STUDY

Requested by the COVI committee

European Parliament

# Social and Economic Consequences of COVID-19


Policy Department for Economic, Scientific and Quality of Life Policies
Directorate-General for Internal Policies
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# Social and Economic Consequences of COVID-19

**Abstract**

This study considers the consequences of measures aimed at countering the effects of COVID-19, in particular the Temporary Framework for State aid, EU Digital COVID Certificates and other measures implemented by EU Member States. The study examines the consequences of the measures on industry, small and medium-sized enterprises and focuses on the cultural and creative industries. Consequences for workers and working practices were also considered, and lessons learnt identified.

This document was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the special committee on COVID-19 pandemic: lessons learned and recommendations for the future (COVI).

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| | |
|---|---|
| **CCI** | Cultural and Creative Industries |
| **CCS** | Cultural and Creative Sector |
| **COVI** | Special Committee on the COVID-19 pandemic: lessons learned and recommendations for the future |
| **DG COMP** | Directorate-General for Competition of the European Commission |
| **DG ECFIN** | Directorate-General for Economic and Financial Affairs of the European Commission |
| **DG GROW** | Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs of the European Commission |
| **EP** | European Parliament |
| **EU** | European Union |
| **EUDCC** | EU Digital COVID Certificate |
| **GDP** | Gross Domestic Product |
| **IPCR** | Integrated Political Crisis Response mechanism |
| **ITRE** | Committee on Industry, Research and Energy |
| **MS** | Member State |
| **NFBS** | Non-financial business sector |
| **OECD** | Organization for Economic Cooperation and Development |
| **PLF** | Passenger Locator Form |
| **PPE** | Personal Protective Equipment |
| **SME** | Small and Medium-sized Enterprise |
| **SURE** | Support to mitigate Unemployment Risks in an Emergency |
| **TF** | Temporary Framework (for State aid) |
| **TFEU** | Treaty on the Functioning of the European Union |
| **WHO** | World Health Organization |

# EXECUTIVE SUMMARY

## Background

The study is set against the backdrop of a growing body of literature on the COVID-19 pandemic and its socio-economic effects. Notably, from the point of view of this study, the report by the High-Level Group on post-COVID economic and social challenges, *A New Era for Europe*[1], published in March 2022, took stock of the socio-economic impact of the pandemic and provided strategic reflections on the emerging and future challenges that will be faced by the EU as it recovers from the pandemic. This study complements the report by providing a focus on industry, including small and medium-sized enterprises (SMEs) and workers.

## Aim

The objective of the study is to consider measures taken to counter the negative effects of measures aimed at constraining the spread of the pandemic, such as lockdowns and various restraints on social interaction. The Temporary Framework for State aid support is looked at in terms of the instruments involved, the sums approved by Member States, and the sectors supported. Digital COVID Certificates are assessed, as well as other measures. The study then aims to determine consequences of the measures on industry, in particular small and medium-sized enterprises and the cultural and creative industries. Attention is also paid to employment consequences and effects on workers such as those in front-line positions, and working conditions. Finally, lessons learnt for the future are identified.

## Key Findings

Member States were not prepared for the unprecedented nature, scale and magnitude of the crisis created by the pandemic. Member States had to make difficult decisions quickly to try to curb the spread of the pandemic and protect the health of their citizens while simultaneously also supporting their economy to avoid large-scale economic collapse. This resulted in a series of restrictions and support measures involving financial and fiscal aid instruments aimed at businesses and workers. Initially Member State trade-offs overall favoured public health over the economy.

The EU played a key role in co-ordinating the response to the pandemic through for example, helping to address single market issues, procurement of vaccines, financial support via conventional EU instruments but also through *ad-hoc* instruments. EU response was also crucial in the recovery from the pandemic as it generated consensus from Member States on the need for a common approach crystallised in the recovery package NextGenerationEU.

With regards to the design and implementation of the **Temporary Framework** measures, the study concluded it was effective in terms of avoiding large-scale bankruptcies and excessive unemployment, and provided support to Member State economies and the EU as a whole. Overall, the approval of Temporary Framework notifications was carried out efficiently and promptly by the Commission. The disbursement of measures at national and regional level was also reported to have been timely and effective overall. The Temporary Framework was amended throughout the pandemic in the light of prevailing conditions. Member States with larger gross domestic products (GDPs) provided, proportionately, higher levels of support to their economies.

[1] Carraro C. et al., 2022, *A New Era for Europe. How the European Union Can Make the Most of its Pandemic Recovery, Pursue Sustainable Growth, and Promote Global Stability*, European Commission, Luxembourg: Publications Office of the European Union. Available at: https://economy-finance.ec.europa.eu/publications/new-era-europe-how-european-union-can-make-most-its-pandemic-recovery-pursue-sustainable-growth-and_en.

The **EU Digital COVID Certificate (EUDCC**) was introduced in July 2021 to facilitate safe and free movement within the EU during the pandemic, and contribute to the gradual lifting of restrictions which had been put in place. 49 non-EU countries and territories also joined the EUDCC. It was the least restrictive method for facilitating safe cross-border movement during the pandemic. The EU Digital COVID Certificate Regulation has been extended until June 2023. As of 31 October 2022, Member States have issued more than 2.2 billion EU Digital COVID Certificates[2]. However, the approach to the vaccines accepted by Member States has been inconsistent, creating confusion among travellers. A more harmonised EU approach to vaccines would mitigate the risk of fragmentation of the internal market, as well as the risk that decisions become politicised, and help to avoid confusion.

During the pandemic the EU **Member States** implemented a range of **measures** to limit contact between people and curb the spread of COVID-19. These include physical distancing measures, case management and quarantine, hygiene and safety measures, as well as internal and international travel measures. The nature of the measures changed during the course of the pandemic, with a gradual move towards looser restrictions as vaccination campaigns were implemented.

**The economic impact** of the pandemic has been uneven across Member States. **EU industries** were heavily affected by the pandemic, although the extent to which they were affected varied substantially. Most affected were industries where personal contact was a key element of activity (e.g. tourism, retail, cultural industries). The sharpest fall in EU output was observed in the second quarter of 2020. The EU economy as a whole returned to its pre-pandemic level in the third quarter of 2021.

**SMEs** were particularly affected by the restrictions put in place to contain the pandemic. The most widely faced disruptions were caused by an increase in late payments, followed by supply chain disruptions leading to shortages of materials, goods and services. Other disruptions included increased prices, difficulties in importing and difficulties in sourcing alternative suppliers and exporting.

Among SMEs, micro-enterprises (who constitute some 93.3% of all enterprises in the non-financial business sector (NFBS) in the EU) were particularly affected by the pandemic and experienced most decreases in working hours, suggesting that smaller enterprises could not adapt as readily as larger ones, or did not access the same levels of public support as larger ones.

Regarding the impact of the pandemic on the **cultural and creative industries** (CCI), it is difficult to make generalisations due to the various definitions of CCI and the heterogeneous nature of the sector. CCI undertakings which were most immediately and directly impacted were those dependent on the close physical proximity of people and included the delivery of festivals, concerts, conferences, live performances, etc., and their supply chains. In addition, there were impacts on bookshops, museums, cinemas, etc. Conversely, CCI businesses that did not rely on face-to-face contact, such as the video game and streaming industry saw their turnover grow, although this could not alone compensate for the severe losses suffered elsewhere in the CCI ecosystem.

The COVID-19 pandemic had profound **implications for workers and the broader labour market**. Frontline workers were more subject to income loss, job insecurity and faced serious health and safety risks; sufficient staffing and adequate personal protective equipment were identified as necessary requirements to face a potential future crisis in a resilient and sustainable manner. The rise in unemployment was largely mitigated due to the use of job protection schemes but did not prevent higher negative impacts on vulnerable socio-economic groups including workers with low levels of

[2] European Commission, Report pursuant to Article 16(3) of Regulation (EU) 2021/953 of the European Parliament and of the Council on a framework for the issuance, verification and acceptance of interoperable COVID-19 vaccination, test and recovery certificates (EU Digital COVID Certificate) to facilitate free movement during the COVID-19 pandemic, COM(2022) 753 final, Brussels, 22.12.2022.

education, youth, foreign-born people (migrants), ethnic minorities and women. Young workers experienced the largest decrease in employment, while workers between the ages of 25 and 54, as well as older male workers, were most impacted by cuts in working hours. Temporary workers were particularly affected by the pandemic, with the number of temporary contracts across the EU falling by 27% between spring 2019 and spring 2020, representing more than three-quarters of the reduction in employment.

Countries in which childcare and education services closed for extended periods of time suffered negative impacts on **gender equality**. The impacts of patchy measures targeting **self-employed** workers are difficult to grasp, as these varied widely in terms of generosity, duration, and conditions for access across Member States.

The crisis was a **powerful catalyst for digitalisation and the transformation of working practices**, bringing about a range of opportunities and challenges for workers, businesses and territories. Future measures need to consider these opportunities to enhance labour market integration, foster entrepreneurship and innovation, as well as improving the quality of work while understanding and addressing the needs of vulnerable social-economic groups.

**In conclusion**, the measures adopted to combat the COVID-19 pandemic succeeded in averting a large-scale collapse of unprecedented proportions in the EU economy and society. From a **social point of view,** on the whole, the measures adopted succeeded in protecting household incomes by protecting employment. Attention was subsequently paid to the position of the self-employed. The crisis revealed that there are groups of workers not adequately covered by social security nets. These include those in various forms of precarious and non-standard employment as found in the cultural and creative industries. However, in some instances, there have been improvements in working conditions as a result of issues brought to the fore during the pandemic. In the medium to longer term, indirect consequences of measures have contributed to a mismatch of the labour supply and demand in some sectors.

From an **economic perspective**, the main conclusions point to a wide variation in the effect of measures on sectors in the economy. At the end of 2021 there was still a good deal of catching up to do in some of the hardest hit sectors compared to pre-pandemic levels. The massive financial support provided to industry has created an overhang of bankruptcies that did not occur. This has implications for the management of industrial policy: how to design a soft landing for industry that will ensure continued competitive sustainable future innovation and growth.

**Several key lessons** identified include the need for greater co-ordination, evaluations of instruments such as the Temporary Framework and the EUDCC, the need to act to protect fragile groups of workers and to be better prepared for future events such as COVID-19. These lessons should not be overlooked as a result of having to deal with new emerging issues.

# 1 OBJECTIVES OF THE STUDY

## 1.1 Aims and objectives

The overall aim of this study is to provide an independent expert perspective that will enable the European Parliament to establish an objective and impartial view on the socio-economic consequences of COVID-19 related measures in the selected fields.

**The objective of the study** is to consider the deployment of some measures to counter the negative effects of measures aimed at constraining the spread of the pandemic such as lockdowns and various restraints on social interaction. The Temporary Framework for State aid support is looked at in terms of the instruments involved, the sums approved by Member States, and the sectors supported. Digital COVID Certificates are assessed, as well as other measures. The study then aims to determine consequences of the measures on industry, in particular SMEs and the cultural and creative industries. Attention is also paid to employment consequences and effects on workers such as those in front-line positions, and working conditions. Lessons learnt for the future are also identified.

The study is set against the backdrop of a growing body of literature on the COVID-19 pandemic and its socio-economic effects. Notably relevant from the point of view of this study, is the Gentiloni report published in March 2022 that took stock of the socio-economic impact of the pandemic and provided strategic reflections on the emerging and future challenges that will be faced by the EU as it recovers from the pandemic (see subsection 1.2 below). The European Parliament has commissioned a range of reports on the impacts of the COVID-19 pandemic[3]. In addition, reports are being published at the national level as countries and EU Member States[4] take stock of their responses to the pandemic. Industry bodies are also developing reports focused on their particular sectors, while multilateral institutions such as the United Nations Conference on Trade and Development (UNCTAD)[5], the Organisation for European Co-operation and Development (OECD)[6], and the World intellectual Property Organisation (WIPO)[7] have published reports related to the pandemic. Finally, there is also an increasing number of academic articles and other publications being produced as researchers across various disciplines and industry organisations seek to make sense of the pandemic.

The study adds to the existing literature by providing three key elements. First, the study differentiates itself from a large part of the literature by looking at the policy response and more specifically **at the socio-economic effects focusing on industry and in particular on SMEs, the cultural and creative industries, workers, and effects stemming from the containment and support measures** put in place by Member States to curb the spread of the pandemic.

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3 For example: De Vet, J.M. et al., 2021, *Impacts of the COVID-19 pandemic on EU industries,* Publication for the Committee on Industry, Research and Energy (ITRE), Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg. Available at: https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662903/IPOL_STU(2021)662903_EN.pdf; Marcus, J. S. et al., 2021, *The impact of COVID-19 on the Internal Market*, Publication for the committee on Internal Market and Consumer Protection, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg. Available at: https://www.europarl.europa.eu/RegData/etudes/STUD/2021/658219/IPOL_STU(2021)658219_EN.pdf; and, Culture Action Europe & Dâmaso, M., 2021, *Research for CULT Committee – The situation of artists and cultural workers and the post-COVID-19 Cultural Recovery in the European Union,* European Parliament, Policy Department for Structural and Cohesion Policies, Brussels. Available at: https://www.europarl.europa.eu/RegData/etudes/STUD/2021/652250/IPOL_STU(2021)652250_EN.pdf

4 For example, Denmark: Folketinget Januar 2021, *Håndteringen af covid-19 i foråret 2020 Rapport afgivet af den af Folketingets Udvalg for Forretningsordenen nedsatte udredningsgruppe vedr. håndteringen af covid-19.*

5 UNCTAD, 2022, *The COVID-19 Pandemic Impact on Micro, Small and Medium-sized Enterprises. Market Access Challenges and Competition Policy*, Geneva.

6 For example, OECD, 2020, *Coronavirus (COVID-19): SME Policy Responses*, Updated 15 July 2020, and, OECD, 2022, *First lessons from government evaluations of COVID-19 responses: A synthesis.*

7 Vecco, M. et al., 2022, *The impact of the COVID-19 pandemic on creative industries, cultural institutions, education and research*, World Intellectual Property Organisation.

Secondly, the study **provides new primary data** and as such **updates existing data** that were collected by previous studies. This is particularly the case for the Temporary Framework for State aid as the latest publication which provided an analysis of the support measures was published in August 2021 and reviewed the period between March and December 2020. As such, section 3.6 presents a new quantitative analysis covering the whole period over which the COVID-19 Temporary Framework for State aid was implemented – albeit with some methodological limitations as set out in the same section. Finally, this study includes a **focus on the Cultural and Creative Industries (CCI)** as this was a sector that was particularly negatively affected by the pandemic and associated restrictions.

Below we provide an overview of the Gentiloni report. Then we briefly set out the methodology that underpinned the data collection and the study more broadly.

## 1.2 The 2022 Report *A new era for Europe*

The report *A new era for Europe*[8] ('the Gentiloni report') was published in March 2022 following work undertaken by a high-level group of academics and scholars convened by the Commissioner for Economy, Paolo Gentiloni. The Gentiloni report provides some reflections on the emerging economic and social challenges faced by the EU as it recovers from the COVID-19 pandemic.

The Gentiloni report provides a **forward-looking assessment** of the future strategic challenges that will be faced by the EU, including the main socio-economic trends and the issues they will raise. However, the scope of the report is quite broad and goes beyond these policy areas by also considering institutional, political, and geopolitical trends and developments. In addition, while the report takes the pandemic as a starting point, it also reviews policy decisions taken before the pandemic and other important developments not directly linked to the pandemic as well, such as the euro crisis for example, to offer an indication of what lies ahead for the EU. Other transformations that were underway before the pandemic, but which were accelerated by the pandemic, including the twin Green and Digital Transition were also reviewed. Finally, the Gentiloni report was drafted before the Russian invasion of Ukraine.

In the report, three scenarios are presented which aim to illustrate potential paths the EU could follow in the short, medium and longer term.

In the '**Business as Usual'** scenario, the current trends and issues faced by the EU would continue to grow in importance but would be met with modest institutional and policy changes, particularly regarding the decarbonisation of the economy and healthcare spending. According to the report's authors, this scenario would be akin to the decade that followed the 2008 financial crisis, the sovereign debt crisis and the subsequent recession.

The **'Fragmentation and Conflict'** scenario presents a more pessimistic future where the effects of the Digital and Green (Twin) Transition fragment the single market by increasing current levels of inequality as some regions and socio-economic groups benefit from the Twin Transition, while others are negatively impacted thereby. In addition, the public debt burden accrued before the pandemic and significantly exacerbated as the result of the public borrowing needed to implement lockdown measures is expected to lead to social and political instability as taxes are raised and public spending is cut. Taken together, these developments could lead to the weakening of the EU's ability to react swiftly to future crises.

[8] Carraro, C. et al. (2022), op. cit.

'**European New Era'** presents the more optimistic scenario in which the COVID crisis provides the impetus for change. This scenario would be akin to the aftermath of WWII where a strong and inclusive recovery was witnessed across many parts of Europe. This scenario is the one favoured by the authors of the report and several recommendations are made to this end.

The Gentiloni report is essentially a **forward-looking** study (in contrast to this study which is primarily retrospective albeit with some prospective elements) which considers some of the more important changes brought by the pandemic and how these will affect the EU's recovery. As such, the Gentiloni report **does not map out the impacts of the pandemic with regards to industry in general, and SMEs in particular,** a gap that this study is intended to help fill.

Moreover, there are several areas where the pandemic had a sizeable impact, and which are not extensively covered by the Gentiloni report. For example, the impact of COVID-19 on the **Temporary Framework for State aid, the CCI sector**, and more specific policy measures such as the **Passenger Locator Forms (PLFs) and the EU digital COVID certificate** are not extensively reviewed. Consequently, this study seeks to complement the Gentiloni report by providing a more detailed and empirical picture of the socio-economic impacts of COVID-19 in those areas.

## 1.3 The EU industrial policy context

### 1.3.1 EU industrial policy

As this study is positioned in the context of EU industrial policy, it is worth presenting shortly its key elements. The overall aim of EU industrial policy is to increase the **competitiveness** of European industry to drive **sustainable growth and employment** in Europe[9]. Industrial policy is horizontal in nature and aims to secure framework conditions favourable to industrial competitiveness. This may require that particular attention be paid to specific enabling industries and technologies that underpin overall competitiveness. Industrial policy is integrated into a number of other EU policies such as those relating to access to finance, development of skills and employment, trade, the internal market, research and innovation, environmental protection and public health.

Specifically, EU industrial policy is aimed at:

1) 'speeding up the adjustment of industry to *structural changes*';
2) 'encouraging an *environment favourable to initiative and to the development of undertakings* throughout the Union, particularly *small and medium-sized undertakings'*;
3) 'encouraging an environment favourable to *cooperation* between undertakings'; and
4) 'fostering better exploitation of the industrial potential of policies of *innovation, research and technological development'*[10].

### 1.3.2 Developments in EU industrial policy

While initially industrial policy was focused on creating the single market, economic and monetary union and dealing with EU enlargement, in recent years, industrial policy has focused more on development of industry. The *Political Guidelines for the next European Commission 2019-2024*[11] set out six themes and supporting policy measures: a European Green Deal; an economy that works for people;

9 The legal basis for EU industrial policy is Article 173 of the Treaty on the Functioning of the European Union (TFEU).

10 Article 173 of the TFEU, emphasis added.

11 European Commission, Directorate-General for Communication, Leyen, U., 2020, *Political guidelines for the next European Commission 2019-2024; Opening statement in the European Parliament plenary session 16 July 2019; Speech in the European Parliament plenary session 27 November 2019*, Publications Office of the European Union. Available at: https://data.europa.eu/doi/10.2775/101756.

a Europe fit for the digital age; protecting our European way of life; a stronger Europe in the world; and, a new push for European democracy.

Several initiatives have been launched within the framework of the *Political Guidelines*. These include The *European Green Deal*[12], launched on 11 December 2019, which is the Commission's *de facto* prime economic policy agenda for Europe aiming at competitive, sustainable and inclusive economic growth. The *New Circular Economy Action Plan*[13], launched in March 2020, underpins the European Green Deal and aims to reduce the EU's consumption footprint and double the EU's circular material use rate in the coming decade, while boosting economic growth.

The Communication of 19 February 2020 on *Shaping Europe's digital future*[14] provides an overall vision and goals of what the Commission wants to achieve in the digital world. The key theme is European technological sovereignty. Two other documents of relevance to the digital transition were also published: the *White Paper on AI 'A European approach to excellence and trust'*[15], and the communication on *A European strategy for data*[16].

On the 10th of March 2020, a Communication on *A New Industrial Strategy for Europe*[17] was launched. This was part of a package of communications including *An SME strategy for a sustainable and digital Europe*[18], a *Strategy for the Single Market* and a *Strategy for enforcement and implementation of the Single Market*. The *New Industrial Strategy* has three drivers: a globally competitive industry, climate-neutrality, and an industry shaped by a digital future.

### 1.3.3 Updating EU industrial policy

On the day after the *New Industrial Strategy for Europe* was launched, the World Health Organization declared the COVID-19 as a pandemic. The impact of the COVID-19 pandemic led to the need for an update of the Industrial Strategy, based on new ideas related to economic recovery, reconstruction and building resilience. According to the Commission, although the impact of the crisis varies across different industrial ecosystems and companies, the key issues highlighted by the crisis are:

- The role of borders in restricting free movement of people, goods and services;
- Interrupted global supply chains affecting availability of essential products; and
- Disruption of demand.

To address these issues, the *Updated Industrial Strategy*[19] put forward new measures to take into account the lessons learned from the crisis and sustain investment. In particular, it focuses on:

- Strengthening of the resilience of the single market;
- Supporting Europe's Open Strategic Autonomy through dealing with dependencies; and

[12] European Commission, *The European Green Deal*, COM(2019) 640 final, Brussels, 11.12.2019.

[13] European Commission, *A new Circular Economy Action Plan For a cleaner and more competitive Europe*, COM(2020) 98 final, Brussels, 11.3.2020.

[14] European Commission, *Shaping Europe's Digital Future*, COM(2020) 67 final, Brussels, 19.2.2020.

[15] European Commission, *White Paper On Artificial Intelligence – A European approach to excellence and trust*, COM(2020) 65 final, Brussels, 19.2.2020.

[16] European Commission, *A European strategy for data*, COM(2020) 66 final, Brussels, 19.2.2020.

[17] European Commission, *A New Industrial Strategy for Europe*, COM(2020) 102 final, Brussels, 10.3.2020.

[18] European Commission, *An SME Strategy for a sustainable and digital Europe*, COM(2020) 103 final, Brussels, 10.3.2020; European Commission *Long Term Action Plan for better implementation and enforcement of single market rules*, COM(2020) 94 final, Brussels, 10.03.2020.

[19] European Commission, *Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery*, Brussels, COM(2021) 350 final, 5.5.2021.

- Supporting the business case for the twin transitions.

In addition, to reflect the need to enhance the competitiveness of Europe's net-zero industry and work swiftly towards climate neutrality, the Commission has recently put forward the *Green Deal Industrial Plan for the Net-Zero Age*[20].

### 1.3.4 Recent developments

For the past three to four decades, industrial policy has been informed by economic liberalisation and globalisation. However, looking ahead, the notion that this will continue is being increasingly questioned. The McKinsey Global Institute asks if the world is *On the cusp of a new era* (2022)[21]; FITCH Solutions Country Risk & Industry Research suggest that globalisation may be at a plateau after three great shocks (the sub-prime mortgage and public debt crises, COVID-19 and Russia's invasion of Ukraine), and future trajectories are uncertain[22]; and, FDI Intelligence refers to '*The new beat of the world economy*' where globalism is being replaced with self-reliance and 'tribal markets'[23]. As such, a sea change might be occurring which needs to be factored in when looking at policy implications of COVID-19 recovery measures.

## 1.4 Methodology

The study was produced by using the following research tools:

- **Desk research** – including an extensive review of the available academic and grey literature;
- **Interviews** – with stakeholders from EU-level industry and Employers' associations, the EU Commission, as well as national authorities, national level associations and enterprises and State aid beneficiaries (see the table below); and
- **Case studies** – on themes of particular relevance and interest.

The table below provides a summary of the interview programme by stakeholder group.

Table 1: Interview programme

| Stakeholder group | Number of interviews |
|---|---|
| European institutions (DGs COMP, GROW and ECFIN) | 5 |
| Professional advisors | 1 |
| EU SME and business associations | 5 |
| National SME associations | 15 |
| NGOs, civil society and labour organisations | 2 |
| Member State authorities (incl. national promotional banks) | 6 |
| International and cross-country organisation | 3 |
| Beneficiaries | 2 |
| Total | **39** |

[20] European Commission, *A Green Deal Industrial Plan for the Net-Zero Age*, COM(2023) 62 final, Brussels, 1,2,2023.
[21] Bradley, C., Seong, J., Smit, S. and J. Woetzel, 2022, *On the cusp of a new era?*, McKinsey Global Institute Discussion Paper.
[22] World of Worries, Political Risks in 2023, 12 October 2022.
[23] Dettoni, J., 2022, *FDI Intelligence*, October/ November 2022, p. 3.

**Case studies** are presented throughout the body of the main report. The table below lists the case studies developed for this study:

Table 2: Overview of case studies

| Case study title | Short description | Section in the report |
|---|---|---|
| (1) French furlough scheme | • Overview of the unfolding of the pandemic in France.<br>• Overview of wage subsidy scheme rolled out to save jobs and avoid large-scale bankruptcies.<br>• Impacts of the scheme and lessons learnt. | Section 3 |
| (2) Greek business guarantee fund | • Overview of the unfolding of the pandemic in Greece.<br>• Overview of the guarantee scheme rolled out to support Greek companies incl. SMEs.<br>• Impacts of the scheme and lessons learnt. | Section 3 |
| (3) Sweden's policy response to the pandemic | • Review of the Swedish response to the pandemic.<br>• Impact of Sweden's no-lockdown strategy on economy. | Section 5 |
| (4) Unintended consequences: the missing bankruptcies | • Overview of the reduction in bankruptcies during and after the pandemic EU-wide.<br>• Potential policy and economic implications going forward. | Section 6 |
| (5) Impact of the pandemic on European theatres | • Focus on the performing arts in the events sector.<br>• Performing arts was purported to be the hardest hit as a result of the pandemic. | Section 6 |
| (6) The impact of the COVID pandemic State aid on culture and creative industries (CCIs) in Estonia | • Overview of the unfolding of the pandemic in Estonia.<br>• Impact of State aid support on the CCI sector. | Section 6 |
| (7) The impact of COVID-19 on architects | • Issues experienced by architects.<br>• Support provided to help the sector.<br>• Long-term impact of the pandemic on architectural sector, incl. business models. | Section 6 |
| (8) Challenges experienced by undertakings in the CCI in obtaining access to TF support | • Due to various factors related to the CCI such as seasonality, the forms of employment, and how supply chains and linkages with other activities operate, there were some particular issues experienced by the CCI in accessing TF support. | Section 6 |
| (9) Unintended consequences of COVID-19: improvement in working conditions for low paid vulnerable workers in Ireland: the case of meat processing | • Issues experienced by meat industry in Ireland during the pandemic.<br>• Impact of the pandemic in improving meat industry's workers conditions. | Section 7 |
| (10) Labour shortages | • Impacts of the pandemic on the labour market.<br>• The return to work – challenges in the labour market with the withdrawal of restrictions and the return to normal working hours.<br>• Impact on youth/education and potential yet-to-emerge impact of labour market. | Section 7 |

## 1.5 Structure of the report

The report is structured as follows:

- **Section 2**: Evolution of the pandemic and EU/MS response;
- **Section 3**: The Temporary Framework for State aid support;
- **Section 4**: The EU Digital COVID certificate;
- **Section 5**: Other measures: restrictions implemented by Member States;
- **Section 6**: Consequences for industry, SMEs and CCI;
- **Section 7**: Consequences for workers;
- **Section 8**: Conclusion: discussion of consequences;
- **Annex A**: Amendments to the Temporary Framework for State aid;
- **Annex B**: Eurofound's categorisation of new forms of employment.

# 2 EVOLUTION OF THE PANDEMIC AND EU/MS RESPONSE

KEY FINDINGS

The COVID-19 pandemic has had a profound impact on the European economy and society. Member States were not prepared to face the unprecedented nature, scale and magnitude of the public health crisis created by the pandemic. Member States had to make difficult decisions trying to curb the spread of the pandemic and protect the health of their citizens while simultaneously also supporting their economy to avoid large-scale economic collapse. This resulted in a series of restrictions, collectively referred to as lockdowns, and support measures involving financial and fiscal aid instruments aimed at businesses and workers. The key points of this section are:

- Member States had to make difficult trade-offs that overall favoured public health over the economy initially. This resulted in lockdowns and other restrictions which negatively impacted the economies of Member States;
- The EU played a key role in co-ordinating the response to the pandemic through for example, helping to address single market issues, procurement of vaccines, financial support via conventional EU instruments but also through *ad-hoc* instruments designed to respond to the unprecedented needs posed by the pandemic. The EU also played a key coordination role, for example, regarding the vaccine roll-out and the EU Digital COVID Certificate. The EU response was crucial in the recovery from the pandemic as it generated consensus from Member States on the need for a common approach crystallised in the recovery package NextGenerationEU; and
- The economic impact of the pandemic has been uneven across Member States. While virtually all Member States' GDP shrank during the pandemic, the level of contraction has been lesser for the Nordics, Baltics and Poland. This could be in part due to the more advanced levels of digitalisation of their economy, which allowed firms to seamlessly continue their activities despite the restrictions on physical gatherings.

To provide a backdrop for what follows, we set out a succinct chronological overview of the evolution of the COVID-19 pandemic in the EU from the first case to the gradual lifting of restrictions. While it is difficult to present an overall account of the pandemic at the EU level, as the pandemic unfolded in different ways and times in different Member States, particularly after the first two waves, below we set out the main events and developments of the pandemic's timeline and as well as the challenges faced by the EU and Member States when responding to this unprecedented health crisis.

**Initial outbreak and first wave**

The first cases of the respiratory illness SARS-CoV-2, now commonly known as COVID-19, were reported in Wuhan, China, in December 2019[24]. Soon after, it became evident that this virus was different to previously known coronaviruses, and within the first two weeks of 2020 the Chinese authorities had shared the sequenced genome of the new coronavirus.

On 11 January 2020, China reported the first known death from SARS-CoV-2. In mid-January of the same year, the European Commission's Health Security Committee met for the first time to discuss the new threat.

[24] Safi, M., 2020, 'Coronavirus: From unknown virus to global crisis – timeline', *The Guardian*, https://www.theguardian.com/world/ng-interactive/2020/dec/14/coronavirus-2020-timeline-covid-19, accessed: 10 October 2022.

Several days later other countries, including Japan, South Korea, Thailand, and the United States (US), started to report detecting COVID-19 cases on their territories[25].

On 28 January 2020, the Croatian presidency of the Council of the EU decided to activate the EU's **integrated political crisis response mechanism** (IPCR) to respond to the COVID-19 outbreak. IPCR is the EU framework for the coordination of cross-sectoral crises at the highest political level. Initially, the IPCR was activated in information sharing mode, however, one month later on 2 March 2020, the IPCR was escalated to full mode. This allowed for regular crisis roundtables.

At the same time, the first block of funding aimed at mitigating the consequences of the pandemic was mobilised by the Commission, with EUR 10 million repurposed for research on the pandemic via Horizon 2020[26]. On 30 January 2020, WHO declared the worldwide COVID-19 outbreak to be a Public Health Emergency of International Concern[27]. By that point, 171 deaths from the new respiratory illness became officially acknowledged[28].

By mid-February 2020, France reported its first death from COVID-19 – the first in the European territory, while in China the death toll had already totalled 1,500. Shortly thereafter, Italy became the first Member State to face a large outbreak of COVID-19[29]. From February 2020, the pandemic spread exponentially throughout Europe, leading in March 2020 to the shutdown of public spaces, closing of the national borders, and country-wide bans on physical gatherings other than for essential purposes, leading to lockdowns. On 11 March 2020, WHO declared the crisis as a global pandemic. On 17 March, EU-27 leaders met via videoconference and agreed to close the EU's external borders initially for a period of 30 days. Flights were suspended, to reopen no sooner than in May 2020, alongside gradual lifting of the restrictions[30].

Responding to the adverse economic effects of lockdowns, European leaders used a wide range of measures to support the economy from mid-March 2020, such as bringing in the **Temporary Framework (TF) for State aid** (see Section 3 for the rationale underpinning the introduction of the TF).

Figure 1 provides an overview of the restrictions put in place by Member States by 13 April 2020. These measures continued to evolve throughout the pandemic on a daily basis and are still being tracked.

[25] Derrick Bryson Taylor, 2021, 'A Timeline of the Coronavirus Pandemic', *New York Times*, https://www.nytimes.com/article/coronavirus-timeline.html, accessed: 10 October 2022.

[26] European Commission, 2022, Timeline of EU action, https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/timeline-eu-action_en, accessed: 10 October 2022.

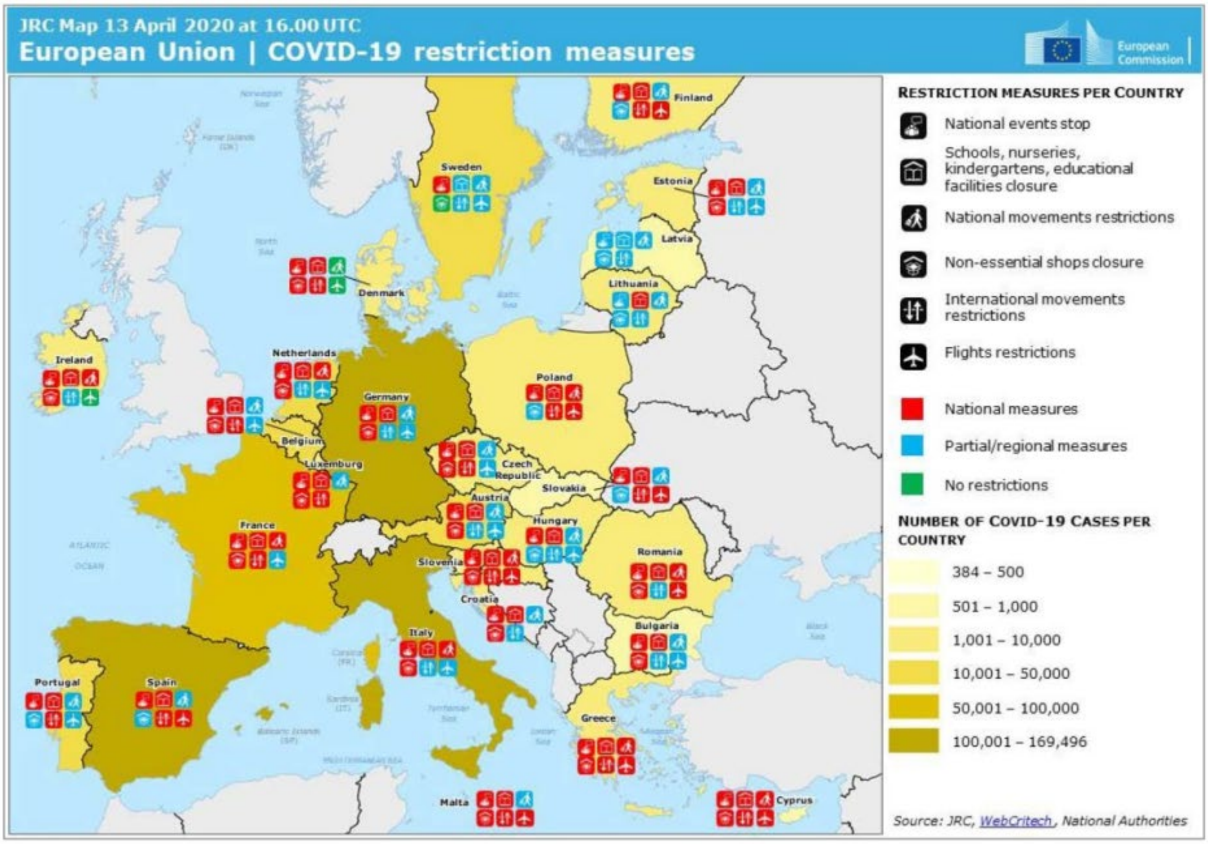
[27] World Health Organization, 2022a, Coronavirus disease (COVID-19) pandemic, https://www.who.int/europe/emergencies/situations/covid-19, accessed: 10 October 2022.

[28] World Health Organization, 2021a, The true death toll of COVID-19. Estimating global excess mortality, https://www.who.int/data/stories/the-true-death-toll-of-covid-19-estimating-global-excess-mortality, accessed: 10 October 2022.

[29] Derrick Bryson Taylor (2021), op. cit.

[30] Blanford, J. I., Jong, N. B., Schouten, S. E., Friedrich, A. W., and Araújo-Soares, V., 2022, 'Navigating travel in Europe during the pandemic from mobile apps, certificates and quarantine to traffic-light system,' *Journal of Travel Medicine*, 29(3): 1-13, DOI: 10.1093/jtm/taac006.

Figure 1: Overview of containment measures and other restrictions put in place by MS




Source: European Commission, Joint Research Centre (2020).

## The second wave

While July 2020 saw a decrease in the number of recorded cases of infection across the EU, by August the official global count of COVID-19 casualties exceeded 800,000 before reaching one million in September[31], when another wave of COVID-19 hit Europe. The new wave of infections led to reinstatement of previously repealed, stringent policy measures and lockdowns across the EU later into the autumn and throughout the winter. During the winter of 2020, the national governments in Europe upheld restrictions on public gatherings, organisation of events, and limits on freedom of movement.

Restrictions and the shutdown of the world economy resulted in spikes in unemployment, pushing the European economies into recession, disrupting supply chains and labour markets. In response to those circumstances, European leaders agreed on the need to provide financial support to Member States, based on the recovery plan and Multiannual Financial Framework covering the period between 2021 and 2027[32]. The package accepted in late July 2020 totalled EUR 1.8 trillion. In addition, on 25 September 2020, it was decided that the Member States would be supported with an additional EUR 87.4 billion through loans under *Support to mitigate Unemployment Risks in an Emergency* (SURE)[33].

[31] Derrick Bryson Taylor (2021), op. cit.

[32] European Commission (2022), Timeline of EU action, op. cit.

[33] Council Regulation (EU) 2020/672 on the establishment of a European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) following the COVID-19 outbreak, 19 May 2020. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0672.

By the end of 2020, several countries worldwide began preparations for their vaccination campaigns, taking the first step towards the re-opening of their economy and towards transitioning out of the pandemic[34].

As of 31 December 2020, the official death toll from COVID-19 reached approximately 1.8 million worldwide. However, WHO estimated that the real scale of excess mortality in 2020 could have had been significantly higher, with more than an additional 3 million people deceased as a result of the pandemic. The agency also emphasised that the scale of unreported mortality has been disproportionately high in Global South countries[35].

A key feature of the EU response was the **joint procurement of COVID-19 vaccines**. In June 2020, Member States approved the *EU Strategy for COVID-19 vaccines* developed by the Commission. The aim of the EU Vaccines Strategy[36] was to secure vaccine supplies and facilitate their distribution throughout the Member States. The strategy included a joint procurement mechanism, which was conceived to provide more equitable access to specific medical countermeasures and improve the overall security of supplies.

The containment measures re-introduced in the autumn of 2020 were gradually lifted in early spring of 2021, as the number of infections in Europe decreased[37]. Several Member States authorities initiated discussions on the need to implement a policy tool to resume freedom of movement with the aim of allowing those who had already received vaccination to travel both domestically and internationally[38]. In March 2021, the **EU Digital COVID Certificate** (EUDCC) was proposed by the Commission. The EU deployed the system on 1 July 2021, however, by the time EUDCC was officially introduced, some national governments had already implemented the solution autonomously on a non-compulsory basis[39]. Alongside the EU Member States, the EUDCC programme has been gradually joined by 49 third countries[40] (see section 4 for a more detailed overview of the implementation of the EUDCC). Since July 2021, the number of issued certificates has been steadily increasing, reaching 350 million in August 2021[41], and then 1.7 billion in April of the following year[42].

May 2021 saw the EU successfully negotiating contracts with *BioNTech* and *Pfizer,* securing the provision of additional 1.8 billion vaccines to the EU by 2023[43]. This purchase followed the two previous contracts, negotiated between 2020 and 2021, which covered 600 million vaccine doses[44].

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[34] Blanford, J. I., Jong, N. B., Schouten, S. E., Friedrich, A. W., and Araújo-Soares, V. (2022), op. cit.

[35] World Health Organization (2021a), op. cit.

[36] European Commission, *EU Vaccines Strategy*. Available at: https://commission.europa.eu/strategy-and-policy/coronavirus-response/public-health/eu-vaccines-strategy_en#:~:text=The%20objectives%20of%20the%20EU,leading%20the%20global%20solidarity%20effort, accessed on 18 January 2023.

[37] Blanford, J. I., Jong, N. B., Schouten, S. E., Friedrich, A. W., and Araújo-Soares, V. (2022), op. cit., p. 2.

[38] Dal-Ré, R., Banzi, R., Becker, S. L., Launay, O., and Pavli, A., 2022, 'High heterogeneity on the accepted vaccines for COVID-19 certificates in European countries', *Travel Medicine and Infectious Disease*, 48,102321; https://doi.org/10.1016/j.tmaid.2022.102321, p. 1.

[39] Karopoulos, G., Hernandez-Ramos, J. L., Kouliaridis, V., and Kambourakis, G., 2021, *A Survey on Digital Certificates Approaches for the COVID-19 Pandemic*, IEEE Access, vol. 9, 138003–138025; https://doi.org/10.1109/ACCESS.2021.3117781, p. 138007.

[40] European Commission, 2022a, European Digital COVID Certificate, https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/eu-digital-covid-certificate_en, accessed: 10 October 2022.

[41] Karopoulos, G., Hernandez-Ramos, J. L., Kouliaridis, V., and Kambourakis, G. (2021), op. cit., p. 138007.

[42] Covid Pass Certificate.com, 2022, EU COVID Certificate: the global vaccine passport, https://www.covidpasscertificate.com/europe-digital-green-pass/, accessed: 10 October 2022.

[43] Forman, R., and Mossialos, E.,2021, 'The EU Response to COVID-19: From Reactive Policies to Strategic Decision-Making', *Journal of Common Market Studies,* 10(59) (Supplement 1): 56-68. DOI: 10.1111/jcms.13259, Epub ahead of print, p. 64.

[44] Martuscelli, C., 2021, 'EU stonewalls over von der Leyen's role in multibillion-euro Pfizer vaccine deal', *Politico.eu*, https://www.politico.eu/article/eu-stonewalls-over-von-der-leyens-role-in-multi-billion-euro-pfizer-jab-deal/, accessed: 10 October 2022.

As of the end of August 2021, 70% of the adult population of the EU was known to be fully vaccinated[45]. This number rose to 75% in October of the same year[46].

Finally, it is important to note the EU support for recovery from the pandemic. In July 2020, the European Council approved the **NextGenerationEU** recovery instrument[47]. This instrument is worth EUR 750 billion and is part of the reworked EU budget. EUR 390 billion would be provided to particularly hard-hit Member States as grants, and an additional EUR 360 billion as loans. The agreement also contains a clear commitment to respect the Rule of Law and protect the financial interests of the EU and its Member States. Key in the implementation NextGenerationEU is the **Recovery and Resilience Facility,** which accounts for EUR 672.5 billion of NextGenerationEU in the form of loans and grants available to support reforms and investments undertaken by Member State. The funding would be made available after Member States submit **Recovery and Resilience Plan**, which need to demonstrate some degree of alignment with EU priorities such as the twin Green and Digital Transition, but also health, economic social and institutional resilience in order to improve crisis preparedness in the future[48].

**Another wave?**

The summer of 2022 saw the infections in Europe increasing in number again.[49] However, the new wave's impact on the economy and societies across Europe was much smaller than that of the outbreaks of previous years. The latest increases in the numbers of infections did not result in health crises as serious as those of 2020 and 2021, nor in the introduction across the EU of policy measures as stringent as those in the previous years. However, WHO has continued to warn against dismissing the possibility of COVID-19 disrupting the socio-economic landscape of Europe in the future. WHO officials predicted that the winter of 2022/2023 might see a spike in hospitalisations and deaths. There is a lingering risk that COVID-19 might evolve into a more deadly and contagious variant[50].

As of 7 October 2022, the total number of recorded cases of COVID-19 contracted worldwide exceeded 620 million, with more than 6.5 million recorded deaths and 9 billion vaccine doses administered[51]. However, earlier that year, WHO's estimates suggested that the number of excess deaths associated with the pandemic in 2020 and 2021 could have reached between 13.3 and 16.6 million[52].

[45] European Commission (2022), Timeline of EU action, op. cit.

[46] European Commission, 2021, Statement by President von der Leyen on vaccine exports, https://ec.europa.eu/commission/presscorner/api/files/document/print/en/statement_21_5341/STATEMENT_21_5341_EN.pdf, accessed: 10 October 2022.

[47] European Council, 2022, *A recovery plan for Europe*, https://www.consilium.europa.eu/en/policies/eu-recovery-plan/, accessed 15 December 2022.

[48] European Commission, 2022, Recovery and Resilience Facility. Available at: https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility_en.

[49] Hipwell, D., 2022, 'Europe Is at Center of New Wave of Covid Infections,' WHO Says,' *Bloomberg*, https://www.bloomberg.com/news/articles/2022-07-06/europe-is-at-center-of-new-wave-of-covid-infections-who-says?leadSource=uverify%20wall, accessed: 10 October 2022.

[50] United Nations News, 2022, *Onset of northern winter could see spike in COVID-19 hospitalizations, deaths*, https://news.un.org/en/story/2022/08/1125912, accessed: 10 October 2022.

[51] Kantis, C., et al. (2022), 'UPDATED: Timeline of the Coronavirus. A frequently updated tracker of emerging developments from the beginning of the COVID-19 pandemic,' *Think Global Health.org*, https://www.thinkglobalhealth.org/article/updated-timeline-coronavirus, accessed: 10 October 2022.

