive margin, with many on short hours returning to work while jobs destroyed were not fully recovered – and unemployment rates picked up in many countries.

**In the Nordic countries, the initial impact of the crisis on unemployment was larger than in most of the other European countries that made significant use of job retention schemes** (see Chapter 2). Peak increases in unemployment (relative to December 2019) were larger in Sweden (+2.6 percentage points from 6.9%), Iceland (+2.4 percentage points from 4.5%) and Finland (+2.3 percentage points from 6.5%). In Denmark and Norway, the peak increases remained below 2 percentage points (from 4.9% and 4% respectively), but above those recorded in Italy, France, Germany and the United Kingdom. Within the Nordic region, the labour market impact of the crisis was particularly pronounced in the Åland Islands (see Box 2.2).

By January 2022, the OECD unemployment rate had returned to its pre-crisis level and continued a slower decline into the first half of the year. The fast recovery prevented the build-up of long-term unemployment which typically follows recessions – with the level of long-term unemployment remaining very close to pre-crisis levels in the Nordic ones, as indeed was the case more generally (OECD, 2022<sup>[11]</sup>). On average across the OECD countries included, between December 2019 and July 2022, the unemployment rate was above its starting level for 21 months with an average deviation of +1.1 percentage points. In July 2022, the unemployment rate was below pre-crisis levels in many countries, with an average deviation of -0.5 percentage points.

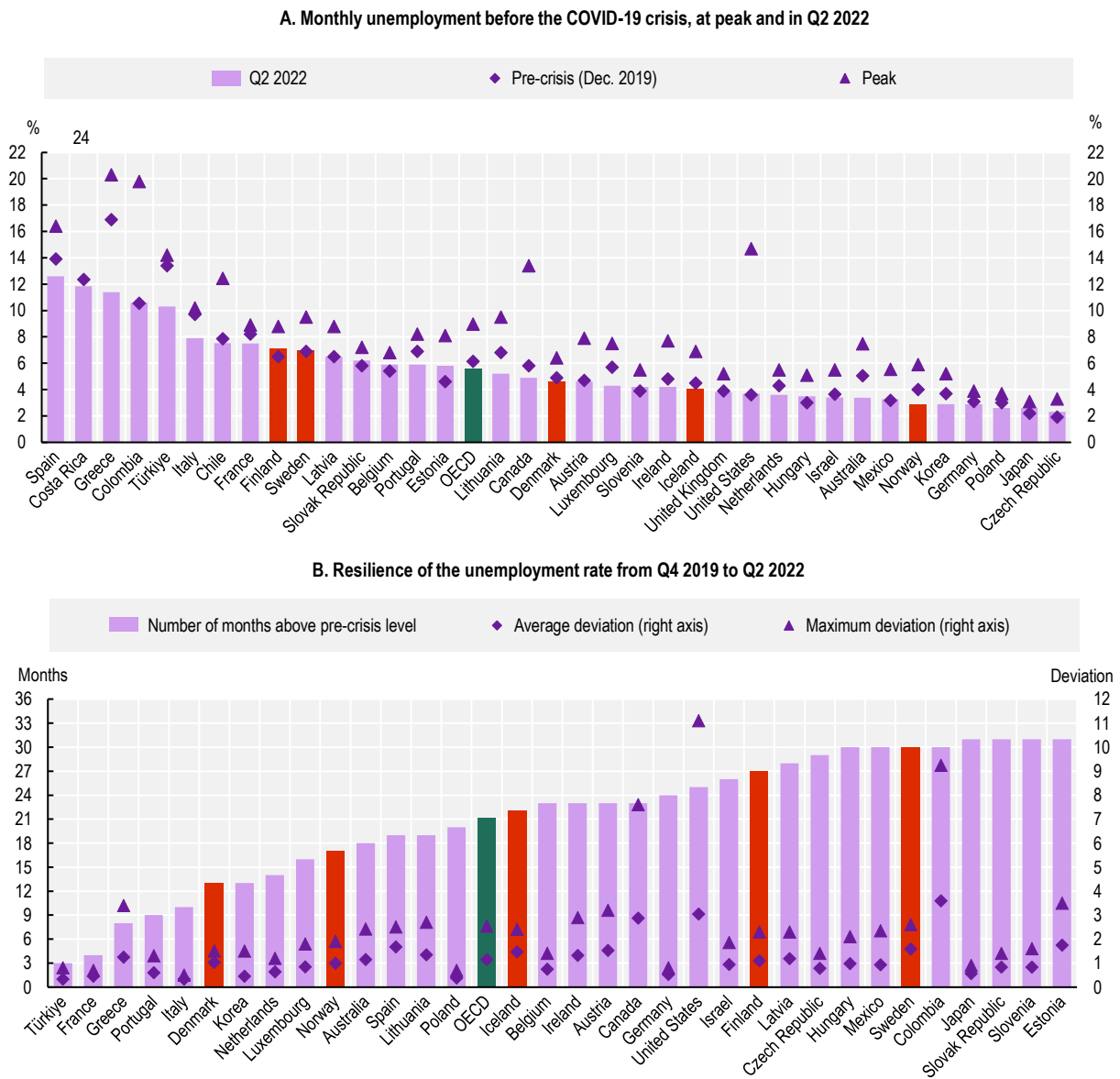
**The unemployment recovery was slower in Sweden and Finland than on average across the OECD** (Figure 2.2, Panel B) – Between December 2019 and July 2022, the unemployment rate was above its initial level for 30 months in Sweden, for 27 months in Finland. Despite experiencing similar peak increases to Sweden and Finland, Iceland saw a faster decline in its unemployment rate which remained above pre-crisis levels for 22 months – in line with the OECD average. Indeed, in July 2022, the unemployment rate remained slightly above pre-crisis levels in both Finland and Sweden, while it had fallen below that level in Iceland (-0.4 percentage points to reach 4.1%).

**The Danish and Norwegian unemployment rates proved particularly resilient to the COVID-19 crisis, experiencing a faster recovery than on average across the OECD.** In Denmark and Norway, the unemployment rate remained above its baseline level by an average of 1 percentage point over 13 and 17 months respectively. Several OECD countries experienced slower recoveries than Denmark and Norway, despite seeing a larger overall increase in unemployment. These countries included Iceland and Finland – as mentioned above – but also some of the European countries that made larger use of job retention schemes, like Belgium and Germany. While many factors that cannot be disentangled contribute to differences in performance – including the structure of the economy, the timing of the pandemic, institutional factors and other policy changes – the result is suggestive that the comparatively lower reliance on job retention schemes did not undermine the resilience of the Danish and Norwegian labour markets (see Chapter 2).



**Figure 2.2. Unemployment increased in the Nordic countries more than in most other European countries, but the recovery was generally fast**

Seasonally adjusted unemployment rates and resilience of unemployment rates, persons aged 15-64



Note: OECD represents the unweighted average of the 36 and 33 countries shown respectively in each panel.

Source: OECD calculations based on data from (OECD, 2023<sup>[13]</sup>), *OECD Short-term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=35253>.

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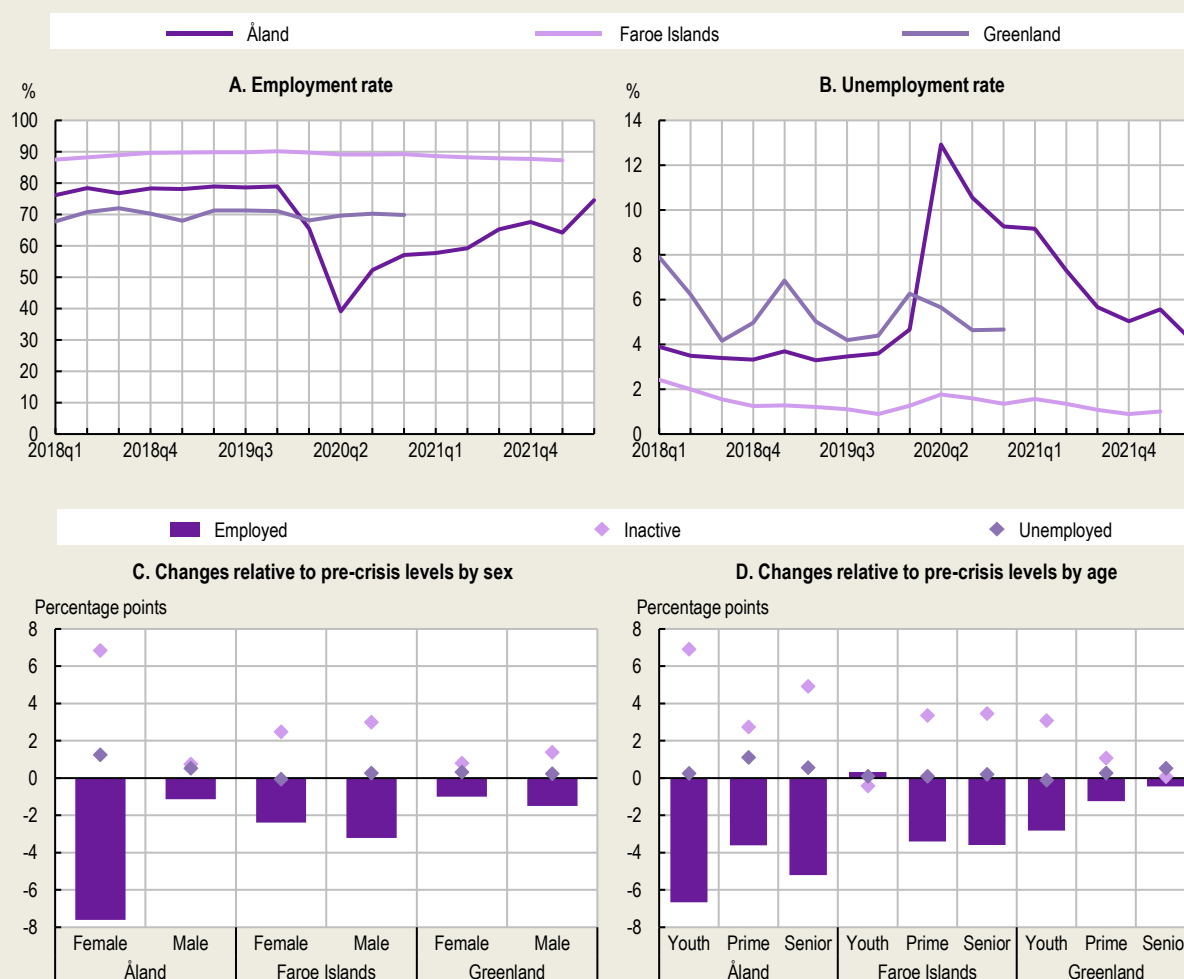


## Box 2.2. The labour market in the autonomous territories during the COVID-19 crisis

The COVID-19 crisis has had a very strong impact on the labour market of the Åland Islands – much larger than in any of the Nordic countries. This was largely driven by the severe hit that tourism and the shipping industry took when travel restrictions were introduced in March 2020 which led to a drop in GDP in 2020 of 19% – far larger than in any of the Nordic countries (see Section 2.2). In Q2 2020, the employment rate almost halved relative to its Q4 2019, reaching 39% (Figure 2.3, Panel A). The unemployment rate soared from 3.6% to 12.9% (Panel B).


### Figure 2.3. Labour market performance in Åland Islands, Faroe Islands and Greenland

Changes in employment, inactivity and unemployment rates, not adjusted for seasonality



Note: The pre-crisis level is benchmarked at Q2 2019 for the Åland Islands and Q4 2019 for the Faroe Islands and Greenland. The latest data point is Q2 2022 for the Åland Islands, Q1 2022 for the Faroe Islands and Q4 2020 for Greenland. The working-age population is defined as those aged 15-64 for the Åland Islands, 15-66 for the Faroe Islands and 18-65 for Greenland. *Youth* refers to persons aged 15-24 (Åland), 16-24 (Faroe Islands) and 18-24 (Greenland), *Prime* to persons 25-54 and *Senior* to persons 55 and over.

Source: OECD calculations based on the register-based unemployment and the size and structure of the population (Statistics and Research Åland (ÅSUB), OECD calculations based on the register-based monthly unemployment and population (Statistics Faroe Islands), Labour force among permanent residents (Statistics Greenland).

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The Åland Islands deployed financial support for the many small firms operating in the autonomous territories in order to prevent bankruptcies and hiring subsidies for the unemployed. This helped alleviate the social cost of the crisis. Yet, the labour market contraction in the Åland Islands has been more persistent than in most of the Nordic countries. Two full years since the start of the crisis, the employment rate had not fully recovered in Q2 2022 – remaining more than 4.3 percentage points below its baseline level. The impact of the crisis was particularly large for women and young people, with both employment rates down by more than 6 percentage points compared to pre-crisis levels (Panels C and D).

The labour market impact of the COVID-19 crisis was much more muted in the Faroe Islands and Greenland and more in line with the developments in the other Nordic countries. In the Faroe Islands, the employment rate gradually fell by 2.6 percentage points to 87.3% in the four quarters ending in Q1 2022 (Panel A). The unemployment rate edged up to 1.8% in Q2 2020 but fully recovered to pre-crisis levels by Q1 2022 (Panel B). The impact of the crisis was stronger among adults and older workers (Panels C and D).

In Greenland, the employment rate (not seasonally adjusted) fell by 1.3 percentage points to 70% in the four quarters to Q4 2020, while in each of the last three quarters of 2020 the unemployment rate was only about 0.5 percentage points higher than those in the corresponding quarter of 2019 (Panels A and B). Young people were disproportionately affected by the crisis, consistent with the pattern observed throughout the OECD (see Section 2.4).