[52] World Health Organization (2022b), *14.9 million excess deaths associated with the COVID-19 pandemic in 2020 and 2021*, https://www.who.int/news/item/05-05-2022-14.9-million-excess-deaths-were-associated-with-the-covid-19-pandemic-in-2020-and-2021, accessed: 10 October 2022.

# 3 THE TEMPORARY FRAMEWORK FOR STATE AID SUPPORT

KEY FINDINGS

This section reviews the findings and insights regarding the design and implementation of the Temporary Framework. Following an overview of EU State aid rules and an analysis informed by interview feedback and available data, the study was able to conclude that:

- The Temporary Framework was effective in terms of avoiding bankruptcies and provided much needed support to the national economies of Member States and the EU as a whole;
- The approval of Temporary Framework notifications was carried out in a highly efficient and swift manner by the Commission. The disbursement of measures at national and regional level was also reported to have overall been timely and effective;
- There were variations in terms of the level of targeting of the Temporary Framework measures. At the outset of the pandemic, some Member States rolled out targeted measures to respond to specific needs. However, as the pandemic went on, the scope of measures became broader and were intended to reach a wider range of beneficiaries;
- Member States with larger GDPs provided the highest level of support to their economies; and
- Linked to the above, the existing literature and evidence, albeit limited, suggests that there are concerns regarding increased disparities between Member States in the medium to long term due to uneven and disproportionate distribution of the measures across the EU-27. Member States with larger fiscal capacities were able to implement more Temporary Framework measures comparatively to other Member States with similar needs.

During the early stages of the pandemic, several estimates highlighted the potentially huge impact that the pandemic might have on the liquidity of undertakings if no policy intervention occurred[53]. As a result, countries launched major support initiatives to avoid collapse of their economies. In the EU, a key vehicle for a wide range of support was the Temporary Framework (TF) for State aid. In this section we set out what the principles of State aid in the EU are and the circumstances that led to the adoption of the Temporary Framework. Some differences between the TF as applied in 2008 and 2020 are noted. Then the evolution of the TF and management of programmes is discussed, after which an analysis of disbursements is presented. Finally, two case studies of TF programmes are provided.

[53] OECD, 2020, Coronavirus (COVID-19): SME Policy Responses, update 15 July 2020, pp.14-16.

## 3.1 The principles of EU State aid and the Temporary Framework

State aid is defined as an advantage in any form whatsoever conferred by national public authorities to undertakings on a selective basis [54]. In practical terms, in order to be considered State aid, a measure needs to meet all the following cumulative criteria:

- uses state resources;
- confers an advantage to a particular undertaking 55;
- confers an advantage that is selective;
- distorts competition; and
- affects trade between Member States.

State aid involves more than just subsidies and includes any public measures that reduce costs normally borne by businesses, such as reductions of social security contributions, deferring payment of taxes, etc. [56]. While Article 107 of the Treaty on the Functioning of the European Union (TFEU) makes clear that State aid is in principle 'incompatible' with the internal market, the Treaty also defines exceptions. These exceptions include situations where State aid facilitates the achievement of public interest objectives and is "appropriate, necessary and not disproportionate for that purpose"[57]. One example of such an exception was the application of the TF in the wake of the 2008 financial crisis.

The Commission has exclusive competence to interpret, apply, and enforce the relevant substantive provisions, which are further elaborated in secondary legislation and soft law, under Article 108 TFEU[58]. As such, Member States wishing to implement State aid measures must first receive approval following the issuing of a formal notification to the Commission. In cases where an exemption has been approved by the Commission, notifications must be confirmed via the issuing of an official decision, which can be found on DG COMP's repository[59]. The main objective of the EU State aid policy is to avoid distortion of competition (i.e. preserve the level playing field of the internal market) to support economic and social cohesion [60, 61].

54 European Commission, State Aid Overview. Available at: https://competition-policy.ec.europa.eu/state-aid/state-aid-overview_en.

55 The European Court of Justice defines undertakings as "any entity engaged in economy activity" regardless of legal status or whether it offers its services free of charge. See Oxford Academic, 2006, *The meaning of undertaking within Article 81 EC*. Available at: https://academic.oup.com/book/4456/chapter-abstract/146467767?redirectedFrom=fulltext.

56 Irish Commission on taxation and welfare, 2022, *Information note on State aid*. Available at: https://assets.gov.ie/234154/b25aa5b3-548e-4f16-877b-988c36be3828.pdf, accessed on 17 February 2023.

57 Nicolaides, P., 2018, 'The compatibility of State Aid with the internal market', *European State Aid Law Quarterly*, 17(4), 534-545.

58 Within the Commission, the Directorate-General for Competition (DG COMP) is primarily responsible for these direct enforcement powers.

59 European Commission, 2022, *Competition Policy*. Available at: https://ec.europa.eu/competition/elojade/isef/index.cfm.

60 European Commission, 2020, *State aid Scoreboard 2020*. Available at: https://competition-policy.ec.europa.eu/state-aid/scoreboard_en.

61 Ibid. While the pandemic led to a significant increase of the overall levels of expenditure on State aid, it can be noted that the two decades preceding it were also marked by a steady increase of State aid expenditure. Indeed, prior to the pandemic, DG COMP data show that overall, between 2009 and 2019, State aid expenditure per capita of the EU-28 doubled. In the period directly preceding the pandemic, Commission data show that Member States spent EUR 134.6bn, i.e. 0.81% of the EU GDP (excluding aid to agriculture, fisheries and railways). This represents a nominal increase of about 3.6% compared to 2018 expenditure, i.e. an additional EUR 4.7 billion. In addition, there were important variations between Member States. In 2019, Malta, Lithuania and Hungary spent the most relative to their GDP (i.e. between 1.6 to 1.8% of GDP), while Germany was the country that spent the most with EUR 53bn in 2019. Conversely, in the same year, Ireland, Luxembourg and Spain were the Member States that spent the least amount of national funds on State aid measures, which was calculated to be around 0.2-0.3% of GDP. Last, it is worth noting that some Member States significantly increased their levels of State aid expenditure between 2009 and 2019, i.e. Estonia (nineteen-fold increase), Bulgaria (twelve-fold increase), Lithuania (eight-fold increase) and Romania (six-fold increase).

## 3.2 The State aid Temporary Framework

In view of the looming crisis following the COVID-19 outbreak, on 13 March 2020, the Commission adopted a Communication on a *Coordinated economic response*[62], setting out a range of responses to the pandemic. In its Communication, the Commission recognised the unprecedented public health emergency posed by the COVID-19 pandemic as well as the extensive social and economic impacts created by the pandemic and the policy response of Member States and countries around the world to curb the spread of the virus.

The COVID-19 pandemic was a major shock to the global and European economy, making its impact felt in the EU through the following channels: (i) the shock resulting from the Chinese economy's initial contraction in the first quarter of 2020; (ii) the supply shock to the European and global economy resulting from the disruption of supply chains absences from the workplace; (iii) the demand shock to the European and global economy caused by lower consumer demand and the negative impact of uncertainty on investment plans; and (iv) the impact of liquidity constraints for firms[63]. Given the limited size of the EU budget, Member States' national budgets would have to be the main source of responses to COVID-19.

At that time, the existing State aid regime (under Article 107 of the TFEU) was deemed suitable for providing support as its provisions allowed Member States to take measures applicable to all companies (e.g. wage subsidies), to provide direct financial support to consumers (e.g. for cancelled services or tickets not reimbursed by the operators), to meet acute liquidity needs and thus support companies facing bankruptcy, and to compensate companies for damage suffered in exceptional circumstances. Additional measures could also be put in place. In the Communication, the Commission notes that Italy - the first Member State substantially affected by the pandemic - was able to mobilise State aid measures under Article 107(3)(b) of the TFEU. The indicators used in assessing Italy's application would be the basis for the assessment of applications by other Member States, and the Commission would put in place procedural facilitations (e.g. providing templates) to ensure swift approval processes. The Commission was also preparing a special legal framework under Article 107(3)(b) TFEU to adopt if needed (as in 2008 financial crisis).

A few days later, on 19 March 2020, the Commission announced the launch of the 2020 Temporary Framework[64]. This was decided on the basis[65] that **ad-hoc State aid support was urgently needed to 'remedy a serious disturbance in the economy of a Member State'**. In addition, the rationale for the implementation of the 2020 Temporary Framework rested on the fact that the pandemic was impacting all Member States and that the containment measures (which were by that time being implemented by the majority of Member States), were having a negative economic impact.

Initially, the Temporary Framework (TF) provided for five types of aid instruments that could be rendered by Member States as set out in Table 3[66].

[62] European Commission, *Communication on coordinated economic response to COVID-19*, COM(2020) 112 final, Brussels, 13.3.2020. Available at: https://competition-policy.ec.europa.eu/system/files/2021-06/state_aid_scoreboard_note_2020.pdf.

[63] Ibid.

[64] European Commission, Communication from the Commission, Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak, 2020/C 91 I/01, 20.3.2020. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOC_2020_091_I_0001.

[65] Pursuant to Article 107(3)(b) of the TFEU.

[66] European Commission, Communication on the Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak, op. cit.

Table 3: Types of aid instruments falling under the Temporary Framework

| Types of aid instruments approved under the Temporary Framework |
| --- |
| • **Direct grants, selective tax advantages and advance payment schemes** to grant up to EUR 800,000 to a company to address its urgent liquidity needs. |
| • **State guarantees** for loans taken by companies from banks to ensure banks keep providing loans to the customers who need them. |
| • **Subsidised public loans** with favourable interest rates to companies which can help businesses cover immediate working capital and investment needs. |
| • **Safeguards for banks** that channel State aid to the real economy, building on banks' existing lending capacities to use them to channel support to businesses (especially SMEs). The TF specifies that such aid is considered as direct aid to the banks' customers, not to the banks themselves, and gives guidance on how to ensure minimal distortion of competition between banks. |
| • **Short-term export credit insurance** where the Temporary Framework introduces additional flexibility on how to demonstrate that certain countries represent risk that can't be carried by the market, thereby enabling short-term export credit insurance to be provided by the State where needed. |

Source: Authors' own elaboration.

Initially, the main **purpose** of the TF was to provide support to otherwise viable companies that have entered into financial difficulty as a result of the COVID-19 outbreak and the associated restrictions. Companies that were already in difficulty before 31 December 2019 were not eligible for aid under the TF. However, they were able to benefit from public support under existing State aid rules, in particular the Rescue and Restructuring Guidelines[67].

The TF also **aimed** to limit negative consequences on the level playing field in the single market. A **safeguard**, in relation to avoiding distortions to the single market, included in the TF is that it links subsidised loans or guarantees for businesses to the scale of the relevant economic activity, by reference to their wage bill, turnover, or liquidity needs, and to the use of the public support for working or investment capital. This means that similar companies in the EU will be dealt with in the same way.

The TF complements the many other possibilities already available to Member States to mitigate the socio-economic impact of the COVID-19 outbreak, in line with EU State aid rules.

The TF was initially intended to be in place until the end of December 2020, with scope to extend it beyond that date if necessary. Ultimately, the TF was extended until 30 June 2022 (see Table 4).

Throughout its implementation, a number of **horizontal requirements** were put in place for the approval and implementation of TF measures. They were:

1. **Timescale for disbursement:** the Commission initially required all TF aid to be granted by 30 June 2021. Recapitalisation aid, however, could be granted until 30 September 2021;
2. **Eligibility of beneficiaries**: Member States had to ensure that benefiting companies were not experiencing economic difficulties prior to 31 December 2019 in order to ensure the aid was

[67] European Commission, *Communication from the Commission, Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, 2014/C 249/01*, 31.7.2014. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0731(01)&from=EL.

aimed at companies affected as a direct result of the pandemic. To this end, to assess whether an undertaking was 'in difficulty' on 31 December 2019, the Commission used the simplified definition set out in Article 2(18) of the General Block Exemption Regulation[68]. The use of the simplified definition under Article 2(18) was meant to facilitate Member States in implementing TF measures to large groups of beneficiaries;

3. **Relocations:** this requirement specified that aid must not be granted for measures that would lead to the relocation of an undertaking's activities from another EEA or EU Member State to the Member State granting the aid. However, it is important to note that this requirement only applied to relocation within the single market;

4. **Cumulation of aid**: The TF allowed for the cumulation of TF aid by beneficiaries. However, one exception concerned the cumulation of public loans and state guarantees, which was prohibited;

5. **Monitoring and reporting requirements** regarding the aid granted and disbursed. Reporting roles and responsibilities were defined in the notification decisions by the Commission. The relevant Member State authority would submit annual reports to the Commission.

## 3.3 Differences between 2008 and 2020 Temporary Frameworks

The **first Temporary Framework for State aid was put in place by the Commission following the 2008 financial crisis**. While the 2008 TF is not within the scope of this study, it is important to note the modifications to the EU's State aid regime at the time of the 2008 crisis as this experience produced a series of lessons learned which subsequently informed how the Commission responded to the COVID-19 crisis.

In the aftermath of 2008 global economic crisis, the Commission, in its Communication[69] of January 2009, recognised the crucial role played by the finance and banking sector as a precondition for investment, growth and job creation. In addition, the Commission further recognised that in the wake of the financial crisis, financial institutions became much more risk-averse, which in turn led to a credit squeeze. Against this backdrop, the Commission endorsed the need for a coordinated approach to the implementation of national aid measures to rescue and bolster the European banking sector, which was facing a liquidity crisis to service their short-term debts.

Initially, Member States provided liquidity support to banks under the control of the Commission, which ensured that measures were proportionate, not unduly selective (i.e. conferring a competitive advantage), and, in turn, did not distort the single market[70]. Subsequently, the first TF was amended under Articles 87 and 88 of the TFEU to allow Member States to grant aid to all sectors, beyond just financial institutions. The measures under this framework included aid of up to EUR 500,000 per company for a period of two years in the form of state guarantee schemes, subsidised loans (for the development and production of carbon-neutral products) and risk capital aid of up to EUR 2.5m per SME.

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68 European Commission, Commission Regulation (EU) 2022/720 of 10 May 2022 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A32022R0720.

69 European Commission, Communication from the Commission — Temporary Community framework for State aid measures to support access to finance in the current financial and economic crisis, 2009/C 16/01, 22.1.2009. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52009XC0122%2801%29.

70 Kasser, K., Solarte-Vasquez, M. C., 2022, 'Neutrality and Equality Aspects in the EU State Aid Temporary Framework 2020: The Case of the Airline Industry', *TalTech Journal of European Studies*, 12(1), pp. 99-122.

The implementation of the 2008 TF allowed the Commission to gain insights and experience on how to respond to economic crises. The scale and scope of the COVID-19 health and economic crisis went well beyond the 2008 crisis. Nevertheless, several operational elements such as loan repayment period requirements (i.e. of up to six years) introduced during the implementation of the 2008 TF were carried over into the implementation of the 2020 TF.

## 3.4 Amendments to the Temporary Framework

Soon after the implementation of the 2020 TF it became apparent that certain amendments regarding specific issues and due to changing circumstances were required in order for the TF to meet its aims. These changes have been on-going throughout the duration of the pandemic. In all, there have been six amendments. The table below summarises the thrust of each amendment, more detail is provided in Annex A.

Table 4: Amendments to the Temporary Framework

| Number and date of amendment | Nature of the amendment |
|---|---|
| (1) 03 April 2020 | Broader scope for support of pandemic-relevant R&D, testing, piloting and up-scaling. Support for production of COVID-19-related products. Support to alleviate liquidity issues, provision for tax deferrals, suspension of social security payments and wage subsidies to limit loss of employment.<br><br>Expanded existing support – particularly useful for SMEs' liquidity needs. |
| (2) 08 May 2020 | Recapitalisation aid to ensure that businesses have sufficient capital to stay afloat in view of the reductions in equity resulting from loss-making, which means it is harder to obtain loans. Some enterprises were also reluctant to take on more debt as this would have to be repaid at some stage.<br><br>It was recognised that in the recovery phase companies will require additional large-scale private and public investments to deal with the challenges and seize the opportunities of the green and digital twin transitions. |
| (3) 29 June 2020 | In the third amendment, the focus was on support to SMEs and start-ups even if they were in financial difficulty on 31 December 2019 (subject to certain conditions). In addition, incentives to encourage private investors to participate in recapitalisation were also provided. |
| (4) 13 October 2020 | Provision for prolongation of the TF until 30 June 2021, and recapitalisation until 30 September 2021.<br><br>Support for uncovered fixed costs to help prevent deterioration of capital, maintain business activity and provide a strong recovery platform.<br><br>Facilitation of state exit from companies, and extension of support for exporters (short-term export insurance) until 30 June 2021. |
| (5) 28 January 2021 | Prolongation of the TF for all measures until 31 December 2021.<br><br>Increases in the aid ceilings were permissible, scope to convert repayable instruments granted under the TF into other forms of aid such as direct grants and the export support was extended to 31 December 2021. |
| (6) 18 November 2021 | This amendment prolonged until 30 June 2022 the State aid TF to provide the opportunity for a progressive and coordinated phase-out of crisis measures, without |

| Number and date of amendment | Nature of the amendment |
|---|---|
| | creating cliff-edge effects. At the same time the Commission would continue to monitor the rise in COVID-19 infections and other risks to the economic recovery.<br>To accelerate the recovery, two new measures were introduced: solvency and investment support for SMEs, start-ups and mid-caps[71]. In addition there were prolongations and other additions. |

Source: CSES analysis of amendments to Temporary Framework.

It is clear from the above series of amendments, sometimes very soon after one another, that the Commission was working hard to keep up with feedback from and developments in the market. Relevant stakeholders such as SME associations indicated that the Commission was responsive and took on board their feedback and suggestions. However, the number of adjustments did sometimes create confusion with applicants and even those dealing with disbursement. Figure 2 provides a timeline of the implementation of the TF, with the main amendments and evolution of the support foreseen.

Figure 2: Timeline of the evolution of the Temporary Framework


Source: European Commission, *State aid: Commission will phase out State aid COVID Temporary Framework*, press release, 12 May 2022. Available at: https://ec.europa.eu/commission/presscorner/detail/en/statement_22_2980.

## 3.5 Management of programmes

In this sub-section, we take stock of the implementation process of TF measures to shed light on the framework's overall effectiveness and efficiency, and identify lessons learned. Interview feedback with key stakeholders informed this section.

**To facilitate the notification process, the Commission issued guidance documents to assist Member States.** Indeed, a series of State aid policy briefs were published by DG COMP with a view of supporting Member States throughout the implementation of the TF[72]. **Notification templates** designed to facilitate the notification process and reduce the time needed for review and approval

[71] In the EU, mid-caps are broadly defined as enterprises employing 250 to 3,000 people.

[72] See for example DG COMP's notifications templates, guidance document on block-notifications and Commission's non-paper on liquidity support under the TF beyond 30 June 2022. Available at: https://competition-policy.ec.europa.eu/state-aid/coronavirus/temporary-framework_en.

were updated in line with the six amendments made to the Temporary Framework. In addition, the Commission published **guidance on block-notifications of amendments**[73] under the TF.

More recently, the Commission published a non-paper[74] on liquidity support and other possibilities to support businesses beyond 30 June 2022, when the TF would begin to be phased out. This non-paper sought to provide continuity to Member States phasing out their State aid measures. As such, the Commission set out repayment conditions that were available to Member States under the EU State aid regime. For example, the Commission noted that it had accepted a so-called '**grace period'** for interest payments if the accrued interest is capitalised accordingly[75].

**The institutional arrangements for the management and administration of TF measures were different across Member States**. Interview feedback from business associations indicated that the Managing Authorities in charge of the implementation of TF were operating at different levels of governance In some Member States. For example, in Germany and Spain, TF measures were notified to the Commission by national governments. However, once the aid was approved, the funds were channelled to local and regional authorities to administer and manage the schemes. This was the case in Spain where the central government had a coordination role but channelled the funds approved under the TF to the regional communities to oversee. Conversely, in other Member States, a more centralised approach was taken. This is the case in France where the Ministry of the Economy, Finance and Digital Sovereignty was in charge of managing and disbursing funds, with additional funding which could be provided by the regions. Similarly, in Denmark, the Danish Business Authority (under the oversight of the Danish Ministry of Business and Growth) was the authority responsible for managing most TF measures across the whole country.

**Financial intermediaries** played an important role in managing and distributing funds under the TF**.** Several billions of euros were spent by Member States on guarantee schemes, which were implemented by national and investment banks in several Member States. For example, Bpi France contributed to the deployment of France's 2020 Emergency Plan in response to the COVID-19 pandemic via a mobilisation of all taskforces at the very beginning of the pandemic, particularly to respond to the concerns on the part of entrepreneurs facing containment measures and lockdowns. In addition, Bpi France was also in charge of managing the TF guarantee scheme (*Prêt garanti par l'État*), which generated an important uptake on the part of private banks in France. Similarly, in Germany, the promotional bank KfW worked closely with the German federal government to roll out a special programme comprised of loans aimed at SMEs facing liquidity constraints[76]. Between 2020 and 2021, according to data shared by KfW, over EUR 52 bn were disbursed to German SMEs.

**The approval of TF notifications was done quickly.** According to the Commission, between March and October 2020, the median duration for approval of COVID-19 measures was 13 calendar days[77], in contrast to 169 days between 2015 and 2018.

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[73] European Commission, 2021, Guidance on block notifications. Available at: https://competition-policy.ec.europa.eu/system/files/2021 12/guidance_on_block_notifications_of%20amendments_under_TF.pdf.

[74] European Commission, 2022, Non-paper on COVID-19 measures restructuring possibilities after June 2022. Available at: https://competition-policy.ec.europa.eu/system/files/2022-06/non paper_coronavirus_restructuring_possibilities_post_june%202022.pdf.

[75] Ibid.

[76] German Ministry of Finance, 2020, *Launch of KfW Special Programme 2020*, Press release. Available at: https://www.bundesfinanzministerium.de/Content/EN/Pressemitteilungen/2020/2020-03-23-KfW-special-programme.html.

[77] European Commission, 2021, State aid scoreboard. Available at: https://competition-policy.ec.europa.eu/system/files/2022-09/state_aid_scoreboard_note_2021.pdf.

With regards to administration of support, there was a great deal of variety in the ways in which the support was implemented across Member States and regions within Member States.

This topic lies outside the scope of the present study but should be the focus of a separate study as there are many lessons to be learnt from these experiences that could provide a positive support to future crises of this type and dimension.

## 3.6 Analysis of programmes (by number/ value/ MS/ focus area)

As part of this study, data relating to the TF measures were analysed. The data collected were extracted from the list of Member State measures approved under Articles 107(2)b, 107(3)b and 107(3)c TFEU and under the State aid TF[78], last updated on 14 August 2022. The scope of this study is restricted to the TF, however, in section 3.6.5 we provide an analysis of State aid expenditure in 2020 drawing on DG COMP's data which goes beyond the TF. In addition to this, it is important to note a number of methodological considerations.

In the first place, **the measures, as reported in the Commission's publication[79], provide the values of the measures which were approved by the Commission but not the real expenditure** or uptake by beneficiaries. As such, the analysis provides an ex-ante picture of the TF, but this analysis should be complemented by subsequent research which will review the uptake of funds and resulting expenditure. Such analysis will only be possible once the Commission publishes data on State aid expenditures in coming years.

Second, the level of granularity of the data does not allow for a detailed analysis of the types of aid instruments approved. Indeed, as will be shown in the analysis below, a large number of approved schemes were umbrella schemes which included a combination of grants, loans, tax deferrals etc. As such, at this stage, the existing data do not provide the visibility required to conduct a full assessment of the support measures. Nevertheless, for the measures that were implemented via specific aid instrument, we provide data and insights.

Third, linked to the above, the available data do not allow for a detailed sectoral analysis. As will be shown in the analysis below, at the outset of the pandemic, many Member States had targeted measures for specific sectors such as tourism, transport and meat production. However, as the pandemic lingered on, the aid schemes approved became increasingly more multisectoral. Moreover, there are Member States, which account for a substantial percentage of the total amount of TF funds approved. These include Germany and France, which submitted notifications for substantial multisectoral umbrella schemes which constrain the granularity of the data and overall analysis (e.g. Germany submitted a notification for a EUR 500 billion umbrella scheme (Economic Stabilisation Fund) approved on 8 July 2020 and consisting of federal guarantees on loans and recapitalisation measures which targeted all sectors of the German economy). Despite these limitations, we provide an analysis of the data collected below.

[78] European Commission, 2022, Coronavirus Outbreak. List of Member State Measures approved under Articles 107(2)b, 107(3)b and 107(3)c TFEU and under the State Aid Temporary Framework. Available at: https://competition-policy.ec.europa.eu/document/download/fd113a0a-9c99-4405-aa4c-4ed52134f657_en?filename=State_aid_decisions_TF_and_107_2b_107_3b_107_3c.pdf.

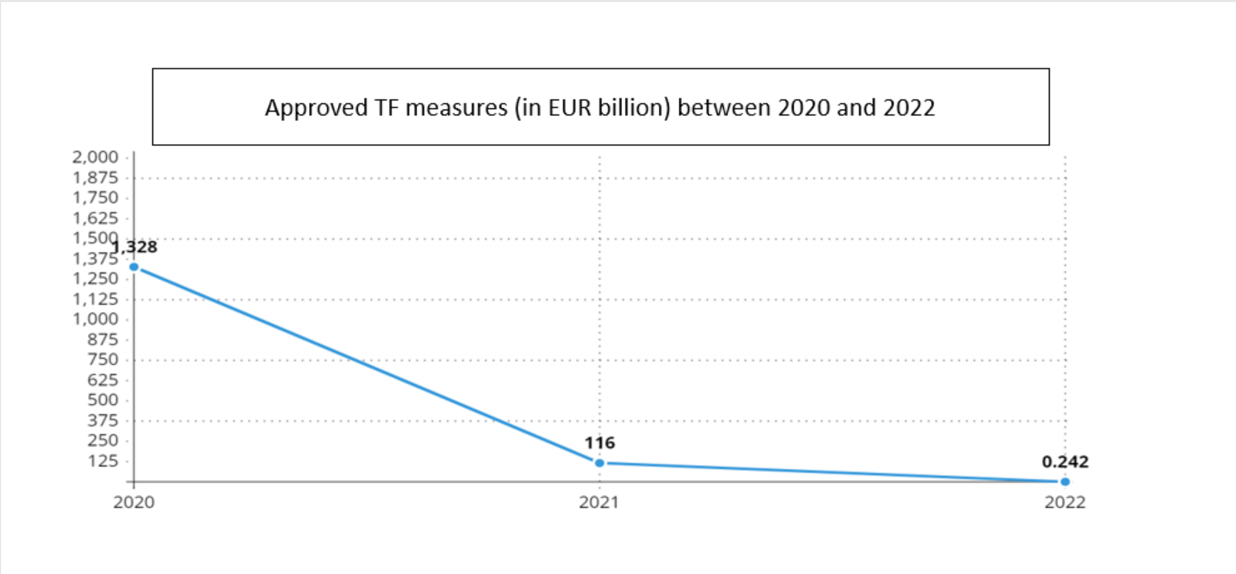
[79] Ibid.

### 3.6.1 Total values approved

According to the Commission[80], **710 notifications were sent to the Commission between March 2020 and December 2022**. The majority of measures were notified in 2020. Of those 710 notifications, 327 were submitted 2020, 292 in 2021 and 91 in 2022.

Overall, **EUR 1.8 trillion were notified to and approved by the Commission** under the 2020 Temporary Framework throughout its implementation. This represents 6% of the EU GDP[81]. This is an unprecedented amount under the EU State aid regime in the span of three years. As mentioned before, the 2008 TF which was also implemented across a three-year period (i.e. between 2008 and 2010) approved measures totalling EUR 567 billion. In terms of financial values, EUR 1.3 trillion were approved by the Commission in the first year of the pandemic (2020), before falling sharply to EUR 116 billion in the following year (2021). Figure 3 shows the approved values under the TF between 2020 and 2022.

Figure 3: Value of approved TF measures between 2020 and 2022 (in billion EUR)




Source: CSES analysis of approved COVID-19 Temporary Framework for State aid measures.

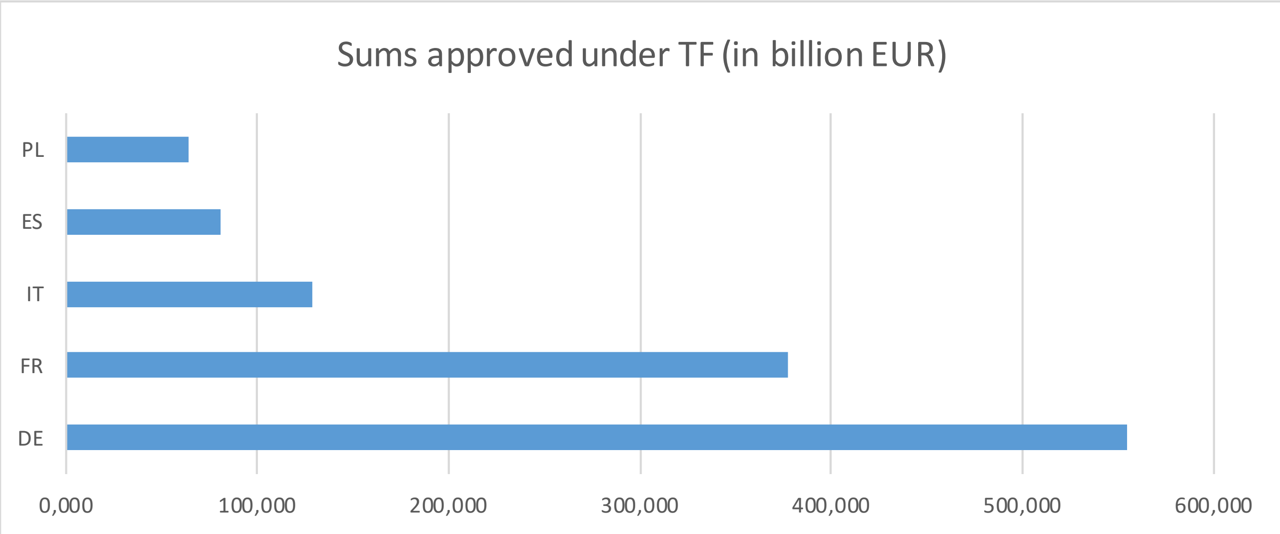
### 3.6.2 Geographic distribution

**There are important variations regarding the sums approved as TF measures across the EU-27**. Germany, France, Italy, Spain and Poland requested the largest amount of funds to be approved under the TF with EUR 554.9 billion, EUR 377.6 billion, EUR 128.3 billion, EUR 80.3 billion, and EUR 63.6 billion respectively. Taken together, these five Member States accounted for over 86% of the total value of TF measures approved across the EU-27. Conversely, the five Member States that requested the least amount of funds were, in decreasing order: Bulgaria (EUR 1.7 billion), Cyprus (EUR 1.6 billion), Latvia (EUR 1.3 billion), Luxembourg (EUR 955 million) and Malta (EUR 819 million). Figures 4 and 5 set out the value of sums approved under the TF across the EU-27.

[80] Ibid.

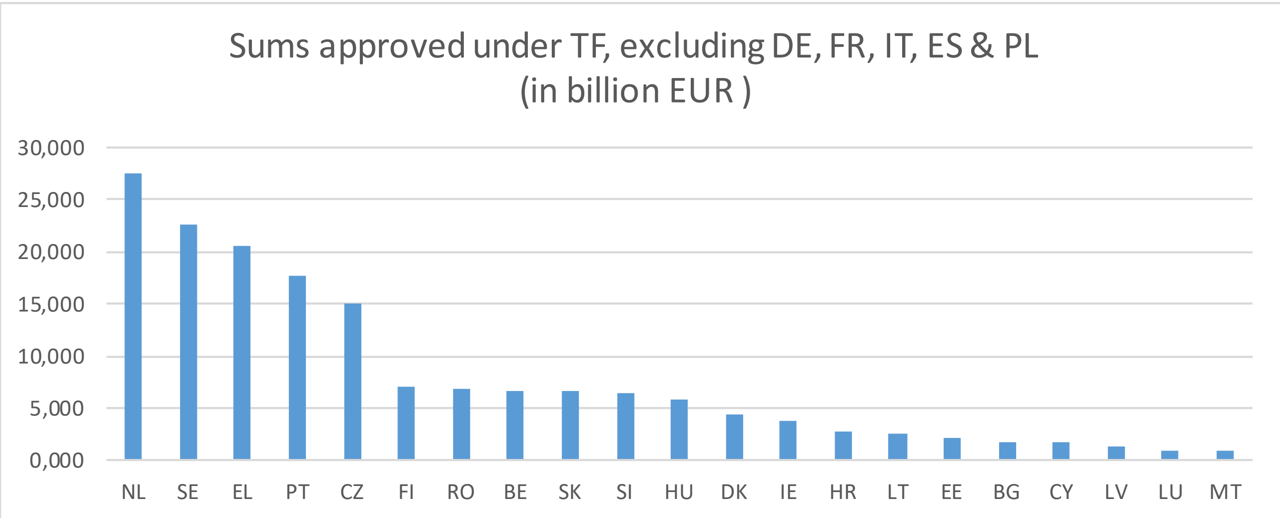
[81] Calculated for the period 2020 – 2021.

Figure 4: Sums approved under TF in Germany, France, Italy, Spain and Poland




Source: CSES analysis of approved COVID-19 Temporary Framework for State aid measures.

Figure 5: Sums approved under TF excluding Germany, France, Italy, Spain and Poland




Source: CSES analysis of approved COVID-19 Temporary Framework for State aid measures.

In terms of **TF values as a percentage of GDP**, there are also important variations which to an extent reflect the distribution of total values approved. Germany is the Member State which requested the largest amount of TF funds, accounting for around 16% of its GDP, followed by France (over 15% of GDP), Slovenia (13% of GDP), Poland (12%) and Greece (11%). Conversely, Belgium, Luxembourg, Denmark and Ireland were the countries which requested the least amounts of funds with 1.39%, 1.38%, 1.34% and 0.89% respectively.

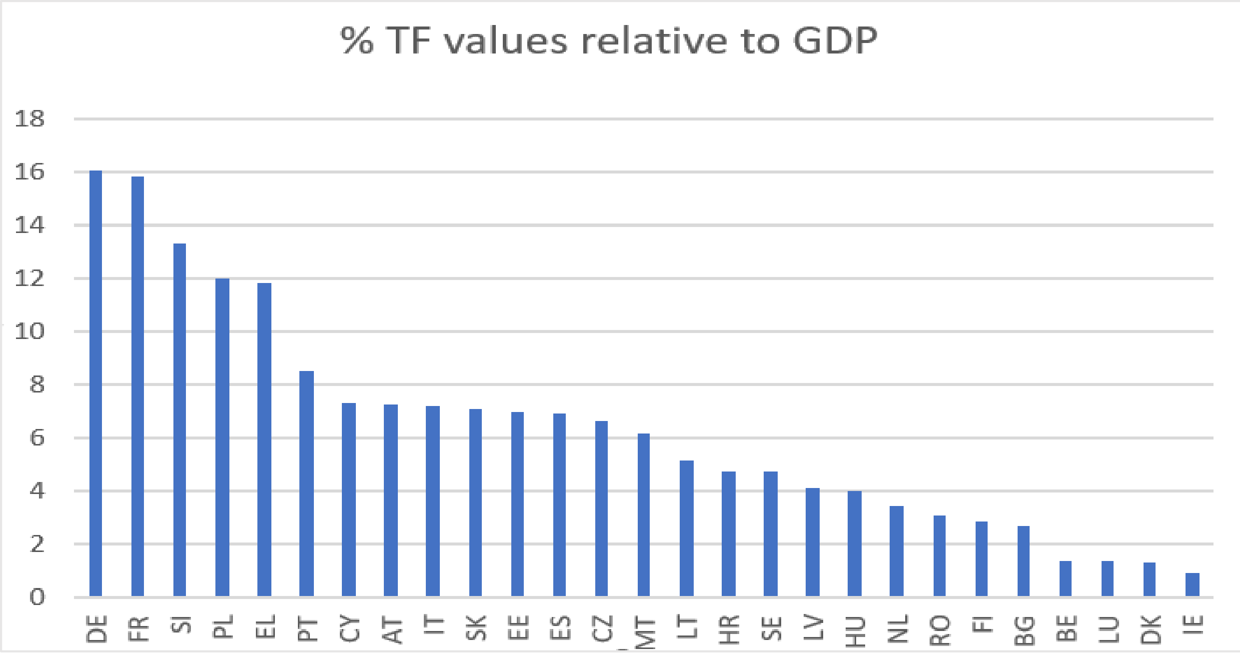
In light of these large variations, although DG COMP in its 2021 State aid Scoreboard concluded that the TF provided the flexibility required around EU State aid rules while preserving the single market's level playing field[82], concerns were raised during interviews by some stakeholders regarding potential distortions to the single market[83]. Indeed, while the need for extensive public support was unanimously

[82] European Commission, DG COMP, 2021, *State aid Scoreboard 2021*. Available at: https://competition-policy.ec.europa.eu/system/files/2022-09/state_aid_scoreboard_note_2021.pdf.

[83] See also: Haegler, U. and Siotis, G.,2020, State aid in response to COVID-19 and implications for competition, Expert Opinion, Compass Lexecon, July 2020, available at: https://www.compasslexecon.com/wp-content/uploads/2020/07/01609_CL_Expert-Opinion_State-Aid-

recognised, the analysis of the total value of TF measures relative to GDP indicates that, overall, larger Member States provided the highest level of support. The higher fiscal, borrowing and implementation capabilities of certain Member States potentially allowed these Member States to provide wide-ranging assistance to support their economy. Conversely, for other Member States, fiscal constraints could have led to the limited utilisation of the flexibility offered by the TF. However, it should be noted that it is too early for this study to adequately assess these claims. Future studies, which review TF expenditure data and take into consideration the subsequent implementation of the Recovery and Resilience Facility, will be needed to further assess the potential impact of the TF on the single market and on its level playing field. For instance, it will be important to consider the impact of the Recovery and Resilience Facility in mitigating the adverse effects on the single market particularly for countries with higher fiscal constraints.

Figure 6: Value of TF measures approved as a percentage of GDP across EU-27




Source: CSES analysis of approved COVID-19 Temporary Framework for State aid measures.

**The great majority of TF schemes were requested at the national level (over 90%). However, there were 70 schemes (9.8%) which had a regional geographic scope**. The countries that requested regional schemes were Belgium (33 notifications), Portugal (20 notifications), Italy (7 notifications), Greece (4 notifications), Czechia and Estonia (2 notifications each) and Germany and Austria (1 notification each). Feedback from the Commission suggests that the differences in regional targeting could be explained by governance culture and arrangements rather than a reflection of the needs. This was, for example, mentioned to be the case for Belgium for which around one third of its notifications were regionally targeted.

Covid-FINAL.pdf; and, Claici,A., Eymard, L. and Vallée, S., 2021, European Union: Economists' Perspective on State Aid and Covid 19, The Brattle Group Inc and DGAP - German Council on Foreign Relations 21 December 2021, available at: https://globalcompetitionreview.com/review/the-european-middle-east-and-african-antitrust-review/2022/article/european-union-economists-perspective-state-aid-and-covid-19.

### 3.6.3 Types of aid instruments notified and approved

**As mentioned above, the majority of TF measures approved were umbrella schemes.** 449 umbrella schemes were notified to the Commission.

This represents 73% of all notifications approved by the Commission. Guarantee schemes were the most popular type of aid instrument after umbrella scheme with 43 notifications, followed by liquidity assistance (28) and loan scheme (22). Conversely, tax deferral schemes, repayable advance schemes and loan and guarantee schemes were the least requested type of TF aid instruments by Member States.

Interview feedback suggests that initially in some Member States including Ireland and Germany, the **degree of uptake of loans (even at low interest rates) was not successful**. There was little appetite for debt financing as SMEs realised that loans would have to be repaid at some stage, especially if there was a short repayment period for some loans. As a result, Member State authorities had to provide more attractive instruments such as grants, and subordinated debt or longer-term loans.

Table 5 provides an overview of the different types of aid instrument which were notified.

Table 5: Number of types of aid instruments notified and approved

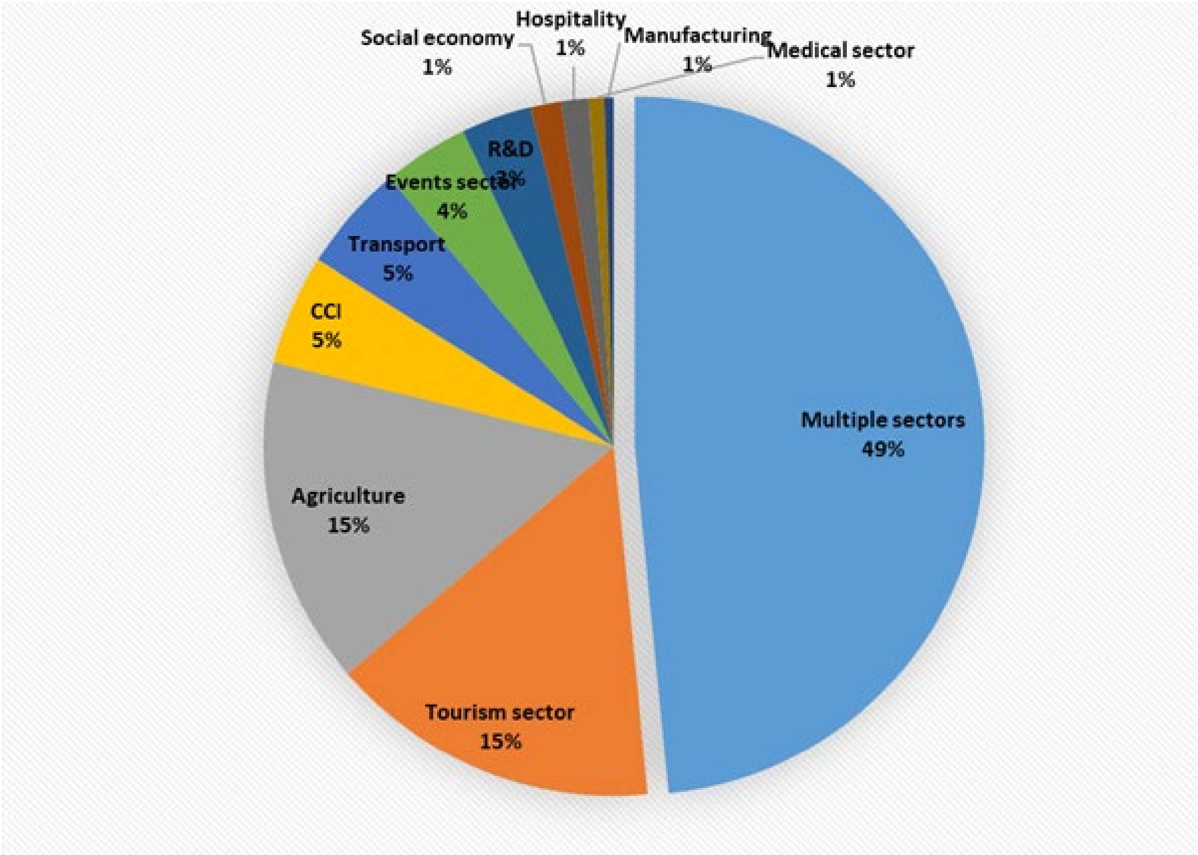
| Type of aid instrument | Number of schemes approved |
|---|---|
| Umbrella scheme | 449 |
| Guarantee schemes | 43 |
| Liquidity assistance | 28 |
| Loan schemes | 22 |
| Direct grant schemes | 17 |
| Wage subsidy scheme | 17 |
| Rent compensation package | 10 |
| Uncovered fixed costs support | 7 |
| Employment aid schemes | 6 |
| Tax deferral scheme | 5 |
| Repayable advance schemes | 4 |
| Loan and guarantee schemes | 3 |
| Miscellaneous | 7 |

Source: CSES analysis of approved COVID-19 Temporary Framework for State aid measures.

### 3.6.4 Sectoral distribution

Based on this study's analysis of TF data, **about half of the TF notifications targeted multiple sectors.** As mentioned above, most schemes were umbrella schemes in the types of aid instruments they included but also in terms of the economic sector they were targeting. Indeed, 49% of notifications were for multi-sectoral support. This was followed by targeted schemes for tourism (15%), agriculture (15%), CCI (5%) and transport (5%). Conversely, hospitality, manufacturing and the medical sector were the sector-specific schemes that were least requested with only 1% of total values approved for each sector. This could be due to the cross-cutting nature of the multi-sectoral umbrella schemes, which, as mentioned previously, constituted the majority of the TF support. Indeed, interview feedback suggests that beneficiaries of the umbrella schemes included hospitality, manufacturing and the medical sector.

Figure 7: Sectoral distribution of values approved for TF schemes




Source: CSES analysis of approved COVID-19 Temporary Framework for State aid measures.

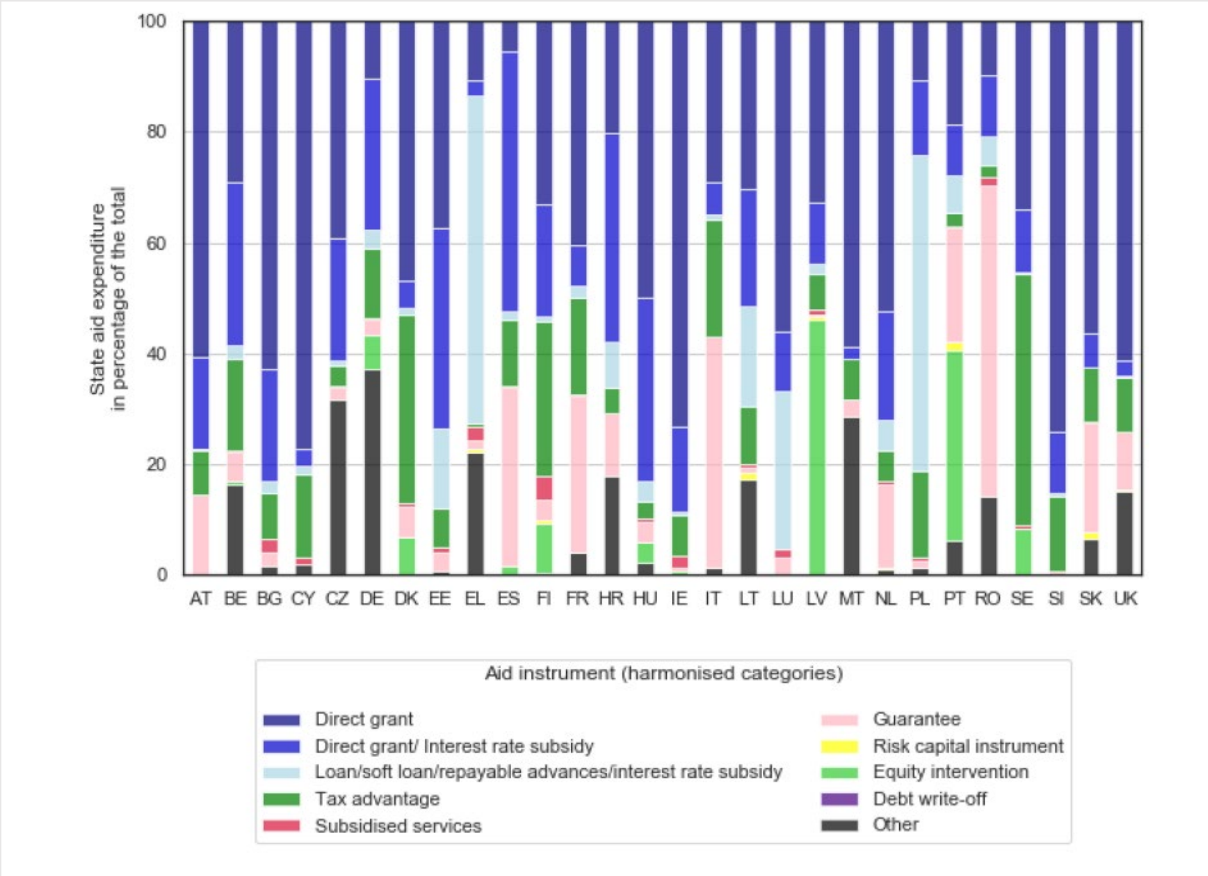
### 3.6.5 State aid expenditure in 2020 (including measures approved under Articles 107(2)b, 107(3)b and 107(3)c TFEU)

For the year 2020, Commission data allow us to analyse expenditure by sector. DG COMP data[84] collected through the monitoring and reporting procedures that Member States have to comply with provide insights into the evolution of State aid expenditure for the period preceding the pandemic and the first year of the pandemic. It is important to note that the analysis was informed by data on COVID-19 related measures, which go beyond the TF and include measures adopted under TFEU.

**In 2020, the majority of Member States provided most of their support to undertakings via non-repayable instruments**. Indeed, the categories of direct grants and direct grant/ interest rate subsidy together accounted for more than 50% of expenditures in 19 Member States (i.e. Ireland, Slovenia, Hungary, Bulgaria, Cyprus, Austria, Estonia, the Netherlands, Luxembourg, Slovakia, Czechia, Malta, Belgium, Croatia, Finland, Spain, Denmark and Lithuania). The Member States that have spent the least in direct grants are Greece (13%), Romania (21%) and Poland (24%), where governments preferred to channel aid through instruments that do not constitute an immediate budget loss. Specifically, Greece and Poland relied heavily on loans (59% and 57% respectively), while Romania relied on guarantees (56%).

[84] European Commission, 2021, *State aid Scoreboard 2021*. Available at: https://competition-policy.ec.europa.eu/system/files/2022-09/state_aid_scoreboard_note_2021.pdf.

Figure 8: Distribution of COVID-19 State aid instruments (expenditure) by Member State in 2020



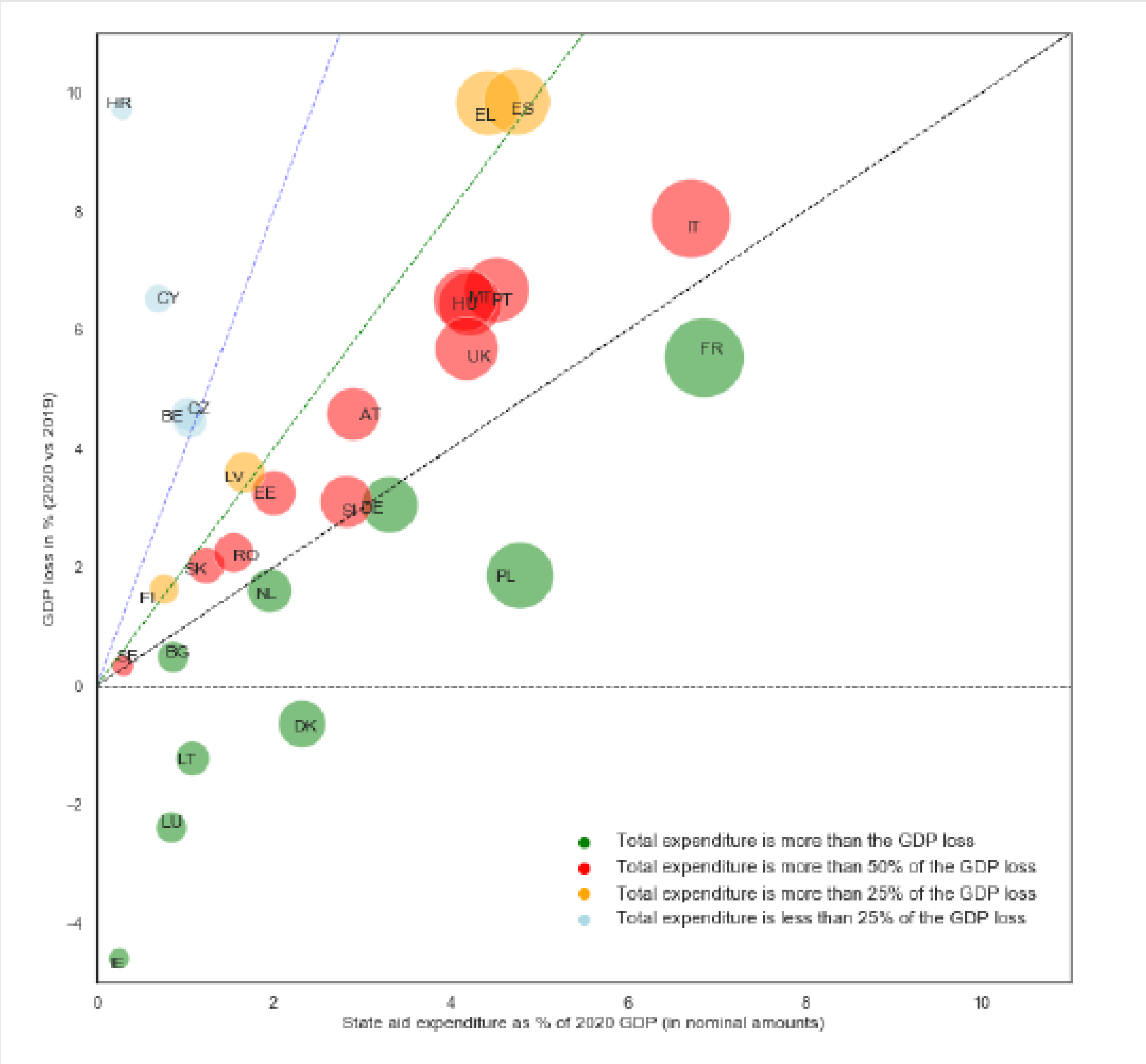

Source: European Commission, *State aid Scoreboard 2021*.

Note : Includes all COVID-19 related State aid measures, which go beyond the TF and include measures adopted under the TFEU.

Regarding **geographic differences,** at the pandemic's outset (i.e. 2020), France, Italy, Poland, Spain and Portugal are the Member States that delivered the highest level of support in terms of expenditure relative to GDP, over 4.5% of their GDP[85]. Conversely, Member States such as (in decreasing order) Finland, Cyprus, Sweden, Croatia and Ireland provided the least COVID-19 related support. Figure 9 provides a graph showing the relationship between COVID-19 State aid in relation to GDP loss.

[85] European Commission (2021), *State aid Scoreboard 2021*, op. cit.

Figure 9: Relationship between COVID-19 State aid in relation to GDP loss




Source: European Commission, State aid Scoreboard 2021, op. cit.

Note: Includes all COVID-19 related State aid measures, which go beyond the TF and include measures adopted under the TFEU.

## 3.7 Case studies

In this subsection, two case studies are presented that provide insight into how some schemes worked in practice.

Case Study 1: French Furlough scheme

| **Protecting jobs in France: *Fonds de solidarité, a successful initiative.*** |
|---|
| **Context and issues** |
| The French government put in place a series of restrictions to contain the spread of the pandemic. The first restrictions were targeted and included restrictions on gatherings of over 1,000 people, issued on 9 March 2020. However, as the virus spread exponentially in subsequent days − coupled with growing and unsustainable pressures on the health services to cope with the influx of COVID-19 patients but also with other patients requiring care − the central government adopted more draconian restrictions starting on 15 March 2020 when the closure of non-essential public spaces was announced[86]. Two days later, the first lockdown was announced. In total, three lockdowns were implemented in France as follows:<br>• first lockdown: from 17 March 2020 to 11 May 2020, i.e. 1 month and 25 days;<br>• second lockdown: from October 30 2020 to 15 December 2020, i.e. 1 month and 15 days; and<br>• third lockdown: from 3 April 2021 to 3 May 2021, i.e. 28 days.<br>The national lockdowns included strict measures such as restrictions to domestic travel, which was limited to only essential purposes (e.g. food shopping, commuting to work when teleworking was not possible). In addition, 'partial' lockdowns were implemented throughout the pandemic which restricted social gatherings and had provisions for social distancing and mask wearing among other preventative measures.<br>As a result of these restrictions, the French economy was severely affected. It is estimated that the French GDP contracted by 7.4% in 2020[87]. The series of lockdowns and other restrictions resulted in the temporary closure of all non-essential businesses, which included hospitality, CCI, transport, retail businesses etc. This resulted in large segments of French businesses experiencing sharp falls in their turnover while having to continue to meet fixed costs, including payroll costs and paying taxes. |
| **Measures and response** |
| In this context, the French government submitted a notification under the Temporary Framework to obtain approval for a EUR 1.2bn wage subsidy scheme initially aimed at small and micro enterprises. The notification was approved by the Commission on 30 March 2020. This wage subsidy scheme known as the *Fonds de solidarité* was subsequently amended four times[88]. Available data show that between March 2020 and July 2021 EUR 31.2 bn were disbursed[89].<br>Initially, the **aim** of the scheme was to support **micro enterprises** facing a liquidity crisis due to falls in turnover linked to the COVID-19 restrictions. However, as the pandemic progressed, the scheme's coverage increasingly became broader and targeted larger companies. According to a report from |

86 France's official bulletin 2020). Available at: https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000041723302.

87 Baleyte,J. et al., 2021, 'The French economy in 2020: a year of upheaval', *INSEE Analyses*, No 64. Available at: https://www.insee.fr/en/statistiques/5395039.

88 Décret n° 2020-371 of 30 March 2020, Décret n° 2020-757 of 20 June 2020, Décret n° 2021-1087 of 17 August 2021 and Décret n° 2022-74 of 28 January 2022.

89 France Stratégie, 2021, Evaluations of support measures to companies during pandemic in France. Available at: https://www.vie-publique.fr/sites/default/files/rapport/pdf/281253.pdf.

**Protecting jobs in France: *Fonds de solidarité, a successful initiative.***

the French Court of Auditors[90], the scheme's aims progressively moved from providing liquidity assistance in the form of direct grants to more longer-term measures aimed at the wider economy and with the specific aim of avoiding unprecedented waves of bankruptcies, in particular in the tourism, CCI, events and hospitality sectors which were particularly affected by the COVID-19 restrictions[91].

The table below provides an overview of the evolution of the *Fonds de solidarité* throughout its implementation:

Table 6: Amendments to the French furlough scheme

| Time period | Target group | Eligibility criteria | Financial support |
|---|---|---|---|
| March 2020 – May 2020 | • Micro enterprises | • Headcount < 10<br>• Turnover < EUR 1m<br>• Taxable profits < EUR 60,000<br>• Turnover decline from 2019 | • No more than EUR 1,500/month |
| June 2020 – November 2021 | • Micro enterprises<br>• SMEs | • Headcount < 20<br>• Turnover < EUR 2m<br>• Turnover decline of at least 80% between March 15 and May 2020 | • No more than EUR 10,000<br>• Nightclubs were eligible to receive up to EUR 45,000 |
| November 2021 – June 2022 | • Micro enterprises<br>• SMEs<br>• Larger companies in specific sectors | • Headcount < 20<br>• Turnover < EUR 2m<br>• Turnover decline of at least 80% between March 15 and May 2020<br>• Companies belonging to predefined sectors deemed to have been directly or indirectly affected by the pandemic | • 70% of revenue loss for companies with less than 50 employees<br>• 90% of revenue loss for companies with more than 50 employees (capped to EUR 10m per semester) |

Source: Adapted from France Stratégie, 2021, op. cit.

**Impact and lessons learnt**

As the *Fonds de solidarité* is still being phased out (it officially ended on 15 June 2022), it is difficult to confidently assess its impacts on the wider French economy and society. Moreover, it is also difficult to isolate its impacts from other measures which were rolled out at the same time (e.g. regional employment support, tax deferral schemes) or from measures which have been put in place since the end of the pandemic such as the European economic recovery package NextGenerationEU. Notwithstanding that, existing data allow us to assess the levels of effectiveness of the scheme against its main objectives of avoiding bankruptcies and protecting jobs.

In terms of avoiding bankruptcies, it seems that the scheme, along with other support measures, was **effective at avoiding a rise in insolvencies**. Data from the Bank of France indicate that the number of bankruptcies in 2020 was down 39.5% compared to 2019[92]. According to the same data, micro enterprises and SMEs were the types of firms which experienced the largest reduction in bankruptcies

[90] France's Court of Auditors (2021), available at: https://www.ccomptes.fr/sites/default/files/2021-03/20210318-06-Tomel-fonds-solidarite-destination-des-entreprises.pdf.

[91] Ibid.

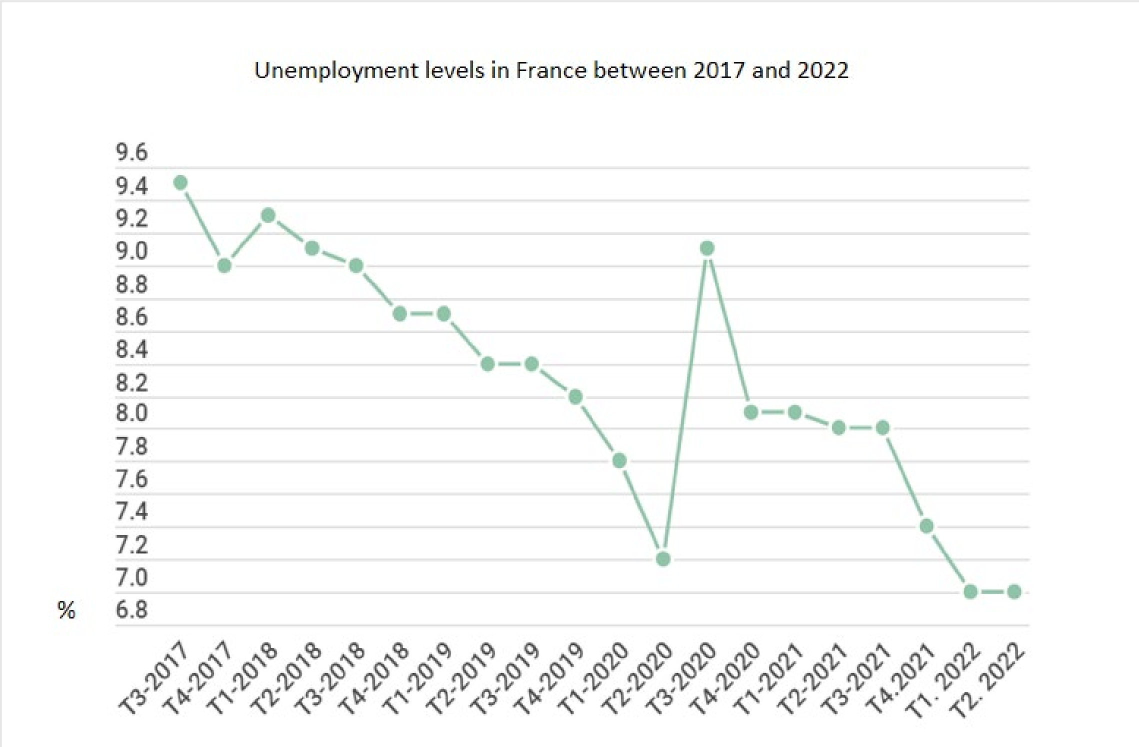
[92] Bank of France (2022), available at: https://www.banque-france.fr/statistiques/chiffres-cles-france-et-etranger/defaillances-dentreprises/suivi-mensuel-des-defaillances#:~:text=En%20cumul%20sur%20un%20an,%2C%20tableaux%20A%20et%20B).

**Protecting jobs in France: *Fonds de solidarité, a successful initiative.***

with levels down -31.9% and -30.4% respectively. This would suggest that the scheme was not only able to stem COVID-related bankruptcies but also bankruptcies that would have normally occurred as part of market dynamics.

Similarly, in terms of employment, the scheme was **successful in protecting jobs**. Despite a sharp increase in unemployment between the second and third trimesters of 2020, with unemployment surging from 7.2m to over 9m by the end of the second trimester of 2020, it subsequently recovered reaching pre-pandemic levels by the end of the fourth trimester of 2021. The graph below provides an overview of unemployment levels in France between 2017 and the middle of 2022.

Figure 10: Evolution of unemployment levels in France between 2017 and 2022




Source: INSEE.

In terms of **lessons learnt**, according to the French Court of Auditors, the last iteration of the subsidy scheme created a situation where beneficiaries could cumulate several aid instruments, which resulted in instances where the total amounts received can sometimes exceed the damage suffered by the pandemic and restrictions.

Case Study 2: Greek business guarantee fund

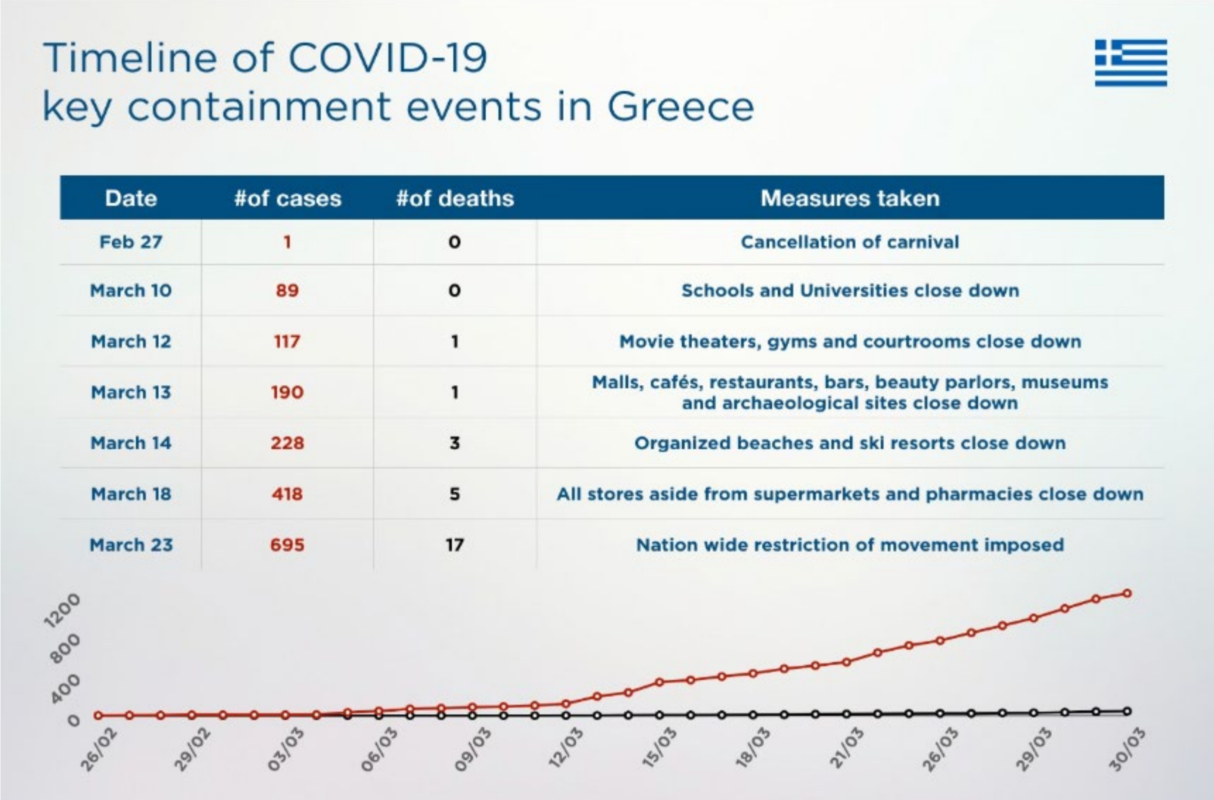
| Debt financing for Greek SMEs: The COVID-19 Business Guarantee Fund |
| --- |
| **Context and issues** |
| In Greece, the first restrictions involved the closure of schools and universities on 10 March 2020, followed by cinemas, gyms and courtrooms on the following day. On 13 March, with 190 confirmed cases and 1 confirmed death, most of the hospitality sector was shut down in order to curb the spread of the pandemic. This included restaurants, bars but also CCI undertakings such as museums and archaeological sites[93].<br><br>On 22 March 2020, the Greek central government placed a ban on all non-essential transport and travel across the country. Domestic travel was only permitted for a pre-defined set of reasons that included commuting to work (during normal business hours), shopping for food or medicine, attending a medical appointment among others. People returning to their permanent places of residence were exempt from these restrictions. In addition, the Hellenic Civil Aviation Authority suspended international air travel first using a targeted approach by banning commercial flights to and from Italy and the UK. However, as the pandemic intensified, the Hellenic Civil Aviation Authority, in line with a majority of Member States, decided to ban third country arrivals and for several EU Member States where the epidemiological situation was concerning.<br><br>Consequently, the Greek economy was particularly affected by the spread of the virus and by the containment measures put in place by the central government. For example, the closure of borders severely affected the country's tourism sector. Indeed, before the pandemic in 2018, the sector directly employed 381,800 persons accounting for 10% of total employment in the country[94].<br><br>The Figure below provides a timeline of the key containment measures taken by Greek authorities. |

[93] Greek National Public Health Organisation, *Current state of Covid-19 outbreak in Greece and timeline of key containment events*, 4 March 2020. Available at: https://eody.gov.gr/en/current-state-of-covid-19-outbreak-in-greece-and-timeline-of-key-containment-events/.

[94] OECD Tourism Trends and Policies 2020, https://www.oecd-ilibrary.org/urban-rural-and-regional-development/oecd-tourism-trends-and-policies-2020_f3180e03-en.

## Debt financing for Greek SMEs: The COVID-19 Business Guarantee Fund

Figure 11: Timeline of key COVID-19 containment measures in Greece




| Date | #of cases | #of deaths | Measures taken |
|---|---|---|---|
| Feb 27 | 1 | 0 | Cancellation of carnival |
| March 10 | 89 | 0 | Schools and Universities close down |
| March 12 | 117 | 1 | Movie theaters, gyms and courtrooms close down |
| March 13 | 190 | 1 | Malls, cafés, restaurants, bars, beauty parlors, museums and archaeological sites close down |
| March 14 | 228 | 3 | Organized beaches and ski resorts close down |
| March 18 | 418 | 5 | All stores aside from supermarkets and pharmacies close down |
| March 23 | 695 | 17 | Nation wide restriction of movement imposed |

Source: Greek National Public Health Organisation, Current state of Covid-19 outbreak in Greece and timeline of key containment events, 4 March 2020.

### Measures and response

In this context, the Commission approved a guarantee scheme on 30 April 2020. This guarantee scheme was conceived as an add-on to the package comprising other measures. The notification of the new TF was known as the 'Capped business loans portfolio guarantees for new working capital loans in the current COVID-19 outbreak'[95] and was introduced by an amendment submitted on 15 April 2020. The Commission took its decision very swiftly - in only 15 days following receipt of the electronic notification from the Greek authorities.

The **aim** of the guarantee scheme, and the wider package within which it was designed, was to ensure that sufficient liquidity was available in the Greek market following the dramatic collapse in supply and demand and to counter the damage inflicted upon undertakings impacted by the COVID-19 outbreak, and to preserve the continuity of economic activity during and after the outbreak.

To implement the measure, the Greek authorities notified the Commission that an independent unit within the **Hellenic Development Bank** (Greece's promotional bank) would be in charge of managing the fund[96]. Initially, the Commission approved the foreseen budget of EUR 2.25 billion partly financed by Greece's national budget and partly by EU resources (through the European Regional Development Fund).

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[95] DG COMP case reference: SA. 56857.

[96] European Commission, 2020, State Aid SA.57048, Notification decision. Available at: https://ec.europa.eu/competition/state_aid/cases1/202018/285579_2152717_68_2.pdf.

| Debt financing for Greek SMEs: The COVID-19 Business Guarantee Fund |
|---|
| Operationally, the measure was implemented via a three-phased approach[97]:<br><br>**1st phase** (from May 2020)<br><br>• Initial budget of EUR 1 billion, of which EUR 500m targeting SMEs and EUR 500m targeting larger companies.<br>• Eligible companies: SMEs and large enterprises which are 'viable' and not deemed undertaking in difficulty as set out in Commission Regulation (EU) No 651/2014 (the 'General Block Exemption Regulation', GBER).<br>• Guarantee rate 80% per loan.<br>• Guarantee cap rate: for SMEs 40%, for large enterprises 30%.<br>Guarantee premium is granted by the Greek government in a total amount up to EUR 800,000 per working capital loan which could have a duration of 1-5 years.<br><br>**2nd phase** (late 2020)<br><br>• Additional budget of EUR 780 million.<br>• Change to targeting of fund: 75 to 90% of new loans were to prioritise SMEs.<br><br>**3rd phase** (from May 2021)<br><br>• Total available funds : EUR 460 million.<br>• Eligible companies: Micro enterprises with max turnover of EUR 200,000.<br>• Loans up to EUR 50,000 or EUR 25,000 for companies established between 2020 and 2021.<br>• Guarantee rate of up to 80% per loan. |
| **Impact and lessons learnt** |
| In terms of the **effectiveness** of the measure, available data (from early 2021) show that the disbursement of the Fund has been successful. During the Fund's first phase, 99.5% of the COVID-19 Guarantee Fund was disbursed amounting to some EUR 3.5 billion. In the second phase, a disbursement of EUR 2.7 billion was achieved, which indicates high levels of demand on the part of beneficiaries. Stakeholder feedback suggests that the COVID-19 Guarantee Fund was successful in **reaching 10,900 Greek businesses**.<br><br>In terms of sectoral distribution, available data indicate that 39% of the loans have been provided to retail and wholesalers, 24% to industry and 15% to hotels and the food industry. It should be noted that the funds of the Guarantee Fund should be disbursed by June of 2021 and the "key" for a more dynamic increase in loans in the new year will be the activation of the Recovery Fund through which total loans of up to 30 billion euros until 2026.<br><br>Looking forward, an additional EUR 2 billion of loans through the Entrepreneurship Fund II (TEPIX) should be added to the disbursements of the Guarantee Fund, bringing the total amount of loans to EUR 7.6 billion.<br><br>**Macroeconomic data** provide some positive indication on the potential success of the fund, alongside other measures, in supporting the recovery of the Greek economy. Commission data[98] for the fourth quarter of 2021 show that the GDP was up by 7.7% compared to Q3 2020 and well above |

[97] European Commission, 2021, Debt instruments in Greece during the pandemic. SME Envoys Finance. Available at : https://single-market-economy.ec.europa.eu/system/files/2021-11/Greece_0.pdf

[98] European Commission, 2022, EURES, Labour market information: Greece. Available at: https://eures.ec.europa.eu/living-and-working/labour-market-information/labour-market-information-greece_en

| Debt financing for Greek SMEs: The COVID-19 Business Guarantee Fund |
|---|
| the EU-27 average of 4.6%. In addition, the unemployment rate decreased to 14.7% in 2021, down from 17.6% in 2020 and its peak of 27.8% in 2013 further suggesting the Greek economy has been recovering from the economic impact of the pandemic. |

## 3.8 Concluding remarks regarding the Temporary Framework

To conclude, the TF represented an important development in the EU State aid regime. To face the unprecedented risk of wide-spread economic collapse following the implementation and protraction of restrictions, EU State aid rules were made much more flexible in order to accommodate the urgent needs of Member States. The study was able to conclude that the TF was **effective in terms of avoiding massive immediate bankruptcies** and provided much needed support to the national economies of Member States and of the EU as a whole.

From an operational perspective, **the TF's implementation was efficient** as the approval of TF notifications from Member States by the Commission was undertaken much more quickly than notifications were dealt with in more 'normal' times. It also provided the flexibility needed by Member States to take contingency measures.

It is also important to note that at the start of the pandemic, the economic support was targeted but as the pandemic progressed and became more protracted, the requested support by Member States became increasingly broad, reflecting the need to support wider parts of their economy due to the knock-on effects of the restrictions and containment measures. Linked to this, feedback from interviews and emerging evidence from the literature (albeit limited) suggest that there are concerns regarding increased disparities between Member States in the medium to long term due to uneven and disproportionate distribution of the measures across the EU-27. Indeed, the analysis provided by this study shows that Member States with larger fiscal capacities were given the possibility to implement relatively more TF measures as compared to other Member States with similar needs but lesser resources.

Last, it should be noted that the present study contains a number of methodological and data limitations, including the unavailability of TF expenditure data (the study was only able to review approved sums). As such, future studies will be needed to determine the level of uptake of TF approved funds and the ensuing results on the level playing field these could have had.

# 4 THE EU DIGITAL COVID CERTIFICATE

KEY FINDINGS

The EU Digital COVID Certificate (EUDCC) was introduced in July 2021 to facilitate safe and free movement within the EU during the pandemic, and contributed to the gradual lifting of restrictions which had been put in place. The EUDCC enabled the holder to show proof of vaccination, a negative test result or recovery from COVID-19. 49 non-EU countries and territories have joined the EUDCC scheme, facilitating travel to and from the EU. The EU Digital COVID Certificate Regulation, which originally applied for a year, has been extended until June 2023. In particular:

- As of October 2022, over 2.2 billion EUDCCs had been issued across the EU, facilitating the freedom of movement;
- The approach to the vaccines accepted by Member States was inconsistent, with some only accepting EMA-approved vaccines and others accepting those approved by the WHO. Certain Member States accepted Sputnik V, which has not been approved by either the EMA or WHO. The vaccines accepted by individual Member States, and other requirements for entry, differed across the EU, creating confusions among travellers;
- There have been concerns about the freedom of movement being impeded based on the vaccine, discrimination on the basis of nationality, as well as linking the freedom of movement to the EUDCC;
- However, the EUDCC was the least restrictive method for facilitating safe cross-border movement during the pandemic. The alternative to the EUDCC to maintain the same level of public health would be additional restrictions, such as quarantine, self-isolation and testing; and
- A more harmonised EU approach to the acceptance of vaccines would mitigate the risk of fragmentation of the internal market and decisions becoming politicised.

## 4.1 Overview

In March 2021, the Commission proposed the introduction of the **EU Digital COVID Certificate (EUDCC)**, formerly known as the EU Digital Green Certificate[99]. The EUDCC aimed to facilitate safe and free movement within the EU during the COVID-19 pandemic, in light of restrictions that Member States had put in place regarding travel to stop the spread of the virus and facilitate their gradual lifting. The EU Digital COVID Certificate Regulation applied from 1 July 2021[100], enabling EU citizens and residents to have their Digital COVID Certificates issued and verified across the EU. The Regulation originally applied for 12 months, and was subsequently **extended until 30 June 2023** to ensure that travellers can continue to use the EUDCC when travelling in the EU should Member States implement further restrictions. At present, however, there are no COVID-19 travel restrictions in the EU, and citizens and residents are not required to provide proof of vaccination, recovery or a negative test result.

[99] European Commission, Proposal for a Regulation of the European Parliament and of the Council on a framework for the issuance, verification and acceptance of interoperable certificates on vaccination, testing and recovery to facilitate free movement during the COVID-19 pandemic (Digital Green Certificate), COM/2021/130 final, Brussels, 17.3.2021.

[100] Regulation (EU) 2021/953.

The EUDCC provides digital proof that a person has either been **vaccinated against COVID-19, received a negative test result or recovered from COVID-19**. It can be issued free of charge in digital or paper format by a certain body, such as a hospital, test centre or health authority. As of 1 February 2022[101], Member States are required to accept vaccination certificates for 270 days after the administration of the last dose of the primary vaccination. The Commission did not propose a validity period for certificates based on booster doses, since it can be expected that their protection may last longer than the primary vaccination series. Additionally, the EUDCC includes proof of a negative Polymerase Chain Reaction (PCR) test result obtained no more than 72 hours before travelling or a negative rapid antigen test obtained no more than 24 hours before travelling, as well as a certificate of recovery indicating that no more than 180 days have passed since the first positive PCR test result[102].

The EUDCC includes a QR code with a digital signature of the issuing body to counter falsification. When the certificate is checked, the code is scanned and the signature verified. To facilitate the process, the Commission developed a gateway through which all signatures can be verified throughout the EU. Additionally, the Commission assisted Member States in developing software and applications to issue, store and verify certificates. The EUDCC includes necessary information such as name, date of birth, issue date, relevant information about vaccine, test or recovery, and a unique identifier number. The data is not stored by the destination country and all health data remains with the Member State which issued the EUDCC.

The certificate is accepted across the EU and, **in principle, provides the holder with an exemption from free movement restrictions**. Indeed, Member States should avoid implementing additional travel restrictions unless they are considered necessary and proportionate in safeguarding public health. However, as is made clear below, there were **diverging rules across the EU**, with certain additional measures being put in place in some Member States, calling into question the fundamental right of freedom of movement. In addition to EU Member States, 49 non-EU countries and territories have joined the EUDCC scheme[103]. COVID certificates issued in these locations are accepted in EU Member States under the same conditions as the EUDCC, and vice-versa. The EUDCC can also be used to gain access to domestic events or venues, though any such conditions are not regulated at the EU level. Any Member State which adopted a COVID-19 certification scheme for domestic purposes was expected to ensure that the EUDCC was also accepted, to ensure that visitors did not need to obtain an additional certificate. As of 31 October 2022, over **2.2 billion EUDCCs had been issued** across the EU[104].

## 4.2 The EUDCC in practice – divergence in application

This subsection explores how the EUDCC was applied across the EU during the pandemic to achieve its objectives. The EUDCC was not intended to serve as a travel document, but as a tool aimed at facilitating movement within the EU and preventing Member States from implementing uneven and discriminatory measures[105]. The freedom of movement is ensured by the Treaty on the Functioning of the European Union.

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101 Commission Delegated Regulation (EU) 2021/2288, articles 1 and 11.

102 European Commission information on the EUDCC: https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/eu-digital-covid-certificate_en.

103 Ibid.

104 European Commission, Report pursuant to Article 16(3) of Regulation (EU) 2021/953 of the European Parliament and of the Council on a framework for the issuance, verification and acceptance of interoperable COVID-19 vaccination, test and recovery certificates (EU Digital COVID Certificate) to facilitate free movement during the COVID-19 pandemic, COM(2022) 753 final, Brussels, 22.12.2022.

105 Regulation (EU) 2021/953.

Indeed, individual Member States **cannot put in place additional travel restrictions** on EUDCC holders, such as testing, quarantine or self-isolation, **"unless they are necessary and proportionate for the purpose of safeguarding public health"**, taking into account scientific evidence available. Should a Member State decide to impose such restrictions, it is required to inform the Commission and other Member States 48 hours in advance, providing the reasons for the restrictions, the scope, specifying who they apply to, and the date and duration. The Regulation points out that it is **not to be interpreted as establishing an obligation to be vaccinated**. As such, the EUDCC is available to those not only vaccinated, but also those who have recovered from the virus and those with a negative test result.

It has been highlighted that the **initial response to the EUDCC by Member States was diverse**[106]. Although certain Member States, including those dependent on tourism such as Austria, Cyprus, Greece, Italy, Portugal and Spain, supported its introduction, others such as Belgium, France, Germany and the Netherlands expressed concern. The Belgian government, for instance, suggested that the EUDCC would risk discrimination given the tardy rollout of vaccines[107]. France and Germany, meanwhile, expressed doubts around linking the freedom of movement to the EUDCC, or requiring certificates to visit venues and events[108]. Nevertheless, **agreement was reached on the scheme**, which included the option of proof of recovery or a negative test result. Further, the Commission committed to providing EUR 100 million under the Emergency Support Instrument for the purchase of tests across the EU. Over 20 million tests were due to be delivered to 24 Member States from February 2021[109]. Some Member States used the Regulation's option of a phasing-in period of six weeks for the EUDCC scheme, with Slovakia, Finland, Malta, Denmark, Sweden and Ireland having all notified the Commission that certain certificates were not ready to be issued when the scheme was introduced[110].

Although the EUDCC facilitated the cross-border movement of vaccinated travellers, there were differences across Member States in terms of the vaccines accepted. The following table shows the individual vaccines approved for national vaccination programmes as well as those accepted as valid proof of vaccination[111].

Table 7: Accepted vaccines across the EU

| | WHO-authorized vaccines | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | EMA-authorized vaccines | | | | | | | | |
| Member State | No. of accepted vaccines | ChAdOx1, Vaxzevria, AstraZeneca | BNT162b2, Comirnaty, Pfizer/ BioNTech | mRNA-1273, Spikevax, Moderna | Ad26. CoV2.S, Janssen | ChAdOx1, Covishield, Serum Institute of India | Inactivated, BBIBP-CorV, Sinopharm | Inactivated, CoronaVac, Sinovac | Gam-COVID. Vac, Sputnik V, Gamaleya |
| Austria | 7 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Belgium | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Bulgaria | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |

[106] Goldner Lang, I., 2021, 'EU COVID-19 Certificates: A Critical Analysis', *European Journal of Risk Regulation*, 1-10.

[107] Nielsen, N., 2021, 'EU to propose Covid-free 'travel pass' ahead of summer', *EUobserver*, 2 March 2021, https://euobserver.com/health-and-society/151084.

[108] Deutsche Welle, *EU to propose 'green pass' vaccine certificate this month*, 3 January 2021: https://www.dw.com/en/eu-to-propose-green-pass-vaccine-certificate-this-month/a-56736273.

[109] European Commission information on the Emergency Support Instrument: https://commission.europa.eu/strategy-and-policy/coronavirus-response/emergency-support-instrument_en.

[110] European Parliament debate on the state of play of the implementation of the EU Digital COVID Certificate regulations, 7 July 2021.

[111] Dal-Ré, R., Banzi, R., Becker, S.L., Launay, O. and Pavli, A., 2022, 'High heterogeneity on the accepted vaccines for COVID-19 certificates in European countries', *Travel Medicine and Infectious Disease*, 48. Data as of September 2021.

| | **WHO-authorized vaccines** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **EMA-authorized vaccines** | | | | | | | | |
| Member State | No. of accepted vaccines | ChAdOx1, Vaxzevria, AstraZeneca | BNT162b2, Comirnaty, Pfizer/ BioNTech | mRNA-1273, Spikevax, Moderna | Ad26. CoV2.S, Janssen | ChAdOx1, Covishield, Serum Institute of India | Inactivated, BBIBP-CorV, Sinopharm | Inactivated, CoronaVac, Sinovac | Gam-COVID. Vac, Sputnik V, Gamaleya |
| Croatia | 6 | Yes | Yes | Yes | Yes | Yes | No | No | Yes |
| Cyprus | 8 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Czechia | 4 | Yes | Yes | Yes | Yes | No | No | No | No |
| Denmark | 4 | Yes | Yes | Yes | Yes | No | No | No | No |
| Estonia | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Finland | 7 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| France | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Germany | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Greece | 8 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Hungary | 7 | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes |
| Ireland | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Italy | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Latvia | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Lithuania | 4 | Yes | Yes | Yes | Yes | No | No | No | No |
| Luxem-bourg | 4 | Yes | Yes | Yes | Yes | No | No | No | No |
| Malta | 4 | Yes | Yes | Yes | Yes | No | No | No | No |
| Netherlands | 7 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Poland | 4 | Yes | Yes | Yes | Yes | No | No | No | No |
| Portugal | 4 | Yes | Yes | Yes | Yes | No | No | No | No |
| Romania | 5 | Yes | Yes | Yes | Yes | Yes | No | No | No |
| Slovakia | 5 | Yes | Yes | Yes | Yes | No | No | No | Yes |
| Slovenia | 8 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Spain | 7 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Sweden | 7 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |

Source: Dal-RE, et al. (2022), op. cit.

As can be seen from the table above, a **range of vaccines was accepted by Member States**, with some approving four of the vaccines noted, some accepting all eight, and some accepting five, six or seven. Indeed, all Member States were obliged to accept a vaccination approved by the European Medicines Agency (EMA), as per Article 5 of the EU Digital COVID Certificate Regulation. Consequently, Czechia, Denmark, Lithuania, Luxembourg, Malta, Poland and Portugal decided to only approve of these vaccines. The Regulation also stipulates that Member States can accept vaccination certificates that have been issued for nationally authorised vaccines and those that have completed the World Health Organisation emergency use listing procedure. As such, the **decision to accept non-EMA approved vaccines rests with individual Member States**. Cyprus, Greece and Slovenia accepted all eight vaccines, including Sputnik V, which has not appeared on the WHO list. Austria, Finland, Hungary, the Netherlands, Spain and Sweden accepted seven of the vaccines.

Of these Member States, only Hungary accepted Sputnik V, while the others accepted all of the vaccines approved by the EMA or WHO. The only other Member States which accepted Sputnik V were Croatia and Slovakia.

The findings demonstrate that there was a **distinct divergence in the way the EUDCC was applied** in terms of the vaccines accepted. As will be discussed later on, this divergence calls into question the overarching objective of the certification scheme, namely to exempt vaccinated persons from free movement restrictions which had been put in place as a result of the pandemic. Interestingly, **19 of the Member States, over 70%, did not accept one or more of the vaccines recommended by the WHO**, which are assessed to ensure they are of acceptable standards in terms of quality, safety and efficacy[112]. Further, the ChAdOx1 Covishield vaccine was not accepted as part of the EUDCC by eight Member States (Czechia, Denmark, Lithuania, Luxembourg, Malta, Poland, Portugal and Slovakia), while all of them accepted ChAdOx1 Vaxzevria, despite being similar in nature. Studies have demonstrated the effectiveness of this vaccine, raising doubts about the scientific rationale behind these decisions[113]. However, it should be pointed out that at least four vaccines were approved for the EUDCC, thus a reasonable number were accepted across the EU.

Within the EU, **COVID-19 certificates could be accepted in either digital or paper format**, with several Member States developing specific mobile applications for their use. A paper by Karopoulos et al. (2021) provides a comprehensive overview of the formats in which EU Member States, and other countries, accepted the EUDCC[114]. The paper demonstrated the heterogeneous application of the EUDCC, insofar as there were different ways in which travellers could present their certificates.

For example, in Austria, the EUDCC could be requested through a government website, and an application was developed to manage the certificates, which could be presented in paper or digital format. France, Ireland, Italy, Latvia and the Netherlands offered similar options. However, the paper found that some Member States did not offer mobile applications to use the EUDCC. For example, Bulgaria, Malta, Spain and Sweden did not offer such a possibility, while Poland offered two applications. Lithuania, meanwhile, announced an application for scanning and verifying the validity of certificates, but no app was foreseen for downloading and managing the certificates themselves. However, Member States still provided the possibility of presenting the EUDCC in an alternative digital format or on paper.

Another study (Blandord et al., 2022) examined the publicly available information online regarding travel entry requirements in the EU and Schengen Area[115]. It found that **different measures had been implemented across Europe** in terms of entry requirements, exemptions and restrictions, such as Passenger Locator Forms (PLFs), COVID-19 certificates and prior testing, while information was not always easy to obtain.

In terms of vaccination certificates, the **vast majority of countries provided additional information about the vaccines**, including those that had been approved, the period for the vaccines to become effective, and the expiry date.

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[112] World Health Organization information on COVID-19 vaccines: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-(covid-19)-vaccines?adgroupsurvey={adgroupsurvey}&gclid=EAIaIQobChMIlozhnaLd-gIVCr_tCh24TQSYEAAYASAAEgI_PPD_BwE.

[113] Dal-Ré, R., Banzi, R., Becker, S.L., Launay, O. and Pavli, A. (2022), op. cit.

[114] Karopoulos, G., Hernandez-Ramos, J. L., Kouliaridis, V., and Kambourakis, G., 2021, A Survey on Digital Certificates Approaches for the COVID-19 Pandemic.

[115] Blanford, J. I., Beerlage-de Jong, N., Schouten, S.E., Friedrich, A.W. and Araújo-Soares, V., 2022, 'Navigating travel in Europe during the pandemic: from mobile apps, certificates and quarantine to traffic-light system', *Journal of Travel Medicine*, 2022, 1–13.

However, the number of countries varied by type of information. While 20 countries listed the approved vaccines and 26 the period for the vaccines to become effective, only seven specified the validity of the certificates. For testing certificates, 26 countries provided additional information, including type, expiry date, timing of the test and validity of the test results. Similarly, the information provided on recovery certificates included timing and period of validity. While only 11 countries provided the day from which the certificates were valid, 24 included the expiry date.

Additionally, only four countries specified the restrictions. The restrictions ranged from no restrictions to persons allowed entry for work, essential work or to visit family. In certain cases, entry was not permitted for tourists, persons from new variant areas or high-risk areas, those without a certificate, unaccompanied minors and pregnant women without medical certificates. Further, nine countries listed exemptions for entry restrictions, including a valid EUDCC, nationals or residents of a particular country, and transiting the country or transiting without a stopover.