### ***2.3.2. The contraction in employment rates in Nordic countries was similar to that of other European countries and generally short-lived, with the exception of Sweden and Iceland***

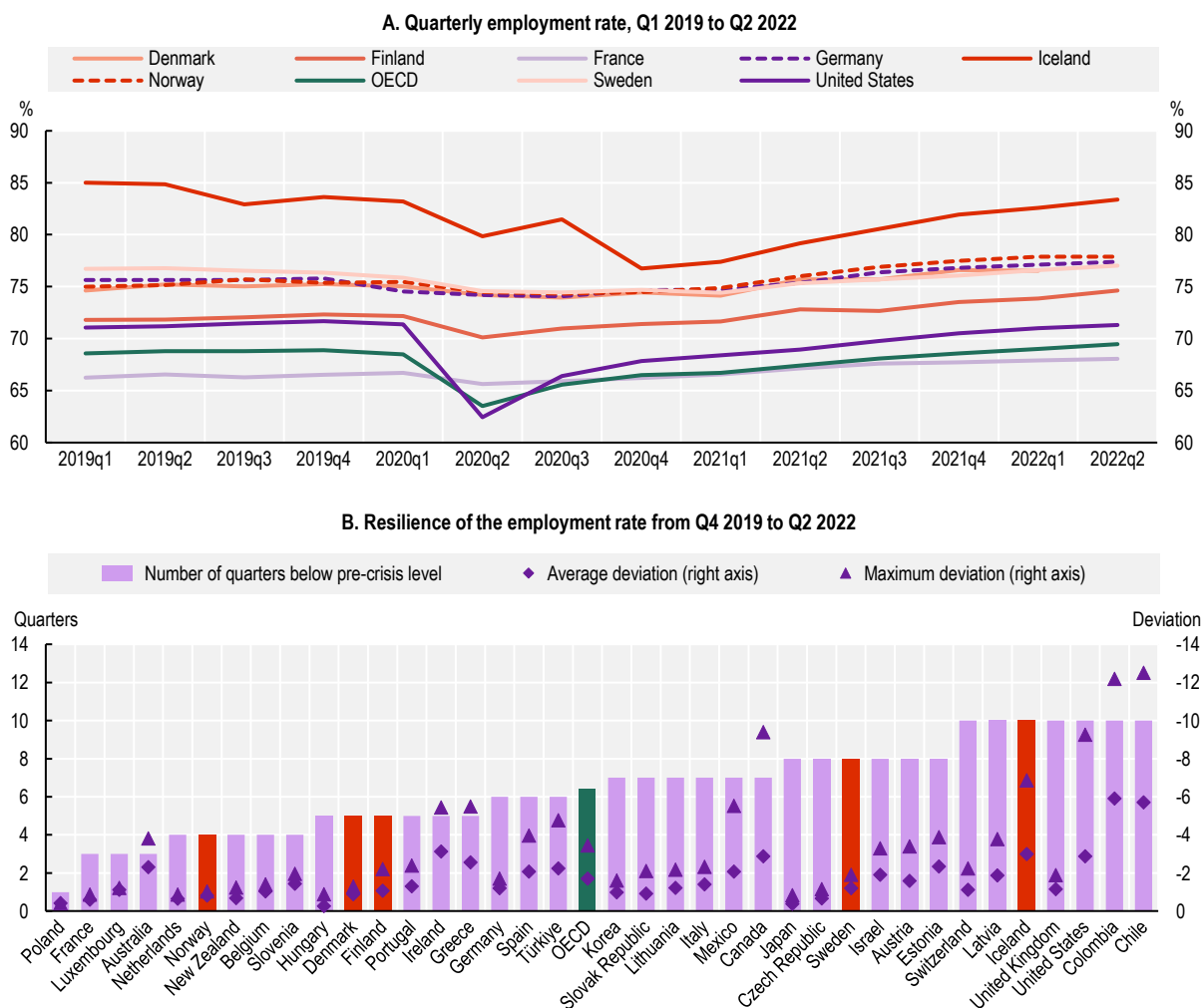
Similar to the unemployment rate, **the employment rate also fell much more during the COVID-19 crisis in countries that made only limited use of job retention scheme**, like the United States and Chile (Figure 2.4). **Iceland was the only Nordic country to experience a contraction in the employment rate larger than the OECD average (-6.9 percentage points vs -3.5 percentage points)** (Figure 2.4, Panel B). In the other Nordic countries, the maximum decline in employment rates were between 1 percentage point and just over 2 percentage points, similar to other European countries that made significant use of job retention schemes, like Germany, the United Kingdom and Switzerland.

**The employment recovery was slower in Iceland and Sweden than on average across the OECD** (Figure 2.4, Panel B). Indeed, Iceland experienced the largest and most persistent decline in employment rates among the Nordic countries (and one of the most persistent in the OECD more generally), though starting from one of the highest levels in the OECD (83.6% in Q4 2019) (Figure 2.4, Panel A). Iceland was the only Nordic country whose employment rate remained marginally below its pre-crisis level in Q1 2022 – with an average deviation from the Q4 2019 base line of -3.3 percentage points per quarter (Figure 2.4, Panel B).

**In Sweden, the decline in employment rate was also relatively persistent albeit of a smaller magnitude** (Figure 2.4, Panel B). Indeed, the employment rate in Sweden returned to the pre-crisis baseline only in Q1 2022 after eight quarters, against an average of just over six quarters across all OECD countries with data available. The employment recovery in Sweden appears comparatively long especially in relation to the maximum decline of -1.9 percentage points. Sixteen OECD countries experienced larger maximum declines but faster recoveries than Sweden. One of these countries is Finland where the employment rate fell by a maximum of 2.2 percentage points but remained depressed over the whole period for only five quarters (with an average quarterly deviation from its Q4 2019 level of -1.1 percentage points).

**Figure 2.4. The fall in the employment rate was generally small and short-lived in Nordic countries, with the exception of Iceland and Sweden**

Seasonally adjusted quarterly employment rates and resilience of employment rates, persons aged 15-64



Note: OECD is an unweighted average and excludes Costa Rica.

Source: OECD calculations based on data from (OECD, 2023<sup>[13]</sup>), *OECD Short-term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=35253>.

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**Norway, Denmark, and Finland experienced a faster recovery in employment than the OECD average.** The employment rate was below pre-crisis levels for five quarters in Denmark and Finland falling by a maximum of 1.3 percentage points and 2.2 percentage points respectively, while Norway saw a maximum contraction of 1.3 percentage points and one of the fastest recoveries in the OECD (over only four quarters). Indeed, only four OECD countries experienced a decline in employment rate at least as large as that of Norway and recovered in no more than four quarters (Luxembourg, Australia, New Zealand, and Slovenia).

An alternative way to assess the recovery of the employment rate is to compare its evolution against its pre-crisis trend rather than level. This has the advantage of recognising that countries whose employment were on a growing trend might revert to pre-crisis *levels* more quickly, but still lag behind where they would

have been in the absence of the COVID-19 crisis. However, the limitation of this approach is the assumption that the pre-crisis trends (which occurred in generally strong labour markets) provide a valid benchmark to assess where employment would have been in the absence of the COVID-19 crisis.

**This analysis of the employment deviation from its pre-crisis trend, confirms that Sweden and Iceland experienced a relatively slow recovery.** Indeed, the employment rate of Sweden was still below its pre-crisis *trend* in Q2 2022 – despite having already passed its pre-crisis *level* (see Annex Figure 2.A.1). In Iceland, the employment rate was below both its pre-crisis trend and level in Q2 2022.

**Similarly, this analysis confirms that Norway and Denmark experienced quick recoveries, returning to pre-crisis trends in early 2021 and late 2021 respectively.** Finland is the only country for which the trend analysis leads to a slightly different conclusion. Indeed, as mentioned above, its employment rate returned to pre-crisis *levels* quickly – already at the start of 2021 – but in Q2 2022, it was still below its pre-crisis *trend*.

## 2.4. The unequal impact of the crisis on sectors translated into an unequal impact on different demographic groups

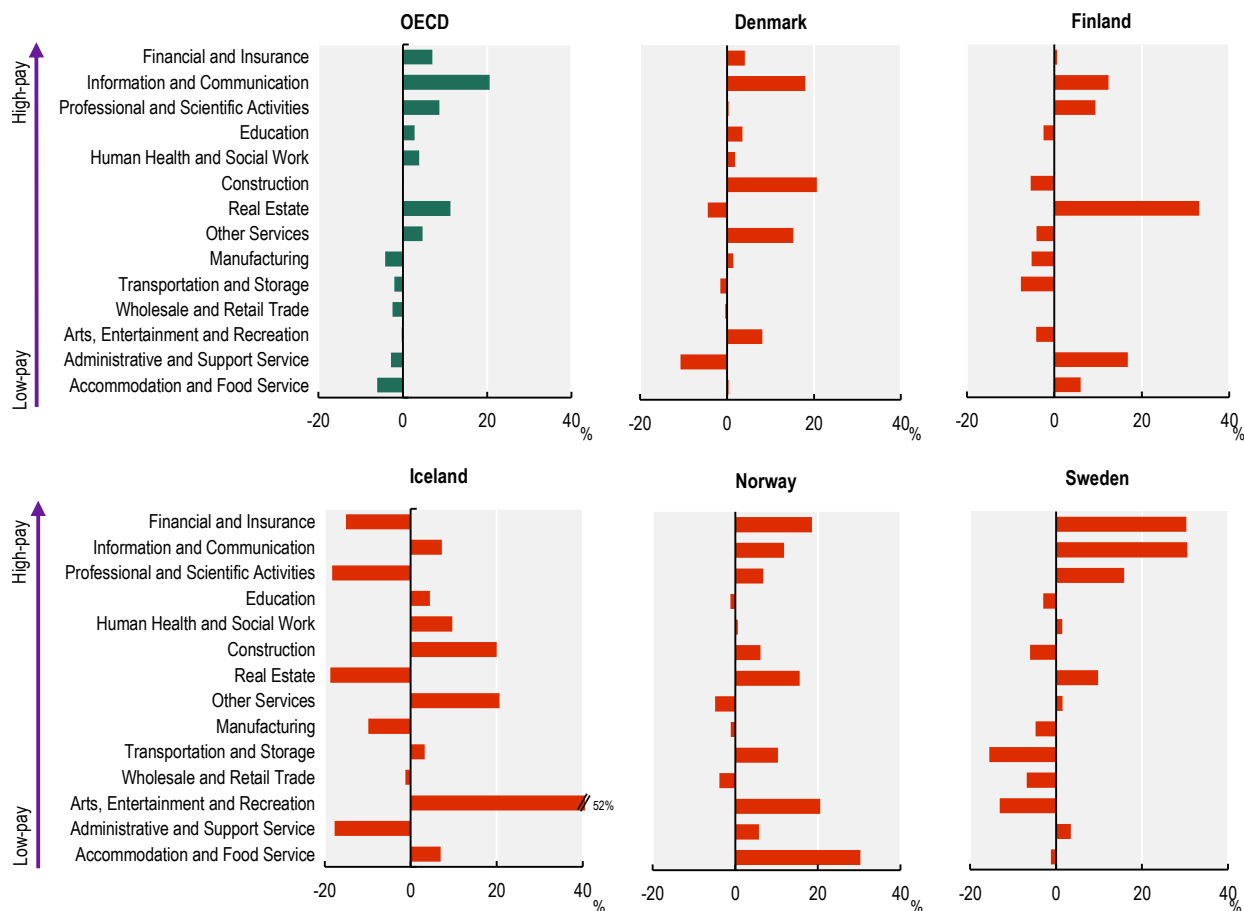
The markedly asymmetric impact across sectors is a distinctive feature of the COVID-19 crisis that is well documented (OECD, 2021<sup>[8]</sup>). **Industries where telework was not feasible – such as accommodation and food services, arts, and transportation and storage – saw larger reductions in hours and employment losses across countries.** By contrast, other service industries such as information and communication, as well as financial and insurance activities, saw an increase in activity already over the course of 2020. As the pandemic protracted into 2021, industries with limited teleworking possibilities continued to be affected disproportionately by more targeted restrictions and persistent changes in consumers' habits even as the overall economic impact of each successive wave became smaller.

Across the OECD, **the differential impact of the crisis on different industries was a significant driver of the impact of the crisis across different groups of workers** (OECD, 2021<sup>[3]</sup>; OECD, 2022<sup>[1]</sup>). The low educated, the young and migrants were more likely to work in industries where telework was less feasible and as a result felt the impact of the crisis more strongly.

**Two years since the onset of the crisis, employment changes by industry across OECD countries were still very clearly shaped by the pandemic** (Figure 2.5). Relative to the same quarter of 2019, in Q2 2022,<sup>2</sup> lower-pay industries exhibited employment losses or modest growth, while higher-pay service industries reported larger employment gains. Construction and Manufacturing – two sectors that employ many medium earners – recorded stable or declining employment. Employment also increased in Health and Education – two medium pay sectors that have been heavily affected by the pandemic.


**Figure 2.5. Low-pay industries are lagging behind in the recovery**

Average percentage change in employment by industry across Nordic countries, Q2 2022 relative to Q2 2019



Note: The figure reports the unweighted average of the percentage change in employment by industry relative to Q2 2019, not seasonally adjusted. Industries are ranked by the median wage in 2019 in the European Structure of Earnings Survey (SES). The ranking of industries is broadly consistent when 2019 data on median wages from the Current Population Survey of the United States are used. OECD represents the unweighted average of 30 countries: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, Norway, Poland, Portugal, Slovak Republic, Spain, Slovenia, Sweden, Switzerland and the United States. See the main text for a discussion of the statistical break that occurred in the series provided by Eurostat in Q1 2021.

Source: OECD calculations based on the Australian Bureau of Statistics, the Canadian Labour Force Survey, the National Employment Survey (ENE) for Chile, the European Labour Force Survey (EULFS) for European countries, the National Survey of Occupation (ENOE) and Telephone Survey of Occupation and Employment (ETOE) for Mexico, the UK Labour Force Survey, and the Current Population Survey (CPS) for the United States.

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In Sweden and (to a lesser extent) in Denmark, employment dynamics across industries were similar to those seen on average across the OECD, with employment remaining generally depressed in low-pay industries but having grown in high-pay ones. In the other Nordic countries – and most notably in Norway – employment had also grown above pre-crisis levels in some low-pay industries, though generally less than in high-pay industries.

### **2.4.1. The crisis hit young people's employment harder and for longer, but by early 2022 they had recovered in all Nordic countries except Sweden**

**The initial impact of the crisis was stronger on young people than older adults across the OECD, including in the Nordic countries.** The employment rate of youth declined by a maximum of 5.6 percentage points relative to its level in Q4 2019 on average across the OECD countries with data available (Figure 2.6, Panel A). The corresponding figure for workers aged 25 to 54 was 3.8 percentage points (Annex Figure 2.B.1, Panel A).

In Iceland, the youth employment rate fell by 9.5 percentage points reaching 60%, against a fall of just over 7 percentage points for the older adults. In Sweden, Finland, and Denmark, the differential impact of the crisis on the youth was particularly pronounced – even though the overall fall in employment was smaller than in Iceland (see Section 2.3). In Sweden and Finland, the youth employment rate fell by 5.5 percentage points, while in Denmark by just over 4 percentage points. By contrast, the 25 to 54 age group experienced a drop in employment rate of around 1.5 percentage points in all three countries. In Norway, in the context of an overall smaller contraction, the differences between the two age groups were smaller, with the employment rate falling by just over 2 percentage points for the young and by about 1.6 percentage points for the older group.

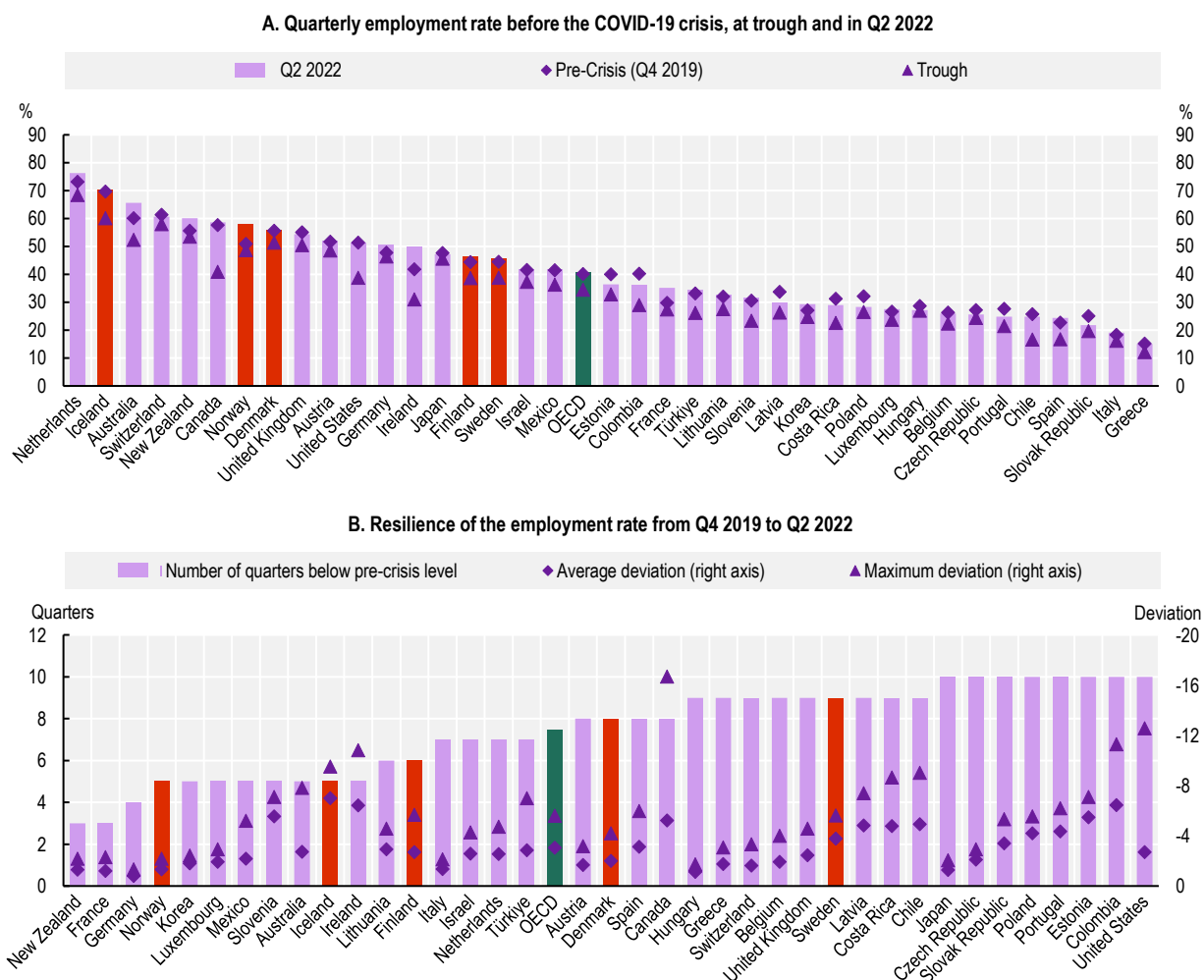
**By Q2 2022, however, the employment rate of young people had fully recovered in all the Nordic countries, except Sweden** where it stood at about 42.4% in Q1 2022 vs 44.4% in Q4 2019. In Iceland, Denmark and Norway, the youth employment rate increased by more than that of older adults relative to the pre-crisis baseline. In Finland, youth and older adults' employment grew by a similar amount. Over the same period, the OECD average indicates a full recovery of the youth employment rate, but a slightly stronger performance for the employment rate of older adults.

Despite the progress, however, **the cumulative impact of the crisis on employment rates was larger for young people than older adults in all Nordic countries, except Iceland.** Indeed, between Q4 2019 and Q1 2022, in Denmark, Norway, Finland and Sweden, the youth employment rate was below pre-crisis levels for more quarters than that of older adults (on average by two quarters) and by a larger amount (on average by -2.8 percentage points). This pattern was seen in a total of 21 countries in the OECD, but not in Iceland where – despite its larger maximum fall – the youth employment was below pre-crisis levels for fewer quarters than that of older adults (five vs eight).<sup>3</sup>

**The impact of the crisis on youth unemployment rate was generally less persistent** (Annex Figure 2.C.1). As the crisis struck, the unemployment rate increased more for the youth than for older adults in almost all the OECD countries, including the five Nordic countries. Among the Nordic countries, the largest increases were recorded in Sweden and Iceland, where the youth unemployment rate increased by about 5 percentage points reaching 25% and 15% respectively. By Q1 2022, youth unemployment had all but returned to pre-crisis levels in Iceland (+0.5%) but remained 3 percentage points above that level in Sweden. The other Nordic countries are among the 26 OECD countries in which the youth unemployment rate had fallen below pre-crisis levels by Q1 2022. The improvement of the unemployment rate was particularly strong in Finland (14.2% or -3.8 percentage points compared to Q4 2019) and Denmark (8.6%, a fall of -1.7 percentage points). In both countries, older adults saw smaller improvements in their unemployment rates.

**Figure 2.6. The crisis had a large and persistent impact on the employment of young people**

Seasonally adjusted employment rates and resilience of employment rates, persons aged 15-24



Notes: OECD is an unweighted average.

Source: OECD calculations based on data from (OECD, 2023<sup>[13]</sup>), *OECD Short-term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=35253>.

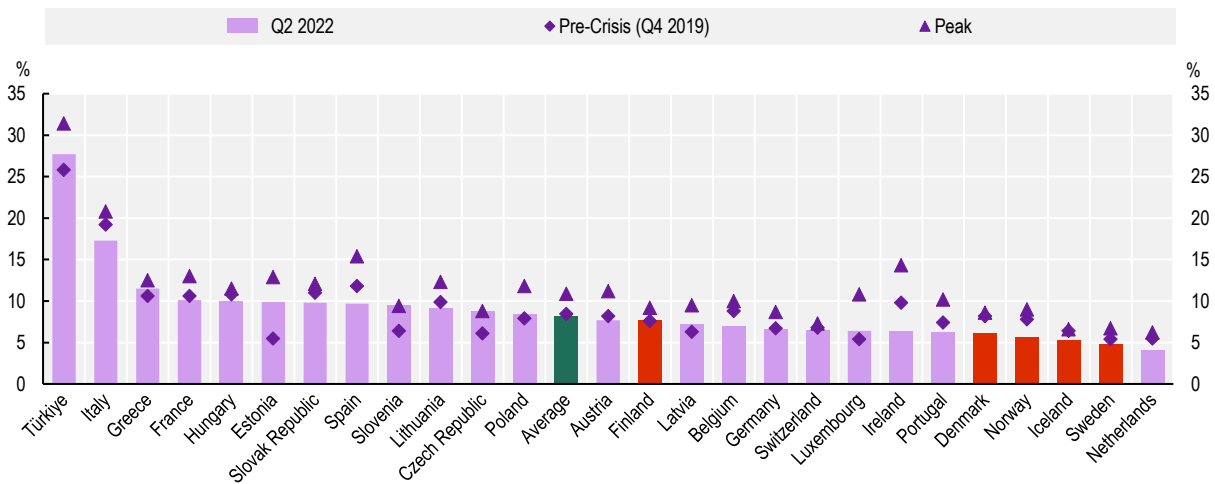
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**The good performance of youth during the recovery is also reflected in the decline in the share of young people not in employment, education or training (NEET) in Q2 2022 relative to pre-crisis levels (Figure 2.7).** On average across 24 European member countries, the NEET rate had declined by 0.4 percentage points, having re-absorbed the increase seen at the beginning of the crisis to return to historically low levels (OECD, 2021<sup>[8]</sup>). In all the Nordic countries the NEET rate was either at the pre-crisis level (Finland) or below it. A decline occurred also in Sweden despite the sluggish performance of the other labour market indicators for youth (0.7 percentage points to reach 4.7%), while the largest decline was recorded in Norway, where the NEET rate declined by 2.2 percentage points to reach 5.6%.



**Figure 2.7. The share of young people not in employment, education or training are at pre-crisis levels or below in all the Nordic countries**

Share of persons aged 15-24 not in employment, education or training (NEET), seasonally adjusted



Note: The green bar represents the unweighted average of the 24 European member countries shown, excluding Switzerland and Türkiye for which the latest quarter is Q4 2020.

Source: (Eurostat, 2023<sup>[14]</sup>), *Young people neither in employment nor in education and training (NEET), by sex and age – quarterly data*, [https://ec.europa.eu/eurostat/databrowser/view/lfsi\\_neet\\_q/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/lfsi_neet_q/default/table?lang=en).

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#### **2.4.2. People without tertiary education experienced a larger and longer negative shock from the crisis, but had recovered by Q2 2022**

**The initial impact of the crisis on employment was larger for people without tertiary education across the Nordic countries and the OECD more broadly.** On average across the countries with data available, the employment rate fell by a maximum of 3.5 percentage points for those with low education (Figure 2.8, Panel B) and by 3.7 percentage points for those with medium education (Annex Figure 2.B.2, Panel B). For people with high education the corresponding figure was 2.2 percentage points.

Relative to that of people with high education, the employment rate of the low-educated fell further in all the Nordic countries except Norway, and that for the middle-educated in all except Sweden. The fall in the employment rate for the low-educated was particularly large in Iceland (-10 percentage points to 65% – the largest among the 24 countries with data) and Sweden (-4.2 percentage points to 55%). In Finland, the middle educated experienced a particularly large drop in the employment rate compared to the general overall employment performance. Their employment rate fell by 3.5 percentage points to 71.3%.

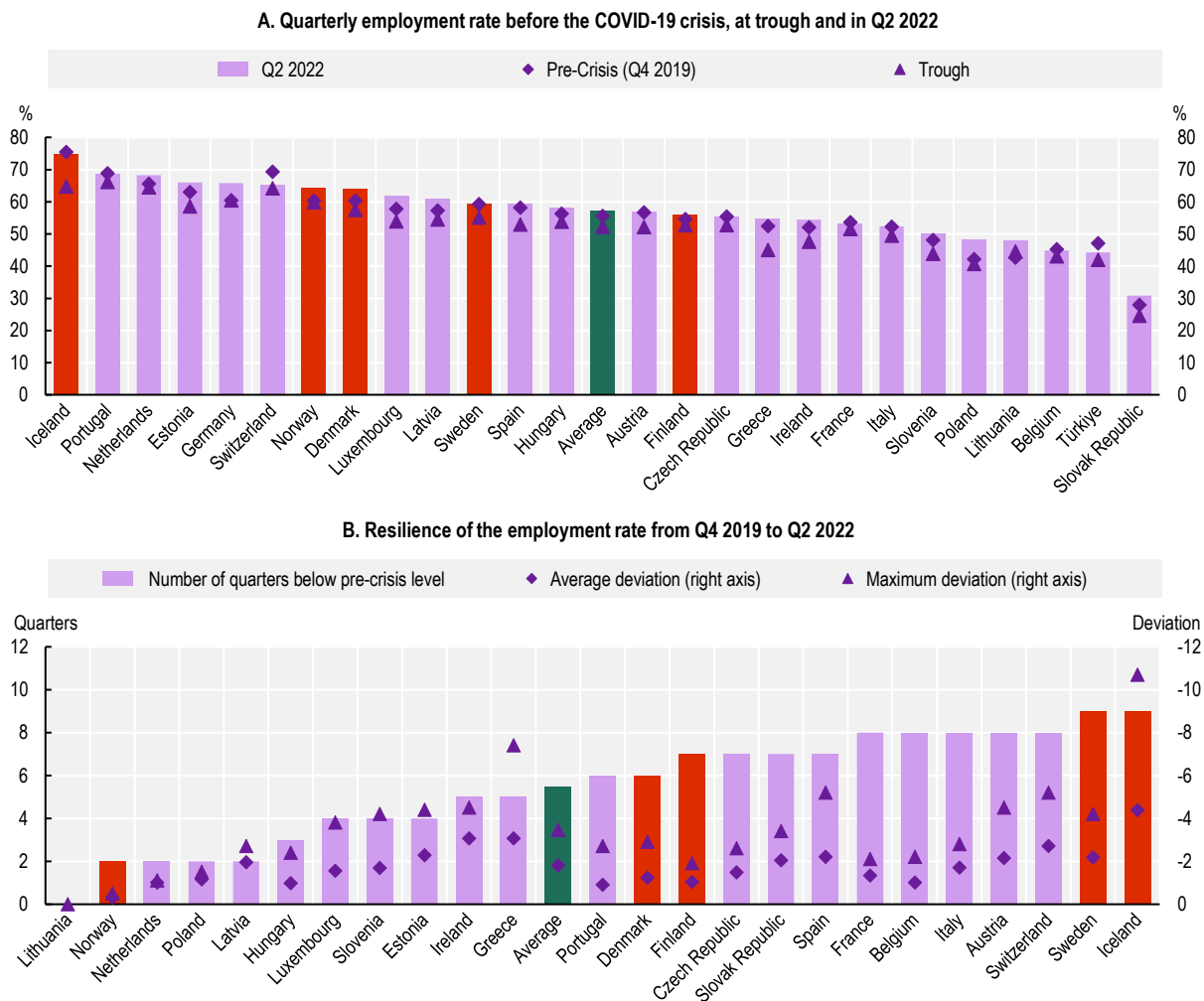
**The cumulative impact of the crisis over the whole period – from Q4 2019 to Q2 2022 – was generally larger for the low-educated and middle-educated across the OECD, including in the Nordic countries.** In fact, their employment rate remained below pre-crisis levels for longer and by a larger amount than for the highly educated. In Sweden and Iceland, in particular, the low-educated experienced the longest contraction in employment among the 24 countries with data available (Figure 2.8, Panel B). Indeed, in Sweden the employment rate of the group only returned to pre-crisis levels in Q2 2022 after nine quarters below pre-crisis levels by an average of 2.2 percentage points. Iceland was the only Nordic country where the employment rate of the low-educated remained (marginally) lower than its pre-crisis levels – after nine quarters with an average deviation of -4.4 percentage points. While in Iceland the slow recovery was linked to the very large initial drop mentioned above, several countries experienced

maximum drops at least as large as that of Sweden but faster recoveries, including Switzerland, Spain, Ireland and Estonia.

At the other end of the spectrum, the overall resilience of the Norwegian labour market to the COVID-19 crisis was also very evident among the low-educated, as their employment saw the smallest contraction and one of the quickest recoveries in the OECD.


**Figure 2.8. The low-educated saw large and persistent contractions in employment in some of the Nordic countries**

Seasonally adjusted employment rates and resilience of employment rates, persons aged 20-64 with low education



Note: The green bars represent the unweighted averages of the 26 and 24 European member countries shown respectively in each panel. Low-educated are persons with less than primary and lower secondary education based on ISCED 2011, levels 0-2. Age group restricted to 20-64 to be consistent with unemployment by education level.

Source: (Eurostat, 2023<sub>[15]</sub>), *Employment by educational attainment level – quarterly data*, [https://ec.europa.eu/eurostat/databrowser/view/LFSI\\_educ\\_Q/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/LFSI_educ_Q/default/table?lang=en).

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There was less variation across the Nordic countries in terms of the time that the employment rate of the middle-educated remained under its pre-crisis level between Q4 2019 and Q2 2022 (Annex Figure 2.B.2,

Panel A). In Iceland the recovery was still incomplete by the end of the observation period, as the employment rate of the middle educated stood 1.7 percentage points below its pre-crisis levels. Belgium and the Slovak Republic experienced contractions of a similar length, even though their maximum fall in employment was more modest.

**In Norway, the labour market of the middle-educated proved less resilient than that of the other education groups.** Indeed, the employment rate of the middle-educated was below its Q4 2019 level by an average of 1.2 percentage points for eight quarters in the period ending in Q2 2022. This was the same length as Sweden, which, as discussed above, had a significantly slower employment recovery overall. In fact, in Q2 2022, the employment rate of the middle-educated had returned to pre-crisis levels in Sweden but remained marginally below that level in Norway. Finland was among the countries where the employment rate of the middle-educated recovered more quickly than Norway and Sweden despite a larger maximum fall.