The paper's findings revealed a **wide range of information available across Europe**, with some countries providing more details than others. As demonstrated, there was a lack of consistency in the information provided by countries, while the paper found that some information required translation by travellers due to language barriers. That said, there was consistency in terms of the use of criteria set out by the European Commission for establishing travel measures and restrictions, including acceptance of the EUDCC and the time limit and validity of testing. Overall, it concluded that a **common approach was adopted, with some variations**.

The EUDCC sought to facilitate free movement within the EU following travel restrictions which had been put in place to prevent the spread of COVID-19. While the EUDCC was accepted by all Member States, in practice there was a heterogeneous application of the certificates across the EU, for example in terms of the vaccines accepted and the level of information available. As such, a discussion on the impact of the EUDCC, which was not intended to be a travel document, on freedom of movement is merited, given that it is ensured by EU law.

## 4.3 The EUDCC and the freedom of movement

The EU Digital COVID Certificate Regulation stipulates that holding a COVID certificate is **not a precondition for exercising the right to free movement** (Article 3)[116]. Rather, the EUDCC is considered a tool facilitating cross-border travel within the EU and the gradual lifting of restrictions on movement. Indeed, by permitting three different types of certification, the EU has provided its citizens and residents with the possibility of travelling while complying with public health standards through approaches other than vaccination[117].

Indeed, the EUDCC provides cross-border travellers who have not yet been vaccinated or are unwilling or unable to be vaccinated, the possibility of undertaking a COVID-19 test or obtaining a recovery certificate. As such, the Regulation states that it cannot be understood as obligating persons to be vaccinated, in line with the views of the Council of Europe Commission for Social Affairs, Health and Sustainable Development, which opined that such an obligation is a useless, if not counterproductive, imposition and advised Member States to implement strategies based on trust and communication[118].

[116] Regulation (EU) 2021/953.

[117] Montanari Vergallo, G., Zaami, S., Negro, F., Brunetti, P., Del Rio, A. and Marinelli, E., 2021, 'Does the EU COVID Digital Certificate Strike a Reasonable Balance between Mobility Needs and Public Health?', *Medicina* 2021, 57, 1077.

[118] Ibid.

However, should a traveller **refuse to be vaccinated or tested, or fail to provide a recovery certificate, their right to free movement is not *necessarily* restricted**, but they might have to comply with restrictions such as quarantine or self-isolation. Further, the Regulation provides that additional requirements for EUDCC holders, such as testing and quarantine or self-isolation, could be implemented where the epidemiological situation allows, if they are necessary and proportionate for safeguarding public health, and non-discriminatory. Therefore, the possibility of further restrictions could be applied in such an event.

While the EUDCC sought to boost cross-border travel at a time when there was a global threat to public health, it received mixed responses, both in the scientific community and among the general public[119]. The rationale behind the initiative is clear: there was a particular need to permit safe travel, since the **freedom of movement is one of the key preconditions for starting an economic recovery**.

As per the Regulation, those who have been vaccinated, have a negative test result or have recovered from COVID-19 in the previous six months seem to have a decreased risk of infecting others, according to scientific evidence. As such, the EUDCC would **assuage fears that cross-border movement would result in a spike in COVID-19 infections**, though it ought to be mentioned that, while vaccines certainly provide protection, vaccinated travellers can still become infected with the virus and transmit it. However, **those who were against the EUDCC** have highlighted the higher risk of discrimination between vaccinated and unvaccinated persons, the risk that vaccination becomes a precondition for the exercise of the right to freedom of movement, and the protection of health data[120, 121].

Certainly, the introduction of a proof of a negative test result or recovery addressed concerns about the need for a vaccination. However, there were also concerns regarding the **speed of vaccine rollout across the EU and the consequences for countries unable to provide mass vaccinations**. For example, the EUDCC could lead to prejudice when the number of doses available is not high enough to vaccinate an entire population who could be vaccinated[122].

Additionally, although Member States are obliged to recognise EMA-approved vaccines, they can decide whether or not to accept a EUDCC covered by nationally authorised vaccines or those recommended by the WHO. As seen earlier, **different vaccines were accepted** across the EU, meaning that Member States could deny entry to those carrying an EUDCC with a non-EMA approved vaccine, such as Sputnik V or Sinopharm, which, it has been argued, **impedes rather than facilitates free movement**[123]. Indeed, it has been argued that the EUDCC would act as a passport, with Member States deciding which travellers can pass through their borders and under what conditions, since they could be subject to quarantine or self-isolation without a vaccine approved by the EMA, resulting in increased financial costs and time constraints.

Article 5 of the EU Digital COVID Certificate Regulation stipulates that EMA-approved vaccinations, those granted a marketing authorisation pursuant to Regulation (EC) No 726/2004[124], are obliged to be

[119] Ibid.

[120] van Eijken, H. and Rijpma, J.J., 2021, 'Stopping a Virus from Moving Freely: Border Controls and Travel Restrictions in Times of Corona', 17(3) *Utrecht Law Review*, pp. 34–50.

[121] The EUDCC is discussed in the study '*Impact of COVID-19 measures on democracy and fundamental rights*' for the COVI committee: https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734010/IPOL_STU(2022)734010_EN.pdf.

[122] Montanari Vergallo, G., Zaami, S., Negro, F., Brunetti, P., Del Rio, A. and Marinelli, E. (2021)., op. cit.

[123] Kochenov, D. & Veraldi, J., 2021, 'The Commission against the Internal Market and European Union Citizens' Rights: Trying to Shoot Down Sputnik with the "Digital Green Certificate"?', *European Journal of Risk Regulation*, 12(2), pp. 404-414.

[124] Regulation (EC) No 726/2004 of the European Parliament and of the Council of 31 March 2004 laying down Community procedures for the authorisation and supervision of medicinal products for human and veterinary use and establishing a European Medicines Agency.

accepted by Member States as part of the EUDCC should they accept proof of vaccination for facilitating free movement. However, this **obligation of equal treatment was not afforded** to non-EMA approved vaccines which have been authorised under EU law through the Medicinal Products Directive 2001/83[125], or non-EMA approved vaccines which have been recommended by the WHO. As such, concerns were raised regarding the freedom of movement of those who have received such vaccines[126]. Indeed, due to the speed of the vaccine rollout across the EU, Hungary decided to issue a temporary authorisation for the Sputnik V and AstraZeneca vaccines. It has been argued that, despite previous concerns regarding the former, growing scientific data has suggested that Sputnik V is sufficiently effective at enabling immunity[127]. Similarly, Sinopharm has been approved by the WHO. Therefore, individuals who have the Sputnik V and Sinopharm vaccines, including a significant proportion of the Hungarian population, would not necessarily pose a greater risk to public health than those who have EMA-approved vaccines. They could, however, run the risk of having their rights to free movement restricted should the Member State they wish to travel to not accept these vaccines. Further, it has been argued that the various speeds of the vaccine rollouts **could lead to discrimination on the basis of nationality**, with those from Member States whose programmes are lagging having a reduced opportunity to travel with a vaccine, and thus being obligated to obtain a negative test result which requires time and money.

Before the introduction of the EUDCC, the European Commission had written to Belgium, Denmark, Finland, Germany, Hungary and Sweden in February 2021 to **ascertain their justification for restrictions** implemented during the pandemic which were harsher than those recommended by the Council, and the same request was submitted to Malta in July 2021[128].

The European Commission raised concerns that a ban applied to unvaccinated persons travelling to Malta could be discriminatory. The Maltese authorities had announced that all travellers wishing to enter the country were required to hold a COVID-19 vaccination certificate, while children between the ages of five and 11 needed a negative PCR test result. As such, a negative test result or recovery certificate could not be used to enter Malta. In response, the Commission expressed its concerns that **the measures could discriminate** against those who are not fully vaccinated[129]. Malta subsequently eased restrictions slightly, by removing the ban on unvaccinated persons and instead putting in place a 14-day hotel quarantine requirement, irrespective of whether travellers had a negative test result, recovery certificate, or had received a non-EMA approved vaccine that could have been recognised in other Member States. Thus, it has been argued, the restrictions appear to remain discriminatory and disproportionate, particularly when compared to other Member States who have accepted a higher number of vaccines, and negative test results and recovery certificates without the need to be subject to quarantine[130]. However, the EU Digital COVID Certificate Regulation does not require Member States to accept all three types of certificates as this decision, in the field of public health, remains with them.

Despite the concerns raised with regard to the COVID certification scheme and the freedom of movement, it ought to be recalled that the EUDCC has facilitated cross-border movement without, generally, the need for additional requirements which had been in place previously. It has been pointed

[125] Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use.

[126] Kochenov, D. and Veraldi, J.(2021) op. cit.

[127] Ibid.

[128] Veraldi, J. and Kochenov, D., 2021, 'EU COVID Certificate: A Vehicle of Arbitrary Restrictions', *EU Law Live* (October 2021).

[129] SchengenVisaInfo.com, EU: Malta's Travel Ban Could Be Discriminatory, 13 July 2021: https://www.schengenvisainfo.com/news/eu-maltas-travel-ban-could-be-discriminatory/.

[130] Veraldi, J. and Kochenov, D. (2021), op. cit.

out that the scheme is **the least restrictive method for facilitating safe cross-border movement**[131]. Indeed, the alternative to the EUDCC in maintaining the same level of public health would be more restrictions, such as quarantine, self-isolation and testing. Therefore, the scheme offers a more individualised risk assessment than generic measures.

The **right to freedom of movement within the EU is one of the EU's core values** and can be considered a success of European integration, and is highly regarded by its citizens. In a Eurobarometer survey carried out in 2020, 84% of respondents considered that the free movement of EU citizens within the EU brings overall benefits to the economy of their Member State, representing a 17-percentage point increase since 2012[132]. Indeed, the EUDCC scheme has helped citizens to travel with relative ease since the summer of 2021, after which vaccine uptake increased significantly across the EU. The freedom of movement was severely put to the test during the pandemic, with restrictions put in place to prevent the spread of COVID-19. The introduction of the EUDCC contributed to the gradual lifting of these restrictions which may have been justified during the early stages of the pandemic. By offering travellers the option of a negative test result or recovery certificate, the scheme did not oblige them to be vaccinated against COVID-19 and was, as pointed out, the least restrictive option for facilitating travel.

Several sectors were impacted significantly by the pandemic, with transport and tourism being particularly affected as travel restrictions were implemented by Member States and individuals decided against travel to try to avoid infection. The EUDCC was welcomed by travel and tourism associations as important in enabling and encouraging citizens to travel. Data on commercial flights revealed that the number of flights in the EU was higher in 2021 than 2020 for all months, with the exception of the first three months. The highest number was recorded in August[133]. Similarly, data on the number of passengers travelling by plane confirms that the highest number was reached in August 2021, coinciding with the introduction of the EUDCC and the summer vacation season[134]. International organisations, including the Organisation for Economic Co-operation and Development, the World Tourism Organization and the G20 are in favour of the scheme[135]. A survey conducted by the Commission in February 2022 found that two thirds of responding Member States would have considered implementing a national COVID-19 certificate had the EUDCC not been introduced. Although citizens and residents may have been provided certificates in their Member States, there would have been no assurance that these would be accepted in others[136].

Although the EUDCC scheme did not establish an obligation to be vaccinated, as stated explicitly in the Regulation, its introduction led to an increase in vaccinations. To give a few examples, it has been estimated that the announcement of the EUDCC during the summer of 2021 resulted in increased vaccine uptake in France of 13 percentage points of the total population up to the end of the year, while in Germany it was 6.2 percentage points and in Italy 9.7 percentage points, averting thousands of deaths.

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131 Goldner Lang, I., 2021, 'EU COVID-19 Certificates: A Critical Analysis', *European Journal of Risk Regulation*, pp. 1-10.

132 European Commission, 2020, Flash Eurobarometer 485. European Union Citizenship and Democracy, available at: https://www.europarl.europa.eu/cmsdata/214273/Eurobarometer%20Report%20Summary%20_%20EU%20Citizenship%20&%20Democracy%20-%20July%202020.pdf.

133 Eurostat data: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=avia_tf_cm&lang=en.

134 Eurostat data: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=avia_paoc&lang=en.

135 European Commission, 2022, Second Report of the Commission on the EU Digital COVID Certificate Regulation & Annex.

136 Ibid.

Additionally, it was estimated that its announcement prevented GDP losses of EUR 6 billion in France, EUR 1.4 billion in Germany, and EUR 2.1 billion in Italy [137]. As such, the EUDCC scheme has had a positive health and economic impact.

However, **there was a lack of a harmonised approach in terms of the vaccines accepted across the EU**, with some only opting for EMA-approved vaccines, others including WHO-approved vaccines and six Member States (Croatia, Cyprus, Greece, Hungary, Slovakia and Slovenia) accepting Sputnik V, which was neither EMA nor WHO-approved. The vaccines accepted by individual Member States, and indeed other requirements for entry, differed across the EU, creating confusion among travellers. Additionally, in certain cases citizens reported challenges in receiving the correct EUDCC, in particular vaccination certificates. For instance, they have reported difficulties in obtaining an EUDCC from the Member State where they were vaccinated because they did not have a national registration or social security number. In other cases, citizens encountered problems when they were administered COVID-19 vaccine doses in different Member States. Citizens reported that the EUDCC issued after their second dose or booster dose in a Member State did not include previous doses received in another Member State. As such, the total number of doses received was incorrect[138].

Travellers could at least be certain that EMA-approved vaccines would be accepted across the EU. Otherwise, the Regulation rightly gave Member States the option to accept other vaccines that were available. However, given that all EU Member States are members of the WHO, having accepted its Constitution, it could be considered surprising that not all accepted WHO-approved vaccines, or only some. A more harmonised EU approach to the acceptance of vaccines would mitigate the risk of fragmentation of the internal market, as well as the risk that decisions become politicised, and help to avoid confusion. Such an approach would contribute to a consistent response to new variants, as well as pandemics caused by other viruses.

## 4.4 Concluding remarks

The EUDCC was introduced during the later stages of the pandemic but proved popular both in terms of the number of people that applied for and used it, and the number of non-EU states that also joined the scheme.

However, there were differences between Member States regarding the vaccines that were accepted and how the certificates were used in practice. This sometimes led to confusion and uncertainty for users of the EUDCCs.

A well-running EUDCC scheme can generate very positive socio-economic impacts in terms of keeping borders open and supporting freedom of movement, as well as protecting or at least shielding sectors such as transport and tourism from harm caused by the pandemic, and maintaining cross-border supply chains. In view of this, there is a strong argument for the continued development of a scheme such as the EUDCC, even though the immediate need for it may have passed, to iron out issues that have encumbered its effectiveness, in a non-crisis environment so that more thought can be given to details. It is not completely improbable that a similar situation to that experienced in the pandemic could arise again, and it could make a big difference if a blueprint on how to deal with it was readily available.

137 Bruegel, 2022, The effect of COVID certificates on vaccine uptake, public health, and the economy.

138 European Commission, 2022, Second Report of the Commission on the EU Digital COVID Certificate Regulation & Annex.

# 5 OTHER MEASURES: RESTRICTIONS IMPLEMENTED BY MEMBER STATES

KEY FINDINGS

During the pandemic, the EU Member States implemented a range of unprecedented measures to limit contact between people and curb the spread of COVID-19. The pandemic caused the worst economic crisis Europe had witnessed in decades, with wide ranging social-economic impacts. In particular:

- All Member States implemented measures, though the nature and timing of those measures varied across the Member States.
- Physical distancing measures were the most prominent ones utilised during the pandemic. Other categories include general measures (e.g., communication to the public, risk assessment or the activation of emergency management teams), case management and quarantine, hygiene and safety measures, and internal and international travel measures.

  The nature of the measures changed during the course of the pandemic, with a gradual move towards looser restrictions as vaccination campaigns were implemented.

## 5.1 Member State restrictions

EU Member States responded to the COVID-19 pandemic by **introducing unprecedented measures** to reduce the spread of the virus. In March 2020, most Member States implemented lockdown measures, with citizens ordered to stay at home, and curbs on outside activities, borders and travel, and events introduced. These measures coincided with an EU-wide ban on non-essential travel of non-EU citizens into the bloc. Such measures restricted personal freedoms to limit contact between people and therefore reduce transmission of the virus.

Italy was the first EU Member State to impose a nationwide lockdown, on 9 March 2020, limiting the movement of its citizens and residents except for essential activities, such as work, emergencies, or health reasons. Additionally, all events and gatherings were banned, while social distancing measures were introduced in public locations.

Other Member States followed suit, implementing restrictions to curb the spread of the virus. The measures put in place included: the suspension of events; school closures; non-essential shop closures; the banning of non-essential movement; and the halting of non-essential production[139]. Border closures became inevitable and by the end of March 2020, most Member States had put entry bans and travel restrictions in place, **leading to a rebordering of the EU**. Measures originally implemented during the first wave of the pandemic were partially lifted during summer 2020, before being reimposed towards the end of the year as the number of cases increased.

The European Centre for Disease Prevention and Control (ECDC) and the Joint Research Centre (JRC) have established a useful database documenting the COVID-19 measures implemented by each Member State. It categorises the interventions and includes information on the specific measures implemented as well as the dates and a description.

[139] Hirsch, C., 2020, 'Europe's coronavirus lockdown measures compared', *Politico*, 31 March 2020. Available at: https://www.politico.eu/article/europes-coronavirus-lockdown-measures-compared/.

The measures are categorised as follows: general; case management and quarantine; hygiene and safety measures; internal travel; international travel; and physical distancing[140].

**General** measures refer to generic non-pharmaceutical interventions (NPIs) including public communication, risk assessment, or the activation of emergency management teams. **Case management and quarantine** include interventions such as contact tracing and self-isolation and quarantine. **Hygiene and safety measures** relate to the use of protective masks, the disinfection of public places and the improvement of air safety. **Internal travel** relates to measures limiting movement within a country, while **international travel** measures concern limiting movement across borders and the closure of borders.

**Physical distancing** measures is the largest category and includes interventions which reduce contact between individuals. These include stay-at-home orders and recommendations, gathering recommendations, restrictions on public gatherings, workplace measures, and closures of public spaces, such as businesses, shops and entertainment venues. It also includes public transport and educational institution closures. The figure below provides a timeline of the physical distancing measures in the EEA from January 2020.

[140] ECDC and JRC database on COVID-19 measures, available at: https://covid-statistics.jrc.ec.europa.eu/RMeasures.

Figure 12: Timeline of physical distancing measures in the EEA


Source: ECDC-JRC database.

All Member States imposed physical distancing measures during the pandemic to curb the spread of COVID-19. As can be seen from Figure 12, however, the length of those measures varied, depending on the Member State. For example, while the measures in several of the Member States ended earlier in 2022, some are ongoing according to the database. Thus, in Austria there are restrictions in place in hospitals and care homes, with visitors and employees needing to provide proof of vaccination, recovery or a negative test. Similar restrictions are in place in Cyprus, Czechia, Greece, Italy, while a mask is required in Malta. Such measures seem appropriate to protect the elderly and others at risk.

In Belgium, Latvia and Spain, teleworking continues to be recommended as a measure, while in Estonia, companies are encouraged to offer disinfectants and face masks, as well as testing and vaccination opportunities. However, **these measures are not mandatory**.

Earlier during the pandemic, however, more stringent measures were implemented across the EU as Member States reacted to increasing COVID-19 cases. As highlighted above, physical distancing measures is the largest category and has had a significant socio-economic impact in Europe. The closure of public spaces represented one of the main measures under this category and included entertainment venues, gyms, hotels, non-essential shops and restaurants and cafes. The figure below provides a general overview of when these closures took place.

Figure 13: Timeline of the closure of public spaces in the EEA


Source: ECDC-JRC database.

All Member States put in place restrictions regarding public spaces. These restrictions have been well documented elsewhere[141]. However, some brief examples of the nature of the measures are now provided.

[141] More detailed information on the measures is available at: https://covid-statistics.jrc.ec.europa.eu/RMeasures.

There were widespread closures of public spaces in March 2020 as lockdowns were implemented in Europe. To give a few examples, in Austria and Germany, all non-essential shops were closed, while in Bulgaria, there was a ban on visits to places such as bars, restaurants and large shopping centres. In Spain, retail premises and establishments were closed, with restrictions ongoing until June. Establishments providing essential goods and services, such as food stores, pharmacies and banks were, however, permitted to remain open. **It is well known that Sweden did not impose a full-scale lockdown, though measures were put in place.** Sweden's no-lockdown strategy, and its impacts, will be explored further in Case Study 3. Measures were gradually lifted before being reinstated or newly imposed as further pandemic waves impacted Europe, for example at the end of 2020 and beginning of 2021.

It needs to be pointed out that the physical distancing subcategory **does not necessarily represent the complete closure of public spaces**, as seen in the early stages of the pandemic. For example, in France, at the end of 2021, the consumption of food and drink was prohibited in settings such as theatres, cinemas and sports facilities. In Czechia, from September 2021, customers in restaurants and cafes required a distance of at least 1.5m between them, except for those belonging to the same party. In the Netherlands, while all non-essential shops were closed from December 2021 until 14 January 2022, they could then open until 5pm from 15 January to 24 February 2022, when restrictions ended. As such, there has been a gradual move from stringent measures to looser restrictions over the course of the pandemic.

Another subcategory is **workplace measures**. These include: specific measures to adapt the workplace, such as safety measures, distancing measures between workers and changes in work schedules; the closure of workplaces; the use of COVID certificates to enter the workplace; and recommended teleworking. These measures were implemented in different Member States, however, **teleworking and the adaptation of the workplace were the most prominent measures**, with the former being recommended in all Member States[142]. As mentioned earlier, teleworking continues to be recommended in certain Member States.

Among the other main categories are **internal travel and international travel**. Internal travel measures included quarantine for internal travellers, COVID certificates for travel, regional travel recommendations, travel advice and cordon sanitaire (the restriction of the movement of people into or out of a defined geographic area). International travel measures included bans on travel to certain countries, border screenings, including COVID-19 testing and temperature screenings, quarantine and total border closures.

Member States implemented their own travel measures to curb the spread of the virus, and they were not applied consistently across the EU[143]. In some Member States, border checks were only applied with certain other Member States. Poland, for example, implemented and enforced checks at all of its borders, while in other Member States there were staff shortages, resulting in border checks not being carried out effectively. Another example is Hungary, which shut its borders to foreign nationals in September 2020. As infections increased and new variants emerged, several Member States **reinstated border controls**, for example by requiring a negative test or quarantine upon arrival[144].

[142] More detailed information on the measures is available at: https://covid-statistics.jrc.ec.europa.eu/RMeasures.

[143] Marcus, J. S. et al. ,2021, *The impact of COVID-19 on the Internal Market*, Publication for the committee on Internal Market and Consumer Protection, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg.

[144] Ibid.

However, there were exemptions to the rules, notably for work-related travel. For example, self-isolation requirements were waived for those travelling for such purposes.

Diplomats, transport staff, truck drivers have been mentioned as those to whom restrictions did not apply and, in the case of Italy, workers who spend 120 hours in the country [145]. Further, a Commission Communication issued in March 2020 recognised that **the free movement of workers in critical occupations was essential**, including healthcare, ICT and food manufacturing and processing, and recommended that these workers be allowed to enter Member States without restrictions[146]. Further, the delivery of goods across borders was generally permitted. The following year, as discussed in Section 4, the EUDCC was introduced, facilitating the freedom of movement for travellers to and within the EU.

More generally, a Joint European Roadmap towards lifting COVID-19 containment measures set out **three criteria for the easing of restrictions**: epidemiological criteria demonstrating that the spread of COVID-19 has significantly decreased and stabilised; sufficient health system capacity; and appropriate monitoring capacity, including large-scale testing and contact tracing[147]. The Roadmap provides recommendations to Member States, including the gradual lifting of measures, more targeted measures, such as the protection of vulnerable groups and quarantine for those who have tested positive or have mild symptoms, and the progressive lifting on gatherings of people. Further recommendations included the continuous monitoring of the actions taken and the gradual opening of the EU's internal and external borders.

[145] More detailed information on the measures is available at: https://covid-statistics.jrc.ec.europa.eu/RMeasures.

[146] Communication from the Commission, Guidelines concerning the exercise of the free movement of workers during COVID-19 outbreak 2020/C 102 I/03, 30 March 2020.

[147] European Commission, Joint European Roadmap towards lifting COVID-19 containment measures, 2020/C 126/01, 17 April 2020.

## Case Study 3: Sweden's policy response to the pandemic

**Sweden's no-lockdown strategy**

In 2020, as Member States implemented lockdowns to curb the spread of COVID-19, there was one noticeable exception: Sweden. Rather than impose severe restrictions observed elsewhere across Europe, the Nordic nation chose a more lenient, trust-based strategy built on voluntary measures and the responsibility of its population. While stay-at-home orders and the closure of schools, shops, restaurants were commonplace in the rest of Europe, Sweden argued that taking such draconian measures was unsustainable and would have an unnecessary, detrimental impact on the economy.

Sweden's no-lockdown strategy became well-known, with the Member State deciding instead to achieve social distancing through public health recommendations. Higher education institutions and secondary schools were encouraged to conduct distance learning, teleworking was encouraged, while shops implemented physical distancing measures and restaurants and bars were told to serve customers at tables. Additionally, public gatherings of more than 500 people were banned. The Swedish population duly complied. Although there was no strict lockdown, as in other Member States, citizens and residents had to adjust their daily lives. Indeed, a survey conducted by the Public Health Agency found that more than 80% of the population had changed their behaviour, for example by practising social distancing, avoiding crowds and working from home[148].

Although Sweden avoided a lockdown, instead preferring to put in place measures enabling society to remain open, it, like all Member States, suffered economically during the pandemic. Sweden is a small, open economy with a large manufacturing industry and is dependent on international trade. For example, the vehicle manufacturer Volvo had to halt production for several weeks due to supply chain difficulties. Additionally, as highlighted, the population significantly changed their behaviour during the pandemic and decided to avoid shops, restaurants and gyms.

However, the economic impact during the second quarter of 2020, when lockdowns were implemented across Europe, was less severe than on other Member States. During that period, the economy contracted 8.6% compared to the previous three months, while the EU average was nearly 12%[149]. The economy started to recover from the middle of 2020, supported by measures aimed at households, businesses and the healthcare sector. These measures included short-time working schemes to avoid redundancies and support for businesses and the sports and cultural sectors, while there was an increase in private consumption, exports and private investment. The economy contracted by 2.8% in 2020 before real GDP growth increased to 5.1% in 2021. However, the war in Ukraine, supply bottlenecks and higher inflation are expected to slow real GDP growth to 2.3% in 2022 and 1.4% in 2023[150].

The Swedish approach to the pandemic was widely debated. Sweden had a relatively low number of COVID-19 cases initially compared to other Member States which had implemented strict lockdowns. However, Sweden was soon experiencing a higher death toll than Norway, Denmark and Finland, bringing criticism from scientists and physicians who had urged the government to implement stricter measures amid a rising number of deaths from the virus[151].

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148 Public Health Agency survey: https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2020/juni/stor-majoritet-har-anpassat-sitt-beteende-under-pandemin/.

149 BBC News, Coronavirus: Sweden's economy hit less hard by pandemic, 5 August 2020: https://www.bbc.co.uk/news/business-53664354.

150 European Commission, 2022, 2022 European Semester: Country Report – Sweden.

151 TIME, The Swedish COVID-19 Response Is a Disaster. It Shouldn't Be a Model for the Rest of the World, 14 October 2020: https://time.com/5899432/sweden-coronovirus-disaster/.

**Sweden's no-lockdown strategy**

In 2020, the government established the Corona Commission, which was tasked with evaluating the measures taken to limit the spread of COVID-19. In its final report, the Commission found that Sweden should have introduced more severe measures at the beginning of the pandemic to slow the transmission of COVID-19, including the temporary closure of indoor settings such as shopping centres and restaurants. The report also concluded that the government was overly dependent on the Public Health Agency, which should have communicated its advice and recommendations as clear rules of conduct. However, the Commission considered that Sweden's policy was fundamentally correct, allowing people to retain more of their personal freedom than elsewhere. According to the Commission, although the approach was fundamentally correct, it must not deter more rigorous measures that may be required in critical phases [152].

Sweden's approach was in stark contrast to other Member States and serves as an interesting point of comparison. It is hoped that the lessons learned from the Swedish Commission and other Member States can contribute significantly to policymaking during future pandemics.

## 5.2 Concluding remarks

Overall, a very wide range of measures was employed in order to deal with the pandemic across Member States. The practical reality is that even in the case of similarly designated measures (such as 'physical distancing'), they were often applied to varying degrees in different ways and for a different duration across Member States. Measures were also applied in divergent cultural environments which meant that there were varying degrees of compliance and enforcement involved. In addition, measures were applied in different combinations with other measures in Member States. All this makes it rather difficult to go beyond rather basic statements such as that the blunt instruments of social distancing and full lockdowns seem to have reduced the spread of the virus. For more nuanced conclusions a country-by-country assessment would be required. At the end of the day, it was the vaccinations that meant that the EU could emerge from the pandemic.

[152] The Corona Commission's final report is available here: https://coronakommissionen.com/publikationer/slutbetankande-sou-2022-10/.

# 6 CONSEQUENCES FOR INDUSTRY

KEY FINDINGS

EU industries were heavily affected by the pandemic. The sharpest fall in EU output was observed in the second quarter of 2020, however, after experiencing this sharp decline, the EU economy as a whole returned to its pre-pandemic level in the third quarter of 2021.

SMEs were particularly affected by the restrictions put in place to contain the pandemic. Data show that the most widely faced disruptions related to the pandemic were caused by an increase in late payments as compared to the same time during the previous year, followed by supply chain disruptions which led to shortages of materials, goods and services. Other disruptions reported were increased prices, difficulties in importing, difficulties in sourcing alternative suppliers and exporting.

Among SMEs, micro-enterprises, (who constitute some 93.3% of all enterprises in the EU) were particularly affected by the pandemic and experienced more decreased working hours, suggesting that smaller enterprises could not adapt as readily as larger ones.

Regarding the impact of the pandemic on the CCI, while it is difficult to make generalisations due to the heterogeneous nature of the sector, CCI undertakings which were most immediately and directly impacted were those involved in the delivery of festivals, concerts, conferences, live performances, etc. and their supply chains. In addition, there were impacts on bookshops, museums, cinemas, etc. Conversely, CCI businesses that did not rely on face-to-face contact, such as the video game and streaming industry saw their turnover grow, nevertheless this could not alone compensate for the severe losses suffered elsewhere in the CCI ecosystem.

In this section, consequences for industry of COVID-19 and the measures taken in response to the pandemic, and in particular for SMEs and the CCI, are discussed.

## 6.1 The impacts on business and industry

In this sub-section, the consequences of measures to deal with COVID-19 on the economy and industry in general are set out. First, the impact on the single market is summarised, then effects on the economy as a whole are presented. This is followed by a sectoral and industrial ecosystem perspective.

### 6.1.1 The wider impacts on business and industry

**Impact on the Single Market**

One of the first and most forceful impacts of measures to control the pandemic was felt through the effects on the single market. The four freedoms of the single market are the freedom of movement of goods, services, people and capital. When the pandemic struck, Member States responded through a range of measures (see above, Figure 1), of which one of the earliest to be implemented was to close national borders. While there were differences between Member States in terms of how this was actually implemented (e.g. the abrupt closure of the Polish borders), there were overall very wide ranging consequences which had severe knock-on effects due to the level of integration of the EU economy. They directly affected three of the four freedoms: movement of goods, services and people.

Examples of how impacts were transmitted include: loss of cross-border orders (undertakings could neither sell nor deliver); queues of vehicles at borders, holding up deliveries and just-in-time (JIT) supplies (containers stacking up); inability to visit family (in Europe family businesses make up between

65-80% of all companies)[153]; cross-border workers could not get to work, meaning that the organisations involved could not operate (for example, a very large percentage of Luxembourg's health workers work cross-border, and as a result hospitals were understaffed – with all the related consequences, and PPE equipment and ventilators could not be delivered); construction industry postings could not take place; service engineers could not carry out cross-border servicing and repairs (e.g. for telecoms and energy); consumption patterns changed due to the unavailability of some products; cross-border tourism and cultural events came to a halt; and, cross-border seasonal and migrant workers in the agri-food industry could not travel, leading to waste and destruction of crops. The response to the pandemic, through its impact on the single market, clearly revealed the effect on supply chains and dependencies throughout the EU and wider.

The situation was aggravated because often information about national legislation was hard to find, complex, not available in other languages, there were differences between national approaches (especially problematic where multiple border transits had to be made), there were frequent adjustments, and border controls were generally considered cumbersome[154]. A knock-on consequence was stockpiling in the context of the overall uncertainty and considerable turbulence in many markets, including for example autos, bicycles and boilers[155]. The various measures often had a cumulative impact well beyond what had initially been foreseen as economic dynamics came into play.

While the Commission did respond promptly with a Task Force and initiatives to remedy or rationalise the various Member State approaches, together with the other measures undertaken, this collapse of the single market contributed to the dire situation of the second and third quarters of 2020. Between 2020 Q2-Q3 intra EU trade declined by 24%[156]. However, stakeholders interviewed were in agreement that measures taken internally had more of a negative impact than those taken in relation to border closures, although there was a variation between industries in this respect[157].

**The overall picture**

According to Canton et al. (2021), 'The COVID-19 pandemic and the measures taken to contain it have triggered the largest and most abrupt drop in economic activity in recent European history'[158]. The restrictions which were implemented by Member States to curb the spread of COVID-19 brought about a high economic cost, with business activity paused or stopped in many sectors, with border and factory closures impacting the supply chains of European businesses. Economic activity contracted by more than 11% in 2020 Q2, then recovered by more than 12% in 2020 Q3, and was followed by a slight contraction. Overall, in 2020, GDP in the EU contracted by 5.9% and in the Euro Area by 6.4%, and grew at 5.4% in 2021 and it is expected to realise 2.7% growth in 2022, although in 2022 other factors have come into play which have led to a downward revision of the estimates[159].

However, there were some significant differences between Member States with regards to changes in GDP which reflected the nature and extent of the measures that were implemented, the state of their economies at the onset of the crisis and their economic structures (e.g. the importance of the tourist

153 European Family Businesses, https://europeanfamilybusinesses.eu/, accessed 18 January 2023.

154 European Commission, Annual Single Market Report 2021, SWD(2021) 351 final, Brussels, 5.5.2021, pp.8-10.

155 Interview, DG GROW.

156 European Commission, Annual Single Market Report 2021, p. 9.

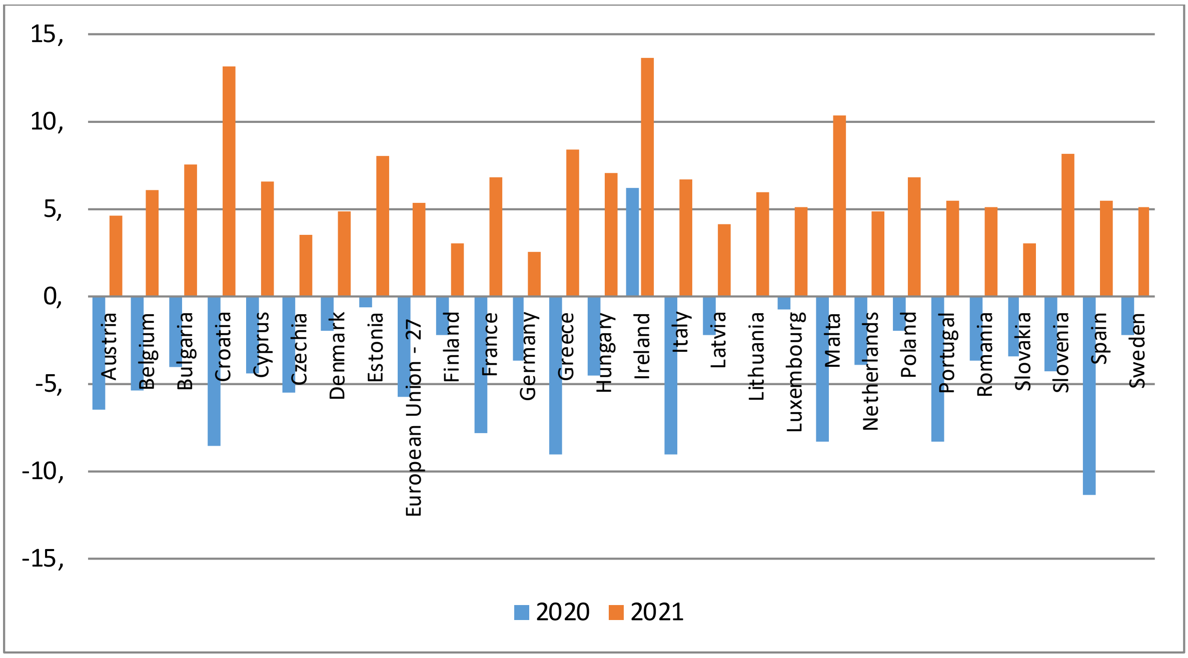
157 Marcus, J. S. et al., 2021; *The impact of COVID-19 on the Internal Market*, op. cit., p.29.

158 Canton, E., et al., 2021, The Sectoral Impact of the COVID-19 Crisis: An Unprecedented & Atypical Crisis, DG ECFIN, Economic brief 069, December 2021, p.2.

159 European Commission, 2022, European Economic Forecast, Spring 2022, Institutional paper 173 | May 2022.

industry)[160]. Spain and Italy, two major nations, were particularly hard hit as countries that rely heavily on tourism and thus international travel, as were Greece and Croatia.

Figure 14: GDP percentage changes in the EU-27, 2020 and 2021




Source: Eurostat Data extracted on 15/11/2022 from [ESTAT].

Interestingly, during the pandemic, the Irish economy grew. This was due to increased multinational exports, particularly from the information technology and pharmaceutical sectors that were favoured by developments during the pandemic. These two sectors, accounting for a substantial portion of Ireland's GDP, were able to offset the falloff in domestic activity and grow the country's GDP. In some Member States, such as Finland, Lithuania and the Netherlands, the percentage reduction in total industrial production (including mining, manufacturing and utilities) was less than 10% in February to May 2020 compared with the previous year, whereas there was a drop in production of more than 30% in France and Italy, where stricter restrictions were put in place. Similarly, there were differences in retail trade volumes compared to the same period of the previous year. In Denmark, Estonia, Finland and Germany, for example, there was a more limited impact caused by the restrictions, and recovery was stronger than in industrial production, perhaps due to businesses conducting more sales online and offering contactless or low-contact delivery, as well as discounts on sales of existing inventory backlogs. However, France, Ireland, Italy and Luxembourg were more heavily impacted, and only witnessed a positive percentage change in retail trade volumes after May 2020[161].

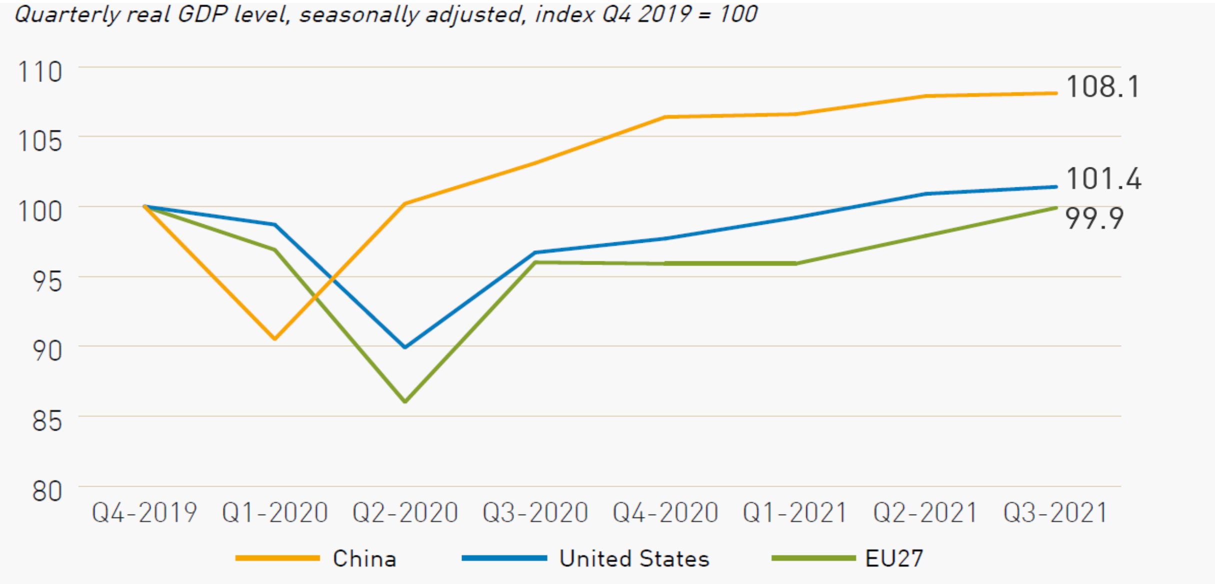
The sharpest fall in EU output was observed in the second quarter of 2020, as the pandemic spread across Europe and governments reacted by imposing restrictions which had a significant impact on industry and businesses. When lockdowns were lifted there was an increase in output over the third quarter before a slight decline which continued until the early part of 2021 as Europe faced more lockdowns and restrictions of various kinds.

[160] BusinessEurope, 2022, Reform Barometer 2022 - Taking stock of the EU's competitiveness after 2 years of the pandemic.

[161] OECD, 2021, Strengthening Economic Resilience Following the COVID-19 Crisis: A Firm and Industry Perspective.

With the relaxing of restrictions and availability of vaccines, **Europe observed stronger growth in 2021 than 2020**. By the third quarter of 2021, EU growth since the onset of the pandemic was only 1.5% lower than the US, which had benefited from greater government financing. However, with financial support from the EU and Member State governments and restrictions lifted, the **EU economy as a whole was at its pre-pandemic level in the third quarter of 2021** [162]. The figure below illustrates EU GDP levels between Q4 2019 and Q3 2021 compared to China and the US.

Figure 15: GDP levels in the EU, China and US between Q4 2019 and Q3 2021




Source: BusinessEurope, Reform Barometer 2022 - Taking stock of the EU's competitiveness after 2 years of the pandemic, 2022.

## Employment

From a macroeconomic point of view, the pandemic also had a profound impact on employees across the EU as businesses closed, physical restrictions were put in place and workers were encouraged to work from home if possible (or even stay at home and not work). Unemployment across the EU grew in the second quarter of 2020, as 4.8 million individuals, who had been previously employed in the first quarter, became unemployed [163]. This figure represented an increase of 1.2 million on the second quarter of 2019. As such, it was found that the impact of the pandemic on job losses was greater in the second quarter of 2020 than the Eurozone crisis between 2010 and 2013.

Young workers experienced the largest decrease in employment, while workers between the ages of 25 and 54, as well as older male workers, were most impacted by cuts in working hours. Temporary workers were particularly affected by the pandemic, with the number of temporary contracts across the EU falling by 27% between spring 2019 and spring 2020, representing more than three-quarters of the reduction in employment [164].

[162] BusinessEurope, 2022, Reform Barometer 2022 - Taking stock of the EU's competitiveness after 2 years of the pandemic.

[163] Weber,E., Neupert, R., 2021, European labour market dynamics after the outbreak of the Covid-19 crisis, IAB Forum, 16 April 2021, p.2. Available at: https://www.iab-forum.de/en/european-labour-market-dynamics-after-the-outbreak-of-the-covid-19-crisis/.

[164] Eurofound, 2021, COVID-19: Implications for employment and working life, COVID-19 series, Publications Office of the European Union, Luxembourg. Available at: https://www.eurofound.europa.eu/publications/report/2021/covid-19-implications-for-employment-and-working-life.

The level of unemployment across the EU was reduced to an extent by the use of short-time working and furlough schemes, supported by the Commission's Support to mitigate Unemployment Risks in an Emergency (SURE) instrument.

SURE supported around 31 million workers in 2020, 22.5 million of which were employees and 8.5 million self-employed. Approximately 2.5 million firms impacted by the pandemic benefited from SURE, facilitating their retention of workers[165].

**Sectoral variations**

A key feature of the impact of the pandemic on economic activity is that it has varied significantly across sectors. It was, unsurprisingly, in view of the lockdowns, the sectors where personal contact was central that were most directly and dramatically affected. These include retail, tourism, cultural activities, hospitality, entertainment, recreation, transport and some service activities such as personal services and household activities. Sectors that facilitate non-contact recovered quickly (e.g. ICT support), while others, which were not targeted for containment (e.g. manufacturing and construction) had almost reached their pre-pandemic levels by mid-2021, although they have been affected by issues related to global value chains and changes in demand.

From the point of view of short term impacts, in the second quarter of 2020 when lockdowns were at their peak, economic activity in personal contact services declined by 25% compared to their pre-COVID-19 level. In comparison, industry contracted by 17%, construction by 13%, whereas in sectors characterised by the presence of highly skilled workers that could work remotely like ICT, real estate and finance, were less affected, contracting by less than 5%. Short term impacts also varied at sub-sector level (see also the section on the CCI below). For example, there was a reduction in turnover for textiles and automobiles (manufacturing industries) of more than 50%[166]. After the first wave, most manufacturing sectors recovered quickly, with automotive sales reaching pre-pandemic levels by the autumn of 2020. Personal contact services (e.g. live performances, tourism, etc.) did not recover that well.