Reflecting the broader pattern across the OECD, **people without tertiary education also experienced larger increases in unemployment during the crisis in all Nordic countries** (Figures in Annex 2.C). However, the differences between education groups in the cumulative impact of the crisis over the two-year period were generally smaller than for employment. By Q2 2022, the unemployment rate had improved for the low-educated relative to pre-crisis levels in Denmark and Norway but remained above pre-crisis levels in the other three Nordic countries. For the middle-educated, in Q2 2022, the unemployment rates had broadly returned to pre-crisis levels in all the Nordic countries.

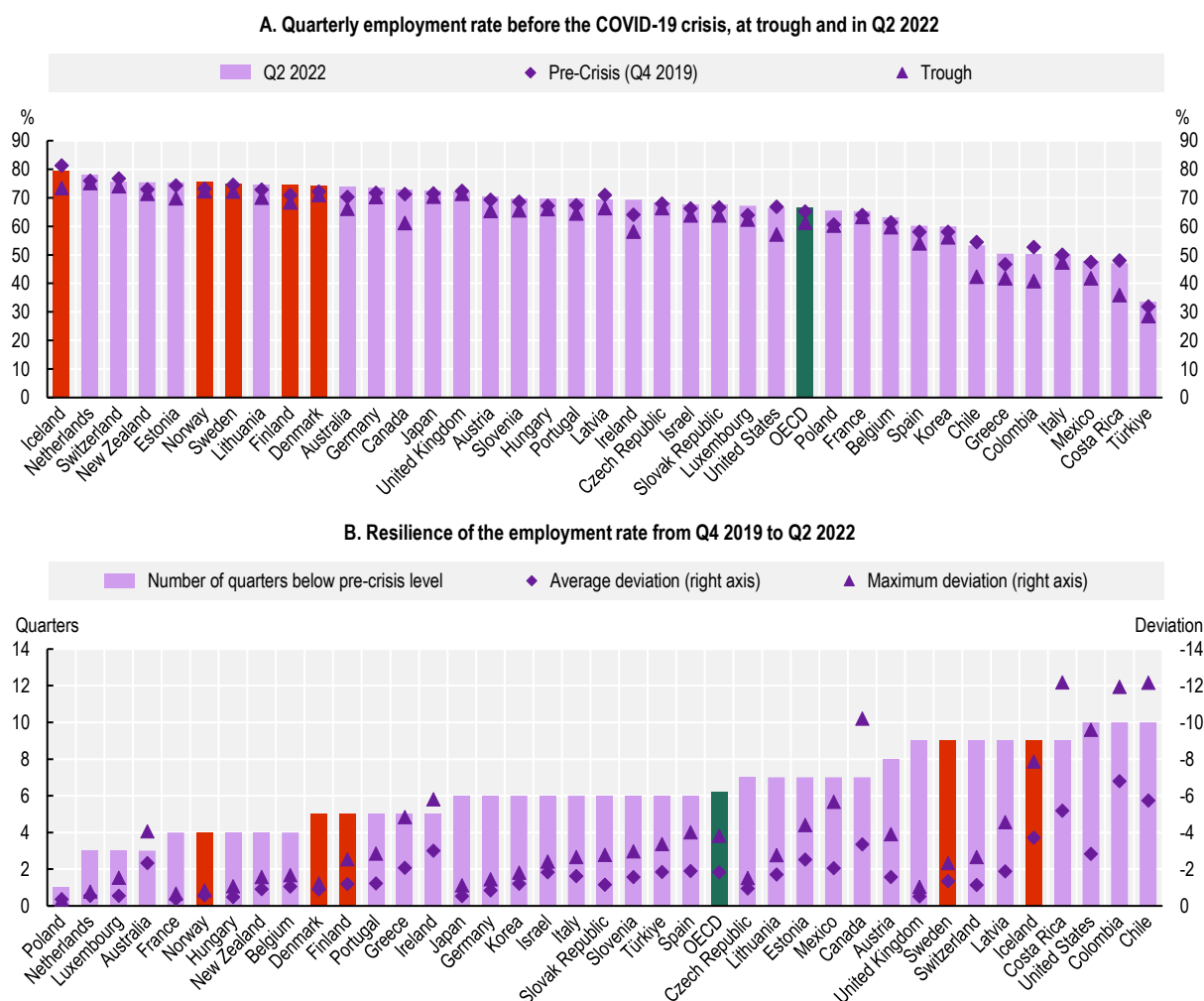
#### ***2.4.3. Women's employment has recovered across the OECD and in most of the Nordic countries***

**The initial employment impact of the crisis was generally larger for women across the OECD**, but the differences between the two genders were mostly small (-3.8 percentage points for women and -3.7 percentage points for men on average across all countries). At the onset of the crisis, the Nordic countries featured some of the highest employment rates for women in the OECD (Figure 2.9, Panel A). Women saw larger peak declines than men in employment in Sweden, Iceland, and Finland. In all five Nordic countries, the differences in the impact between women and men did not exceed 0.7 percentage points in absolute value.

Over the recovery, however, **women's employment recovered at least as quickly as that of men in almost all countries**. Sweden was one of the only four OECD countries in which the employment rate contraction between Q4 2019 and Q2 2022 was longer for women, lasting nine quarters with an average quarterly deviation of -1.3 percentage points vs seven quarters with an average deviation of -1.1 percentage points for men. In Iceland, the employment rate of both genders was still below pre-crisis levels in Q2 2022 – after nine quarters. By contrast, the women's employment rate deviated from its baseline level for fewer quarters than men's in Norway and Finland – and for the same number of quarters (and average deviation) in Denmark.


**Figure 2.9. Women's employment quickly recovered from the initial hard blow of the crisis**

Seasonally adjusted female employment rates and resilience of employment rates, ages 15-64



Note: OECD is an unweighted average.

Source: OECD calculations based on data from (OECD, 2023<sup>[13]</sup>), *OECD Short-Term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=35253>.

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**By early 2022 the employment gap between women and men had decreased in most OECD countries. Among the Nordic countries, this occurred in Denmark and Finland.** In the other three Nordic countries the employment gap grew slightly, with the largest increase recorded in Iceland, where in Q2 2022, employment was still below pre-crisis levels by 1.8 percentage points for women and by 0.3 percentage points for men.

The evolution of the unemployment rate tells a similar story across the OECD broadly and the Nordic countries in particular. **The initial impact of the crisis on unemployment was larger for women, but they recovered much of the lost ground in subsequent quarters.** Among the Nordic countries, women's unemployment rate remained above pre-crisis levels in Q2 2022 in Sweden (8.5% or +1.1 percentage points since Q4 2019) and Iceland (4.9% or +1.5 percentage points) – in both cases by more than for men.

#### **2.4.4. Over the recovery, migrants recovered most of the lost ground in all Nordic countries, but their unemployment rate was still lagging behind in Sweden and Iceland in Q2 2022**

The initial severe impact of the crisis on migrants across countries has been documented using different approaches and pre-crisis reference points in the literature (see for example (OECD, 2020<sub>[16]</sub>; OECD, 2022<sub>[17]</sub>). Unlike for the other demographic groups covered in the previous sections, seasonally adjusted data that also account for the statistical break in the series of the countries covered by Eurostat are not available for employment and unemployment by country of birth. Hence, to deal with the statistical break in the series, this section uses series corrected following the procedure described in Annex 2.E. To deal with seasonality, the section compares the last data point in the observation period (Q2 2022) with the same quarter of 2019 – omitting the resilience analysis presented in the other sections due to the difficulty of isolating seasonal effects across different quarters. The timing of peak and trough points varies across countries and do not always correspond to Q2 2020 and so it might be affected by seasonal variation, though they are likely to be minor compared to the effect of the crisis. These differences in approach and time reference warrant caution when comparing results from this section to those from previous ones.

This measure confirms that **the initial impact of the crisis on employment was larger for migrants than natives in most OECD countries, but not in all five Nordic countries**. On average across the 28 OECD countries with available data, the employment rate of migrants fell by a maximum of 4.1 percentage points vs 2.4 percentage points for the natives relative to Q2 2019 (Figure 2.10, Panel A) for migrants and Annex Figure 2.D.1 for the natives). Denmark and Finland were among the six countries where employment fell more for the natives than migrants. In Norway migrants' employment fell more, but the difference between the two groups was smaller than in most other countries, (-2.6 percentage points for migrants and -1 percentage point for the natives). By contrast, in Sweden and Iceland the disproportionate impact of the crisis on migrants was larger than on average across the OECD, with Iceland in particular recording one of the largest differentials (-14 percentage points for migrants vs -8.2 percentage points for natives).

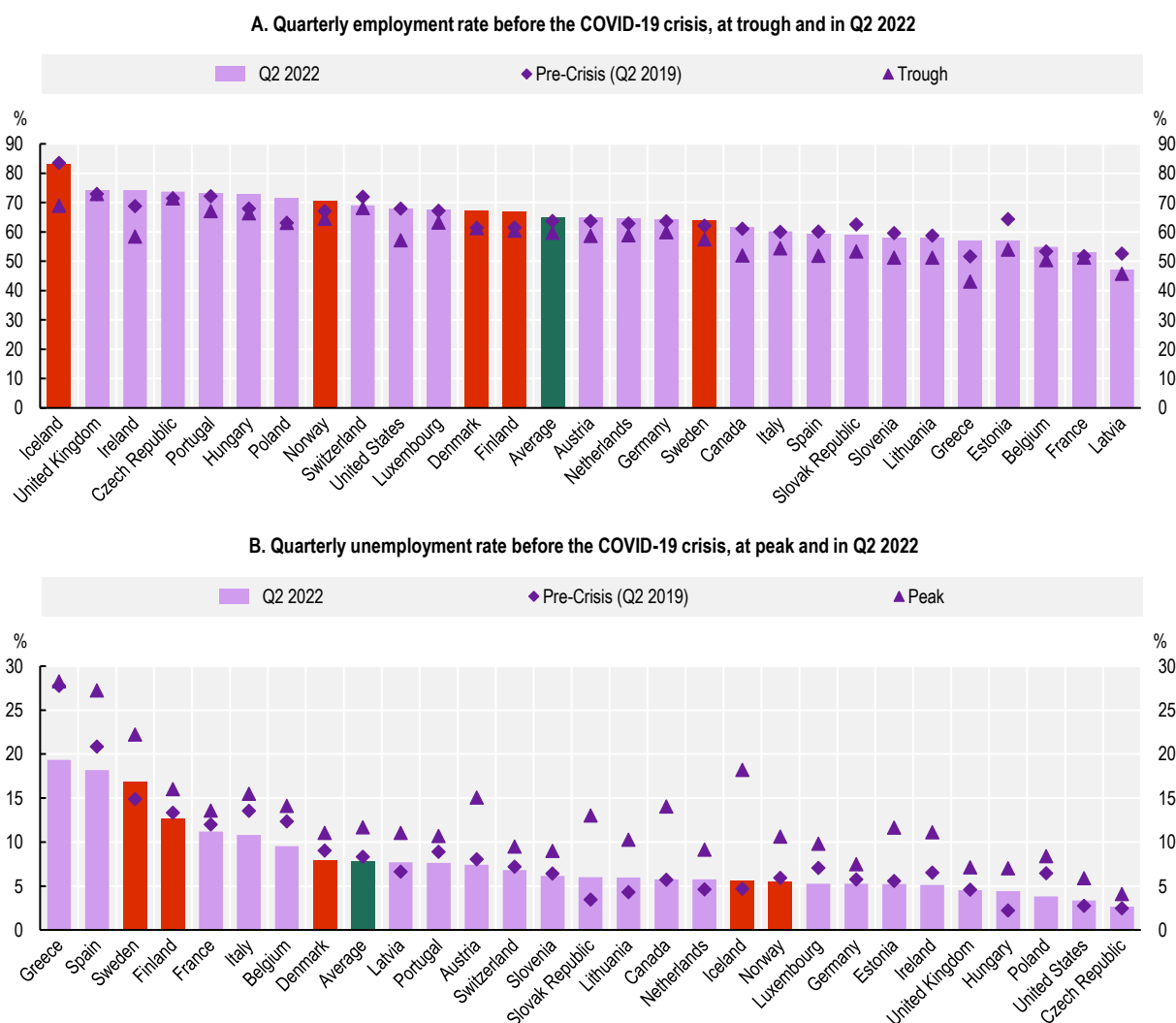
**Over the course of the recovery, however, migrants' employment grew more than natives', resulting in a narrowing of the employment gap in many countries, including all five Nordic countries**. On average across the 28 OECD countries, migrants' employment was 1.1 percentage points higher in Q2 2022 than in the same quarter of 2019 – while the corresponding figure for the natives was 0.6 percentage points. In all five countries the employment gap between migrants and the natives narrowed by at least 1 percentage point, against an average across all OECD countries with data available of 0.6 percentage points. Iceland was the only Nordic country where migrants' employment remained below its baseline level in Q2 2022 (-0.5 percentage points vs -1.8 percentage points for the natives). Migrants' employment growth was particularly strong in Finland and Denmark, where the employment rate of migrants stood more than 5 percentage points higher than before the crisis in Q2 2022 – leading to a narrowing of the employment gap with the natives by almost 4 percentage points.

**The impact of the crisis on the unemployment rate was stronger for migrants than for the natives in almost all OECD countries, including the five Nordic countries** (Figure 2.10, Panel B for migrants and Annex Figure 2.D.1 for natives). Despite the overall resilience of its labour market, Norway saw a particularly significant increase in the unemployment rate for migrants, which at its peak climbed 4.7 percentage points (against 1.2 percentage points for the natives) above its Q2 2019 level – which, at 5.9% was one of the lowest in the OECD and the lowest among Nordic countries. Sweden and Iceland saw some of the largest increases in the unemployment rate for migrants across the OECD (+7 percentage points and +13.5 percentage points respectively). In the case of Sweden, the increase took place from one of highest baseline levels of the unemployment rate in the OECD (14.9% vs an average of 8.3% across all countries).

Sweden and Iceland were also the only two Nordic countries where the unemployment rate for migrants remained above pre-crisis levels in Q2 2022 (by 1.9 percentage points and 0.8 percentage points respectively), leading to an increase in the unemployment gap between migrants and natives. In the other Nordic countries (and more widely on average across the OECD countries with available data), the unemployment rate had fallen more for migrants than for the natives. Norway was the Nordic country where the unemployment rate for migrants had fallen the most relative to that of natives, despite the initial surge mentioned above.

Figure 2.10. Migrants have recovered most of the lost ground in all Nordic countries

Seasonally adjusted quarterly employment and unemployment rates, foreign-born aged 15-64



Note: The green bars represent the unweighted average of the 28 countries shown.  
 Source: OECD calculations based on national Labour Force Surveys (Canada, United Kingdom), the European Union Labour Force Survey (European countries) and Current Population Survey (United States).

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Analysis from OECD (2022<sup>[17]</sup>) find that recent arrivals have seen their outcomes develop more favourably than those of settled immigrants in some of the Nordic countries over the course of the recovery. In

Sweden, the employment rates of immigrants with less than five years of residence increased, whereas the rates of settled migrants declined. In Finland, the situation improved for both groups but much more for recent arrivals. This is unusual, since recent arrivals are generally among the hardest hit in early phases of economic downturns (OECD, 2009<sup>[18]</sup>; OECD, 2014<sup>[19]</sup>). Two factors may contribute to this phenomenon. First, immigration took a massive hit in 2020, and groups with weak labour market attachment (such as refugees and family migrants) saw particularly strong declines in numbers of new arrivals, thereby resulting in a mix of recent arrivals with more favourable outcomes. Second, emigration of previous immigrants increased in a number of countries, with recent arrivals being much more prone to emigrate or return. However, it is unclear to which degree this concerned recent immigrants with weaker labour market attachments. For Norway, Bratsberg and Raaum (forthcoming<sup>[20]</sup>) found that the use of posted workers declined by two-thirds during the pandemic, thereby cushioning the impact on resident immigrants and the native born alike.

## 2.5. The growth of teleworking raises new policy challenges

### 2.5.1. A short portrait of teleworking before the COVID-19

Across OECD countries,<sup>4</sup> the use of teleworking was limited before the COVID-19 pandemic, with about 15.1% of employees reporting working from home in 2019.<sup>5</sup> However, the incidence of teleworking was higher than the OECD average in all Nordic countries except Norway. According to EU-LFS data, about 27-28% of employees were working from home in Denmark, Finland and Iceland and about 35% in Sweden in 2019.

These differences in the use of teleworking across countries can be attributed to different factors, notably the fact that not all jobs can be done remotely, that not all firms are equipped with the adequate infrastructure, and that some regions might not have yet benefited from the roll-out of fast broad-band connections (OECD, 2020<sup>[21]</sup>). Moreover, variation in national management culture to teleworking, but also regulations governing the access and the working conditions of teleworking also mattered in explaining cross-country variations. As shown in Figure 2.11 Panel A, **the incidence of teleworking has been rising since 2000 in countries where an enforceable right to request telework<sup>6</sup> exists**. In most countries with no enforceable right to request teleworking and no encompassing legal framework,<sup>7</sup> the incidence of teleworking had been stagnating below 10% since 2000. Finally, **the incidence of teleworking was highest on average – and most steadily rising since 2000 – in countries where access to teleworking is granted through collective bargaining** like in Denmark and Sweden (Figure 2.11 Panel B).<sup>8</sup> In Norway access to teleworking is also granted through collective bargaining, but the share of teleworkers is lower (7.7% in 2019) highlighting that other factors also contribute to shaping the take up of teleworking in practice.

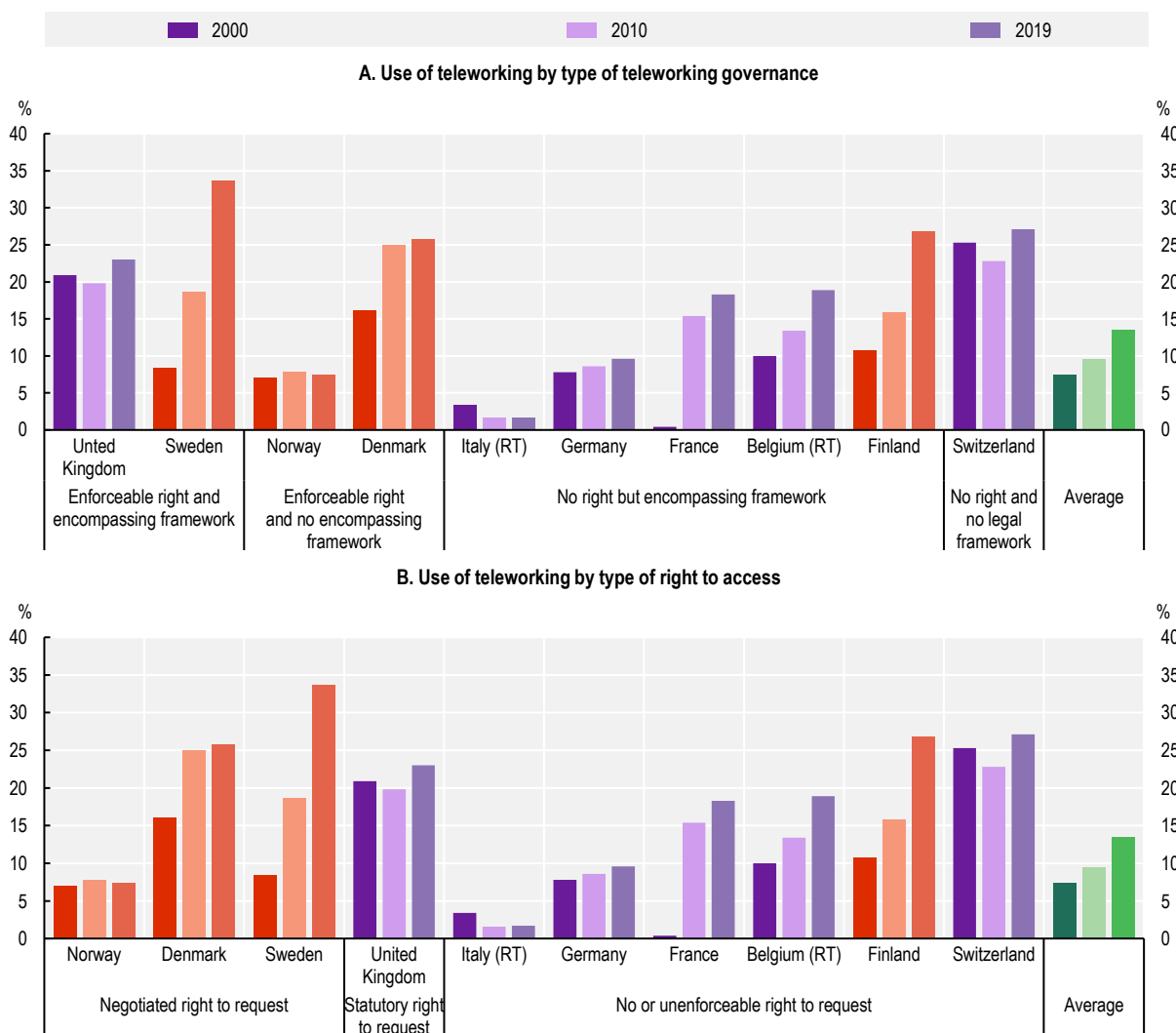
Available evidence on the incidence of teleworking across socio-demographic groups in OECD countries prior to the COVID-19 crisis, reveals a clear divide between those who can telework and those who cannot. First, in the majority of countries for which data were available, **the share of men teleworking was higher than that of women** – and in some cases much higher (e.g. Norway). Second, **the incidence of teleworking increased both with educational attainments and earnings** (OECD, 2021<sup>[22]</sup>).

In addition to socio-demographic characteristics, access to teleworking depends on other factors, including region of residence (those living in cities are more likely to be in teleworkable occupations compared to those living in rural areas), firm size (since medium and large firms concentrate more teleworkable occupations than small enterprises), occupations and work organisation (Fana, Torrejón Pérez and Fernández-Macías, 2020<sup>[23]</sup>).



**Figure 2.11. Teleworking by type of regulation, Nordic and other selected OECD countries, in the pre-COVID period**


Percentage of employees aged 15-64 usually or occasionally working at home



RT: Regular Teleworking.

Note: The green bars represent the unweighted averages of 24 European member countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom. Year 2000 refers to 2001 (Poland, Slovak Republic, Switzerland), 2003 (Latvia), and 2006 (Türkiye).

Source: Adapted from (OECD, 2021<sup>[3]</sup>), *OECD Employment Outlook 2021: Navigating the COVID-19 Crisis and Recovery*, Figure 5.6, <https://doi.org/10.1787/5a700c4b-en>.

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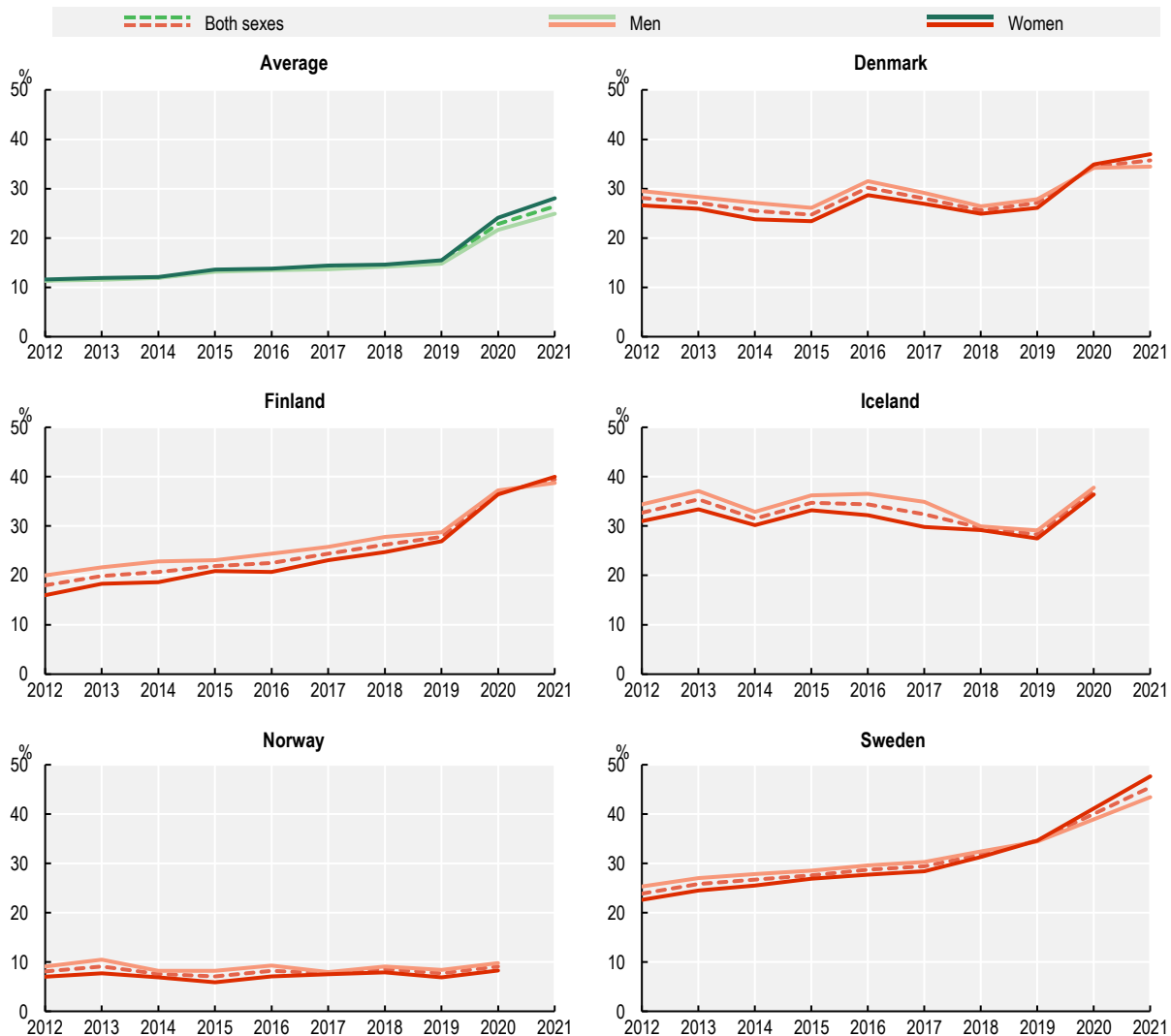
### 2.5.2. Teleworking after the pandemic

The forced experiment in mass teleworking led business, governments and workers to adapt quickly to maintain activity and employment during the COVID-19 pandemic. As a result, teleworking use boomed in OECD countries; latest data and surveys of workers and business across OECD countries show that **teleworking remains high and is likely here to stay**: the incidence of employees working from home

grew up to 22.8% in 2020 and 26.4% in 2021 against 15.1% in 2019 for the OECD.<sup>9</sup> This surge in teleworking took place in almost all OECD countries, independently of their pre-COVID teleworking prevalence. In the Nordic countries, the increase was particularly stark in Finland<sup>10</sup> (39.4% in 2021 against 27.8% in 2019, Figure 2.12). The increased importance of teleworking has spurred some regulation changes in at least some of the Nordic countries already (see Box 2.3).

**Figure 2.12. Teleworking (work from home) trends, total and by gender**

Percentage of employees aged 20-64 (main job) by gender, 2012-21



Note: Teleworking covers employees who usually or sometimes work from home. Average is the unweighted average of 23 European member countries and the United States. Excluded: Australia, Canada, Chile, Colombia, Costa Rica, Iceland, Israel, Japan, Korea, Mexico, New Zealand, Norway, Türkiye and the United Kingdom). In Sweden, the questions regarding working from home were changed in 2020. This has resulted in more comprehensive data for the country but also means that the Swedish figures since 2020 are not comparable to previous years, nor to other EU countries. Data for 2021 are not available for Iceland. Data for Norway refer only to workers who work from home by contract. Data for 2021 are not shown due to a change in the questionnaire.

Source: (Eurostat, 2023<sup>[24]</sup>), *Employed persons working from home as a percentage of the total employment, by sex, age and professional status*, [https://ec.europa.eu/eurostat/databrowser/view/lfsa\\_ehomp/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/lfsa_ehomp/default/table?lang=en) and OECD estimates based on the American Time Use Survey (ATUS).

### 2.5.3. A more structural shift to teleworking raises new policy challenges

The rapid switch to mass teleworking as a result of COVID-19 highlighted both **benefits** – e.g. in reduction of commuting time, higher flexibility and autonomy for workers, higher job satisfaction, etc. – as well as **risks** – work intensification, degraded work-life balance, isolation, etc. Moreover, there is a risk that teleworking might widen further existing inequalities. **Pre-existing disparities in teleworking outlines before between educational and income groups widened** during the first lockdowns (Norlén et al., 2022<sup>[10]</sup>), **whereas gender disparities reversed in some countries**: while women tended to work less from home (both occasionally and usually) than men before the pandemic *in all Nordic countries*, more women than men reported that they usually worked from home both in 2020 and 2021 in Denmark, Finland and Sweden (Figure 2.12). In Iceland and Norway, men continued to work from home more than women in 2020.

The increased use of teleworking among women raises questions on how it might affect disparities in work-life balance, wages and career progression between genders. Overall, available pre-pandemic evidence suggests that **teleworking mirrors pre-existing gender inequalities** in work-life balance and therefore likely hinges on prevalent contextual gender norms, expectations about fathers and mothers' roles, and firms' organisational cultures (OECD, 2023<sup>[25]</sup>). In already unequal contexts, for example, teleworking tends to be used primarily by mothers as a way to balance work and family commitments, while fathers might use it for other reasons, such as productivity enhancement (see for example (Craig and Powell, 2012<sup>[26]</sup>; Chung and van der Horst, 2020<sup>[27]</sup>).

Studies have also found that teleworking can be associated with a wage boost, but so far men appear to have benefitted from it more systematically than women (see (OECD, 2023<sup>[25]</sup>) for a review). While this difference might partly reflect actual gendered productivity effects, gendered stigma, social norms, and firms' managerial culture might also play a role.