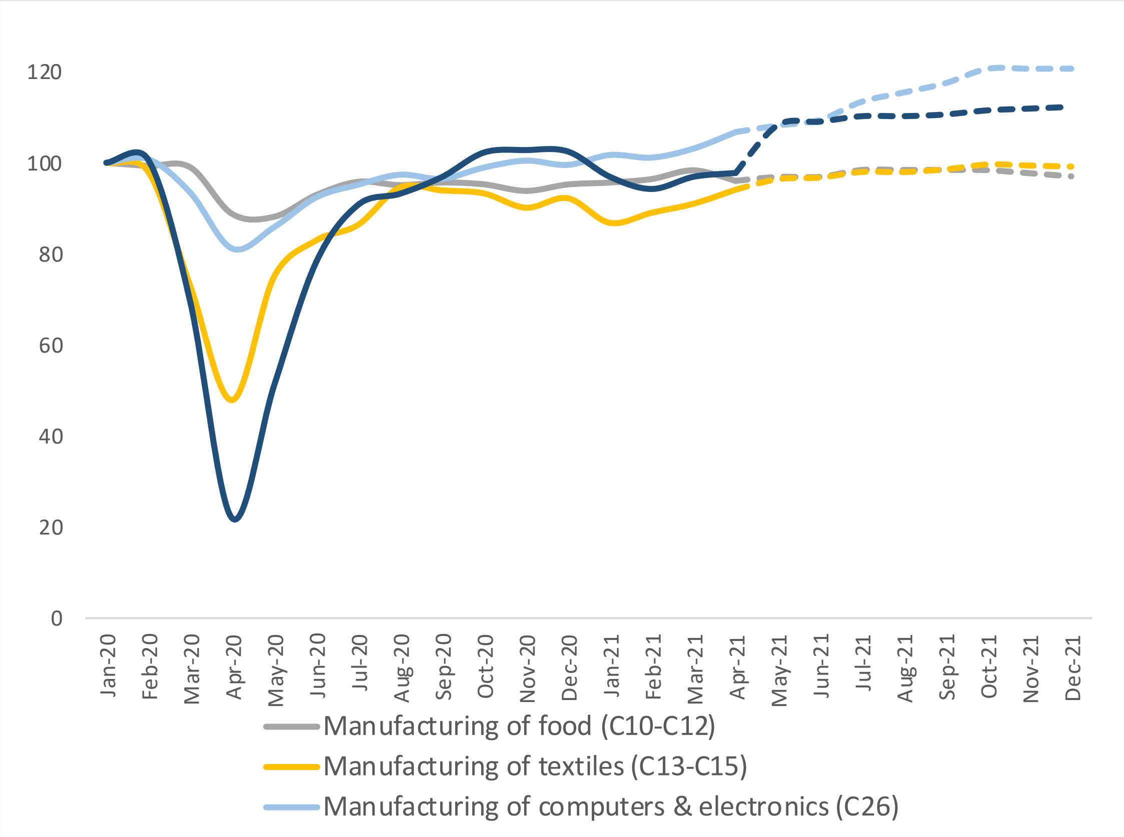
The impact of the second wave was more muted and the economic contraction resulting from restrictions not as strong. The population had adjusted its behaviour and measures in support of consumers and business, including increasingly the self-employed (which had been relatively absent during the first phase of the pandemic), had kicked in. However, activities such as tourism, hospitality, live performances and events where people gathered, continued to experience reductions due to restrictions such as those on international travel and social distancing.

The two graphs below (Figures 16 and 17) set out the evolution of economic activity in a range of sectors over the course of 2020 and 2021.

[165] European Commission, Report on the European instrument for Temporary Support to mitigate Unemployment Risks in an Emergency (SURE) following the COVID-19 outbreak pursuant to Article 14 of Council Regulation (EU) 2020/672 SURE: One Year On, COM(2021) 596 final, Brussels, 22.9.2021. Available at: https://ec.europa.eu/commission/presscorner/detail/en/IP_21_4822.

[166] Canton, E., et al. (2021), op. cit., p. 4.

Figure 16: Turnover in selected manufacturing sectors, EU average



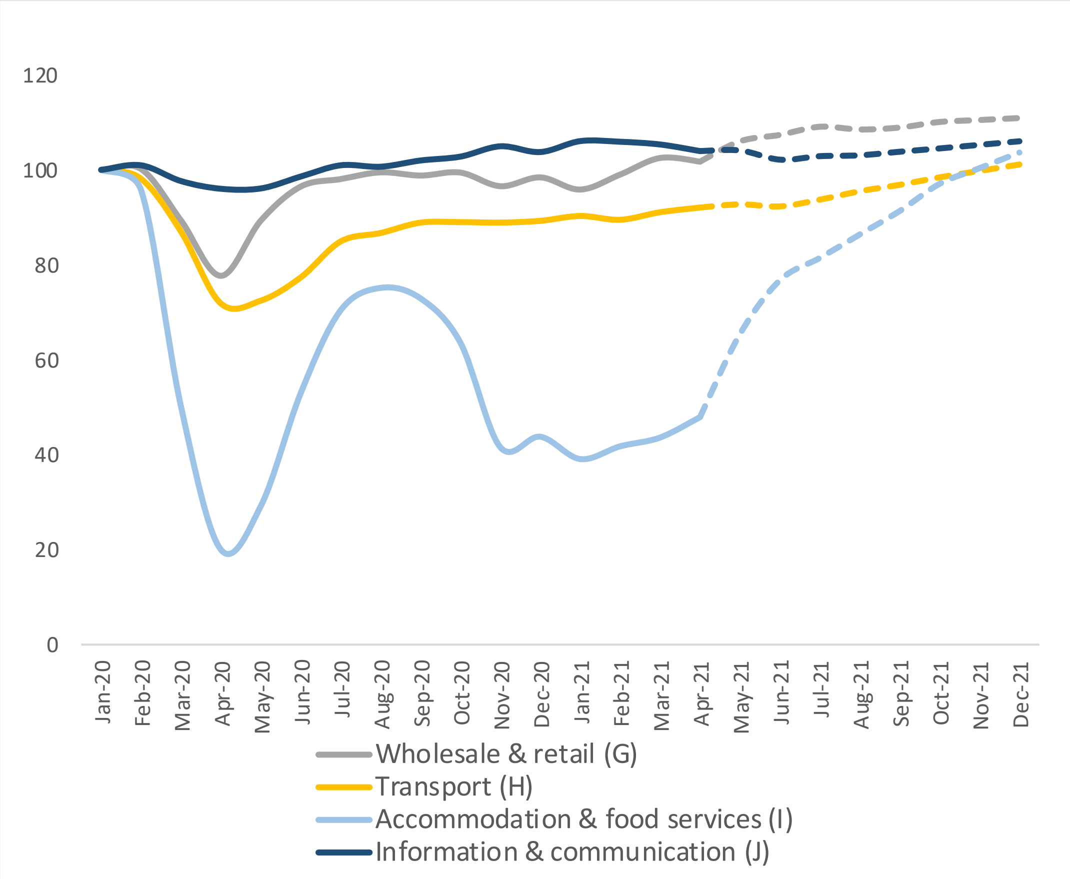

Note: EU turnover-weighted average for all countries except CY and MT.

Source: Archanskaia et al. (2021), in Canton, et al., op.cit., p. 4.

Figure 16 makes clear the extent of the impact on different manufacturing sectors, with transport equipment initially the hardest hit, textiles showing the slowest recovery and food also lagging.

In the case of services (Figure 17), accommodation and food services show a decided lag in recovery, reflecting the impact of the second and subsequent waves as compared to other sectors. Information and communication technologies remained resilient, and while wholesale and retail recovered, transport services have lagged.

Figure 17: Turnover in selected service sectors, EU average




Note: EU turnover-weighted average for all countries except CY and MT.

Source: Archanskaia et al. (2021), in Canton et al., op. cit., p. 4.

Importantly, while hours worked contracted (for example by 25% in the arts, hospitality and entertainment; in professional and business services and construction by 15%) during the periods when there were restrictions, employment did not fall as much due to the widespread support for employment both at Member State level (e.g. through the Temporary Framework) and EU-level (e.g. SURE). Over the period 2019-Q4 to 2020-Q2 some 6 million jobs or 3% of employment was lost.

Tendencies in employment reflect those at sector level. Where it is possible to work by avoiding contact, for example through tele-working, employment fell less (e.g. finance and insurance). This was less possible in industry and construction, and even less so in trade, transport and accommodation, and in arts, entertainment and recreation. On the other hand, in industries defined as essential such as food, health and education (public sector), so that they were not completely shut down although they involved personal contact, impacts were less severe. Factors such as differences in job security and employment protection regulations, the nature of employment contracts and levels of skill played a role in reductions in employment. In agriculture, international mobility restrictions on movement of migrant labour meant that there was a relatively high fall in employment. Younger and lower-skilled workers have been more affected by job losses.

**An industrial ecosystems approach**

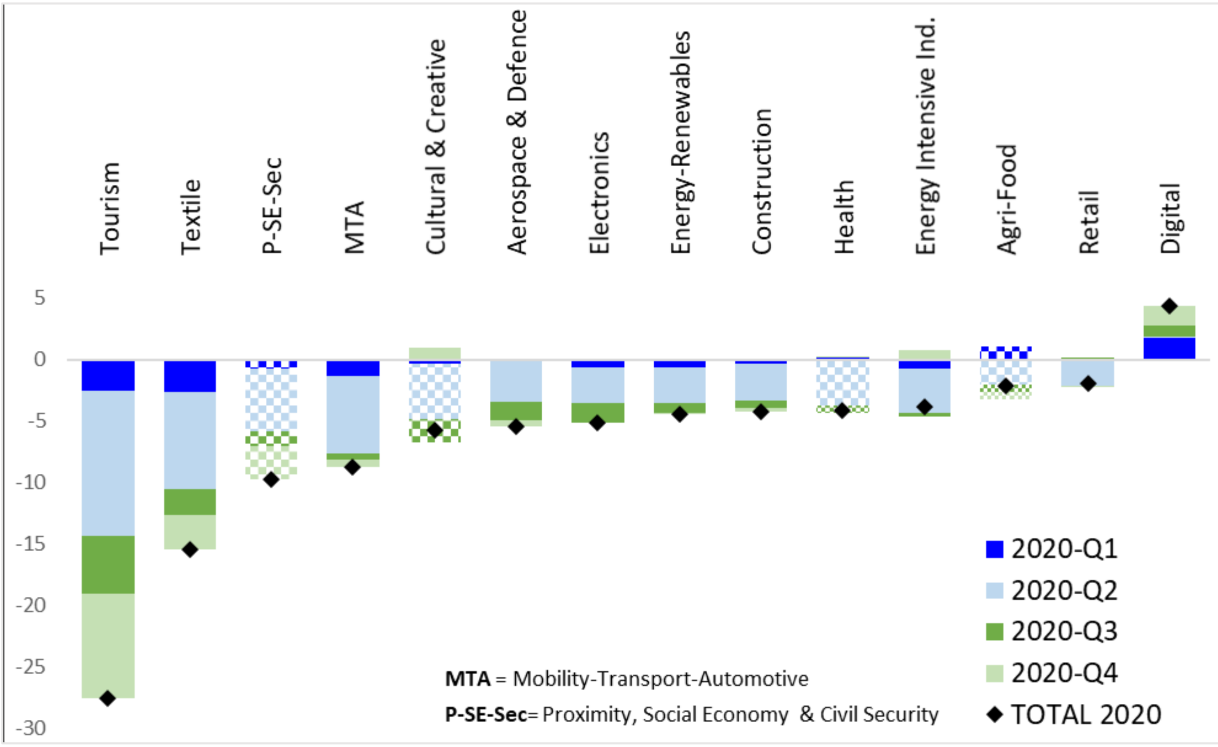
A more data-rich approach to understanding the impacts of the pandemic than the sectoral approach is to look at it in terms of the industrial ecosystems approach that is presented in the *Updated Industrial Strategy* and set out in the *Annual Single Market Report 2021*[167]. This approach incorporates linkages between the various participants in an industry, upstream and downstream, as well as support organisations (public and private). At the time of writing, some 14 EU industrial ecosystems have been identified[168]. Their selection was based on their economic and technological relevance, their potential contribution to the dual transition, and to the resilience of the EU economy. They represent around 70% of the EU economy and 80% of the business economy (as a share of value added). The single market provides the economic background for these ecosystems. According to the Single Market Report (2021), the diverging impact of the COVID-19 crisis across the European economy, and the disruptions experienced in spring 2020, confirmed the need for an ecosystem approach.

The uneven contraction of economic activity and the long duration of the pandemic deepened the differences in impact between the industrial ecosystems which became apparent in the course of the summer of 2020. As Figure 18 shows, by the second quarter of 2020, lockdowns had triggered substantial losses for all ecosystems except “Digital”. Figure 18 also shows that “Tourism”, “Textile” and “Automotive” were most affected in terms of turnover, but that there were substantial differences within the industrial ecosystems. In “Tourism”, for example, travel agencies and tour operators experienced losses in turnover of some 80% in the last three quarters of 2020, while air transport also lost between 60% and 70% of their revenues. It is also pointed out that the data significantly underestimate the impact for ecosystems such as “Cultural and Creative” and “Proximity, Social Economy and Civil Security” because these are underrepresented in the data. Although by Q3 2020 most industrial ecosystems had returned close to 2019 levels, further divergences between them started to emerge, becoming clearer in Q4 2020. Thus, while turnover in “Tourism” contracted significantly, “Digital” and “Energy Intensive Industries” increased their turnover compared to the previous year.

[167] European Commission, 2021, Annual Single Market Report 2021 accompanying the Communication from the Commission ‘Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery’, Commission Staff Working Document, SWD (2021) 351 final, Brussels, 5.5.21, p. 71. More details about boundaries and linkages of industrial ecosystems is provided in this document.

[168] Aerospace and Defence, Agri-food, Construction, Cultural and Creative Industries, Digital, Electronics, Energy Intensive Industries, Energy-Renewables, Health, Mobility-Transport-Automotive, Proximity, Social Economy and Civil Security, Retail, Textiles and Tourism.

Figure 18: Change in Turnover by Industrial Ecosystem – by Quarters



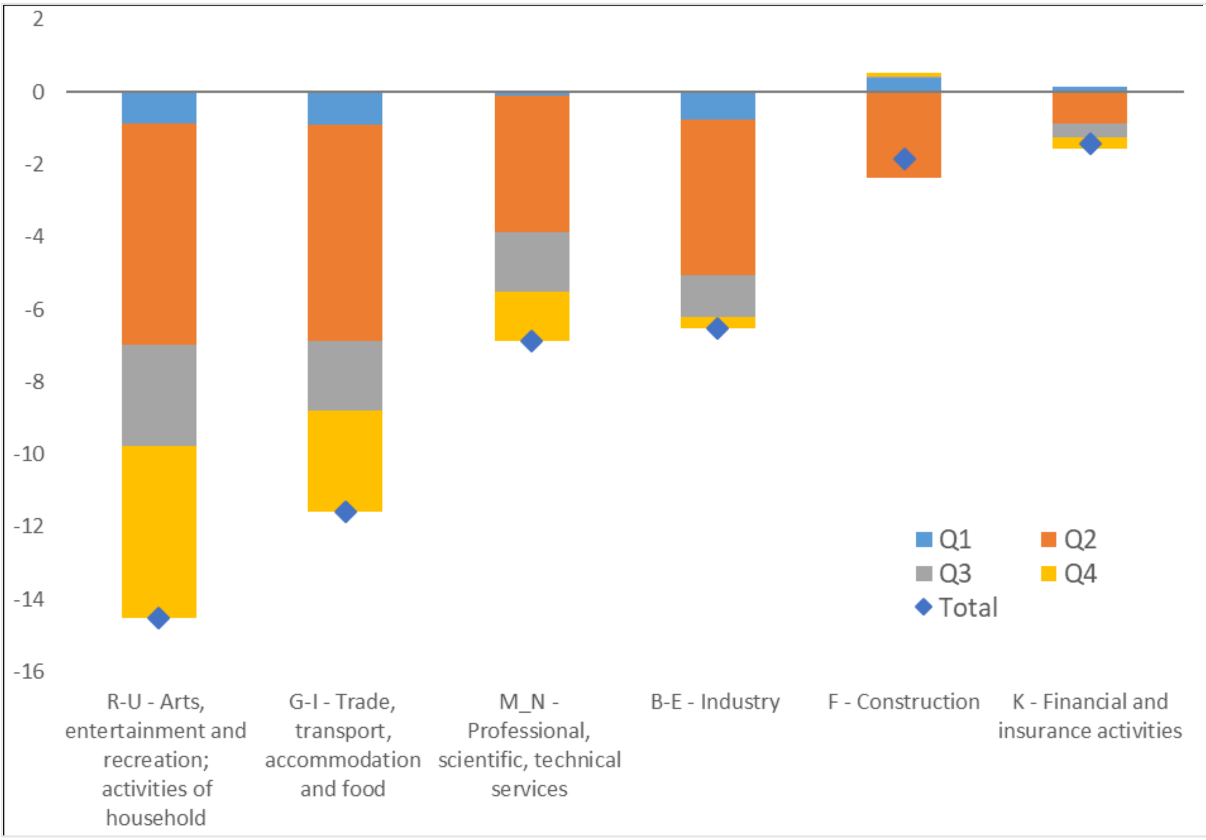

Source: European Commission analysis based on data by Eurostat Short-term business statistics[169].

Note: Data show annualised y-o-y change in turnover for each quarter of 2020. For "Agrifood", "Health", "Social", and "Creative & Cultural" data available cover only partially that ecosystem. For this reason, they are depicted using dotted bars and the related values have to be interpreted with caution. Data for "Cultural and Creative Industries" and "Proximity, Social Economy and Civil Security" may underestimate the impact of the crisis, as data for some relevant sectors are not available.

Quarterly Value Added data provide a better picture of the impact on industrial ecosystems not fully covered by data on turnover. **According to these data, in 2020, the arts, entertainment and recreation activities experienced the largest percentage drop compared to 2019** (see below Figure 19), particularly in the second and fourth quarters, when the waves of the pandemic and associated lockdowns and social distancing requirements occurred. It is also worth noting that a large share of the Cultural and Creative industry activities overlaps with the Proximity, Social Economy and Civil Security ecosystem.

[169] European Commission, 2021, Annual Single Market Report 2021, op. cit., p. 14.

Figure 19: Gross value added, 2020. Percentage change with respect to the same period in the previous year, by sector




Source: European Commission, 2021, Annual Single Market Report 2021, op. cit., p. 15.

There were severe disruptions, potentially comparable to those in Tourism, in the CCI. This was particularly the case for those components of the industry based on venues and visits:[170] performing arts and 'heritage' sectors (e.g. live music, theatres, circus, festivals, cinema, museums and heritage sites). For example, it was reported that during 2020, cinema operators in the EU experienced a 70% drop in box office receipts, music venues reported a 76% drop in attendance (64% in revenues) and museums lost between 75-80% of their revenues in popular tourist regions. There was a drop of 30-80% in advertising revenues experienced by publishers of news. By comparison, in 2020 there was a less severe decrease in revenues of some 15% in the audio-visual sector (including remotely accessible services like broadcasting or streaming besides cinema). The increased uptake of streaming and gaming services could not compensate for the severe losses suffered elsewhere in the ecosystem.

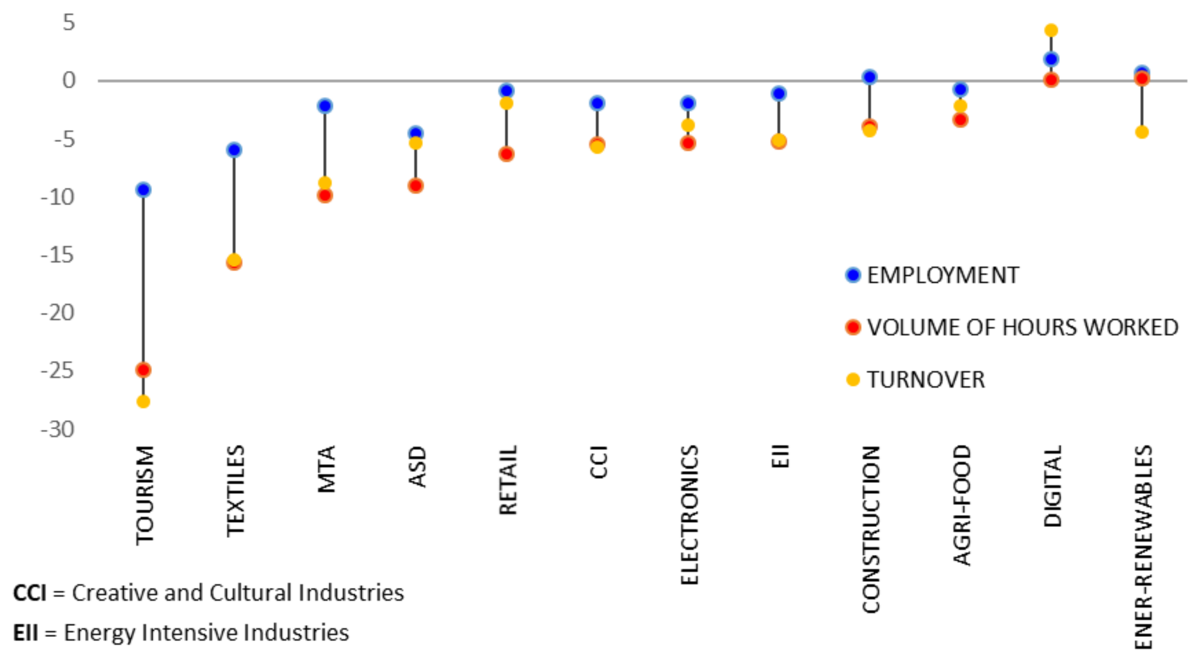
**Employment effects**

The drop in turnover across industrial ecosystems is mirrored by a drop in the volume of hours worked and in employment. However, generally, drops in turnover and hours worked were much greater than reductions in employment. In some ecosystems ("Aerospace & Defence", "Retail", and "Digital") the drop in total hours worked was considerably larger than the drop in turnover. This indicates that there were important productivity gains in these ecosystems. By contrast, in the "Energy-Renewables" ecosystem, the volume of hours worked and the level of employment have remained constant while there was a reduction in turnover, signalling a decline in productivity. As mentioned in preceding paragraphs, data that include the high share of self-employment and non-standard employment are

[170] Data in this paragraph from: European Commission, Annual Single Market Report 2021, op. cit., p. 15.

not available for "CCI" and "Proximity, Social Economy and Civil Security" ecosystems, as a result of which the impact of the crisis on these industrial ecosystems tends to be underestimated.

Figure 20: Change in Turnover, Employment and Hours Worked in 2020




**CCI** = Creative and Cultural Industries

**EII** = Energy Intensive Industries

**MTA** = Mobility-Transport-Automotive

**ASD** = Aerospace and Defence

**P-SE-Sec**= Proximity, Social Economy & Civil Security

Source: European Commission, 2021, Annual Single Market Report 2021, op. cit., analysis based on data by Eurostat.

Note: For "Health" and "Proximity, Social Economy and Civil Security", data do not cover enough sectors to build a proxy, so they are not included. Data for "Cultural and Creative Industries" significantly underestimate the impact of the crisis, as data for some relevant sectors are not available.

The case study below presents some of the consequences on bankruptcies of the wide ranging support measures provided for enterprises as a response to the COVID-19 pandemic.

## Case Study 4: Unintended consequences: the missing bankruptcies

### The issue

In the course of the pandemic – soon after 2020 Q2 – it became clear that the number of bankruptcies were falling well below the level that might have been expected in the normal course of events. This case study sets out why the situation developed, its impacts and what can be done to mitigate any negative consequences in the future.

### Why was there a reduction in bankruptcies?

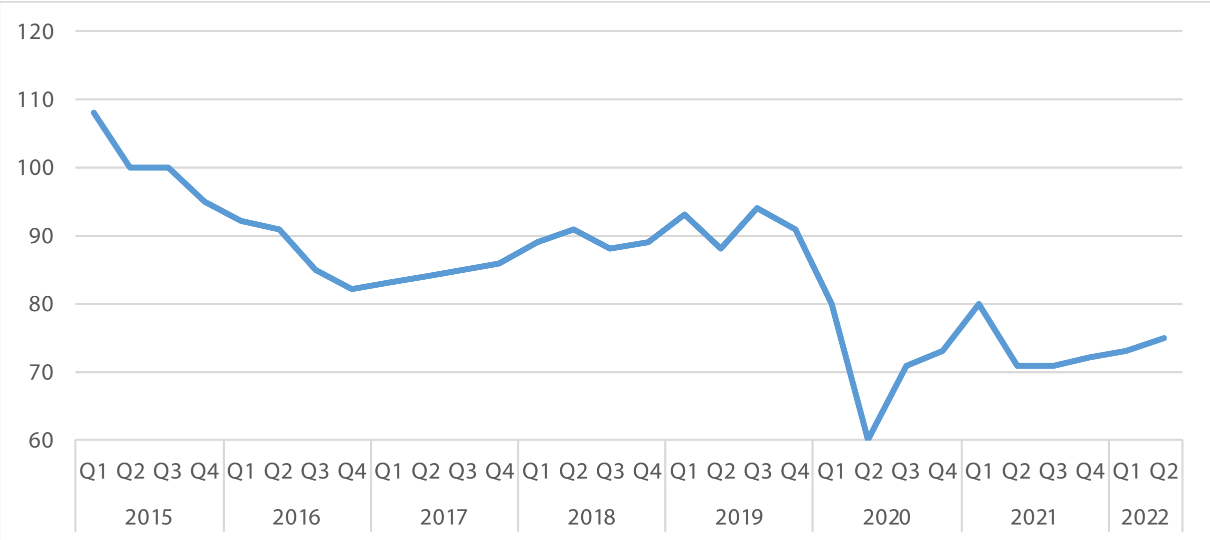
In order to counter a large-scale increase in bankruptcies as a result of the introduction of measures to deal with the pandemic (e.g. lockdowns), Member States introduced a range of measures to combat any substantial increase in bankruptcies. These were primarily: forbearance by creditors; temporary suspension of legal rules related to when company directors or owners must file for bankruptcy; and, temporary closure of legal and advisory entities dealing with bankruptcy declarations.

The **rationale for keeping bankruptcies low** was based on three factors**:** (i) the need to keep businesses going so that healthy businesses are not lost, which would make recovery more difficult; (ii) to keep demand up by supporting household incomes; and (iii) to avoid a surge in costs related to unemployment. Initially, support through the TF was only provided to businesses that were not in financial difficulty in December 2019. However, after the third amendment of the TF on 29 June 2020 the measures also extended to businesses that had been in financial difficulties in December 2019.

### The extent of the reduction in declarations of bankruptcy

Figure 21: Declarations of bankruptcies in the EU

*(Q1 2015-Q2 2022, seasonally adjusted (2015=100)*



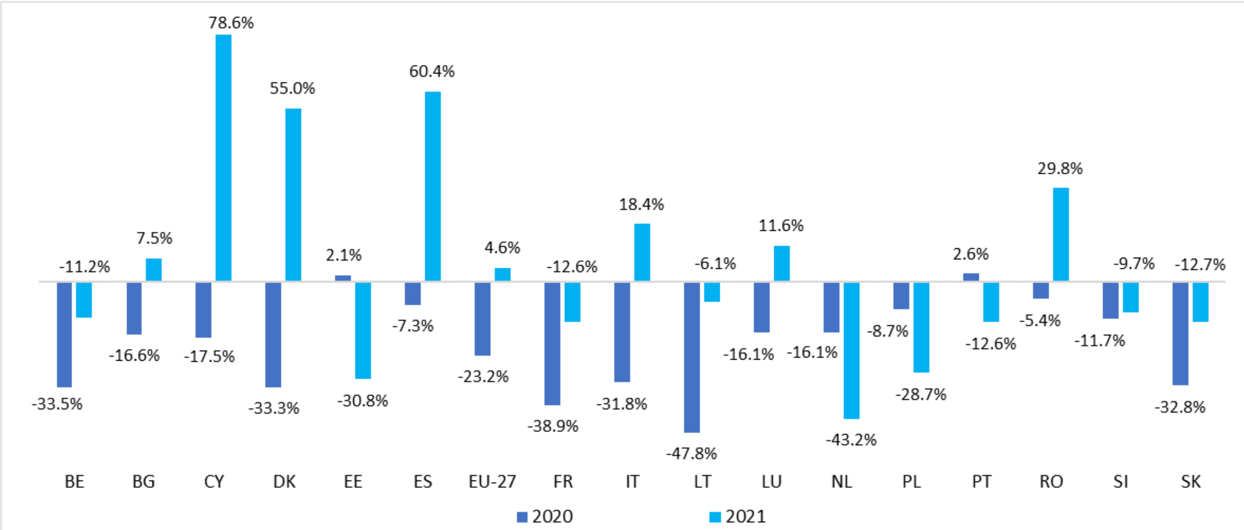

Source: Eurostat: Quarterly registrations of new businesses and declarations of bankruptcies.

The radical departure from the longer term trend in bankruptcies is clear from the figure with the minimum being reached in the Q2 2020. A bounce back can be observed until Q1 2021, but then there was a new decline followed by a gradual increase, albeit from a much lower level than is the case in earlier years[171].

The bar chart below provides bankruptcy data at Member State level for the 16 Member States for which detailed information is available[172]. During 2020, Estonia and Portugal experienced small increases, but others experienced declines ranging from 5.4% in Romania to 47.8% in Lithuania. In larger Member States, such as France and Italy, there were also substantial declines.

Bankruptcies at EU-level rebounded in 2021 by 4.6%, driven by large increases in Cyprus, Denmark, Spain and Romania, while in seven Member States there was still a double-digit decline. Overall, the reduction of 2020 has not been offset by the increase in 2021. There has also been a gradual increase during 2022, but not enough to 'catch up' with where the situation 'should' be, had circumstances been more normal.

Figure 22: Annual percentage change in business bankruptcy declarations in 2020 and 2021




Source: Eurostat, SME Annual Report, 2021/2022, p. 47.

This suggests that there might be a 'business bankruptcy overhang' and a large increase in bankruptcies can potentially be expected in coming years, for example, due to the incapacity of businesses to fulfil repayment obligations linked to the financial support received during the pandemic and, as a result, bankruptcies occurring in future years. Some businesses may have borrowed more than was warranted in the circumstances (possibly as a result of over-hasty or even purposely less robust review of applications in the crisis context), some should not have received funding in the first place (as they were in financial difficulty)[173], and some who were healthy may be in trouble now due to new market conditions in 2022/23.

[171] Eurostat, Aug 2022 (next update Nov 2022). The data are based on the absolute number of registrations and bankruptcies sent to Eurostat by EU Member States on a voluntary basis until the fourth quarter of 2020 and on a mandatory basis since the first quarter of 2021.

[172] European Commission, 2022, Annual Report on European SMEs 2021/2022, SMEs and environmental sustainability. SME Performance Review 2021/2022, Brussels, pp. 47-9. Available at: https://single-market-economy.ec.europa.eu/smes/sme-strategy/sme-performance-review_en.

[173] Maybe as a result of the third amendment to the Temporary Framework of 29 June 2020.

Estimates suggest that there are differences between Member States regarding the 'missing bankruptcies' which can be put down to the differences in various legal, regulatory, administrative and financial measures aimed at mitigating the impact of the pandemic on businesses (for example, in some Member States, during the pandemic, public organisations dealing with registration of bankruptcies were closed), as well as sectoral-specific differences in their economies (e.g. the role of tourism)[174].

**Consequences**

Government policies have effectively sustained businesses and have in fact reduced bankruptcies to a level well below normal throughout the pandemic. This has a positive effect on maintaining employment and reducing redundancies. However, as support measures are phased out, beneficiaries will increasingly face issues regarding repayment of debt (e.g. for postponed tax payments) and the challenges of more normal competition. This could be more of an issue for those who were already in financial difficulties in December 2019. It is hoped that government credit guarantees and loan repayment moratoria will 'soften the landing'.

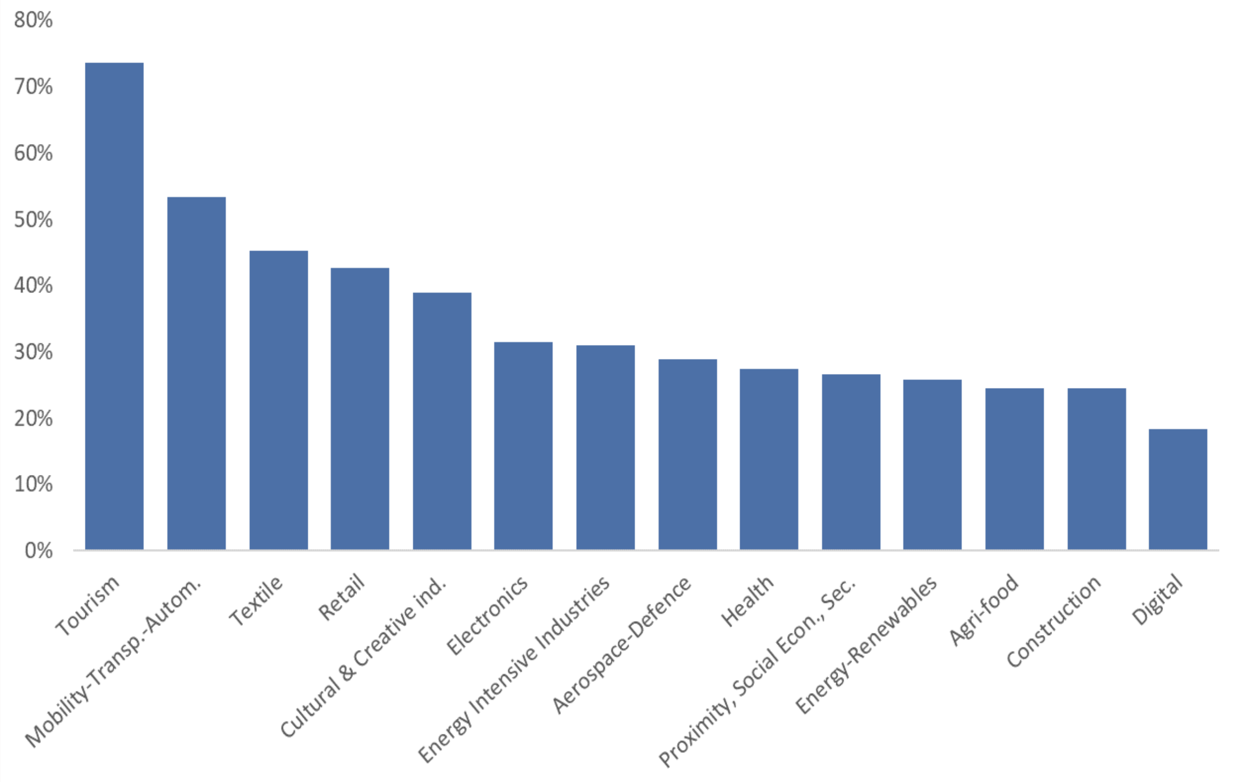
Although the number of bankruptcies has fallen, there is still wide-ranging financial distress throughout the business world as a result of the pandemic and measures taken to contain it. The extent and impact of financial distress varies significantly by sector/ecosystem, and firms that were healthy at the start of the crisis have also been affected. On a sectoral basis, the largest share of distressed firms is in the automotive and hospitality industries (2021 baseline scenario)[175]. In terms of industrial ecosystems, there is also substantial variation[176].

[174] European Commission, 2022, Annual Report on European SMEs 2021/22, SMEs and environmental sustainability. op. cit., p.49.

[175] European Commission, 2021, Annual Single Market Report 2021, op. cit., p.18., Figure 9: Share of EU firms likely to face financial distress at different points in time. European Commission analysis based on ORBIS, Eurostat and Member State specific information collected by DG ECFIN.

[176] European Commission, 2021, Annual Single Market Report, op. cit, p.19.

Figure 23: Share of firms likely to face financial distress by March 2021




Source: Commission analysis based on ORBIS and Eurostat (SBS and STS)[177].

Most Member States focused their support measures (especially at the beginning of the pandemic) around debt, even if such support has not always been taken up fully as this might lead to excessive

borrowing. However, many businesses did take up such support and there will be a significant need for recapitalisation for SMEs, especially smaller ones.

Furthermore, SMEs form and integral part of supply chains and represent approximately 99% of companies in every industrial ecosystem, and an increasing number of bankruptcies could have substantial consequences on supply chains and jobs[178]. Late payment, a long-standing difficulty for SMEs, could worsen, as since March 2020, payment delays have grown quickly, indirectly influencing entire supply chains.

One further consequence of the reduction in bankruptcies as a result of public intervention has been that the reallocation of labour from less to more productive enterprises with a better competitive position has been disrupted. One of the key characteristics of the recovery since 2022 has been labour shortages. One argument is that the 'zombie firms' that should have been liquidated, by continuing to absorb labour, have been constraining the recovery by not releasing labour to better uses.

177 Ibid.

178 Ibid.

**Conclusion - policy implications**

The aforementioned points suggest some policy implications. In the first place, there should not be any complacency about the possible future extent of bankruptcies throughout the EU, especially in view of the additional crises (energy, Russian invasion of Ukraine) that emerged in the course of 2022. Therefore, the TF (and other) support measures should be withdrawn gradually in order to avoid creating an economic 'cliff-edge'. At the same time, transition support needs to be put in place through for example facilitating access to re-financing, business mentoring, and making alternatives to bankruptcy (e.g. trade sales) more readily available. Services such as these could be developed and delivered at an industry association level (for example, in the CCI, Culture Action Europe (CAE) is supporting transition, and DG GROW is providing a range of financial instruments in support of restart). At the same time, measures need to be present to support businesses well-poised for recovery.

### 6.1.2 Concluding remarks: industry

The impact of the pandemic and measures taken to combat it were unprecedented in recent history. The impacts were different across various economic sectors, with those sectors requiring personal proximity to operate the most affected. Despite the extent of the decline in economic activity in 2020, by the third quarter of 2021, activity overall had recovered to pre-pandemic levels. Again, the sectors most affected were slowest to recover.

One key lesson of this experience has been the importance of co-ordinated action at EU level in order to minimise the disruption to activities resulting from *ad hoc* national level interventions as in the case of for example border closures. Another lesson is the importance of quick and sufficiently extensive action as in the case of supporting industry through the Temporary Framework and mechanisms such as SURE in order to preserve business liquidity and employment. In a non-crisis context it would also be worthwhile to reflect on what could have been done to support the hardest hit sectors better, or differently. In addition, there would be value in considering whether support in general might be designed in a different way so as not to lead to such a large overhang of bankruptcies which has a damaging effect on the allocation of resources and innovation.

## 6.2 Impacts on small and medium-sized enterprises

While there has been a good deal of research published on SMEs and the pandemic[179], in this subsection, the focus is on the consequences of measures taken to deal with the pandemic on SMEs throughout the EU, their responses and the extent of recovery. To this end, first we look at how SMEs are defined in the EU, and how they are distributed between Member States and industries. Then we indicate why SMEs might be considered as a group deserving of specific attention. Then impacts are discussed, with a focus on TF measures.

### 6.2.1 The profile of EU SMEs

**Definition of SMEs**

In the EU, SMEs in the non-financial business sector (NFBS) are defined as indicated in the table below:

Table 8: The definition of Small and medium-sized enterprises (SMEs)

| Company category | Staff headcount | Turnover | or | Balance sheet total |
|---|---|---|---|---|
| Medium-sized | < 250 | ≤ EUR 50 m | | ≤ EUR 43 m |
| Small | < 50 | ≤ EUR 10 m | | ≤ EUR 10 m |
| Micro | < 10 | ≤ EUR 2 m | | ≤ EUR 2 m |

Source: EC recommendation 2003/361/EC[180].

There are other definitions of SMEs, for example in the United States, and even within the EU some Member States have different criteria to define SMEs in terms of the categories involved. In the USA, for the purposes of some government programmes, the Small Business Administration considers a small business as one with less than 500 employees, although the actual definition of what a small business is varies by industry[181]. In Germany, the *Mittelstand* as a statistical category covers firms with less than 500 employees. In Australia, micro businesses are defined as those with 1–4 employees, small with 5–19, medium with 20–199, and large businesses with 200 or more. One may also be quite critical about this definition, treating or referring to 'SMEs' as a homogenous group, whereas in fact a key factor regarding SMEs is their heterogeneity – what does a nail bar and hair dresser have in common with a mini-multinational with global operations?

Based on the EU definition of SMEs, the table below sets out the number of enterprises, value added and employment by size class of SMEs in 2020[182].

[179] For example, Juergensen, J. et al., 2020, 'European SMEs amidst the COVID-19 crisis: assessing impact and policy responses', *Journal of Industrial and Business Economics* (2020) 47:499–510 https://doi.org/10.1007/s40812-020-00169-4; Dimson, J. et al., 2020, *COVID-19 and European small and medium-size enterprises: How they are weathering the storm*, McKinsey & Company; GAIN, 2020, *Impacts of COVID-19 on Small- and Medium-Sized Enterprises in the Food System: Results of a Second Online Survey*, Geneva: Global Alliance for Improved Nutrition (GAIN); OECD, 2020, *Coronavirus (COVID-19): SME Policy Responses, OECD Centre for Entrepreneurship, SMEs, Regions and Cities (CFE)*, July, 2020; UNCTAD, 2022, *The COVID-19 Pandemic Impact on Micro, Small and Medium-sized Enterprises. Market Access Challenges and Competition Policy*, Geneva.

[180] Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003H0361. According to the recommendation, It should be noted that the frequently cited data on SMEs constituting over 99% of businesses in the EU and contributing to more than two thirds of employment was shown not to be completely correct in the 2012 *Evaluation of the SME Definition* for DG Enterprise by CSES.

[181] McIntyre, G.,2020, *What is the SBA's Definition of Small Business (And Why)*? Available at: https://www.fundera.com/blog/sba-definition-of-small-business; accessed 18 January 2023.

[182] Data at this stage relate primarily to 2020 because that is the year in which the most immediate impacts related to the COVID-19 pandemic were experienced.

Table 9: Number of enterprises, value added and employment in the EU-27 NFBS by enterprise size class in 2020

| | Micro SMEs | Small SMEs | Medium-sized SMEs | All SMEs | Large enterprises | All enterprises |
|---|---|---|---|---|---|---|
| **Enterprises** | | | | | | |
| Number | 21,044,884 | 1,282,211 | 199,362 | 22,526,457 | 40,843 | 22,567,300 |
| % | 93.3% | 5.7% | 0.9% | 99.8% | 0.2% | 100.0% |
| **Value added** | | | | | | |
| Value added in EUR (m) | 1,179,476 | 1,071,196 | 1,087,613 | 3,338,286 | 2,956,544 | 6,294,829 |
| % | 18.7% | 17.0% | 17.3% | 53.0% | 47.0% | 100.0% |
| **Employment** | | | | | | |
| Number | 36,988,539 | 25,313,006 | 20,130,548 | 82,432,093 | 44,358,284 | 126,790,377 |
| % | 29.2% | 20.0% | 15.9% | 65.0% | 35.0% | 100.0% |

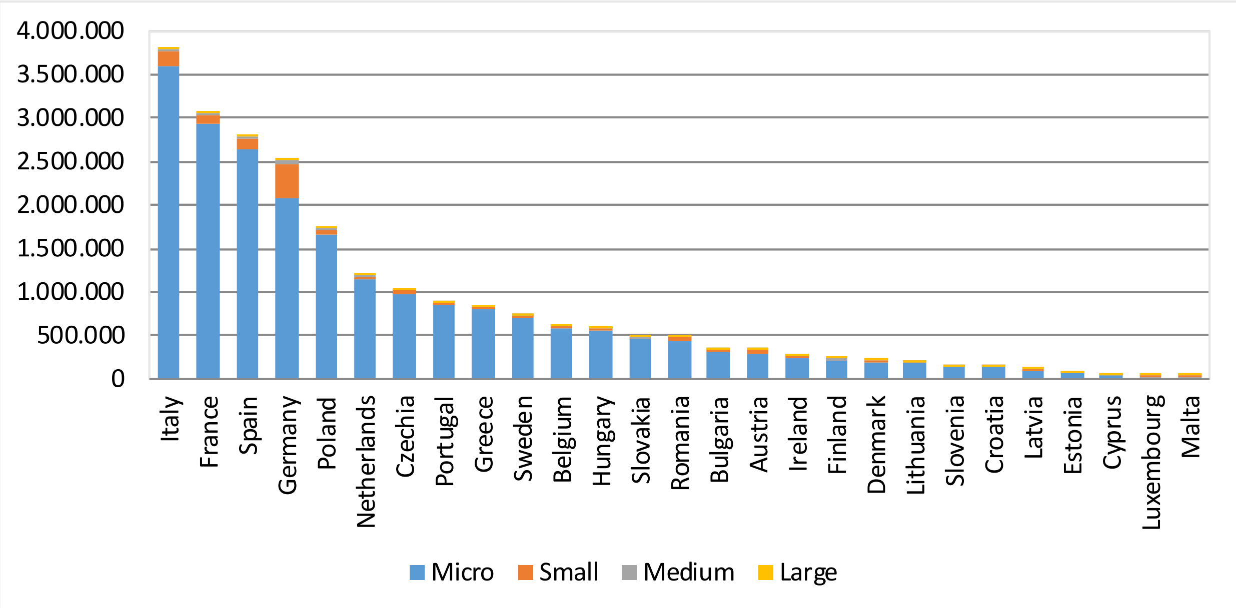
Source: European Commission, Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021 (Eurostat, National Statistical Offices, DIW Econ), p. 9.

Table 9 makes it clear that most enterprises in the EU are micro-enterprises – some 93.3%. However, they only create 18.7% of value added and employ 29.3% of EU employees.

**Distribution of SMEs by Member State**

It is important to note, when considering impacts of various factors on SMEs, that the categories micro-, small and medium are not evenly distributed throughout EU Member States in terms of number, nor is the division in terms of activity the same throughout. The bar chart below sets out the distribution of SMEs by size category between EU Member States in absolute numbers.

Figure 24: Enterprises in the EU by number and size category




Source: *SME Performance Review 2019*[183].

Some features of EU SMEs as indicated by the above chart are listed below[184].

[183] European Commission, *Annual Report on European SMEs, 2018/2019. Research & Development and Innovation by SMEs*. Data from the SME Performance Review (2019).

[184] Data from the SME Performance Review (2019); see also Smit, S.J., 2020, *SME Focus Long Term Strategy*. Publication for the committee on Industry, Research and Energy (ITRE), Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, p. 20. Available at: https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662903/IPOL_STU(2021)662903_EN.pdf.