Finally, while robust empirical evidence on career progression is still missing, studies suggest several contextual elements surrounding teleworking might negatively affect the career prospects of teleworkers and particularly women. These include the fact that, at least since the pandemic, men use it less than women, that men use (or are at least assumed to use) teleworking for different reasons than women, and that in many workplaces career advancement hinges on visibility and input measurement, rather than output evaluation (OECD, 2023<sup>[25]</sup>).

#### Box 2.3. The pandemic has spurred changes in the regulations on working conditions for teleworkers in Denmark and Norway

In Nordic countries, post-pandemic discussions on facilitating access to and working conditions of teleworking have mostly occurred at the firm level and through individual working contracts. However, the new context generated by the COVID-19 crisis has also led to new policy initiatives in Denmark and Norway.

In Denmark, a new executive order issued by the Danish Working Environment Authority (WEA) and prepared in close collaboration with the social partners came into force in April 2022 to facilitate teleworking. Employees are now allowed to use their own work equipment (desk, chair, private computer) when they are teleworking, as long as it complies with current standards. Otherwise, employers are obliged to provide the necessary tools if employees work from home for an average of more than two days per week each month.

Following a series of rounds of consultation with social partners, Norway amended its legislation on the working environment in the summer of 2022. The amendments removed existing exemptions from working hours regulations, meaning that the same rules will now apply for work performed from home

or from an office – including those restricting work at night and on Sundays. Employers are also required to apply the rules on the psycho-social work environment to employees working from home. The Norwegian Labour Inspection Authority is charged with monitoring compliance. While it cannot inspect employees' homes, it can require documentation to prove compliance with regulations. The new rules do not apply to work that is brief or sporadic – i.e. less than a day per week on average.

Source: OECD consultations with national Governments.

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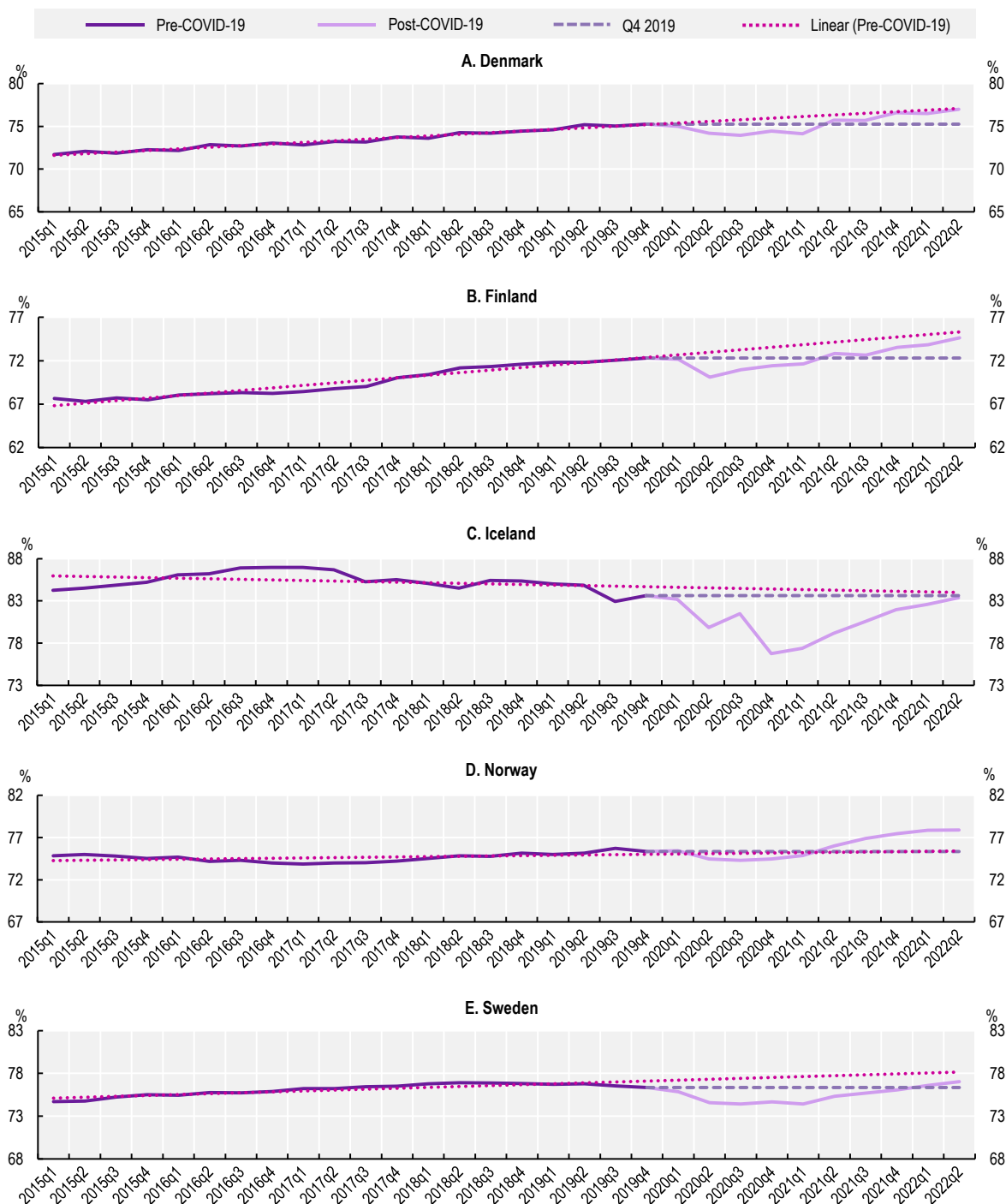
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# Annex 2.A. Employment rate time trend

Annex Figure 2.A.1. Pre-COVID-19 employment rate trend in the Nordic countries (ages 15-64)

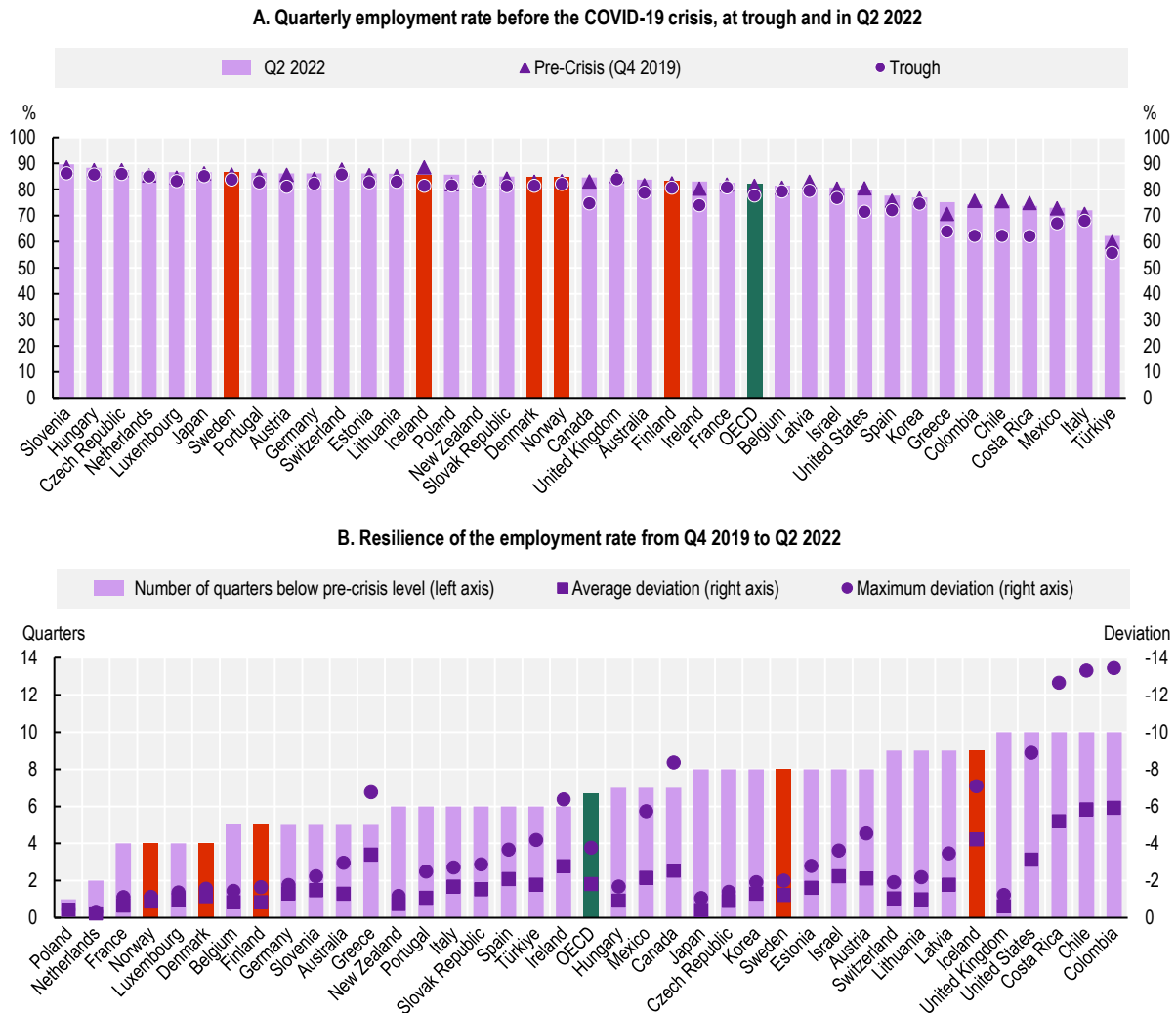


Note: Panels show the linear time trend extrapolating the employment rate from Q1 2015 to Q4 2019, before the COVID-19 pandemic.  
 Source: OECD calculations based on (OECD, 2023<sup>[13]</sup>), *OECD Short-term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=115261>.




# Annex 2.B. Additional results to the employment analysis for groups of workers

Annex Figure 2.B.1. Seasonally adjusted employment rates and resilience, persons aged 25-54

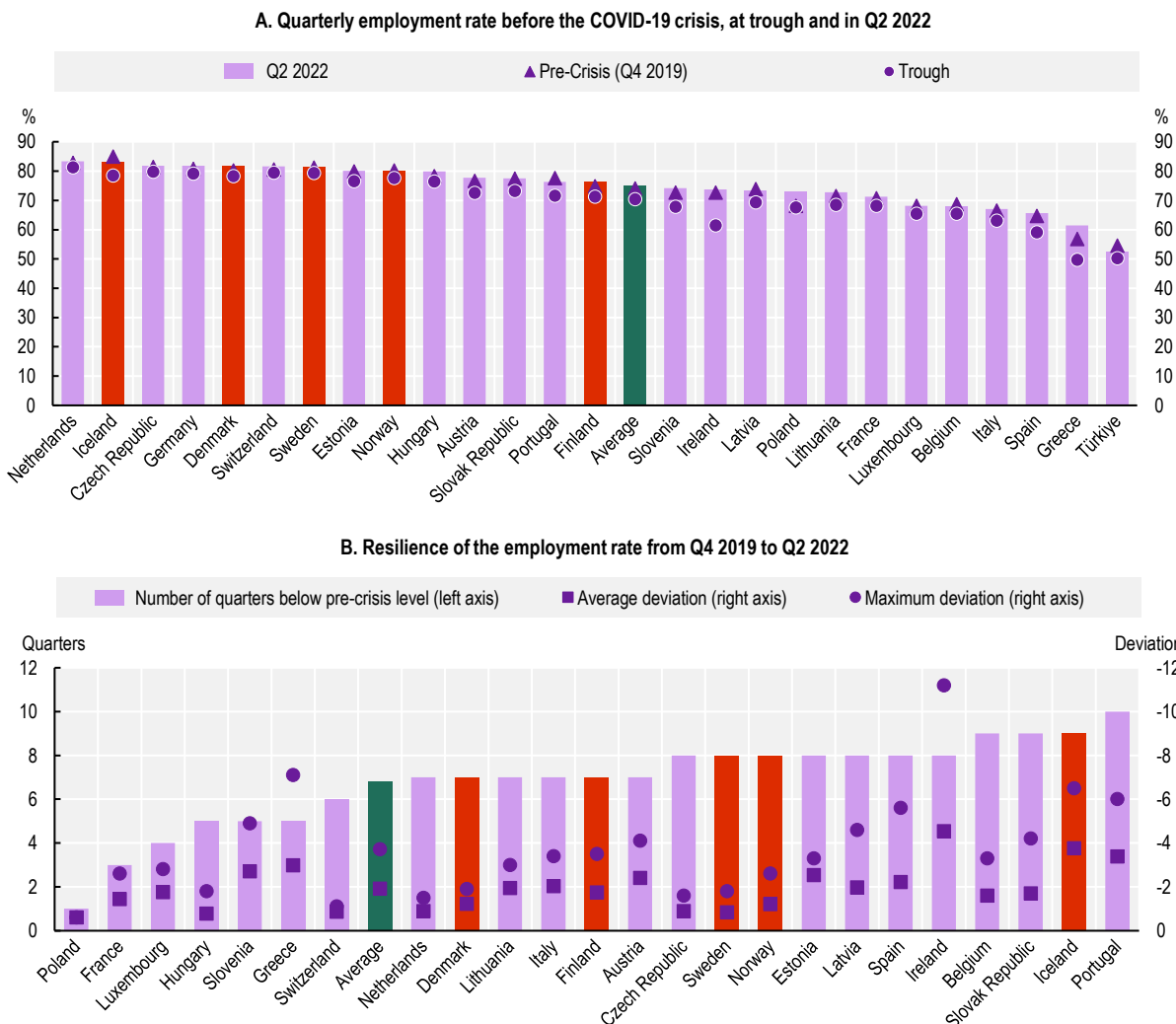


Note: OECD is an unweighted average.

Source: OECD calculations based on data from (OECD, 2023<sup>[13]</sup>), *OECD Short-term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=35253>.


StatLink  <https://stat.link/kh5erd>

### Annex Figure 2.B.2. Seasonally adjusted employment rates and resilience, persons with middle-level education, persons aged 20-64

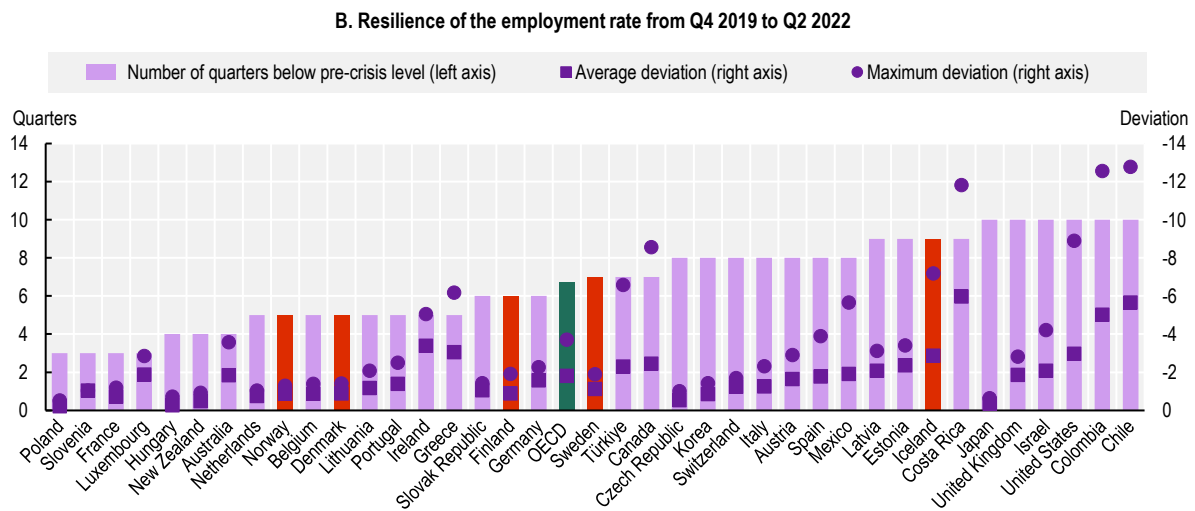
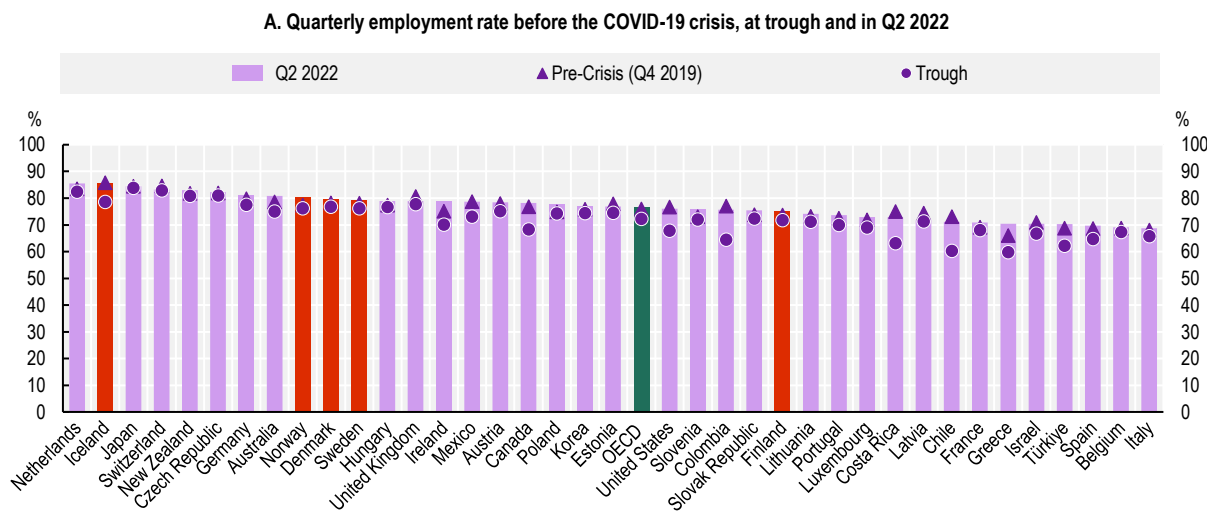


Note: The green bars represent the unweighted average of the 26 and 24 countries shown in each panel respectively. Workers with an upper-secondary and post-secondary non-tertiary education based on ISCED 2011, Levels 3 and 4. Age group restricted to 20-64 to be consistent with unemployment by education level.

Source: (Eurostat, 2023<sup>[15]</sup>), *Eurostat Dataset: Employment by educational attainment level – quarterly data*, [https://ec.europa.eu/eurostat/databrowser/view/LFSI\\_educ\\_Q/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/LFSI_educ_Q/default/table?lang=en).

StatLink  <https://stat.link/6eno05>

### Annex Figure 2.B.3. Seasonally adjusted employment rates and resilience, men aged 15-64



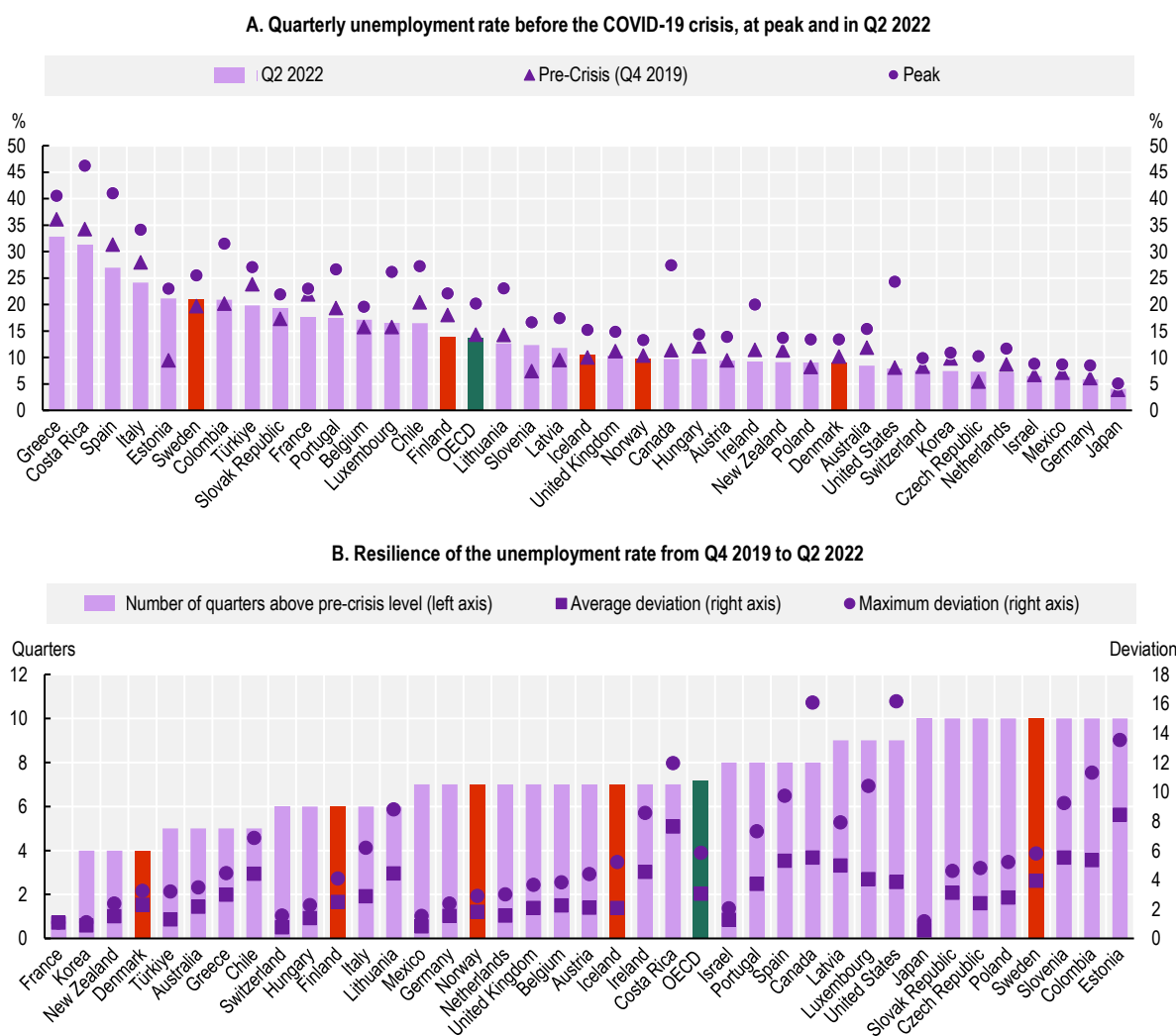
Note: OECD is an unweighted average.

Source: OECD calculations based on data from (OECD, 2023<sup>[13]</sup>), *OECD Short-term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=35253>.

StatLink  <https://stat.link/c2w8la>

# Annex 2.C. Additional results to the unemployment analysis

Annex Figure 2.C.1. Seasonally adjusted unemployment rates and resilience, persons aged 15-24

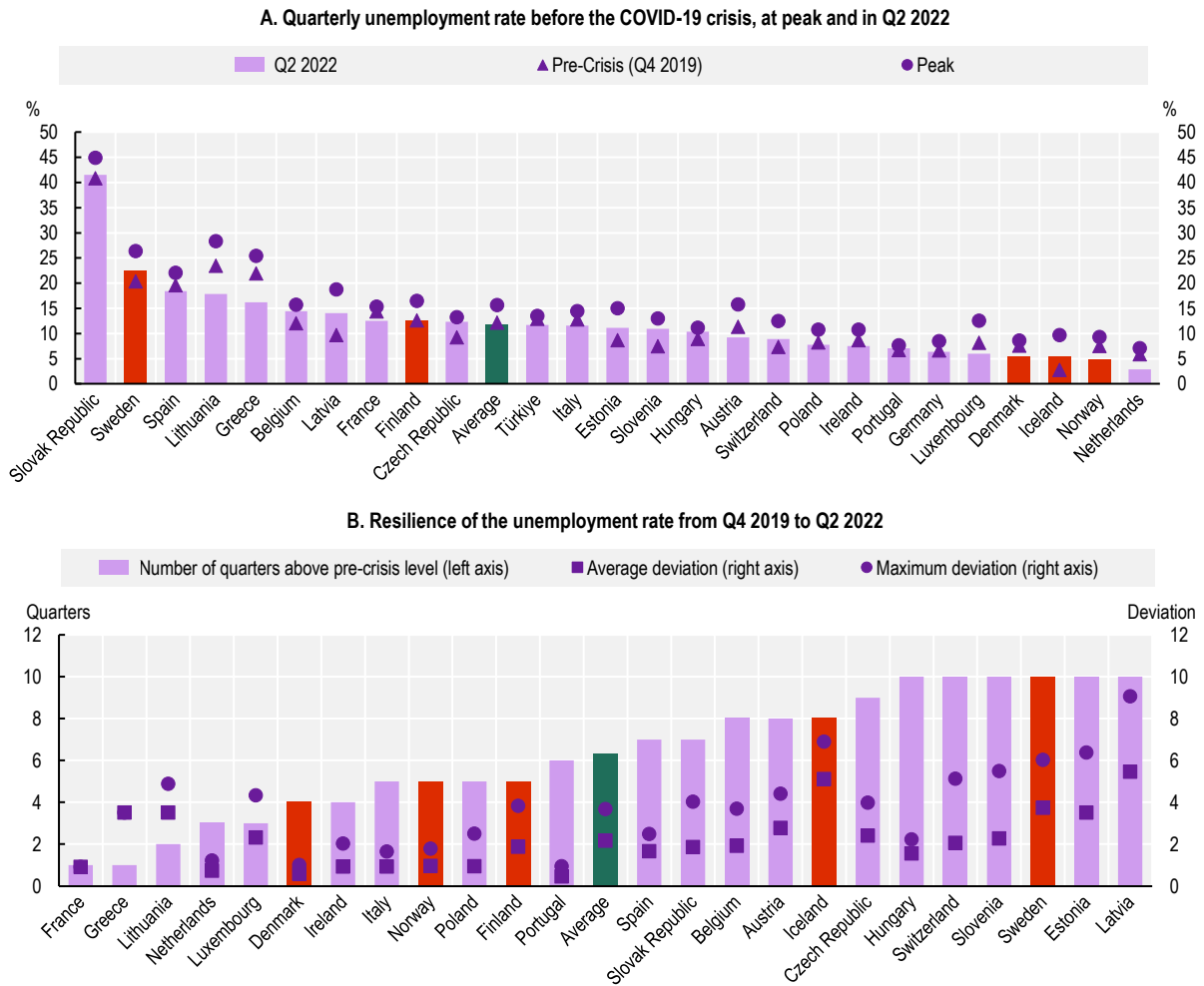


Notes: OECD is an unweighted average.

Source: OECD calculations based on data from (OECD, 2023<sub>[13]</sub>), *OECD Short-term Labour Market Statistics dataset*, <https://stats.oecd.org/index.aspx?queryid=119786>.


StatLink  <https://stat.link/m0fy8s>

### Annex Figure 2.C.2. Seasonally adjusted unemployment rates and resilience, persons aged 20-64 with low level education

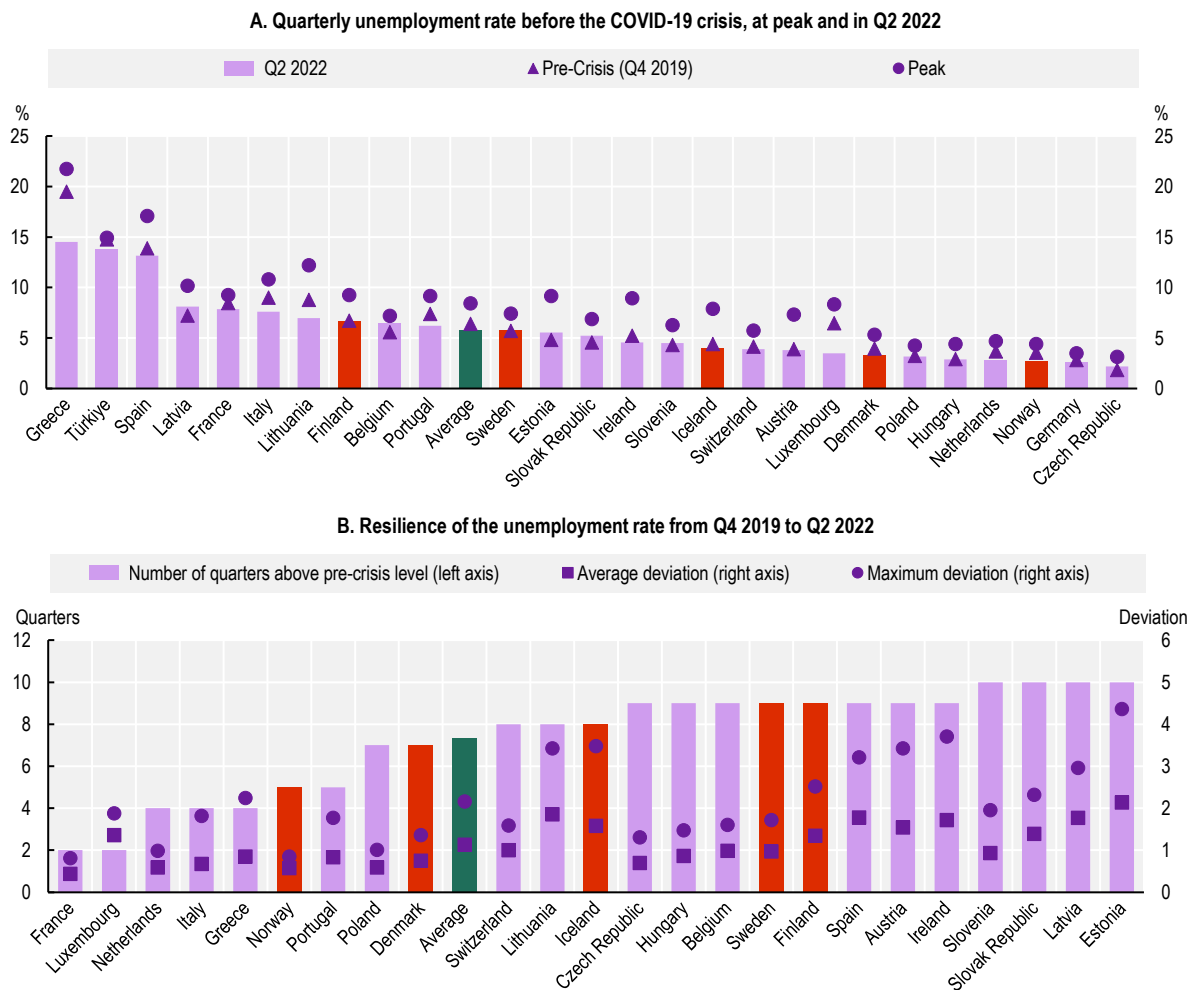


Note: The green bars represent the unweighted average of the 26 and 24 countries shown in each panel respectively. Persons with less than primary and lower secondary education based on ISCED 2011, levels 0-2.