- **Microenterprises (1-9 employees).** Italy has approximately 3.6 million microenterprises, whereas they are 2 million in Germany, notwithstanding the fact that the German economy is approximately 90% larger than that of Italy in terms of GDP. As a percentage of all enterprises, data for Germany (82%) and Austria (87.1%) show the lowest shares. This means, for example, if a measure or event (e.g. COVID-19) has a particularly powerful impact on micro enterprises, a Member State such as Italy will, proportionately, be more affected. It will also be more of a challenge to provide for support;
- **Small enterprises (10-49 employees).** In Germany they are more than double (381,700) the number of Italy, in second place (172,000). As a percentage of all enterprises, first-placed Germany with 15.1% is followed by Austria at 10.9%;
- **Medium-sized enterprises (50-249 employees).** Being 62,000 in Germany, these account for more than three times the number of Italy (19,000), in second place. France and Spain follow with 18,000 and 15,500 respectively;
- **Large enterprises (250 or more employees).** Germany lists 11,900, more than three times their number in France (3,800). Poland, Italy and Spain each have 3,400.

The share of SMEs (by number) in the 14 industrial ecosystems is more than 99% throughout, ranging from 99.1% in electronics to **99.9% in the cultural and creative ecosystem**[185].

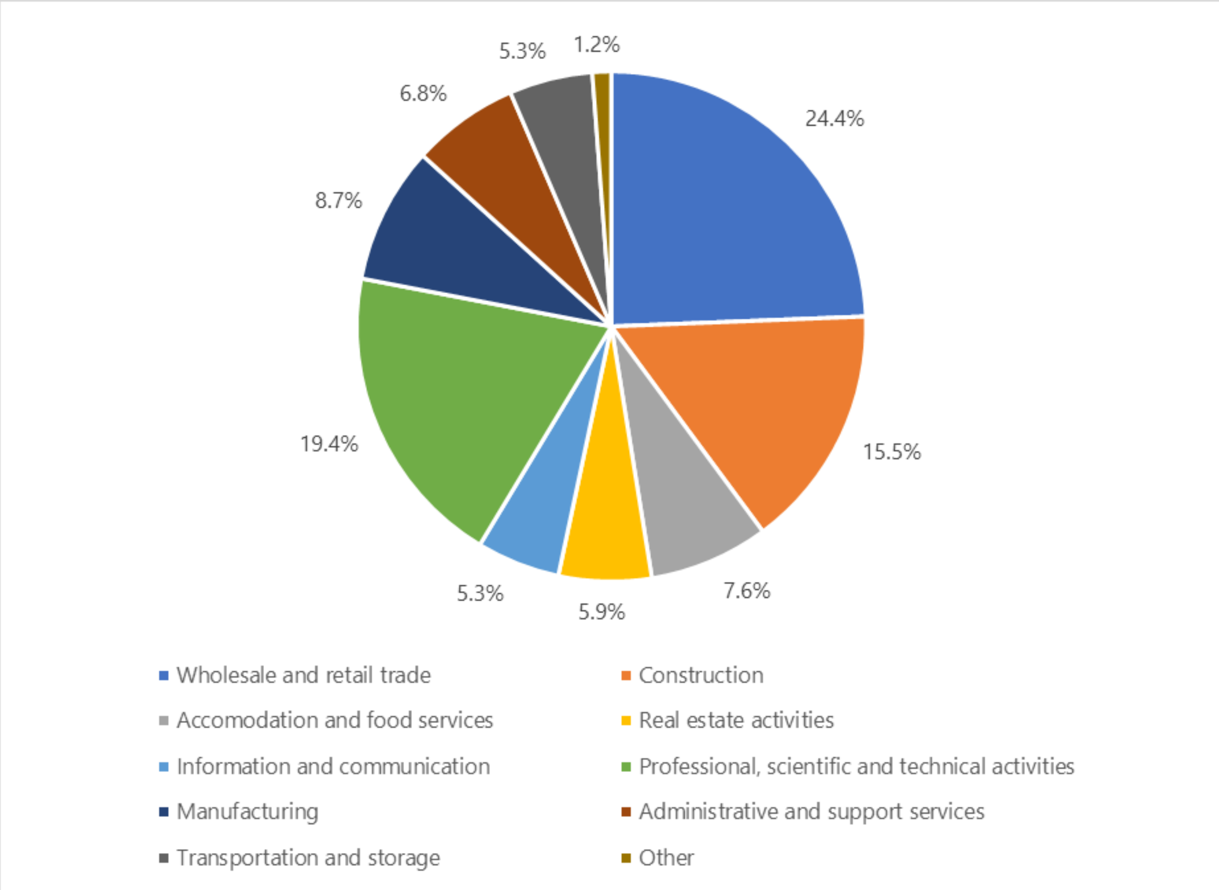
**Distribution of SMEs by industry sector**

The pie chart below sets out the distribution of SMEs by industry sector[186]. The majority are in the ‘wholesale and retail trade’ (24%), ‘professional, scientific and technical activities’ (19%), and ‘construction’ (16%). It is notable that within ‘wholesale and retail trade’ there is a considerable presence of face-to-face contact.

[185] SME Annual Report 2022, p.22.

[186] SME Annual Report 2022, p.5.

Figure 25: Distribution of EU-27 SMEs across the NFBS industries in 2021



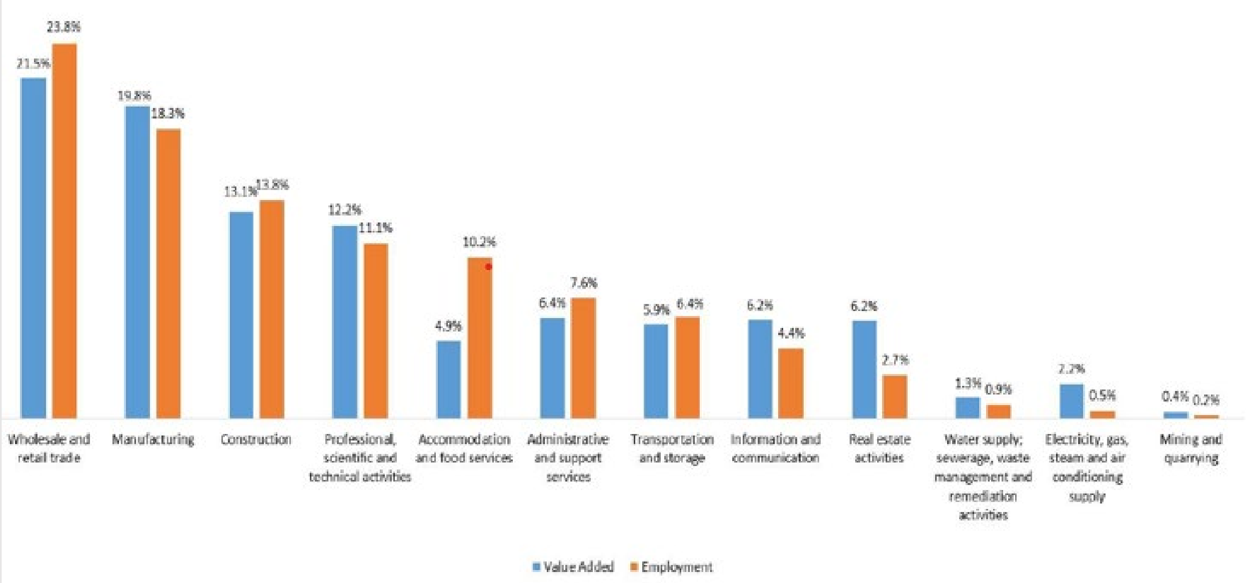

Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database; from *SME Annual Report 2022*.

Note: 'Other' includes 'electricity, gas, steam and air conditioning supply' (0.8%), 'water supply, sewerage, waste management and remediation activities' (0.3%), and 'mining and quarrying' (0.1%).

With regards to **employment,** SMEs are responsible for the majority of total employment in most industries, and for more than 80% of total employment in the following four industries: 'construction', 'accommodation and food services', 'real estate activities' and 'professional, scientific and technical activities'. Micro SMEs carried the majority of employment in 'real estate activities' and 'professional, scientific and technical activities'.

As indicated in Figure 26, in most industries, the share of SME **value added** generated was smaller than their share of employment. SMEs accounted for the majority of total value added in 'construction', 'wholesale and retail trade', 'accommodation and food services', 'real estate activities' and 'professional, scientific and technical activities'. In all of these except the latter, personal contact is a critical element of doing business.

Figure 26: Distribution of the number of SMEs, SME employment and SME value added across EU-27 NFBS industries in 2021




Source: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database; from *SME Annual Report 2022*, op. cit.

### 6.2.2 Why consider SMEs as a separate group?

While large enterprises undeniably face major challenges, these are different to those faced by SMEs. SMEs are often treated as a separate category (however, the provisions regarding heterogeneity mentioned above need to be borne in mind) compared to large enterprises for the following reasons, many of which have implications for their ability to respond to the impacts of major external challenges such as the COVID-19 pandemic on their operations and even existence[187].

SMEs face **financing difficulties**. As a rule of thumb, the smaller the company, the harder it is to get finance, especially from the regulated market (although there are variations throughout the EU, this holds true in general). Small enterprises are often dependent on the health of a single entrepreneur, and they do not always have long credit histories, or substantial collateral to provide as security for loans, or deep reserves or access to additional funding through stock markets, if necessary. This situation is particularly acute in the case of start-ups or where funds are necessary to finance innovation. When banks do provide funds, because there are higher risks, costs tend to be higher. This means that if SMEs face, for example, an unforeseen liquidity crisis (e.g. due to a decline in sales) they are less resilient to withstanding such shocks than larger enterprises.

The owner/ entrepreneur is also usually **extremely busy** and a multi-tasker, which means there is little time available for search and investigation of support measures and familiarisation with legislation. External advisors can be costly and unreliable. In a larger enterprise it is possible to allocate specialised employees to deal with such matters or to appoint external advisors.

**Specialised staff** come at a premium cost and need to be fully employed on their speciality to recover their costs. Shortages of and difficulties in the recruitment of specialist staff for SMEs mean that SMEs generally do not have such specialist support available. These employees can be recruited by larger enterprises which operate at scales and in markets where specialist costs can be recovered.

[187] Smit, S.J., op. cit., p. 21; European Commission, 2021, Study on the effectiveness of public innovation support for SMEs in Europe, pp. 6-8.

Smaller businesses also tend to have less experience and limited internal know-how on **how to manage change** (for example on how to restructure operations). This also relates to technological knowledge and transfer. While there are some SMEs that, being smaller and not having a legacy of burdensome administrative systems in place, may find it easier to adapt, many SMEs face greater challenges adjusting to new technological trends such as digitalisation due the a lack of skills, capabilities and funding. There is a 'dark side' to digital transformation that is often overlooked[188]. Larger enterprises have more internal skills or can afford to use external advisors.

Related to the above, SMEs usually have less expertise in **Intellectual property management** – one thinks of for example the CCI and the issues surrounding royalties and on-line streaming in this instance. SMEs have less resources and capabilities for the economic exploitation of intellectual property rights, whereas larger enterprises may be in a position to exploit their market power in situations involving SMEs.

SMEs have less knowledge about **customer needs and foreign markets**, which hinders product and service development, development of supply chains, marketing and internationalization of their activities, leaving them less resilient than larger enterprises with such expertise.

Slow/costly **administrative procedures** and restrictive laws or regulations may constrain SME adaptation, especially in highly regulated sectors (e.g. construction or chemicals), or where there are subsectors not operating according to 'standard contracts' such as in the cultural and creative sector. Again, in this instance larger enterprises can use specialists or advisors to deal with problems and hold-ups.

SMEs also usually have a smaller **network of partners** to call on for advice or support, or lack access to relevant actors with specialist knowledge (e.g. applications for public support, dealing with supply chain problems).

The experience with the COVID-19 pandemic has shone a direct light on these vulnerabilities of SMEs. While it has been suggested by some in the course of the interview programme that some SMEs may just have gone into 'hibernation' to sit out the crisis, in the majority of cases such an option was not possible as unless they wanted to go out of business. They still had to fulfil contracts, pay suppliers, or cover fixed costs even if there was no activity.

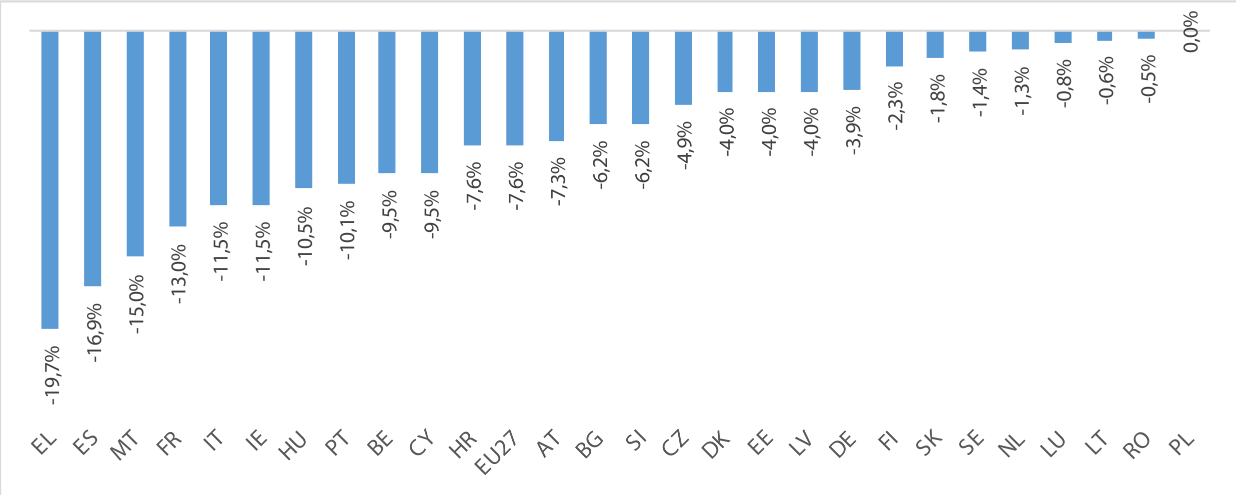
### 6.2.3 Impacts of the pandemic on SMEs

In the preceding sub-section, the impact of the measures to contain the pandemic on the economy as a whole and at a sector/ecosystem level have been presented. Within that discussion there is already some reference to SMEs. The two charts below are illustrative of the immediate effects of the pandemic on SMEs.

The first chart shows the annual percentage change in value added of SMEs in Member States during 2020. This ranges from -19.7% in Greece to 0% in Poland, with the EU average at -7.6%. Three of the largest EU Member States have reductions larger than the EU average: Spain at -16.6%, France at -13.0% and Italy at -11.5%. Some 42.2% of the EU's SMEs are in these three Member States. In terms of absolute numbers the dramatic negative impact is clearer than just by comparing percentages. Germany (11.0% of EU SMEs) suffered a reduction of -3.9%.

188 See: Smit, S.J. op. cit., section 4.2.3.

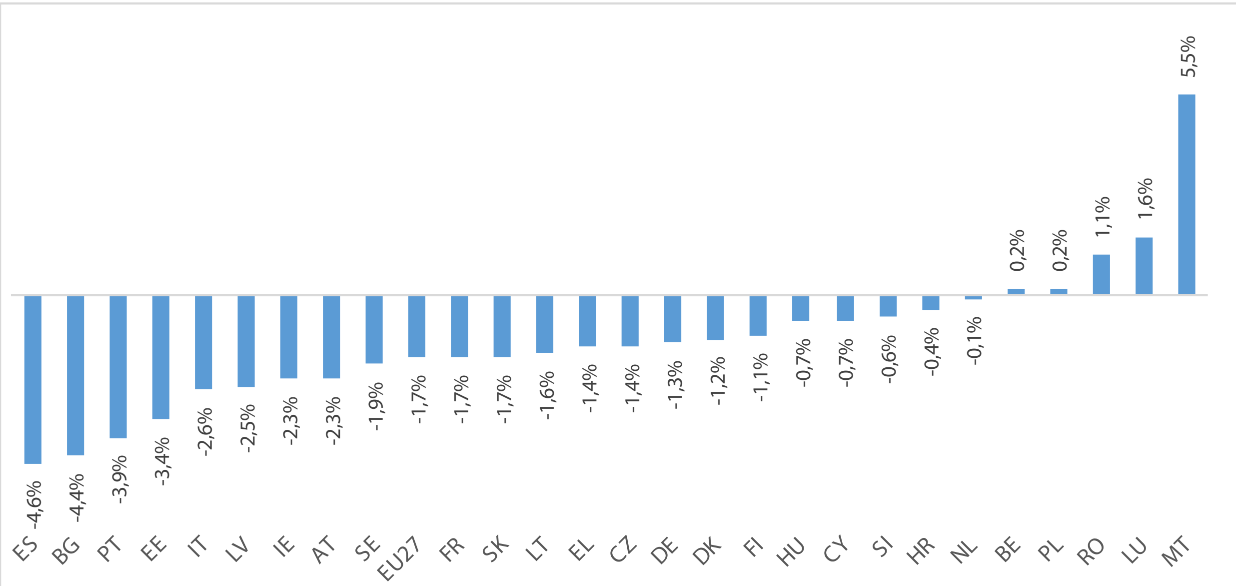
Figure 27: Annual change (in %) in SME value added of EU Member States in 2020




Source: European Commission, Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021 (Eurostat, National Statistical Offices, DIW Econ).

The second chart relates to effects on employment. While the percentages are not as dramatic as in the case of added value, largely as a result of the various wage subsidy schemes that were implemented very promptly, large reductions did occur in Spain (-4.6%) and Italy (-2.6%) over a very short period. Increases were recorded in Poland, amongst others.

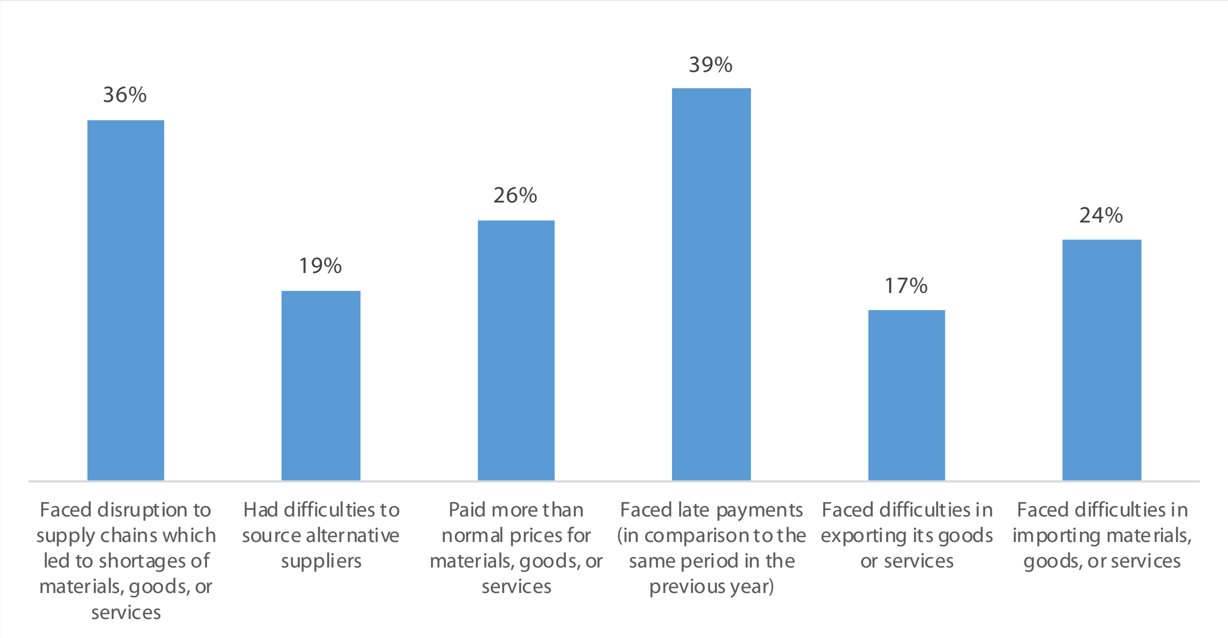
Figure 28: Annual change (in %) in SME employment of EU Member States in 2020




Source: European Commission, Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021 (Eurostat, National Statistical Offices, DIW Econ).

Turning to ways in which SMEs were affected, some surveys undertaken for the SME Annual Report (2021) provide useful information, as reflected in the following charts relating to 9 EU Member States. Figure 29 indicates that the most widely faced disruption (reported by 39%) related to the pandemic was an increase in late payments as compared to the same time during the previous year. This was followed by supply chain disruptions at 36% which led to shortages of materials, goods and services. Other disruptions reported were increased prices (26%), difficulties in importing (24%), difficulties in sourcing alternative suppliers (19%) and exporting (17%).

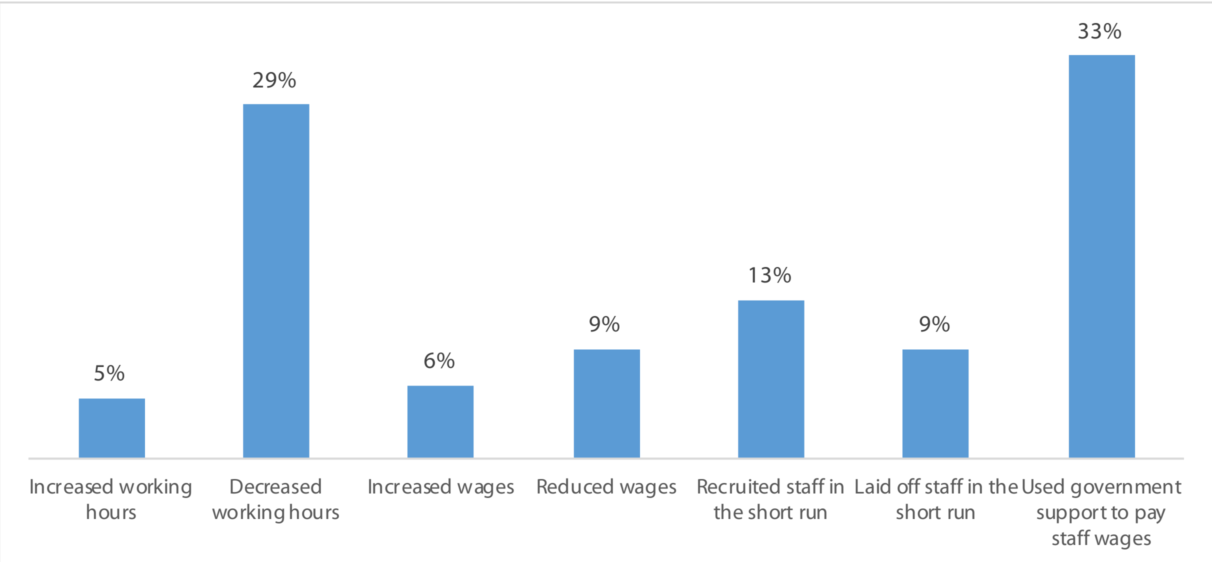
Figure 29: Percentage of SMEs reporting various types of disruptions caused by Covid-19 in 9 EU-27 Member States




Source: European Commission, Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021.

The critical role of resorting to public support to pay staff is clear (33%), as is that of decreasing working hours. It may be that short-run employees were recruited to replace those off ill or otherwise, although as indicated above, some sectors did expand during the pandemic.

Figure 30: Percentage of SMEs reporting various measures taken in response to the pandemic in 9 EU-27 Member States

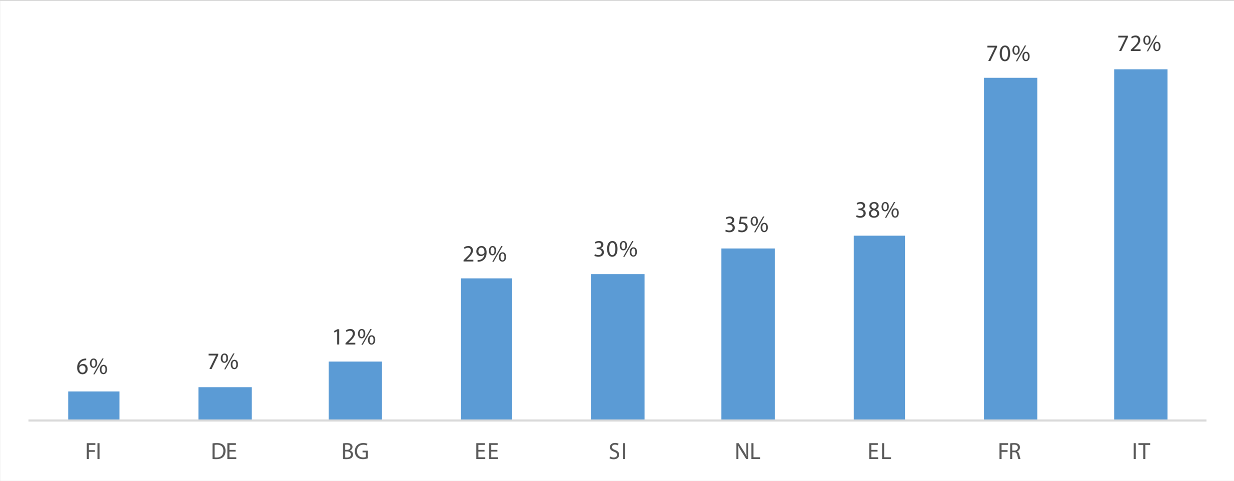



Source: European Commission, *Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021*, Special SME survey run in October/November 2020.

Note: Sample size is 901, based on SMEs surveyed from 9 EU-27 Member States (BG, DE, EE, EL, FI, FR, IT, NL and SI).

Figure 31 indicates the percentage of SMEs reporting use of government support to pay staff wages during the pandemic and in particular the high level of use in two of the EU's most populous states – Italy and France (who have most SMEs in the EU – see above).

Figure 31: Percentage of SMEs reporting use of government support to pay staff wages during the pandemic in 9 EU-27 Member States

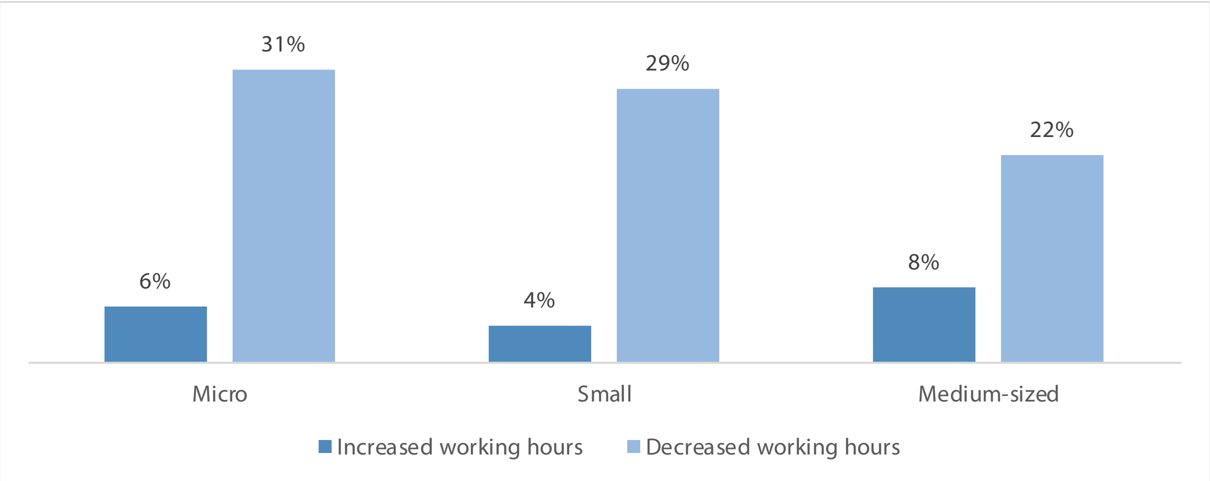



Source: European Commission, *Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021*, Special SME survey run in October/November 2020.

Note: Sample size is 901, based on SMEs surveyed from 9 EU-27 Member States (BG, DE, EE, EL, FI, FR, IT, NL and SI).

It is also clear from Figure 32 that it was especially micro-enterprises, who constitute 93.3% of all enterprises in the EU that decreased working hours, suggesting that the smaller enterprises were more vulnerable and could not adapt as readily as larger ones. A larger share of SMEs is also in the services industry – hairdressers, retail, etc. which could not operate at full capacity during the pandemic.

Figure 32: Percentage of SMEs reporting increased and decreased working hours during the pandemic in 9 EU-27 Member States by SME size class



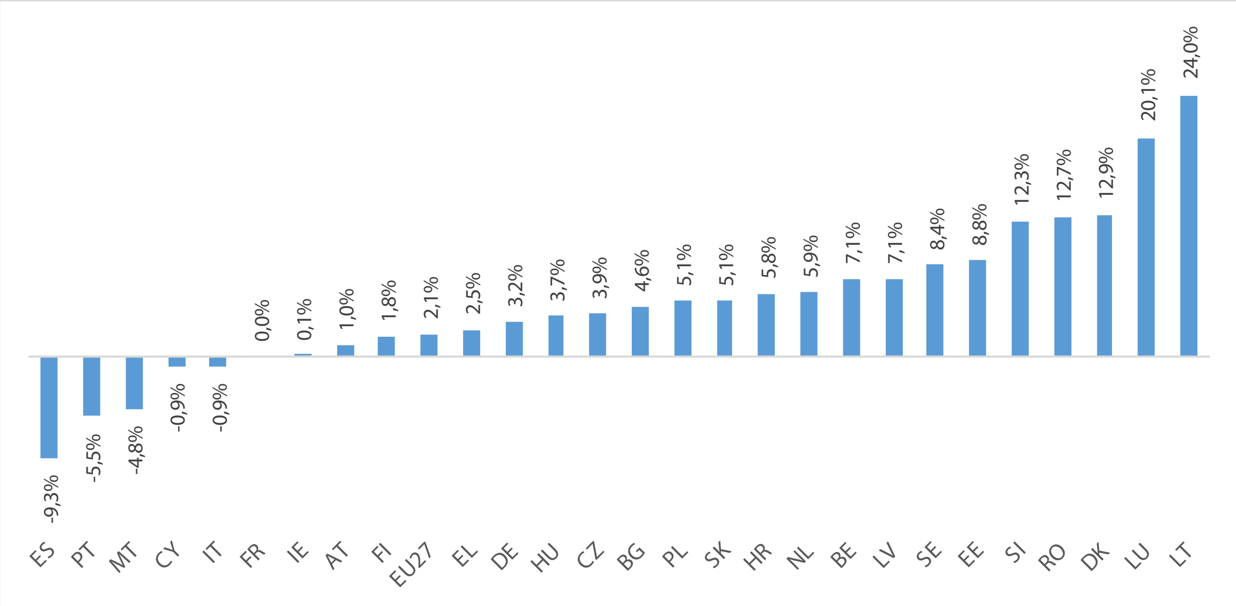

Source: European Commission, *Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021*, Special SME survey run in October/November 2020.

Note: Sample size is 894, as it excludes the 7 respondents which did not provide their number of employees. Based on SMEs surveyed from 9 EU-27 Member States (BG, DE, EE, EL, FI, FR, IT, NL and SI). SME size classes are defined here based on the average number of persons employed in the first half of 2020: Micro SMEs: 0-9 employees; Small SMEs: 10-49 employees; Medium-sized SMEs: 50-249 employees.

**Recovery by 2021 – a comparison**

The SME Annual Report (2022) compared the SME added value and employment in 2021 and 2019 to help assess to what extent SMEs have recovered from the pandemic. Turning first to added value (Figure 33), looking at percentage performances, the situation looks relatively positive. However, from the point of view of absolute numbers the situation is not as positive as two Member States with high shares of SMEs (Italy and especially Spain) are still in the negative zone, with France only just level.

Figure 33: Percentage change in SME value added in 2021 compared to 2019 in the NFBS of the EU-27 and across EU Member States

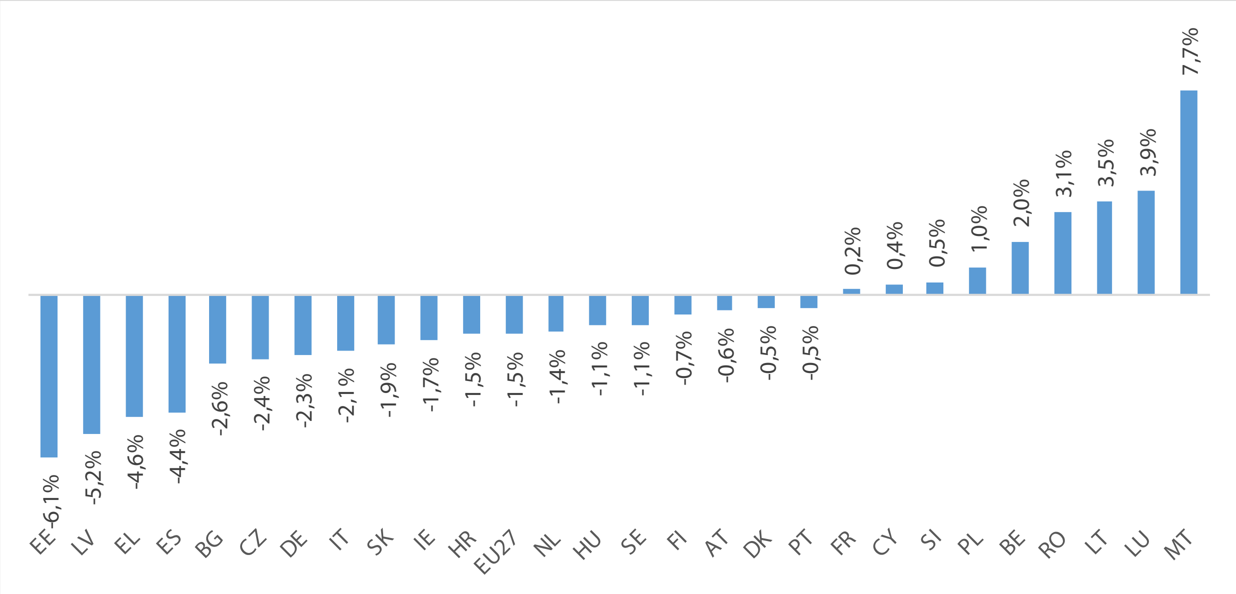



Source: European Commission, *Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021*.

Note: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database.

With regards to a comparison between 2019 and 2021 as far as employment is concerned, there has been less of a recovery than in the case of added value, with again, three of the four most populous Member States in negative positions, and one, France, barely positive at 0.2%.

Figure 34: Percentage change in SME employment in 2021 compared to 2019 in the EU-27 and across EU Member States




Source: European Commission, *Annual Report on European SMEs, 2020/2021, Digitalisation of SMEs. SME Performance Review 2020/2021*.

Note: Calculations by the JRC based on Eurostat's Structural Business Statistics, Short-Term Business Statistics and National Accounts Database.

Overall, Europe's SMEs still have a way to go in order to reach a comparable level with 2019, before the pandemic. At the same time, SMEs are being faced with the bankruptcy overhang, mismatches in the employment market (see below), the energy crisis, the effects of Russia's invasion of Ukraine and the need to deal with the fiscal deficits at national level that resulted from financing support to keep economies going through the pandemic. Clearly, there is a difficult road ahead.

### 6.2.4 SMEs and Temporary Framework measures

As some 99.8% (table 9 above) of all enterprises in the EU are SMEs, most TF measures, unless specifically designated for a particular beneficiary such as an airline, could be provided to SMEs. However, some of the TF modifications were targeted at SMEs, such as the extension of access to the TF measures to micro and small enterprises that were in financial difficulties in December 2019, or encouragement of private investors to support start-ups and SMEs (3rd amendment), and the solvency support measures of the 6th amendment.

In addition, casual analysis of TF measures identified just over 50 measures that were directed at SMEs beneficiaries in general, or start-ups/ scale-ups, and some that were highly targeted at for example SME coach companies, SMEs in primary agriculture or in fisheries, small farmers, SMEs affected by the pandemic, SMEs affected by export markets, SMEs in construction, small tourist shop operations, SMEs in road freight, and SMEs and the self-employed.

These measures ranged in terms of size of budget from EUR 8.4 billion (wage subsidies) to EUR 1.2 million. The majority were in umbrella schemes (see above), 'support packages', but also included loan subsidies, recapitalisation and guarantees.

The programmes were approved from very soon after the TF was launched – there was no delay as in the case of the self-employed.

### 6.2.5 Concluding remarks on consequences for SMEs

The definition of SMEs in the EU makes it problematic to discuss SMEs as a group because of the wide variation of enterprise sizes encompassed in that definition. However, in reality most SMEs are micro-enterprises, and it is these smaller enterprises, which are also more vulnerable than larger ones, which have generally been most affected by the pandemic and measures taken to stop its spread. SMEs are also more prevalent than larger enterprises in the sectors that require physical proximity to operate. SMEs were particularly affected by late payments and disrupted supply chains (see Figure 29).

Member States also have differing shares of micro-enterprises in their business demography. Those with larger shares, such as Italy, will then have been proportionately more affected than for example Germany and Austria, with relatively low shares.

In terms of changes in SME value added (Figure 33), SMEs in three of the EU's larger economies (Spain, Italy and France) had by the end of 2021 not yet recovered to pre-pandemic levels. This is despite access to measures such as the TF and SURE, and the drop in bankruptcies discussed in Case Study 4 above.

The overall message is that the EU's SMEs are still in a somewhat precarious situation post-pandemic, especially as new challenges emerged during 2022. Policy efforts need to focus on increasing their resilience and competitiveness.

## 6.3 Cultural and creative industries

In this sub-section, the focus is on the cultural and creative industries (CCI). In order to understand the consequences of the pandemic and the measures taken to deal with it in relation to the CCI, the first step is to develop a shared understanding of what is meant by the CCI. Then the impacts will be discussed.

### 6.3.1 The characteristics of the cultural and creative industries (CCI)

According to Eurostat, 'In 2019, 1.2 million cultural enterprises in the EU (approximately 5% of all businesses in the non-financial economy) generated EUR 158 billion value added' (slightly higher than the motor trade sector), and turnover was estimated at EUR 402 billion [189].

However, it needs to be noted that the Structural Business Statistics data used for some parts of the Eurostat report do not yet cover creative, arts and entertainment activities (NACE [190] division 90) nor libraries, museums and other cultural activities (NACE division 91). In addition, in reality, a good share of tourism and hospitality is closely linked with the cultural and creative industries – one estimate is that some 40% of tourism is linked to cultural activities such as for example travelling to festivals or visiting museums[191]. There is also an overlap with sport and recreation activities (e.g. school children attending summer camps). In sum, the cultural and creative industries represent a substantial component of the EU economy.

#### 6.3.1.1 Structure of the CCI

The CCI sector consists of several sub-sectors that present some important differences between them. The text box below provides some detail on what is included under the heading of 'cultural and creative industries'.

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[189] Eurostat, *Culture statistics – cultural enterprises. Statistics explained*, extracted March 2022.

[190] NACE (from the French term *Nomenclature statistique des activités économiques dans la Communauté européenne*) refers to the categories used to classify economic activities in the EU.

[191] E&Y, op. cit., p. 29.

Box 1: Components of the CCI

There is no universally agreed definition of what activities are included in the CCI. This study mainly relies on the Eurostat approach, but there is also a UNESCO approach . We also use the industrial ecosystem approach (see below). Even the Eurostat definition itself is evolving, and there are some gaps with regards to capture of employment data. In fact, according to Culture Action Europe & Dâmaso (2021) , one of the things standing in the way of supporting the CCI that was again (as in previous crises) laid bare when developing responses to COVID-19 is that different definitions of the industry exist in Member States and supra national organisations.

Bearing the above proviso in mind, the cultural and creative industries can be seen as encompassing the following (Eurostat):

**Manufacturing**: printing and reproduction of recorded media, manufacture of jewellery and related articles, manufacture of musical instruments;

**Distributive trades**: retail sale of books in specialised stores, retail sale of newspapers and stationery and of music and video recordings in specialised stores.

**Information and communication**: publishing of books, newspapers, journals and periodicals, and computer games; motion picture, video and television programme production, sound recording and music publishing; programming and broadcasting activities; and news agency services.

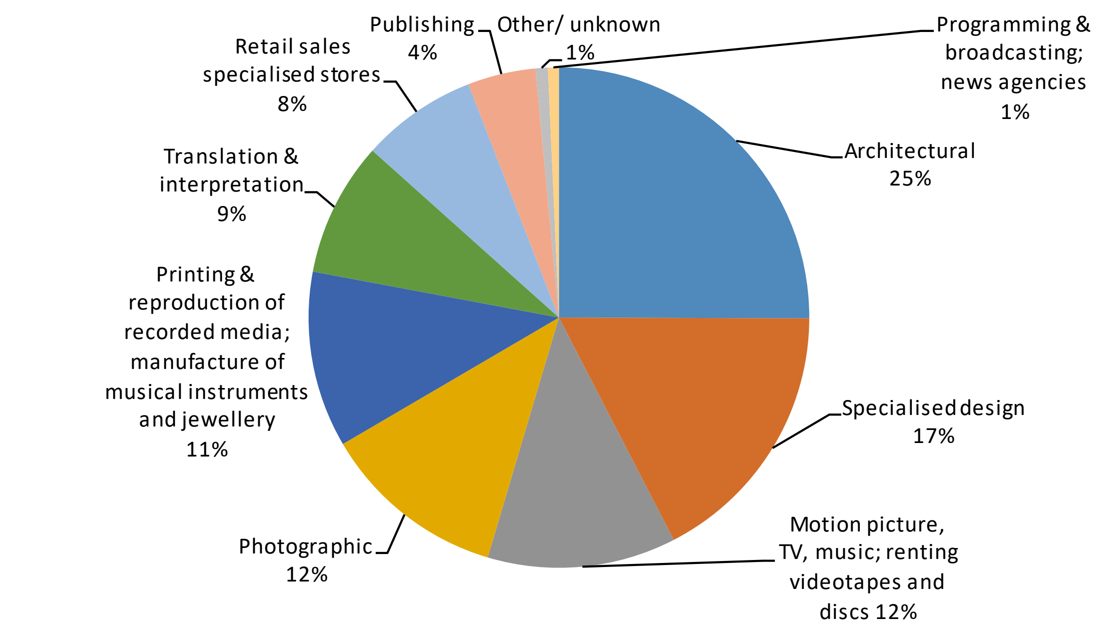
**Professional, scientific and technical activities**: architectural activities, specialised design activities, photographic activities, and translation and interpretation services.

**Administrative and support services**: renting of video tapes and disks.

The pie chart below illustrates the relative shares of cultural enterprise activities by broad headings. As the pie chart makes clear, most CCI enterprises in the EU are found in **the following areas**: architectural activities (25.1%); specialised design activities (17.4%), photographic activities (12.0%), motion picture, TV, music; renting videotapes and discs (12.2%) and printing and reproduction of recorded media, manufacture of jewellery and related articles, manufacture for musical instruments (11.4%).

In terms of **added value**, 'programming and broadcasting, news agency activities' generated 16.6% of added value; whereas, at the other extreme, photographic activities generated 2.3% of the sector's added value.

Figure 35: Shares of types of cultural enterprises as a percentage of total cultural enterprises




Source: Eurostat, Culture statistics – cultural enterprises. Statistics explained, extracted March 2022.

There is a good deal of **variation between Member States** with regards to the extent of the presence of different sub-sectors within the CCI in their economies. This cautions against making simple generalisations about the effects of the pandemic in different Member States, as the effects varied, to an extent, depending on the sub-sector in question. Italy has the largest number of enterprises (14.5% of the EU total) and together Italy, France, Germany and Spain contain some 50.4% of all cultural enterprises in the EU. Value added at factor cost as a percentage of CCI for the economy as a whole also varies significantly between Member States – from 2.8% in Sweden, Finland and France, to 1.1% in Slovakia and 0.8% in Romania.

With regards to **firm sizes**, these vary between the sub-sectors. In some activity areas such as translation, photography and specialised design, nearly all are micro enterprises, with a few small and no large ones. Printing and reproduction of recorded media reflect the EU averages for the size categories, whereas in programming and broadcasting activities there are more large enterprises than the EU average.

### 6.3.1.2 Employment in the CCI

From the point of view of **employment**[192]**,** in 2021 some 3.7% (7.4 million people) of all employees in the EU worked in the CCI. However, as a result of COVID-19 the number had fallen by about 220,000 in 2020 as compared to 2019. This was especially the case in 'Creative, arts and entertainment activities' and 'Motion picture, video and television programme production, sound recording and music publishing activities'. In 2021, the overall figure bounced back to that of 2019. However, the overall data obscure some important Member State level developments. Between 2019 and 2021 the numbers grew in some MS – the largest increases were in France (126,000), the Netherlands (41,000) and Portugal (20,000); while in others they fell, the largest falls being in Germany (103,000), Italy (63,000) and Romania (25,000).

[192] Eurostat, *Culture statistics – cultural employment*, p.1. Statistics explained, extracted March 2022.

There are wide variations in shares of CCI employment in total employment across Member States – from 1.4% in Romania to 5.1% in Slovenia and Finland and 5.2% in Estonia.

Overall there is an **almost equal balance between male and female** employment in the CCI, with slightly higher share of female participation in the labour force in the cultural sector than the economy as a whole. Also, **young people** (15 to 29 years old) represent a slightly lower share of employment than the average for the economy as a whole. The shares of young people employed in CCI varied in Member States from 10% in Italy to 21% in the Netherlands and 24% in Malta (2019).

The proportion of people who were **self-employed** in cultural industries (33%) was **more than double the average** for the economy as a whole. This reflects the nature of many occupations in the CCI: authors, performing artists, musicians, painters and sculptors. The percentage of self-employed in the CCI varies from 47% in the Netherlands and 46% in Italy to 19% in Estonia and Lithuania, 13% in Romania.

Linked to the high level of self-employment, there is a lower than average share in **full-time work** (77% as compared to 81%). This reflects the level of self-employment, freelancing and job flexibility required in the sector where work is often project-based. The flip-side of this is higher levels of insecurity and considerable variations in income over time. Shares in full-time employment vary between Member States from 47% in the Netherlands to 95% in Bulgaria and Slovakia and 97% in Romania.

The category of **artists, journalists and authors** includes creative and performing artists (visual artists, musicians, dancers, actors, film directors, etc.) and authors, journalists and linguists. Some 46% of the 1.6 million identified in this category were self-employed (compared to 14% for the EU as a whole), representing almost a quarter of cultural employment. Furthermore, it is not unusual for people in this group to have a second job. Fewer artists, journalists and authors have a permanent contract than is the average for all EU employees (77% as compared to 81%). Again, as in the instances discussed above, there are significant variations between Member States. These data all point towards the **precarious nature** of their work and that of other CCI workers. The precarious nature of work in the creative economy has been researched and discussed since the1980's, and is characterised by short term employment contracts, fragmented and individualised work, lack of regulatory frameworks and social safeguards, and low wages ('flexploitation')[193].

It is because some **cultural employment is 'non-standard'** that it is often underestimated in official statistics. It can be complicated to extract the genuinely cultural extent of some economic activities and occupations. Therefore those which are only partially cultural are often not covered by CCI employment statistics. Labour force surveys usually only include a respondent's main job, and do not cover the secondary employment or volunteer employment present in CCI[194].

It is also important to look at the CCI ecosystem as a whole, rather than just a sub-sector, because many of the short-term, temporary, project-based jobs performed by those individuals often working on a self-employed basis in the CCI provide critical inputs to larger enterprises, who are dependent on their services, for example in the media. The individual artists, journalists, authors, etc. sustain the larger edifice of the industry.

In sum, the preceding empirical data indicate the **heterogeneous and complex nature** of the CCI, both in terms of its internal structure, the relationship between the various parts of the industry and in

193 Rodgers, G. (ed.) and Rodgers, J. (ed.), 1989, *Precarious Jobs in Labour market Regulation: The growth of Atypical Employment in Western Europe*, International Institute for Labour Studies Free University of Brussels.

194 OECD, 2020, *Culture Shock: COVID-19 and the cultural and creative sectors*, p. 6, and Eurostat, *Cultural Statistics- Cultural Employment*, op. cit.

terms of its scope and role in Member States. This suggests that care should be taken in making generalisations about the CCI as a whole when talking about the impacts of COVID-19 and the measures taken to counteract the pandemic's effects. This is also why it can be difficult to shape support instruments relevant to the many types of CCI employment.

### 6.3.2 Impacts of COVID-19 on the CCI

The impacts of measures to deal with COVID-19 were felt in full from the beginning of the pandemic.

#### 6.3.2.1 The First wave

As indicated above in section 6.1.1, according to DG ECFIN[195], the COVID-19 pandemic and measures taken to contain it triggered the largest and most abrupt drop in economic activity in recent European history. There were dramatic variations in its impact, and the impacts on the CCI were some of the most severe.

#### 6.3.2.2 Impacts on CCI sub-sectors

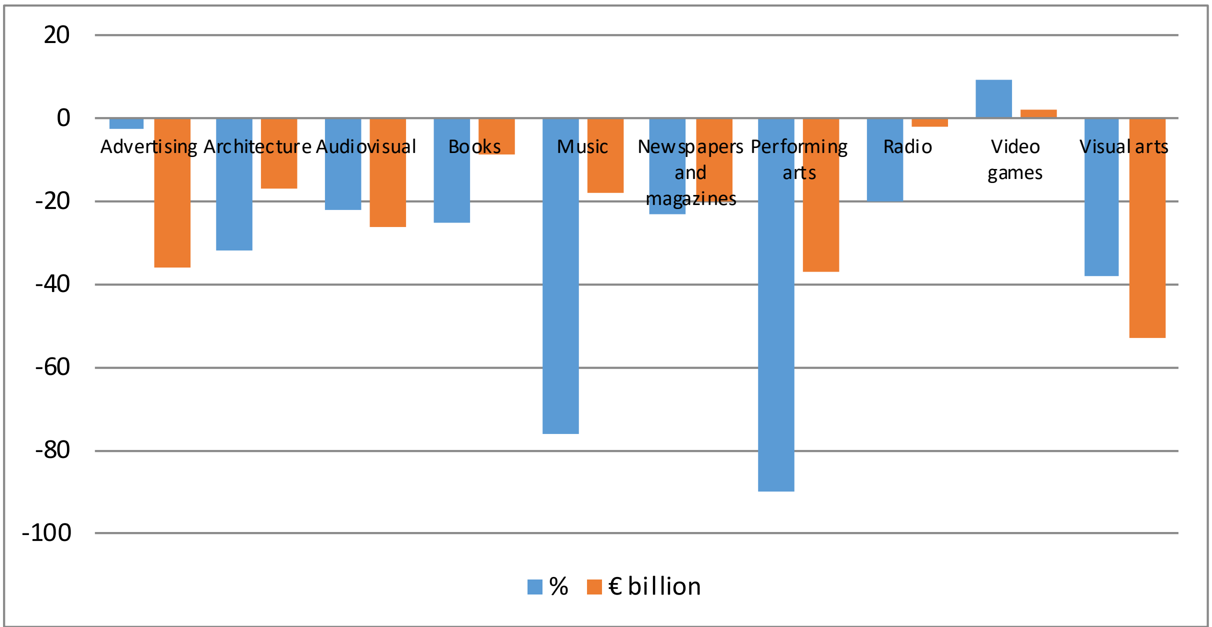
As indicated in the previous paragraphs, the CCI comprises a wide range and diversity of activities, ranging from large media organisations to self-employed individuals making at times a somewhat precarious living through short term contracts. The measures introduced to combat the spread of the COVID-19 virus affected these different sub-sectors in different ways. In general though, the greater the social interaction element, the greater the negative effect, especially for event-based activities. These different effects are illustrated in the bar chart (Figure 36) below (see also above Figure 19).

Whilst there was an overall loss of some EUR 200 billion (30% of turnover) in revenues expected for 2020, the various ways in which sub-sectors were affected[196] were also reflected in impacts in the related parts of the labour force. At one end of the spectrum there were the large enterprises for which readily implementable employment supporting wage subsidies had been designed. In contrast, at the other end of the spectrum there were the self-employed on temporary contracts that had been cancelled by event organisers whose events had been cancelled and for whom there was no provision for support by the authorities. Those most and immediately and directly impacted were those who lost out as a result of the cancellation of festivals, concerts, conferences, live performances, etc. and their supply chains. In addition there were impacts on bookshops, museums, cinemas, etc. On the other hand, some could keep working (e.g. from home) or draw a certain amount of income through a few of the support measures. Turnover of videogames grew, as did streaming services as people were staying at home.

[195] Canton, E., Colasanti, F. et al., 2021, The Sectoral Impact of the COVID-19 Crisis, European Economy, Economic Brief 069, European Commission, Directorate-General for Economic and Financial Affairs, p. 2.

[196] E&Y, op. cit., p. 29.

Figure 36: Estimated change in turnover 2019-20 by CCI subsector (in % of total turnover and in EUR billion; EU-28)




Source: Eurostat, GESAC, professional organisations, Oxford Economics, EY, in EY, Rebuilding Europe – The cultural and creative economy before and after the COVID-19 crisis, p. 8.

## Case Study 5: Impact of the pandemic on European theatres

In the events sector, performing arts were reported to have been hit the hardest by the pandemic. According to 2021 data, it is estimated that performing arts, which include theatres, **lost 90% of their turnover**, representing EUR 37 million in the first year of the pandemic between 2019 and 2020[197]. For example, Dansk Teater in Denmark estimates that the theatres have suffered a loss of between EUR 13.4 million to EUR 20.1 million during spring 2020, following 311 cancelled productions and 3699 cancelled performances[198]. Similarly, in Italy (a Member State with a large CCI sector), it is estimated that theatres saw their box office revenue decline by some 78% compared to before the pandemic[199].

Given that theatres operate in face-to-face settings, they were therefore particularly impacted by the lockdowns and other restrictions established by Member States. Theatres were one of the last businesses allowed to resume their activity at full capacity. In addition, the adverse effects on theatres also had negative effects on the wider performing arts ecosystem, which includes freelancers such as performers and artists.

To respond to the challenges posed by the pandemic, theatres adopted various strategies. One of them was the harnessing of digital technologies, which allowed theatres to provide cultural content in novel ways. As such, during the pandemic many theatres streamed live or pre-recorded content through bespoke or existing platform but also made use of communication software such as Zoom to engage their audiences in more interactive ways[200].

At the **EU level**, several measures were put in place by the Commission to support theatres and the performing arts more generally, namely[201]:

- EUR 2.5 million **call for the cross-border distribution of performing arts works** (in theatre, dance, circus and street arts), both physical and digital, awarded to the Perform Europe project[202].
- EUR **500,000 dedicated to 'sectorial support to theatre'**.
- The **European Theatre Forum** in November under the initiative German Presidency of the Council of the EU.

At the **national level**, Member States also provided financial and fiscal support to theatres via various measures including the Temporary Framework for State aid. Across the EU-27, 142 support measures were collected in total. The support measures concern mainly CCI or theatre specific support measures but also include general economic support measures from which the CCI could also benefit.

Looking ahead, there is evidence to suggest that business models of theatres could have been permanently changed by the pandemic. As mentioned above, many theatres used the opportunities brought by digitalisation to ensure a certain degree of continuity despite restrictions on physical gathering.

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197 European Commission, Directorate-General for Education, Youth, Sport and Culture, 2022, Study on 'The situation of theatres in the EU Member States' : final report, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2766/89198.

198 European Commission, PPMI and KEA, 2021, Study on 'The situation of theatres in the EU Member States'. Available at: https://keanet.eu/wp-content/uploads/Final-Report_Theatre-study_10-05-003.pdf.

199 Ibid.

200 Chatzichristodoulou, M., Brown, K., Hunt, N., Kuling, P., and Sant, T.,2022, 'Covid-19: theatre goes digital–provocations', *International Journal of Performance Arts and Digital Media*, *18*(1), 1-6.

201 European Commission. PPMI and KEA,2021, Study on 'The situation of theatres in the EU Member States', op. cit.

202 Perform Europe is an EU-funded project which aims to rethink cross-border performing arts presentation in a more inclusive, sustainable and balanced way (https://performeurope.eu/).

The benefits of digitalisation extend beyond content distribution and also apply to content creation[203]. Indeed, while before the pandemic new jobs like digital dramaturges, producers or intermediaries were beginning to be incorporated into practices, the pandemic acted as a catalyst and these arrangements are now far more common.

#### 6.3.2.3 Impacts on different parts of the EU

The measures implemented to deal with the pandemic affected Member States in different ways and in varying degrees, depending on the importance (size) of the CCI in the national economy, the types of CCI activities carried out, links with the tourism industry, international dependencies (markets, suppliers), and the capability of the authorities in dealing with the challenges arising. Looking at the estimated change in CCI turnover by country revenues in the EU in 2020[204], it appears that in terms of year-on-year revenue changes, Central and Eastern European countries were the hardest hit. In Bulgaria and Estonia revenue reductions were in the 40-44% range, in Lithuania 36-40%, as was the case in Hungary, Latvia and Romania. The performing and visual arts represent a larger share of the creative economy in these countries than in other parts of Europe.

There are also strong impacts in other countries where live cultural experiences have a larger share of the market. According to EY (2021), these countries include Austria, Belgium, Czechia, France, the Netherlands and Slovenia, where a reduction in turnover of between 30-35% was expected in 2020 as compared to 2019.

While during the summer of 2020 it seemed that the pandemic was beaten, the second wave brought additional lockdowns and rules on social distancing, meetings, etc. in the late summer and autumn/ winter months. This continued also into 2021.

The case study below sets out the experience of dealing with the pandemic in the CCI in Estonia, a Member State in which several CCI-specific TF measures were implemented.

[203] European Commission, DG-EAC, 2022, Study on 'The situation of theatres in the EU Member States', op. cit.

[204] E&Y, op. cit., p.35.

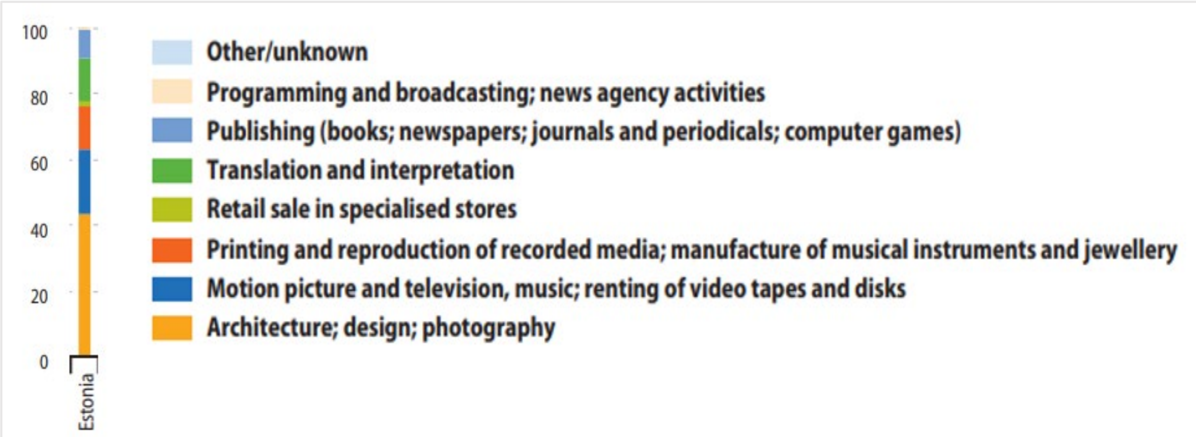
**Case Study 6: The impact of the COVID-19 pandemic State aid on CCIs in Estonia**

**Context and issues**

Estonia saw a relatively slow development of the pandemic, with new cases being within two-digit numbers up until the beginning of November 2020. By 7 November 2022, Estonia had a total of 607,300 COVID-19 cases confirmed with 2748 deaths caused by the disease[205].

**The state of emergency was announced early in the spread of the virus within the country with measures restricting movement of people and public gatherings.** The first case was identified on 24 February 2020. By 16 March, 232 people in Estonia had been diagnosed with the virus[206]. In response to the spread of the virus, the Estonian government declared a state of emergency on 12 March[207]. All public gatherings were banned, including sports and cultural events; schools and universities were closed; border control was restored with health checks at every crossing and entry point. Moreover, full border controls were imposed from 17 March 2020, restricting international travel to the country to citizens and permanent residents of Estonia and their relatives, and transport workers carrying out freight transport. Operating bans were extended to recreation and leisure establishments, ordering sports halls and clubs, gyms, pools, aqua centres, saunas, day cares, and children's playrooms to be closed immediately. On 24 March, the Government Emergency Committee decided that at least 2 meters distance between people should be kept in public places, and up to two people are allowed to gather in public spaces.

Figure 37: Cultural activity by subsector in Estonia (2016)




Source: Eurostat, 2019.

**The CCI sector was a strong contributor to the Estonian economy and accounted for 3% of national GDP[208] and above 5% of employment[209].** Before the pandemic, cultural participation in Estonia was on par with the EU average, with just below 60% of the Estonian population ≥ 16 y.o. having attended live performances in the past 12 months and approximately 40% having attended cinema in the same period in 2015[210].

205 WHO, 2022, Estonia, https://covid19.who.int/region/euro/country/ee.

206 Ibid.

207 Embassy of Estonia in London, 2020, *Estonian government declared an emergency situation until 1 May*, https://london.mfa.ee/estonian-government-declared-an-emergency-situation-until-1-may/.

208 E&Y, 2021, *Rebuilding Europe The cultural and creative economy before and after the COVID-19 crisis*.

209 Eurostat, 2021.

210 Eurostat, 2019.

Roughly 42% of CCI enterprises in 2016 operated in the architecture, design, or photography subsectors, and approximately 10% in the video, music production, and TV subsectors. The majority of CCI employment in 2019 (79%) was under full-time contracts, but still below the average across all sectors of the economy (88%). Self-employment was much more prevalent in the CCI sector than in the economy as a whole (18% compared to 11%), but still considerably below the EU average of 32%[211].

**Measures and response**

**Estonia used the State aid Temporary Framework that enabled Member States to use the full flexibility foreseen under State aid rules to support the economy during the COVID-19 pandemic**[212]. In addition to other economy-wide mitigating measures, between 30 March 2020 and 31 March 2022, under the Temporary Framework, Estonia implemented EUR 33.4 million worth of financial assistance aimed at protecting the cultural and sports sectors specifically[213]. Measures mainly took the form of grants paid to event organisers and other companies to offset losses, as well as to compensate them for business restructuring costs directly related to the prevention of COVID-19 outbreaks.

**CCIs received access to a variety of State aid, both specific to cultural sphere and following under other economy-wide measures.** The support package for CCIs included labour market support, illness benefits, tax benefits and allows tax arrears to be deferred for 18 months. It also included the temporary suspension of the second pillar contribution to the pension fund and the partial reimbursement of the direct costs of the cancelled events. State funds were channelled to support businesses through financial measures and direct support measures.

**Support to CCI sectors in Estonia was among the highest in the EU in relative terms**. Estonia channelled a large share of COVID-19 measures in the form of subsidised loans[214]. Moreover, Estonia, along with several other EU countries, including Poland, Slovenia, Hungary and Cyprus, granted an overall amount of aid corresponding to more than 100% of the real GDP loss[215].

[211] Eurostat, 2022, *Culture statistics - cultural employment*. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Culture_statistics_-_cultural_employment#Cultural_employment_.E2.80.93_developments_between_2019_and_2021.

[212] European Commission, 2020. *The State Aid Temporary Framework*. Available at: https://competition-policy.ec.europa.eu/state-aid/coronavirus/temporary-framework_en#:~:text=The%20State%20aid%20Temporary%20Framework%20was%20adopted%20on%2019th,context%20of%20the%20coronavirus%20outbreak.&text=Since%20its%20adoption%2C%20the%20Temporary%20Framework%20has%20been%20amended%20six%20times.

[213] European Commission, 2022, *Coronavirus Outbreak - List of Member State Measures approved under Articles 107(2)b, 107(3)b and 107(3)c TFEU and under the State Aid Temporary Framework*. Available at: https://competition-policy.ec.europa.eu/system/files/2022-09/State_aid_decisions_TF_and_107_2b_107_3b_107_3c.pdf.

[214] European Commission, 2022, Competition, *State Aid Brief*, Issue 3/2022, October 2022, p. 4. Available at: https://competition-policy.ec.europa.eu/system/files/2022-11/state_aid_brief_3_2022_kdam22003enn_coronavirus.pdf.

[215] Ibid, p. 5. The GDP loss rate is the gap between the actual GDP and the trend GDP in percentage of trend GDP. The cumulated loss rate is the sum of the loss rate in 2020 and the loss rate in 2021. Source: Ameco, 2022 Spring Forecast.

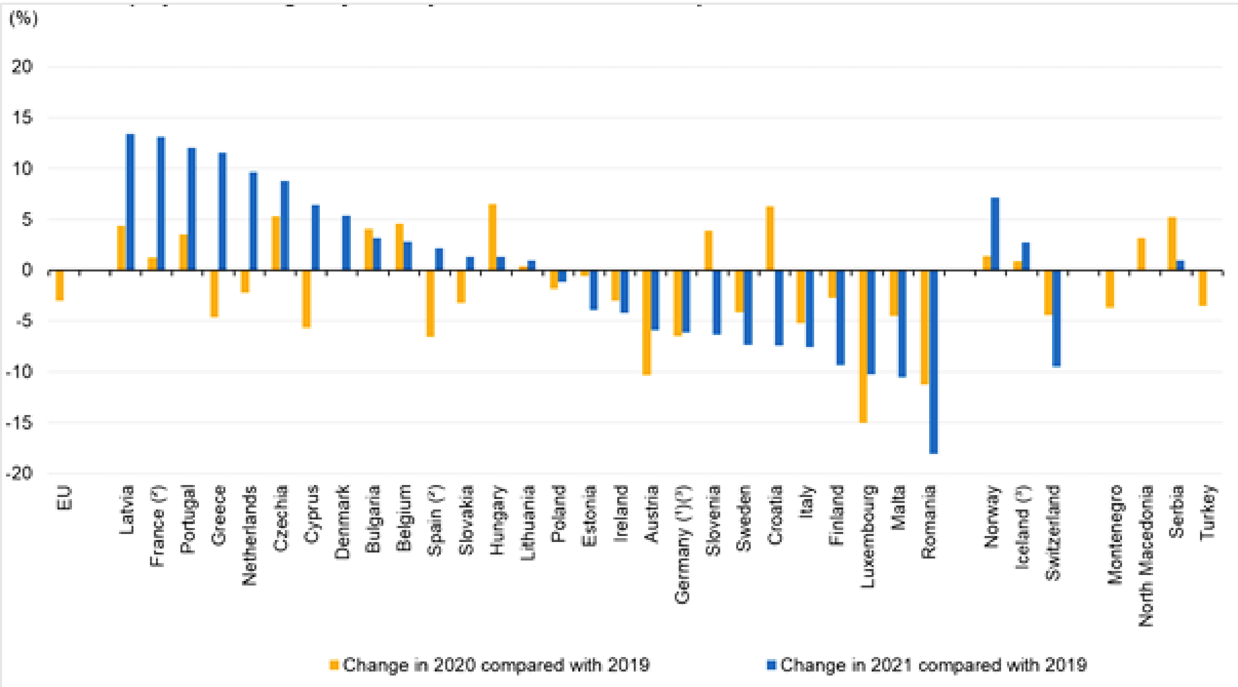
| Impact and lessons learnt |
| --- |
| **Across EU countries, Estonia's CCI was among the most adversely affected by the pandemic.** The estimated change 2019-20 in CCI turnover by country revenues reached -44% (paralleled only in Bulgaria)[216]. Moreover, while the impact of support measures for the CCI labour force was reportedly positive, the pandemic still had an adverse effect on CCI employment. As evidenced by Figure 38, cultural employment in 2020 and 2021 was below 2019 levels, which was not the case for other EU countries.<br><br>**In 2022, the CCI sector in Estonia entered a period of recovery but was hit by the cost-of-living crisis.** While it is hard to estimate the lasting impacts on the cultural and creative sector, it will take time for the creative sector in Estonia to bounce back. In 2022, the sector was hit by increasing energy and cost of living prices. As confirmed by the interviews, the COVID-19 support packages allowed CCI businesses to buffer the impact of the rising energy costs, at least in the near term. However, the situation is far from certain and further help might be needed to ensure that the CCI sector recovers to pre-pandemic levels.<br><br>**State aid provided to CCI was a crucial lifeline for businesses and employees throughout the pandemic, but clearer guidance on the restrictions would have been helpful**. State aid under the Temporary Framework allowed CCI sectors to withstand the pressures of the COVID-19 restrictions that made normal operations virtually impossible. Interviews with CCI sector representatives in Estonia confirmed the availability of state support. People in the sector commented that aid under the Temporary framework was readily available and accessible. That said, government communication on the COVID-19 restrictions could have been improved. In particular, the fact that guidance on the restrictions was issued every two weeks led to inefficiencies, as CCI firms tried to schedule upcoming events in the hope of relaxed restrictions. Instead, a slightly longer time horizon, as in other neighbouring countries, could have helped avoid sunk costs involved in rescheduling the planned events. |

216 E&Y, 2021.

### 6.3.2.4 Comparing employment in CCI in 2019, 2020 and 2022

Looking back at developments in employment in the CCI over 2020 and 2021 as compared to 2019, Figure 38 provides data on changes on a country by country basis.

Figure 38: Changes in CCI employment in 2020 and 2021 compared to 2019




Source: Eurostat Statistics Explained, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Culture_statistics_-_cultural_employment – accessed 25/10/2022.

Note: A break in time series for all countries for which 2021 data are available due to the implementation of the new Regulation (EU) 2019/1700, also called the Integrated European Social Statistics Framework Regulation (IESS FR)

(1) 2020, 2021 – provisional data.

(2) 2021 – definition differs.

The chart makes clear that although overall numbers have recovered (as mentioned above), there has been a shift in employment between Member States because in some countries there were reductions, whereas in others there were increases.

Looking at overall impacts, it can be said that in the short term, there was a massive decline in turnover and a drop in employment which was to a great extent mitigated by policy measures for employees. A liquidity crisis ensued, which was also addressed by policy (loans, guarantees), although in due course this had to be complemented by grants. Some undertakings experienced a complete drop in turnover, while others could continue functioning and operating to a greater or a lesser extent.

In the medium term, other impacts started to emerge, such as a reduction in collection of royalties, the inability to plan work or issue orders for projects due to uncertainty, problems related to obtaining creative inputs from suppliers, people beginning to consider leaving, or leaving the industry.

In the longer term, there are questions about behavioural changes: will people ever go back to some museums or some festivals – have they closed down forever? Also, there are questions about structural changes, in particular digitalisation, which occurred as a result of the pandemic – what will the effect be on the industry?

In the case study below, impacts on architectural activities are set out.

## Case Study 7: The impact of COVID-19 on architects

As a part of the broader construction sector, the architecture industry has been impacted by the halting of some construction projects (sometimes connected to the disruption of global supply chains[217]) and delays in others. However, the impact of the pandemic on construction output across Europe has varied between countries. Based on early 2020 data, in the early stages of the pandemic in Europe, the Southern-European countries and the UK witnessed a significant decrease in the number of construction projects carried out, while for example in Germany, Poland, most of the Balkan states, and in Scandinavia the number of construction projects increased[218]. According to a stakeholder interviewed for this study, the Polish construction sector thrived during the period of restrictions linked to the pandemic. Moreover, it has been noted that different types of projects carried out by the broader construction industry were impacted to a varying extent, with some completely cancelled, and others influenced to a lesser extent[219].

The April 2020 data from Building Design suggest that in the early stages of the pandemic, most of the owners of architectural practices were significantly concerned about the future, with 93% of respondents being *very concerned,* or at least *concerned* about the finances of their respective practices, and more than 70% indicating that their practices would not survive for longer than six months[220]. This corroborates with data from the previous studies, which showed that the impact of economic crises on the construction market is disproportionately large for architects[221]. The wider economic importance of COVID-19 impacts on architectural businesses is apparent from Eurostat data according to which, as of 2019, more than one quarter of all 1.2 million EU cultural enterprises were involved in architectural activities[222]. Architects contribute EUR 17 billion to the European economy annually[223] and, as of 2020, 559,070 persons were estimated to be working in the architectural profession across Europe[224]. The estimated COVID-19-related decline in turnover between 2019 and 2020 for the architectural industry totalled 32% year on year, almost equal to the overall CCI sector average loss in turnover[225].

Beyond the reduction in turnover, in an interview with the Polish Architects' Union representative it was noted that one of the problems for architectural industry was delays on the side of public administration, where public officials tended to use the pandemic as an explanation for delays in their usual activities. As a result, architects were facing delays in administrative procedures crucial for their industry's functioning.

[217] Commercial Design, 2020, *Impact of covid-19 on architecture industry*, https://www.commercialdesignindia.com/insights/6020-impact-of-covid-19-on-architecture-industry, accessed: 08 November 2022.

[218] Architects Council of Europe, 2020, *The Architectural Profession in Europe 2020, A Sector Study,* 2020ACESECTORSTUDY.pdf (ace-cae.eu), accessed: 14 November 2022, p. 25.

[219] The Architect's Newspaper, 2020, *What does the coronavirus pandemic mean for architects?,* https://www.archpaper.com/2020/03/coronavirus-pandemic-architects/, accessed: 08 November 2022.

[220] Building Design, 2020, *Nearly 95% of architects have no coronavirus recovery plan in place*, https://www.bdonline.co.uk/news/nearly-95-of-architects-have-no-coronavirus-recovery-plan-in-place/5105771.article, accessed: 15 November 2022.

[221] İlter, A. T., 2022, 'Architects' Reactions to COVID-19 Pandemic with Evidence from Their Social Media Accounts', *International Journal of Architecture and Planning*, 10(1), 158-178, ICONARP, DOI: 10.15320/ICONARP.2022.198, p. 159.

[222] EUROSTAT, 2019, *Culture statistics - cultural enterprises, statistics explained.* Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Culture_statistics_-_cultural_enterprises#:~:text=In%202019%2C%201.2%20million%20cultural,%E2%82%AC158%20billion%20value%20added.&text=In%202019%2C%20a%20quarter%20of,were%20related%20to%20architectural%20activities.&text=Most%20cultural%20enterprises%20in%20the,five%20years%2C%202019%20data%20reveals., accessed: March 2022.

[223] Architects Council of Europe, 2020, *The Architectural Profession in Europe 2020, A Sector Study,* op. cit, p. 3.

[224] Ibid, p. 11.

[225] EY, 2021, *Rebuilding Europe. The cultural and creative economy before and after the COVID-19 crisis*, https://www.rebuilding-europe.eu/, accessed: 07 November 2022, p. 31.

## Case Study 7: The impact of COVID-19 on architects

The same problem has been pointed out in the Cypriot context, where the local Architects' Association sent an open letter to the country's Ministry of Interior appealing for ensuring that the Urban Planning Authorities would renew ongoing communication with the business community, after they had become unresponsive in the early days of the pandemic[226].

The impacts of the pandemic on architects can be further assessed according to how they faced the challenges they were confronted with[227]. Architectural companies addressed challenges by adapting their business models. The adaptability of firms differed depending on their respective size, with the large companies that offer a wide array of services being able to swiftly shift their activities to the areas of the market where increased demand was noted, and smaller firms being more easily adaptable from an organisational point of view. The medium-sized companies found themselves in the most difficult position in this context[228]. It can be added that based on the data for US, as of 2019, only slightly above one fifth of the architectural design companies had contingency plans developed in case of the event of business disruption, in comparison to more than 70% of large firms[229].

As regards individual architects, the most significant change was a shift to working from home. According to the 2019 data, prior to the pandemic outbreak, it had been relatively uncommon for architects to work from home, while a significant majority among the 20% of architects who declared working from home regularly were sole practitioners[230]. The switch to remote-only working has been reported to have negatively impacted working efficiency, mostly through slackening of everyday communication. On the other hand, collective transitioning to remote work allowed architects to make international connections more easily with their foreign business partners.

As regards employment of individual architects, a 2020 study carried out by the Architects Council of Europe (ACE) found that roughly one in three architects who worked part time or was out of work at the time when the study data was being collected was in such a position as a result of the COVID-19 pandemic[231]. The available data indicate also that a large share of architects might be working on a self-employment basis, which could have made them more vulnerable to the impacts of the pandemic. The results of a 2013 survey carried out by Building Design suggested that as many as 45% of the UK architects worked on a self-employed basis, and the more recent data from ACE suggest that in 2020, the share of self-employed and freelance-working professionals in the industry was still high (about one third of respondents were 'sole practitioners', and approximately 5% of freelance-working persons)[232].

**Measures and response**

On the whole, across EU Member States, architects have been provided with access to general business support available to firms and individuals. For example, in Romania, the local architects' union advised that persons exercising the profession of architect in all its possible forms were eligible

[226] Cyprus Architects Association, 2020, *Επιστολή στον Υπουργό Εσωτερικών*, https://architecture.org.cy/8955/, accessed: 14 November 2022.

[227] ABI, 2020, *May 2020: Architecture Firms Report Steep Decline in Billings for Third Consecutive Month - AIA*. Available at: https://www.aia.org/pages/6306219-abi-may-2020-architecture-firms-report-ste.

[228] Cityscape Intelligence, 2020, *Covid-19: Challenges & opportunities for architects*, https://www.cityscape-intelligence.com/architecture-projects/covid-19-challenges-opportunities-architects, accessed: 07 November 2022.

[229] Nassereddine, H., Seo, K. W., Rybkowski, Z. K., Schranz, C., and Urban, H., 2021, 'Propositions for a Resilient, Post-COVID-19 Future for the AEC Industry', *Frontiers in Built Environment* (7), article 687021, DOI: 10.3389/fbuil.2021.687021, p. 2.

[230] Ibid. p. 6.

[231] Architects Council of Europe, 2020, *The Architectural Profession in Europe 2020, A Sector Study*, op. cit., p. 14.

[232] Ibid., p. 15.

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for state financial support[233]. In Lithuania, the country's Union of Architects reminded the professionals in the industry that professionals recognised by the Lithuanian state as professional artists and creators are eligible for social support in case of a loss of income[234]. In Cyprus, some of the social and financial support tools that architects could access included special allowances in case of sickness, childcare support, VAT exemption, allowances in case of closing of the business, or financial support for the self-employed[235]. In one of the interviews it was pointed out that in Poland, architectural companies were eligible for different forms of general, business support. Those included exemption from social insurance payments, or being offered partially non-refundable subsidies. Architectural firms were eligible also for financial aid from the state distributed on a regional (voivodeship) level. However, problems were encountered with regards to the accessibility of this financing. Such problems related to the fact that the electronic system for filing applications for the financial support stopped accepting applications seconds after it had opened. According to an interviewee, the reason for that was that the pool of available support had been disbursed almost immediately, with many companies failing to secure support.

Beyond that, some measures were implemented for persons in professional training in the field of architecture. In Slovakia, the local industry association, Slovenska Komora Architektov, organised a closed webinar for its members, including persons in professional training, on the access to financial support from the Slovak state[236]. In Belgium, persons in architectural training were offered more flexible assessments on the traineeship they are obliged to complete as a part of their formal education[237]. In France, the *Ordre des Architectes*, the country's professional association, developed a training package for architects, together with a set of complimentary on-line materials, in cooperation with the French Ministry of Culture. It has been emphasised that architects, often performing managerial functions in the construction process, would play a key role in re-opening of construction sites after the period of pandemic closure, and, hence, it was necessary to ensure they have knowledge to address COVID-19-related challenges to health and safety[238].

Furthermore, the pandemic forced industry representatives to enhance remote exchange of information and, in the long term, fostered the discussion on the future prospects and the social mission for the industry. For example in Italy, a new online platform has been launched to provide remote-working professionals the space for 'detect[ing] and shar[ing] proposals [and] policy actions', as well as to support 'general discussion between architects and Italian society'[239].

233 Ordinul Architectilor di Romania, 2020, *OUG nr. 32 / 2020: toate formele de exercitare a profesiei de arhitect sunt protejate prin ajutorul de stat!*, https://oar.archi/stiri/arhiva-4/oug-nr-32-2020-toate-formele-de-exercitare-a-profesiei-de-arhitect-sunt-protejate-prin-ajutorul-de-stat/, accessed: 14 November 2022.

234 Lithuanian Union of Architects, 2020, Informacija meno kūrėjoms ir kūrėjams, http://www.architektusajunga.lt/kiti/informacija-meno-kurejoms-ir-kurejams/, accessed: 14 November 2022.

235 Cyprus Architects Association, 2020, Πρόγραμμα Αντιμετώπισης Επιπτώσεων CoVid-19, https://architecture.org.cy/programma-antimetopisis-epiptoseon-tou-koronoiou/, accessed: 14 November 2022.

236 Slovenska Komora Architektov, 2020, Webinár „AKO (S)PRÁVNE NA COVID?", https://www.komarch.sk/spravy/webinar-ako-spravne-na-covid, accessed: 14 November 2022.

237 Architects Council of Europe, 2020, *COVID-19: European overview - ACE Survey#2*, *https://www.ace-cae.eu/fileadmin/user_upload/COVID-19___European_overview_-_ACE_Survey_2MAY2020.pdf*, accessed: 14 November 2022, p. 28.

238 Ordre des Architectes, 2020, *Un kit de formation « covid-19 » gratuit pour tous les architectes*, https://www.architectes.org/actualites/un-kit-de-formation-covid-19-gratuit-pour-tous-les-architectes, accessed: 14 November 2022.

239 Architects Council of Europe, 2020, *COVID-19: European overview - ACE Survey#2*, op. cit., p. 25.

## Case Study 7: The impact of COVID-19 on architects

The current ongoing discussion in the architectural community, importantly, touches upon the balance between the price and the quality of projects, particularly with regards to post-pandemic recovery.

Based on the interviews conducted for this study, it has been reported that in post-pandemic recovery plans in some countries, e.g. in Italy, France, or in Scandinavia, emphasis is put on the readiness of access to available financing. It was emphasised that such a strategy poses a threat to the quality of construction services. The promotion of 'design and build' type of contracts, where the architectural company is involved as a sub-contractor of the main contractor - a construction company - has been pointed out as a part of this issue. It has been emphasised that reliance on such contracts might undermine the quality of project outcomes and should not be prioritised in post-pandemic recovery plans for the industry.

### Impact and lessons learnt

The most important impact on the architectural profession has been a change in the mode of work, likely leading to the internationalisation of businesses and permanent increase in the number of professionals working in hybrid mode, or remotely. No other, significant change to the everyday practice of architects' work has been identified. Architectural businesses have been impacted by financial crisis predominantly in cases where the local markets witnessed shortages of work as a result of delays, and other administrative problems posed by the pandemic. As far as the current financial condition of the architectural industry is concerned, referring to the data for the UK, it can be pointed out that according to the Royal Institute of British Architects' (RIBA), as of Autumn 2022, the architectural workload in the UK exceeded pre-pandemic levels by 4%[240].

Another long-term impact for architectural business that can be pointed out is the impact of pandemic-related challenges on architectural companies' business models. As noted in the literature, one of the lessons from COVID-19 both for the architectural industry and for the other branches of architectural and engineering industry is that firms from those sectors need to invest in their business models' resilience[241]. A study on architectural and engineering industry employees' career resilience found that for some members of staff the pandemic provided an opportunity to develop resilience, both personally and in a career context. This, however, was more often the case for more senior staff, as the younger workers turned out to be in a greater need of external support[242].

Finally, the pandemic fostered thinking about the social mission of architecture, leading some thinkers within the architectural community to reflect on how their industry can support sustainable social development in the context of recovery and in the post-pandemic period[243]. In this context, the balance between economic efficiency and quality of architectural services turns out to be one of the major issues discussed in the industry.

240 Royal Institute of British Architects ,2022, *RIBA Quarterly Economics Report, The Architectural Market, Autumn 2022*, https://www.architecture.com/knowledge-and-resources/resources-landing-page/architectural-market-economics-rep orts-2022, accessed: 08 November 2022.

241 Nassereddine, H., Seo, K. W., Rybkowski, Z. K., Schranz, C., and Urban, H.,2021, op. cit., p. 11.

242 Borg, N., Scott-Young, C. M., Naderpajouh, N., & Borg, J. ,2022, 'Surviving adversity: personal and career resilience in the AEC industry during the COVID-19 pandemic', *Construction Management and Economics*, 1–18, DOI: 10.1080/01446193.2022.2096250.

243 İlter, A. T.,2022, op. cit., p. 176.

### 6.3.3 The temporary framework measures

In this sub-section, the nature of TF measures as applied to the CCI are set out. As indicated above, the majority of TF measures were generic in terms of sector. Therefore, any company that met the requirements could apply. However, in the course of our research we did identify, in a good number of Member States some 50 programmes under the TF that were targeted at support for the CCI. In addition, some programmes were targeted at the Events sector, which included, among other things, live performances such as concerts, or suppliers to the Events sector (in addition to events in the Sport and other areas). Other programmes targeted at Tourism, specifically mentioned for example 'historic centres in cities', cultural tourism, and CCI together with nightlife, restaurants and cafes. There is therefore not a hard and fast definition or circumscribing of the extent of TF measures targeting the CCI. Casual examination identified some 53 programmes that were either CCI specific or Events, Tourism and Hospitality that specifically mentioned the CCI. These were found in 16 Member States.

The table below sets out the names of Member States where CCI-related programmes were identified, the number of such programme and targets/beneficiaries.

Table 10: CCI Specific Temporary Framework measures

| Member State | Number | Target/ beneficiaries |
|---|---|---|
| Belgium | 8 | CCI, events industry, nightlife, restaurants, cafés, incl. their suppliers, festival organisers |
| Croatia | 1 | SMEs in cultural and creative sectors |
| Cyprus | 1 | Newspapers |
| Czechia | 5 | Terrestrial television networks, audio visual sector, fairs and exhibitions, cultural events |
| Denmark | 5 | Large events suppliers, local newspaper businesses, TV producers affected by pandemic, event organisers, self-employed affected by pandemic |
| Estonia | 7 | Cultural and concert events, cultural events and conferences, operators of event centres, cultural and sport events companies, film producers and cinemas, cultural event organisers, cultural events companies. |
| Greece | 5 | Art and entertainment companies, various media companies, audio-visual distributors, cultural activities |
| Ireland | 5 | Commercial venues and live performance, arts and culture, events companies |
| Italy | 5 | Theatre and live performance, audio-visual production companies, art and tourism publishers, historic centres in cities, book publishers, music recording companies. |
| Lithuania | 1 | Culture and art sectors |
| Latvia | 5 | Arts, entertainment and recreational, media companies, cultural institutions, cultural events |
| Luxembourg | 1 | Audio-visual companies |
| Poland | 1 | Tourism and cultural |
| Romania | 1 | Independent cultural |
| Sweden | 2 | Events sector |

Source: Author's own elaboration

Some characteristics of the programmes are listed below in terms of approval dates, value and whether national or regional.

**Dates of approval:** The first of these programmes was approved during May 2020, with a few more during June. But the majority only came from September and later, with the second wave. The latest one on record was from 29 March 2022.

**Value:** The largest programme is an Italian one of a value of EUR 500 million for historic centres in cities. Others worth more than EUR 100 million are for event organisers in Sweden (EUR 297 million and EUR 189 million – although these are also for non-CCI strictly speaking events) and Poland (EUR 193 million, tourism and cultural). By far the majority of strictly CCI-specific programmes are worth less than EUR 25 million (these figures were approved, not actually disbursed).

**National/ regional:** The majority of programmes are at a national scale. In Belgium, 4 were at a regional level (3 for Flanders and 1 for Brussels-Capital). In Estonia 1 was regional (Ida-Viru and Harju Counties), and 1 in Greece was regional (Athens municipality).

The data in Table 10 also suggest that the majority of CCI-specific programmes were in smaller Member States. In the larger Member States, the CCI industry was dealt with among other sectors. The text box below provides some examples of some measures in the TF that are targeted at the CCI.

Box 2: Examples of TF schemes in support of CCI

**State Aid SA.62035 (2021/NN) – Denmark: Aid scheme for discounts on tickets to cultural events**

**Rationale**: The Danish authorities see CCI institutions as the foundation of cultural life in Denmark. CCI contribute to creating a common identity, new thinking and innovation. The CCI industry also

Rationale: The Danish authorities see CCI institutions as the foundation of cultural life in Denmark. CCI contribute to creating a common identity, new thinking and innovation. The CCI industry also contributes significantly to the Danish economy (employment and economic activity) and has an impact on related industries, suppliers and the tourism industry. Many cultural institutions depend heavily on revenues from ticket sales.

*Summer camps for children* organised by associations and revolving around sporting activities form a key part of the Danish culture. They contribute to social cohesion and the forming democratic values. They also generate economic activity (a traditional holiday activity for children). Many associations organising summer camps rely on revenues generated in a short amount of time.

As a result of border closures, bans on meetings, closure of facilities, a severe impact has been felt by cultural institutions and those organising summer camps. The idea is to counteract the drop in demand for cultural and sporting activities.

**The measure** is to provide compensation of 50% of ticket prices for events during the summer of 2020 if a 50% discount was granted on ticket prices on 15 June 2020 for cultural and small non-profit sport events; and 25% for summer camps for under 18 years old for less than a week long. The reference period was 2019.

Beneficiaries are undertakings organising cultural events and small non-profit sporting and exercise activities and summer camps, irrespective of size, for discounts during the 2020 school summer holiday period.

**Form of the measure**: The measure would consist of direct grants.

**Administration** would be by the Danish Agency for Culture and Palaces.

**The budget for the measure**: DKK 286.6 million (EUR 38.5 million).

**Duration**: 23 June to 31 December 2021

**State Aid SA.63164 (2021/N) – Estonia (i) Emergency aid for the restructuring of a cultural operator's service, product, business process or business model due to a COVID-19 outbreak and (ii) emergency aid to cultural and sports public entities, foundations set up by the State and public authorities managed by government agencies due to COVID-19 related restrictions**

This measure consisted of two elements as detailed above.

**Aims of the measures**: (i) was to restore long term sustainability to enterprises affected by COVID-19 e.g. by restructuring their service production, business processes, business model, to make them more competitive and efficient, including provision of a contactless service. Aid would be to the value of between EUR 1,000 and EUR 200,000; (ii) was to support beneficiaries whose activities have been completely suspended or severely restricted as a result of the containment measures applicable from 11 March 2021 to ensure the sustainability of their core business and allow the access to culture through restructuring. Aid would not exceed EUR 1,800,000 per undertaking.

**The budget** for (i) was EUR 4,150,000, and (ii) EUR 6,000,000.

**Final beneficiaries** for (i) were SMEs and large enterprises in the cultural sector; and for (ii) SMEs and large enterprises in the cultural and sports sector.

**Administration of the measure** was by the Estonian Ministry of Culture.

Some issues that are quite specific to the application procedures for TF support for the CCI industry were identified in the course of the interview programme. These are summarised in the Case Study below.

Case Study 8: Challenges experienced by undertakings in the CCI in obtaining access to TF support

**The issue**

The TF was rolled out very quickly and the main targeted beneficiaries were the majority of households and businesses. As mentioned in Section 3, the median time for approval of COVID-19 measures was 14 days[244]. However, it soon became clear that **some of the eligibility criteria to qualify for support created issues with some non-standard business operating models and the self-employed**. Below are outlined some of the issues as identified throughout the course of the interview programme. These were of particular relevance to CCIs, although not exclusively so.

**Specific challenges**

***The reference period for loss of income estimates***

In order to qualify for some measures it was necessary to compare the undertaking's income in the current period either with the previous three months, or the same period a year ago to show that there was a loss of revenue of a certain magnitude (e.g. 20-30%). The issue with this was that a good number of enterprises in the CCI have seasonal (for example in the case of summer camps for children) or irregular income (for example in the case of events, concerts or publishing books). In such instances, different approaches to the reference period have to be developed (e.g. the same season or a smoother income stream) or enterprises will not qualify, negating the aim of the support.