Source: (Eurostat, 2023<sup>[15]</sup>), Eurostat Dataset: Employment by educational attainment level – quarterly data, [https://ec.europa.eu/eurostat/databrowser/view/UNE\\_EDUC\\_Q\\_custom\\_4675549/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/UNE_EDUC_Q_custom_4675549/default/table?lang=en)


StatLink  <https://stat.link/eb4sa0>

**Annex Figure 2.C.3. Seasonally adjusted unemployment rates and resilience, persons aged 20-64 with middle level education**

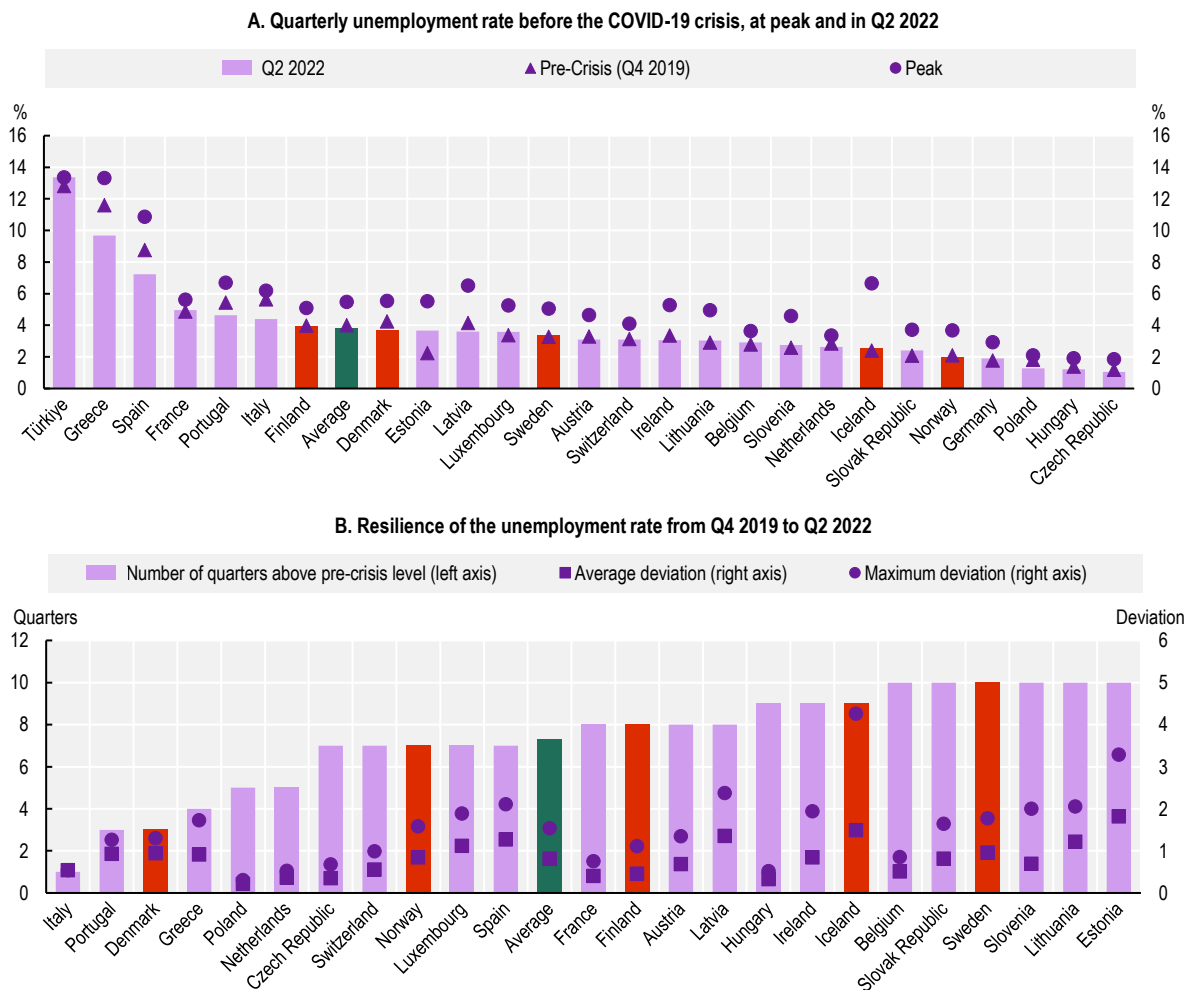


Note: The green bars represent the unweighted average of the 26 and 24 countries shown in each panel respectively. Workers with an upper secondary and post-secondary non-tertiary education based on ISCED 2011, Levels 3 and 4.

Source: (Eurostat, 2023<sup>[15]</sup>), Eurostat Dataset: Employment by educational attainment level – quarterly data, [https://ec.europa.eu/eurostat/databrowser/view/UNE\\_EDUC\\_Q\\_custom\\_4675549/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/UNE_EDUC_Q_custom_4675549/default/table?lang=en)


StatLink  <https://stat.link/p08w1n>

**Annex Figure 2.C.4. Seasonally adjusted unemployment rates and resilience, persons aged 20-64 with higher education**



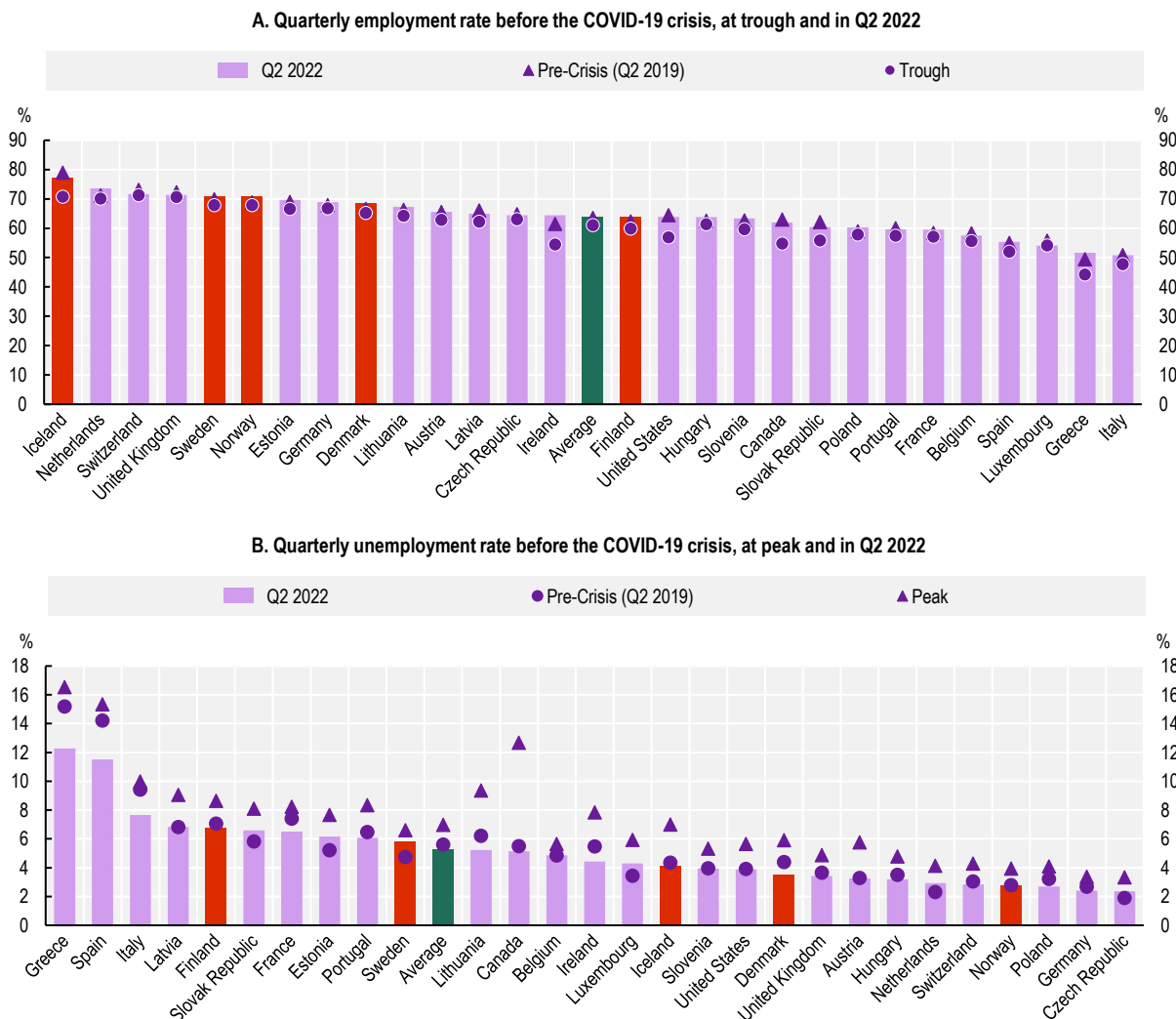
Note: The green bars represent the unweighted average of the 26 and 24 countries shown in each panel respectively. Persons with tertiary education based on ISCED 2011, Levels 5-8.

Source: (Eurostat, 2023<sup>[15]</sup>), Eurostat Dataset: Employment by educational attainment level – quarterly data, [https://ec.europa.eu/eurostat/databrowser/view/UNE\\_EDUC\\_Q\\_custom\\_4675549/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/UNE_EDUC_Q_custom_4675549/default/table?lang=en)

StatLink  <https://stat.link/u4qc2e>


# Annex 2.D. Additional results to the native-born analysis

Annex Figure 2.D.1. Seasonally adjusted employment and unemployment rates, native-born aged 15-64



Note: The green bars represent the unweighted average of the 28 countries shown.

Source: OECD calculations based on national Labour Force Surveys (Canada, United Kingdom), the European Union Labour Force Survey (European countries) and Current Population Survey (United States).

StatLink  <https://stat.link/khy9q8>



## Annex 2.E. Adjustments to the breaks in Eurostat time-series

In 2021, Eurostat implemented a number of methodological changes to the way European Union Labour Force Survey data are collected and managed as well as some changes to the labour market status definitions. These changes have produced a break in the series for employment and unemployment provided by Eurostat in the first quarter 2021. In the spring of 2022, Eurostat released break-adjusted series for employment and unemployment and some demographic breakdowns. The methodology employed is described in Eurostat (2022<sup>[28]</sup>). Whenever possible, this chapter uses the recently released break-adjusted series. This is the case, for example, for aggregate employment and unemployment rates, as well as for the series by education, gender and age.

However, for some of the series used in this chapter, Eurostat has not provided the break-adjusted version. This is the case for employment by industry, as well as employment and unemployment by country of birth. In all these cases, the chapter uses adjusted series using a correction factor calculated exploiting the availability of both break-adjusted and non-break-adjusted series at a higher level of aggregation.

To illustrate the procedure, consider the case of employment by industry. In this case, a correction factor (for each country and quarter) is calculated by taking the ratio between the break-corrected aggregate employment and the uncorrected aggregate employment. The same correction factor is then multiplied by the (uncorrected) employment level of each industry in the relevant quarter. For example, to correct the employment level of a given industry in Q1 2019, the level of employment for that industry reported by Eurostat is multiplied by the ratio between the adjusted total employment in Q1 2019 and the unadjusted total employment in the same quarter.

Eurostat did not provide corrected series for employment by country of birth. The correction factor for the proportion of the foreign-born population in employment is computed as the ratio between the corrected and uncorrected employment rate for the whole population. The same correction factor is then applied to correct the series for employment by country of birth by *industry*.

The main limitation of this approach is the underlying assumption that the outcomes of the various groups to which the correction factor is applied were indeed affected in the same way by the break in the series. For example, in the case of the employment of women by industry, the procedure assumes that the proportional change in employment produced in the aggregate for women by the break also occurred in every single industry.

## Notes

<sup>1</sup> The higher resilience of Nordic countries to the COVID-19 crisis is also confirmed by variations in total hours worked. Seasonally adjusted data from Eurostat indicates smaller cumulative decline in hours worked in Nordic countries than most major European economies. In particular, the cumulative decline in hours worked between Q4 2019 and Q2 2022 was between -16% (in Denmark) and -28% (in Sweden) in Nordic countries, against an average for the European Union of -36%.

<sup>2</sup> Seasonally adjusted data that correct for the break in the Eurostat series are not available for employment by industry. These results are based on data not adjusted for seasonality, but break-corrected using the procedure described in Annex 2.E.

<sup>3</sup> Statistics Sweden (2022<sup>[29]</sup>) also finds that over the course of the COVID-19 crisis the risk of unemployment was higher for younger workers. Consistently with results presented later in the chapter, they also find a higher risk of unemployment for individuals with lower qualifications and for the foreign-born.

<sup>4</sup> Unweighted average of 24 OECD countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United States.

<sup>5</sup> While different definitions of teleworking – and related cross-country data sources – are available for OECD countries, the only comparable data source that allow looking at the evolution of teleworking over time are the European Labour Force Survey (EU LFS) that define teleworkers as “employees usually or occasionally working from home” and provide data for European countries, Norway, Iceland and Switzerland from 2000 onwards. They can be combined with data from the American Time Use Survey (ATUS) for the United States. The underlying definition in the EU-LFS however is somewhat imprecise as excluding employees working remotely outside of their home but from another remote location not provided by the employer, while it might also include employees working from home *not* using ICTs.

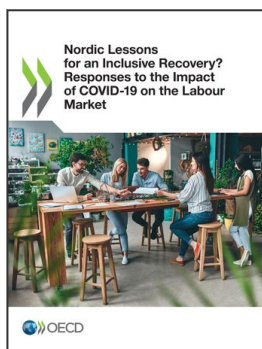
<sup>6</sup> A right to request telework is enforceable if employers have a limited list of valid reasons to refuse to grant it.

<sup>7</sup> “Encompassing” legal frameworks are defined as such if they regulate most working conditions of teleworkers, such as occupational safety and health, cost of equipment, working hours, etc. By contrast, regulations only stipulating the conditions for workers to request teleworking (e.g. by written demand) and for employers to respond (e.g. written notification within x months) are not considered encompassing (OECD, 2021<sup>[22]</sup>).

<sup>8</sup> This can be explained by the fact that when negotiated through collective bargaining, the right to request telework is often encompassing, while statutory right tends to be restricted to specific categories of workers.

<sup>9</sup> OECD-24 average for employees aged 20-64 based on EU LFS and ATUS for the United States.

<sup>10</sup> According to Statistics Norway, this may reflect the fact that only those who had an employment contract indicating a home office responded positively to respective questions in the Labour Force Survey (Norlén et al., 2022<sup>[10]</sup>).



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