***Direct result of government measures***

It was usually necessary to demonstrate that the losses in income were a direct result of steps taken by Member State authorities. This was problematic in some instances where businesses and workers were **indirectly impacted by COVID-19 restrictions.** For example, stakeholders reported that suppliers for events that were cancelled (even if the event was cancelled as a result of an intervention by the authorities) found it difficult to prove a link to that event and therefore to prove their eligibility for support. Other examples include the cases of taxi drivers who could not get work because hospitality (particularly bars/nightclubs) was closed, or cases of where souvenir shops which were eligible for support but their suppliers (e.g. in Estonia) were not in some cases as it was difficult for these businesses to prove direct causal links with the containment measures.

In addition, in some Member States, authorities put in place soft measures such as guidance rather than enforceable legislation against attending gatherings. As a result, people did not attend concerts and other events in line with the guidance issued, which led to these events incurring substantial losses, particularly in some Member States where behavioural factors led to a high degree of compliance with government guidance such as was the case in the Nordics. Interview feedback suggests that it was difficult for several event organisers and workers to meet the eligibility criteria attached to the disbursement of TF measures.

[244] European Commission, 2022, State aid Scoreboard 2021, DG Competition Policy and Strategy State aid case support and policy. Available at: https://competition-policy.ec.europa.eu/system/files/2022-09/state_aid_scoreboard_note_2021.pdf.

## Case Study 8: Challenges experienced by undertakings in the CCI in obtaining access to TF support

***Self-employment and non-standard forms of employment***

As indicated above, self-employment is much more prevalent in CCI than in other parts of the economy. Following the outbreak of the pandemic, the authorities in the EU tended to focus on protecting employees, and the initial TF measures were created to this end. In a number of Member States (e.g. Portugal, Spain, Estonia and Greece), measures to support the self-employed only came later, by which time the lockdowns had caused a great deal of economic damage. This would have hit the CCI harder than other industries.

For those in non-standard employment, as the OECD put it: 'Employment and income support measures are not always accessible or adapted to the new and non-standard forms of employment (freelance, intermittent, hybrid – e.g. combining salaried part-time work with freelance work) that tend to be more precarious and are more common in CCI'[245].

***Proof of income***

In some parts of the CCI, employment can be rather informal and people who do work might not always keep accurate records of income or fully declare all income to the tax authorities. These tend to be the more marginal and socially vulnerable segments of the industry. When such individuals tried to apply for support it was still necessary to prove an income loss. This was challenging because they might not have the necessary documents, lack a credit history or have under-declared income to the tax authorities, which meant that support was withheld.

From one point of view it could be argued that not being able to access support was a 'just' punishment for dishonesty. However, from a social point of view these may well be the people most in need of support.

An anomaly at the other end of the income spectrum concerns the **proportionality of the support measures**. It was pointed out by stakeholders that artists receiving annual income of EUR 300-450,000 per year were treated on the same basis as people with much more modest incomes. If their incomes fell by the percentage required to qualify e.g. 20-30%, they also received public support.

***Ownership***

Support was not available to enterprises, where more than 25% was owned by other enterprises. While this was a general constraint for all industries, there are instances in the CCI where this had a major effect in keeping enterprises closed which, if they had been independent, could have accessed support and reopened earlier (e.g. the Tivoli Gardens in Copenhagen).

**Lessons from these experiences**

It is not always possible to get things right the first time in a crisis. However, there is an argument for being better prepared, as it is not unlikely that another, similar public health crisis could emerge in the future and where the experiences gained from dealing with the COVID-19 pandemic will be relevant.

There is a strong argument for carrying out a thorough evaluation of the practical experiences of administering the TF from the point of view of the various target beneficiaries (types of

[245] Travkina, E. and Sacco, P.L., 2020, *Culture shock: COVID-19 and the cultural and creative sectors*, OECD Policy Responses to Coronavirus (COVID-19), 7 September 2020. Available at: https://www.oecd.org/coronavirus/policy-responses/culture-shock-covid-19-and-the-cultural-and-creative-sectors-08da9e0e/.

| Case Study 8: Challenges experienced by undertakings in the CCI in obtaining access to TF support |
|---|
| undertakings/ sector-ecosystems) and the different Member State administrations sharing knowledge so as to devise a detailed template (sector specific and bearing in mind different kinds of employment) that can be applied, possibly with minor modifications, in a similar future scenario (which need not necessarily be a national health emergency). |

**Other measures** in support of the CCI include the EUDCCs (see above, section 4). Once they came into being, they did facilitate cross border travel, and thereby helped the CCI recover, by for example making attendance at cross-border festivals easier. A further use of the EUDCC was to present it at in-country events as a way to obtain access. A wide range of other measures was brought in to support the CCI, as detailed in Text Box 3 below.

Box 3: EU initiatives and measures taken to tackle the effects of COVID-19 on the cultural and creative industries (CCI)

- On 29 June 2021, the Commission issued **guidelines on the safe resumption of activities in the cultural and creative sectors to coordinate the safe reopening and facilitate the sustainable recovery of activities in the cultural and creative sectors**.
- Member States can also re-allocate cohesion funds to the cultural sector under the **Coronavirus Response Investment Initiative (CRII and CRII Plus)**.
- Employees and the self-employed in the cultural and creative sectors can also be supported by short-time work scheme under the **Support to mitigate Unemployment Risks in an Emergency (SURE)**.
- The **European Guarantee Fund** can be used to support SMEs of the CCI.
- Under the **Erasmus+ programme**, the European Commission launched two extraordinary calls for culture and creativity to support educational exchanges in the aftermath of the pandemic.
- The Commission set up two **platforms to facilitate the exchange** of knowledge and best practices at the EU level in relation to the COVID-19 impact on the CCI.
- The Commission funded an EUR 2.5 million program MusicAIRE to the benefit of the music sector starting in October 2022.

Source: European Commission, 2022, *Coronavirus response. How the EU responses to the coronavirus outbreak in support of the cultural and creative sectors*. Available at: https://culture.ec.europa.eu/resources/coronavirus-response.

### 6.3.4 Concluding remarks on the CCI

Despite the lack of unanimity on exactly what constitutes the CCI, most analysis agrees that the CCI, and in particular authors, journalists, artists (including in the performing arts, music and visual arts) was very badly affected by the pandemic and measures taken to control it.

This negative effect was not only the consequence of the need for personal presence in delivery, but also closely affected by the nature of a large part of the employment in the industry. Many parts of the CCIs are characterised by non-standard employment contracts such as part-time work, self-employment, freelancing and project-based work. This can lead to a precarious existence where income streams may be unpredictable and intermittent.

When such streams have dried up completely for some, as was the case during the COVID-19 pandemic, it has led to very dire consequences for the individuals involved.

Such a precarious situation might be exacerbated by the fact that those in that situation find it difficult to access official support which is often dependent on being able to provide proof of personal data related to being in standard employment situations. On a wider scale, this could lead to groups of individuals/ enterprises that form part of the cluster to disappear from the CCI, weakening the cluster overall.

There is therefore an argument for reviewing in some detail what went wrong in cases where support did not reach those who needed it from the CCI and designing new systems of support that would avoid such an occurrence in the future.

It would also appear that parts of the CCI have been slow to recover and special measures to support the industry might be justified.

# 7 CONSEQUENCES FOR WORKERS

KEY FINDINGS

The COVID-19 pandemic had profound implications for workers and the broader labour market. Frontline workers were more subject to income loss, job insecurity and faced serious health and safety risks. Sufficient staffing and access to adequate personal protective equipment were identified as necessary requirements to face a potential future crisis in a resilient and sustainable manner. A rise in unemployment was largely mitigated by the use of job retention schemes. However, job retention schemes did not prevent higher negative impacts on vulnerable socio-economic groups including workers with low levels of education, the youth, foreign-born people, ethnic minorities, women and those in precarious non-standard employment. In countries where childcare and education services closed for extended periods of time there were negative impacts on gender equality. It is difficult to generalise on the impacts of ad hoc measures targeting self-employed workers because they varied widely in generosity, duration, and conditions across countries.

The crisis was a catalyst for digitalisation and the transformation of working practices, bringing about a range of opportunities and challenges for workers, businesses and territories. Future measures need to consider these opportunities to enhance labour market integration, foster entrepreneurship and innovation, as well as improving the quality of employment while understanding and addressing the needs of vulnerable socioeconomic groups.

In this section, the impacts of policy measures to deal with the COVID-19 pandemic are considered, first, in terms of the overall labour market, then from the perspectives of frontline workers, vulnerable groups and the self-employed. Then impacts on new working practices are discussed.

## 7.1 Impact of policy measures on the labour market

**The COVID-19 pandemic affected the labour market in several ways,** as indicated in the 'Gentiloni report'[246]. First, as a result of containment measures, such as lockdowns, imposed to reduce the transmission of the virus and restricting individuals' movements, the activity of certain industries diminished. This had a direct effect on employment, the production of goods and services and supply chains. Second, changes in consumer behaviour driven by fear of contracting the illness and a certain level of uncertainty led to the acceleration of new purchasing trends such as virtual shopping (reducing the need for staff in shops and businesses) and an increased demand for labour for home delivery. Third, the successive lockdowns accelerated digitalisation and profoundly transformed working habits with a revolution in remote working for jobs that permitted it. Fourth, the containment measures, combined with job retention schemes (which made it easier for employees to retrain or look for employment in other sectors), seem to have contributed to a wider phenomenon of individuals leaving their jobs or switching employment sectors (for example away from hospitality and tourism to business services), which increased the mismatch between employment market needs and demand as containment measures were lifted.

Furthermore, **the impact of the measures to contain the pandemic was different across industrial sectors.** On the one hand, the hospitality sector, the CCI, sport and leisure, retail and trade, transport and tourism were hit the hardest. Company size was also relevant, with SMEs being most negatively impacted. On the other hand, the pandemic caused an increase in workload for services deemed

[246] Carraro, C., et al., 2022, *A New Era for Europe*, op.cit..

"essential" to the functioning of society and contributed to the development of digital industries. The impact across socio-demographic categories was also highly differentiated, with the most vulnerable groups being hit the hardest (see below).

**State aid measures were put in place in order to limit the effects of the containment measures on companies and workers.** The first policy measures put in place by Member States to support workers were emergency responses to mitigate the effects of the COVID-19 containment measures. These were comprised of wage subsidies, job retention schemes, self-employment income support and benefits and sick pay[247]. In this context, the European Union put in place the SURE instrument, consisting of loans to Member States to support their own measures to deal with pandemic-related unemployment. With the lifting of containment measures, policy response shifted from emergency measures to structural programmes: this included the phasing out of income support and self-employment schemes and the deployment of training programmes, including digitalisation programmes and innovation support for businesses. The following sub-sections examine the effects of measures on frontline workers, vulnerable socio-economic groups, including those in precarious non-standard employment and the self-employed, as well as the impact of the development of new working practices on workers.

The case studies below look at some unintended consequences of the pandemic on vulnerable workers in Ireland (case study 9), and examine some issues surrounding the return to work after the lifting of restrictions (case study 10). Section 6.1.1 above provides information regarding employment from a macro and an industrial cluster perspective, while section 6.2.3 looks at developments in employment from a SME point of view. Employment in the cultural and creative industries (CCI) is the focus of 6.3.1.2.

## 7.2 Frontline workers

### 7.2.1 Defining the frontline

The expression "frontline workers" has emerged in the common language in the context of the COVID-19 pandemic to designate workers who continued working and whose job could not be performed remotely. Often, frontline workers form a part of "essential industries", activities whose functions are critical to public health, safety, economic and national security - although not all essential jobs can be categorised as frontline. Establishing a definitive list of frontline occupations is problematic, as the occupations in question varied between countries and over time in the course of the pandemic. In the policy debate, we can differentiate two broad sub-categories of frontline workers:

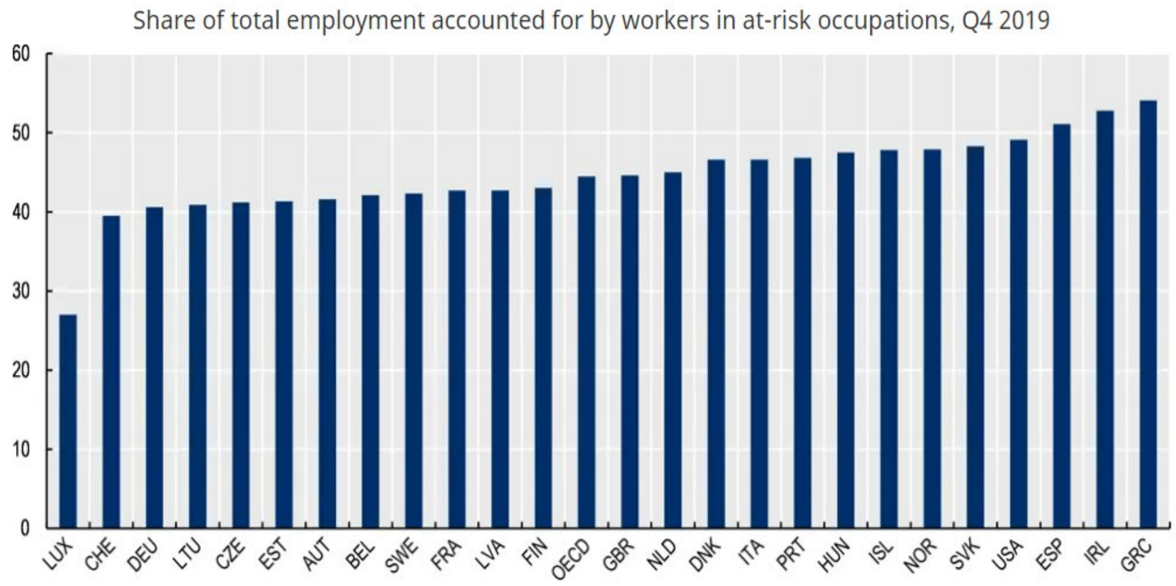
- **At-risk frontline occupations** involve workers who, by the nature of their work, cannot avoid close contact with people and have a much higher risk of contagion with COVID-19. Examples of these occupations include workers in health care, cashiers, personal care, food processing, builders, assemblers, cleaners, police officers, firefighters, teachers (depending on the context), waiting staff and security guards;
- **Other essential frontline occupations** involve workers who cannot shift to remote work and are not in close contact with other people, and have an existing but limited risk to be in contact with the virus at their workplace. These include transporters, process, plan and machine operatives,

[247] OECD/European Commission, 2021, *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*, OECD Publishing, Paris, https://doi.org/10.1787/71b7a9bb-en.

manufacturers, veterinarians, general medical practitioners, chemists, mechanics, electricians, meat processors, plumbers, etc[248].

Eurofound (European Foundation for the Improvement of Living and Working Conditions)[249] identifies frontline workers as those who worked in their physical workplace and in close contact with other people during the pandemic. In 2019, across OECD countries, 44% of workers had to work in close physical proximity with others to perform their jobs, although there are significant cross-country variations (27% for Luxembourg and over 50% for Greece)[250].

Figure 39: Estimated share of at-risk frontline worker across OECD countries




Source : OECD, 2022, *The unequal impact of COVID-19: A spotlight on frontline workers, migrants and racial/ethnic minorities*. Available at: https://www.oecd.org/coronavirus/policy-responses/the-unequal-impact-of-covid-19-a-spotlight-on-frontline-workers-migrants-and-racial-ethnic-minorities-f36e931e/#figure-d1e682.

Note: At-risk occupations include jobs that were typically not done remotely before the pandemic and involved a considerable level of physical proximity to other people. OECD indicates the unweighted average of the countries included.

### 7.2.2 Effects of the pandemic on frontline workers

Studies showed that that those working in at-risk frontline occupations were more affected by income loss and job insecurity and reported lower levels of health and mental well-being during the pandemic. In Spain, a survey conducted at the national level with frontline workers showed higher psychological impact of the COVID-19 pandemic than the rest of the population. According to this study, healthcare and grocery workers were the most severely affected[251].

[248] Amosse, T. et al., 2021, 'Les métiers "de deuxième ligne" de la crise Covid-19 : quelles conditions de travail et d'emploi dans le secteur privé ?', *Document d'études*, No. 246, DARES, Paris.

[249] Eurofound, 2020, *Living, working and COVID-19, COVID-19 series*, Publications Office of the European Union, Luxembourg. Available at: https://www.eurofound.europa.eu/publications/report/2020/living-working-and-covid-19.

[250] Eurofound, 2021, *Living, working and COVID-19 (Update April 2021): Mental health and trust decline across EU as pandemic enters another year*, Publications Office of the European Union, Luxembourg. Available at: https://www.eurofound.europa.eu/publications/report/2021/living-working-and-covid-19-update-april-2021-mental-health-and-trust-decline-across-eu-as-pandemic.

[251] Rodríguez-Rey R, et al., 2020, 'Working in the Times of COVID-19. Psychological Impact of the Pandemic in Frontline Workers in Spain', *International Journal of Environmental Research and Public Health*, 17(21):8149. https://doi.org/10.3390/ijerph17218149.

Measures taken to support frontline workers included in particular:

- **Measures to ensure continuity of essential services:** The pandemic put additional pressure on essential services which in some Member States were already under pressure before. Several governments took temporary emergency measures to ensure the continuity of these services, as in the case of the health care system. For instance, the Irish government took emergency measures to deploy additional health care workers[252]. In Finland, health care workers and students were mobilised to work[253]. In France, temporary measures were taken to derogate from the rules on working hours and weekly rest in essential sectors such as agri-food, large-scale distribution and undertakings which contribute to the activity of hospitals[254];
- **Remuneration and rewards for frontline workers and workers in essential services**: The crisis shed light on the societal importance of the work performed by at-risk frontline workers, and on the extent to which this importance is not reflected in their pay. This societal realization led a majority of European governments to take measures, largely symbolic, taking the form of one-time bonuses and tax-free payments, to recognise and reward frontline workers' contribution and sacrifice over the pandemic. Examples of such rewards are to be found in Bulgaria[255], France[256], Greece[257] Ireland[258] and Sweden[259] for frontline healthcare workers and other "essential" occupations. Trade unions have long been advocating for long-lasting measures to increase remunerations of underpaid occupations, which are often at-risk frontline occupations.

**At-risk frontline occupations often faced serious workplace health and safety risks during the COVID-19 pandemic.** Cross-sectoral studies carried out at the national level found that many frontline occupations faced a disproportionately higher risk of contracting the illness at the workplace and to experience severe outcomes (hospitalisation and death)[260]. Public sector workers were not threatened by layoffs or income loss during this crisis, as might be the case for private sector workers. However,

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[252] Eurofound, 2020, *Measures to deploy a larger workforce in public healthcare and allow for the reassignment of public sector staff and teachers to other duties*, measure IE-2020-12/822 (measures in Ireland), EU PolicyWatch, Dublin. Available at: https://static.eurofound.europa.eu/covid19db/cases/IE-2020-12_822.html.

[253] Eurofound, 2020, *Mobilisation of healthcare professionals*, measure FI-2020-13/811 (measures in Finland), EU PolicyWatch, Dublin, https://static.eurofound.europa.eu/covid19db/cases/FI-2020-13_811.html.

[254] Eurofound, 2020, *Temporary derogation from working hours in essential services*, measure FR-2020-13/490 (measures in France), EU PolicyWatch, Dublin, https://static.eurofound.europa.eu/covid19db/cases/FR-2020-13_490.html.

[255] The Bulgarian government took measures, including a EUR 500 monthly bonus for medical staff, to support front-line workers between 2020 and the end of 2021. Eurofound, 2020, *COVID-19: Assistance for frontline workers in health care services, measure BG-2020-31/1086 (measures in Bulgaria)*, EU PolicyWatch, Dublin, https://static.eurofound.europa.eu/covid19db/cases/BG-2020-31_1086.html.

[256] The French government granted a once-off bonus of EUR 1500 to hospital staff for the year 2020. Ministère des solidarités, de l'autonomie et des personnes handicapées (2020), *Covid19 : Le Gouvernement annonce une prime exceptionnelle pour tous les professionnels hospitaliers*. Available at: https://solidarites-sante.gouv.fr/archives/archives-presse/archives-communiques-de-presse/article/prime-soignants. Other bonuses were subsequently provided not only to healthcare workers but to other essential services occupations in France. Eurofound (2020), *Exceptional purchasing power bonus for essential services employees, measure FR-2020-14/511 (measures in France)*, EU PolicyWatch, Dublin, https://static.eurofound.europa.eu/covid19db/cases/FR-2020-14_511.html.

[257] Eurofound, 2020, *Elite Hotels offer subsidised stays for people in risk groups and health care staff*, measure SE-2020-13/1365 (measures in Sweden), EU PolicyWatch, Dublin, https://static.eurofound.europa.eu/covid19db/cases/SE-2020-13_1365.html.

[258] The Republic of Ireland agreed to grant a recognition payment of €1000 tax free for eligible frontline health and ambulance workers, and an equivalent payment for health staff in the private sector for the year 2022. Government of the Republic of Ireland, 2022, *Government agrees Covid Recognition Payment and New Public Holiday.* Available at: https://www.gov.ie/ga/preasraitis/b926b-government-agrees-covid-recognition-payment-and-new-public-holiday/.

[259] Eurofound, 2020, *Elite Hotels offer subsidised stays for people in risk groups and health care staff*, measure SE-2020-13/1365 (measures in Sweden), EU PolicyWatch, Dublin, https://static.eurofound.europa.eu/covid19db/cases/SE-2020-13_1365.html.

[260] Basso, G., et al., 2020, *The new hazardous jobs and worker reallocation,* OECD Social, Employment and Migration Working Papers, No. 247, OECD Publishing, Paris, See also Walsh et al. (2020), *Differences in risk of severe outcomes from COVID-19 across occupations in Ireland.* ESRI, Dublin.

they often lacked, critically, sufficient staffing and adequate personal protective equipment to face this crisis in an effective and resilient manner. This was especially the case in the healthcare and long-term or social care sectors. Trade unions point out that this situation is in part the result of austerity measures in the aftermath of the financial crisis 2009. In May 2022, COVID-19 was recognised as an occupational disease by the EU Advisory Committee on Safety and Health at Work (ACSH). This concerned occupations in the health and social care and in domiciliary assistance. In addition, sectors where there was an outbreak in activities with proven risk of infection would be eligible[261]. Looking forward, improving workers' health and safety, especially in at-risk frontline occupations, and investing in public sector services will be key to face a potential future crisis in a resilient and sustainable manner.

The case study below looks at improvements in working conditions of low-paid vulnerable workers in Ireland as a result of interventio0n related to the pandemic.

**Case Study 9: Unintended consequences of COVID-19: Improvement in working conditions for low paid vulnerable workers in Ireland: the case of meat processing**

Irish meat processing plants were designated as essential activities and remained operational throughout the pandemic. Early in the pandemic, **Irish meat processing plants were identified as significant 'hot spots' for COVID-19 infections (as was the case in other countries such as Canada and Germany)**, along with nursing homes and public sector direct provision centres (centres for asylum seekers). Upon examination it turned out that meat processing plants provided unrivalled vectors for the transmission of the virus due to the ambient cool temperature, the air cooling system, the close proximity of workers that did not provide for social distancing, the need to shout often to communicate above the noise, language barriers and the bottlenecks at various facilities in the plants such as canteens[262]. Further investigations found that although there had been complaints about conditions in the plants, no inspections had been carried out by the Health and Safety Authority between March and May of 2020. When inspections were resumed in May, they were predominantly 'announced' inspections. Furthermore, although meat production was highly regulated in terms of food safety and hygiene, the same level of regulation did not extend to workers and their employment.

A Special *Oireachtas* (Irish National Parliament) Committee on COVID-19 Response was established on 6 May 2020 to consider and take evidence of the State's response to the COVID-19 pandemic[263]. A key issue driving the level of infections was found to be the lack of sick pay schemes in the meat processing industry which provided an incentive for workers to continue to work even if they had COVID-19 symptoms. According to Meat Industry Ireland (MII), only some 20% of plants had sick pay schemes. A typical practice for example, mentioned in the report and by an interviewee, was to take paracetamol to reduce body temperature to by-pass scrutiny by heat cameras.

According to the Services Industrial Professional and Technical Union (SIPTU), the Temporary Wage Subsidy Scheme was in use, followed by the Employer Wage Subsidy Scheme in September 2020, which provided for a wage subsidy of EUR 350 per week for employees not working (paid through employers).

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261 European Commission, 2022, *Member States, workers and employers agree on the need to recognise COVID-19 as an occupational disease*, Press release, https://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=10262&furtherNews=yes.

262 Houses of the Oireachtas, Special Committee on Covid-19 Response, Final Report 6 October 2020 33 SCCR 004, p. 38.

263 The Committee's terms of reference are laid out in the Dáil Supplementary Order Paper of Wednesday, 6 May 2020. The Committee published its final report and laid it before the Houses of the Oireachtas on 8 October 2020. The work of the Committee is now complete.

The average wage in the industry was approximately EUR 500 per week. As employers were not willing to make up the difference between the subsidy and the average wage, this provided an incentive for employees to keep working for as long as possible, even if they had symptoms until they became ill and could no longer work, or were tested and found to be positive.

The Special Committee on COVID-19 response therefore recommended that statutory sick pay schemes for low-paid, vulnerable workers in meat processing plants (also in nursing homes and direct provision centres) should be provided within six months of the publication of the report[264]. It was also recommended that COVID-19 be a notifiable disease under health and safety regulations. In addition, it was recommended that a wider ranging investigation into the meat industry be undertaken to look into the work permit regime, the use of sectoral work permits, and the use of employment agencies to provide workers for the industry[265].

In this instance therefore, **COVID-19 acted as a catalyst for improving the longer term economic and social conditions in Ireland of vulnerable workers in meat processing**, as well as a range of other activities.

Similar issues to those present in Ireland have been addressed in Germany as a result of the pandemic, and the European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT) is pursuing a campaign to improve working conditions in other countries in the EU[266].

## 7.3 Vulnerable groups of workers

The pandemic had a higher negative impact on vulnerable socio-economic groups, including young people, low educated workers, foreign-born people, ethnic minorities and women.

### 7.3.1 Socio-economic consequences for vulnerable workers

**Low-skilled and low-wage social groups were hit the hardest by job losses and were the most at risk to suffer health consequences.** Across OECD countries, 37% of those working in at-risk occupations were low-wage workers, as compared to 15% for professions with telework opportunities. 12% of young workers were in at risk employment compared to 5% for jobs with telework opportunities, as were 16% of foreign-born workers (in at-risk employment) compared to 13% of employees overall. Across OECD countries, **young people, foreign-born people, low-paid workers and racial/ethnic minorities were more likely to perform low-paid jobs also considered as at-risk in terms of the probability of contracting COVID-19**[267]. Migrant workers were hit harder than native-born employees and recovered more slowly from the crisis. Important cross-country variations were reported with Estonia, Iceland and the Slovak Republic recording the highest job losses among the migrants' group compared with the native-born in the second quarter of 2021. In addition to this, migrants were at much higher risk of contracting COVID-19 due to other parameters that made physical distancing difficult (e.g. overcrowded housing conditions, at-risk jobs, etc.).

[264] Recommendation 5, p.16.

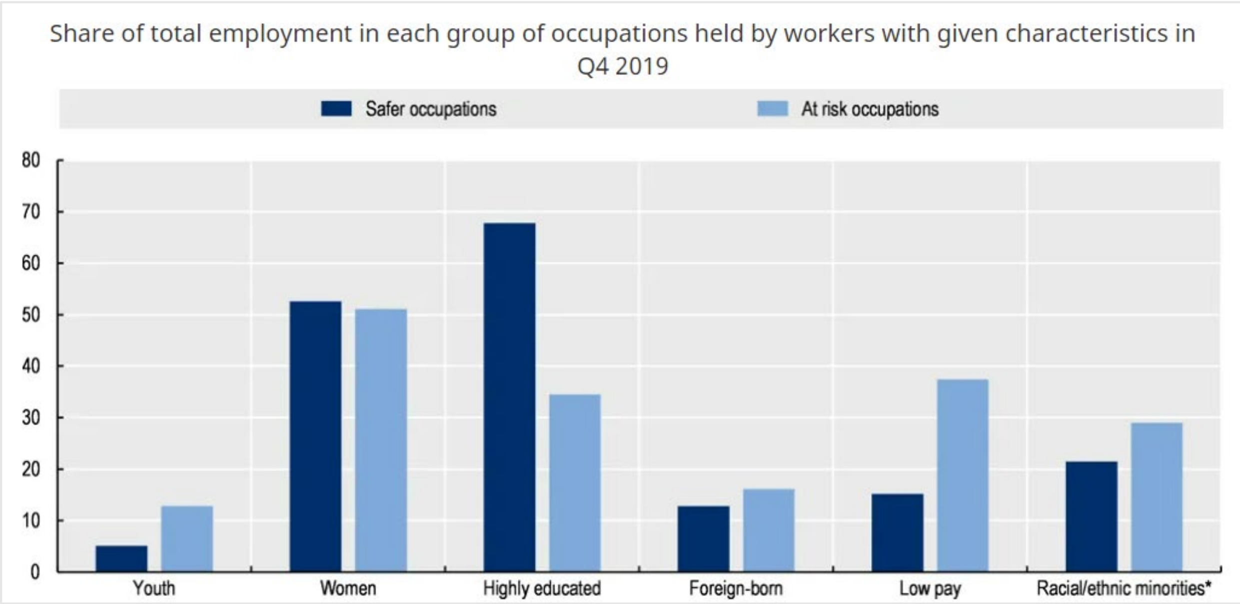
[265] Recommendation 8, p.18.

[266] European Federation of Food, Agriculture and Tourism Trade Unions, 2020, EFFAT Report : Covid-19 outbreaks in slaughterhouses and meat processing plants. State of affairs and demands for action at EU level, 7 September 2020. Available at: https://effat.org/wp-content/uploads/2020/09/Covid-19-outbreaks-in-slaughterhouses-and-meat-processing-plants-State-of-affairs-and-demands-for-action-at-EU-level-7.09.2020.pdf.

[267] OECD, 2022, *The unequal impact of COVID-19: A spotlight on frontline workers, migrants and racial/ethnic minorities*. Available at: https://www.oecd.org/coronavirus/policy-responses/the-unequal-impact-of-covid-19-a-spotlight-on-frontline-workers-migrants-and-racial-ethnic-minorities-f36e931e/#figure-d1e682.

Racial and ethnic minority workers were also more likely to lose their job, die from COVID-19 (twice as likely as other groups across OECD countries), and to suffer deterioration of their mental health. The COVID-19 crisis shed light on structural inequalities in a range of socio-economic dimensions.

Figure 40: Occupation at higher risk of job loss or contagion




Source: OECD, 2022, *The unequal impact of COVID-19: A spotlight on frontline workers, migrants and racial/ethnic minorities*, op. cit.

### 7.3.2 Effects of support measures on vulnerable groups

In the second quarter of 2020, the number of layoffs surpassed the number recruited in the EU-27: 4.8 million workers who were in employed in the first quarter of 2020 became unemployed in the second quarter of 2020 – 1.2 million more than in the second quarter of the previous year[268].

**The rise in unemployment was mitigated by the use of short-time work schemes.** These mechanisms protected jobs during the COVID-19 pandemic and ensured that workers continued to receive their wages or part of their wages. The widespread use of job retention schemes mitigated the pandemic's impact on labour markets and contributed to facilitate the restart of the economies once containment measures were lifted[269]. In December 2021, unemployment rates across the EU had declined to a record low level. In some countries, employment rates reached record highs. A further point of interest is that the increase in the unemployment rate of low-skilled workers was relatively limited during the pandemic as compared to the situation during the financial crisis of 2009 when the rate had increased much more than the unemployment rate of workers with higher levels of education.

However**, concerns have been raised that the implementation of job retention schemes as such did not reach the groups that were the most vulnerable.** The SURE mechanism was greatly welcomed by employers and employees' representations for being successful in mitigating the rise in unemployment. Yet, several research reports pointed to insufficiencies and inadequacies of temporary income protection schemes for certain categories of workers which were particularly hit by the crisis. For example, the IMF recommended that the "general nature, coverage and characteristics of the safety

[268] Weber and Neupert, 2021, European labour market dynamics after the outbreak of the Covid-19 crisis, IAB Forum.

[269] Ando, S. et al., 2022, 'European Labor Markets and the COVID-19 Pandemic: Fallout and the Path Ahead', *Departmental Papers*, 2022(004).

net and social protection institutions" be reviewed to ensure a better protection of workers such as the self-employed, gig/digital platform workers, young people, the low-skilled, migrants, people with health limitations and women with care responsibilities in a sufficient manner, whereas these groups were particularly hit by the crisis[270]. Altogether 10% of temporary and part-time workers lost their jobs[271] despite the job retention measures, and the crisis further widened the divide for the most vulnerable groups in terms of access to the labour market. Issues with narrow or inadequate eligibility criteria were pointed out as possible shortcomings of job retention schemes. It was noted that wage support varied widely across the EU in terms of amount, duration and eligibility criteria. A number of gaps between the needs of beneficiaries and the measures were identified. Some national business representations thought that wage subsidy schemes were phased out too soon, while others thought the schemes lasted too long and made companies, especially SMEs, reliant on public funding. The OECD has stressed the necessity to identify the specificities of vulnerable groups and to proactively address their needs[272].

**When looking at the EU-27 as a whole, there were no significant gender differences in labour market developments in 2020. However, high levels of heterogeneity across individual countries were observed.** In Germany, Portugal and the UK, men experienced larger increases in unemployment rates than women. In Finland, Hungary, Iceland and Romania, the opposite was observed. In Lithuania and Belgium, female employment shrunk the most relative to men. These differences could be attributed to structural factors, such as the gender composition of employment sectors, the availability and affordability of childcare and employment regulations with differential impacts by gender. In particular, the availability and accessibility of childcare services has been uneven across EU countries and throughout the crisis. Countries such as Sweden, which maintained early childhood care and primary schools open during the crisis recorded positive impacts on women's participation in the labour market. Countries in which childcare and education services closed suffered negative impacts in work-life reconciliation for women, with teleworking mothers suffering especially from work-life conflicts[273].

A further group of vulnerable workers is those working in **precarious employment conditions and environments characterised by non-standard contracts**. Precarious employment may involve a combination of low wages, no benefits (or lack of awareness of statutory working provisions), no union coverage and low job tenure. Non-standard contracts for work may be, for example, short-term, on-call or part-time. This kind of work is an increasingly prevalent feature of the employment landscape, and as in the case of other vulnerable groups, COVID-19-related support measures did not always reach it. It is also important to appreciate that precarious and non-standard work is not only confined to the low-skilled, platform workers, etc. The section on the CCI (see section 6.3.1.2) presents the situation faced by various groups in that industry, for example 'artists, journalists and authors'.

[270] Ando, S. et al., 2022, European Labor Markets and the COVID-19 Pandemic: Fallout and the Path Ahead. International Monetary Fund, Departmental Papers.

[271] Ibid.

[272] OECD, 2021, Building inclusive labour markets: active labour market policies for the most vulnerable groups.

[273] Eurofound, 2022, *COVID-19 pandemic and the gender divide at work and home*, Publications Office of the European Union, Luxembourg.

## 7.4 The self-employed

The self-employed are defined by Eurostat as persons who are "the sole or joint owners of the unincorporated enterprise […] in which they work, unless they are also in paid employment which is their main activity"[274]. They accounted for 13.8% of the labour force in the EU in the third quarter of 2021[275]. The percentage share of self-employed varies significantly across countries with Greece (27.4%), Italy (19.3%) and Poland (18.4%) having the largest percentage shares of self-employed people and Germany (7.6%), Luxembourg (7.9%), Denmark (8.1%) and Sweden (8.7%) the smallest (2021)[276]. Self-employment comprises important variations in terms of number of hours worked, sectors and societal composition[277]. Self-employment is more frequent among male workers than female workers and the propensity to become self-employment grows with age among men. A minority of self-employed have employees themselves.

### 7.4.1 Effects of the pandemic on self-employed workers

**Self-employed have been particularly affected by the pandemic in the short-term.** In the first months of the pandemic, self-employed were twice as likely to become unemployed or suffer a reduction in working hours compared with employed workers[278]. In Germany, 60% of the self-employed faced income losses between March and May of 2020. Similarly, the number of new start-ups dropped significantly at the EU-level in the early stages of the pandemic. Recovery was quicker in some EU countries (Belgium, France, Germany and Hungary) than others (Italy, Portugal and Spain), where the new start-ups remained depressed in the months following the first lock-down measures. By the third quarter of 2021, the percentage of self-employed showed only a slight decline from its pre-pandemic level[279].

**The effects of containment measures on self-employed workers have been uneven** depending on the sectors, countries and the point in time. For instance, "forced" entrepreneurship - the necessity to start an own business driven by the lack of employment alternatives - increased in one half of the countries while it decreased in the other half. **This 'forced entrepreneurship' had important implications for the financial security and state of health** of the self-employed. They were more likely than employees to report financial difficulties and a decline in mental health, well-being and happiness levels[280].

**The possibility and ability to use digital technologies have been determining factors** of the capacity of the self-employed (and more widely of SMEs) to adapt and be resilient to the crisis. For some of the self-employed, lockdown measures have created opportunities. This was particularly true for businesses using digital tools, where some could increase their online presence during periods of lockdown. While some businesses were able to adapt to this ever more digitalised world, there is a risk

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274 Eurostat, 2022, *Glossary: Self-employed.* Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Self-employed.

275 Eurostat, 2022, *Employment in detail – quarterly statistics*. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Employment_in_detail_-_quarterly_statistics&oldid=553470#Self-employment:_outline_and_latest_developments.

276 Ibid.

277 OECD, 2020, *What are the impacts of COVID-19 on self-employment and what policies are needed? OECD Webinar – 7 December 2020.* Available at: https://www.oecd.org/cfe/leed/Self-employment_and_COVID-19_7Dec_SUMMARY.pdf.

278 OECD/European Commission, 2021, *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*, OECD Publishing, Paris, https://doi.org/10.1787/71b7a9bb-en.

279 Eurostat, 2019, *Self-employed persons*. Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/EDN-20190430-1.

280 OECD/European Commission, 2021, *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*, OECD Publishing, Paris, https://doi.org/10.1787/71b7a9bb-en.

that those of the self-employed lacking resources and capacities will lag behind in the medium and long term. This is a particular concern for countries lacking in digital skills[281].

### 7.4.2 Measures targeting self-employed workers and their effects

**In the early stages of the COVID-19 pandemic, EU Member States scaled up existing social protection schemes to support workers through emergency measures. However, these primarily targeted employed workers and were not always extended to the self-employed or were offered at later stages of the crisis.** The emergency support deployed in early 2020 was designed to mitigate the side-effects of the containment measures and included income support, grants, loans and deferrals of payment. These policy measures were primarily tailored for businesses and designed to target workers in a situation of employment, whereas self-employed workers and entrepreneurs could not always meet the eligibility criteria.

The SURE instrument – temporary Support to mitigate Unemployment Risks in an Emergency – allowed the EU to provide additional support in the form of loans to Member States aimed at keeping workers in employment, such as short-term work schemes or similar measures. The self-employed were included in its scope[282]. In a second phase, measures were adjusted to address gaps such as sectors particularly affected. Most – yet not all – EU Member States adjusted their policy design temporarily to aim specifically at the self-employed. However, these measures varied broadly in substance, coverage and time. Some were in place for two years, whereas others lasted a few months and came much later than protection schemes targeting employed workers.

**Governmental support across the EU was unprecedented and effective to mitigate the adverse consequences of containment measures on employment.** Unlike the 2008-2009 financial crisis where the crisis response had been to cut public spending, the Member States agreed to invest massively to limit the increase in unemployment and poverty. Stakeholders agree that this was the right thing to do considering the situation of uncertainty at the time. The measures taken by Member States under the Temporary Framework for State aid generally encompassed the self-employed. Self-employed individuals fell within the scope of section 3.10 of the Temporary Framework on wage subsidies for employers to avoid lay-offs and were included in the deferrals of taxes and social security contributions[283]. However, the Temporary Framework measures also had shortcomings.

**Groups of self-employed workers that needed support the most could not always use it, whereas others were over-compensated[284].** The first phases of measures had some unintended consequences towards the self-employed and micro-enterprises, including an increased dependence on government support, indebtedness and a high rate of false claims. Some experts estimate ineligible claims among workers to amount to 9%[285].

**There are also criticisms that the support measures did not reach everyone due to restrictive eligibility criteria, difficulties to access information on support available and delays in processing claims**, which may have contributed to exacerbating inequalities between groups of self-

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281 See: European Commission (2022); Digital Economy and Society Index (DESI) 2022, Thematic Chapters.

282 European Court of Auditors, 2022, Audit preview: Support to mitigate Unemployment Risks in an Emergency (SURE). Available at: https://www.eca.europa.eu/Lists/ECADocuments/AP22_01/AP_SURE_EN.pdf.

283 Bouchagiar, A., 2021, State aid in the context of the COVID-19 outbreak, including the Temporary Framework 2020. European university Institute. Available at: https://fsr.eui.eu/publications/?handle=1814/69678.

284 OECD, 2020, *What are the impacts of COVID-19 on self-employment and what policies are needed*? OECD Webinar – 7 December 2020. Available at: https://www.oecd.org/cfe/leed/Self-employment_and_COVID-19_7Dec_SUMMARY.pdf.

285 Ibid.

employed. This can be explained by the need to take quick action and also because the recommendations given by the Commission on the definition of SMEs led some Member States to apply a narrower definition of beneficiaries than those that the Temporary Framework aimed to assist. In addition, these emergency measures targeting the self-employed were aimed at "supporting businesses to stay afloat"[286] and protecting income, but not oriented towards helping companies finding new opportunities and adapting to challenges brought about by the pandemic[287]. This was all the more crucial in that support for innovative start-ups and firms was paused as governments implemented emergency measures. Furthermore, if the temporary support has been crucial to mitigate adverse social-economic consequences on the short and medium term, some stakeholders warned against a risk to create dependencies on State aid among the self-employed and SMEs.

**The COVID-19 pandemic has amplified pre-existing inequalities in self-employment and entrepreneurship and reinvigorated the debate about social protection for this category of workers.** The OECD recommends more inclusive entrepreneurship policies, targeted to support groups affected by inequalities such as women, immigrants, young people, unemployed people, people with disabilities and ethnic minorities[288]. The widely diverse provisions targeting the self-employed at the national level reveal that the self-employed were unequally protected, often with undifferentiated compensation, and on an ad-hoc basis.

**The content, duration and conditions attached to the measures targeting the self-employed varied widely between Member States.** Often, these were adopted at a later stage to complement provisions which initially did not provide for self-employed workers. This was the case in Greece, with the "Financial support for freelancers, self-employed and sole proprietors who were affected by COVID-19 pandemic" amending the Legislative Act of 20 March 2020. In Austria, the safety net for the self-employed constituted one of two hardship funds adopted for specific target groups. It was designed as a one-off payment for the self-employed in one person companies, who could decide between this hardship fund or the emergency fund.

**These income support measures often took the form of a lump sum for those among the self-employed who were ineligible for other support schemes and often varied over time.** In some countries, the amount of the lump sum increased after an initial period. This was the case in Italy, where the self-employed could obtain EUR 600 for the month of March 2020; the measure was renewed for April and May with the indemnity ranging from EUR 500 to EUR 1000. In August 2020, the measures were extended for all beneficiaries and the indemnity was increased to EUR 1000[289]. In other countries, the amount of the support decreased over time: for instance, in Greece, there was a special state benefit of EUR 800 for beneficiaries for the period 17 March – 30 April 2020, which was decreased to between EUR 534 and EUR 300 for the period 1 May to 31 May 2020[290]. In Austria, the amount was tailored according to previous incomes. In a first phase which ended on 17 April 2020, the value of the lump sum amounted to EUR 500 if the net income was below EUR 6,000 and EUR 1,000 if it was above EUR

[286] Eurofound EU PolicyWatch categorisation.

[287] OECD/European Commission, 2021, *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*, OECD Publishing, Paris, https://doi.org/10.1787/71b7a9bb-en.

[288] OECD/European Commission, 2021, *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*, OECD Publishing, Paris. Available at: https://doi.org/10.1787/71b7a9bb-en.

[289] Eurofound, 2020, Factsheet for measure IT-2020-12/427 – measures in Italy: COVID-19 indemnity for self-employed, economically dependent workers and employees. Available at: https://static.eurofound.europa.eu/covid19db/cases/IT-2020-12_427.html.

[290] Eurofound, 2020, Factsheet for measure GR-2020-12/670 – measures in Greece: State income benefit to support freelancers, self-employed and sole proprietors. Available at: https://static.eurofound.europa.eu/covid19db/cases/GR-2020-12_670.html.

6,000, with an upper income threshold of EUR 33,812[291]. In a second phase (from 20 April 2020), support amounted to up to EUR 2,000 per month for up to three months without any upper threshold. Small companies and liberal professions were also eligible.

The maximum amount of funding was EUR 6,000 for all applicants. In Hungary, the measure involved a one-off grant equal to the amount of the monthly minimum wage for skilled workers (approx. EUR 608)[292].

**Across Member States, the schemes were administered by various national institutions.** For instance, in Greece, the support scheme was administered by the Ministry of Development and Investment and was financed by the Partnership Agreement (PA) 2014-2020 through the European Structural and Investment Funds resources. In Italy, the income support was paid from the National Social Security Institute. In Austria, the Ministry of Economic Affairs administered the measure.

**The conditions for access varied widely from a Member State to another.** In Italy, there were a number of conditions attached to the support measure, which were amended in a second joint decree issued on 30 April 2020 to cover further categories, such as occasional workers not registered as self-employed as well as door-to-door sales person registered as sales persons. For instance, door-to-door sales persons had to be registered as self-employed before 24 February 2020 and with an annual income from this activity higher than EUR 5,000 for 2019. In Belgium, the self-employed could apply for the temporary COVID-19 "bridging right" if the government had obliged them to interrupt their activity in whole or in part; or if they were forced to interrupt their activity for a period of at least 7 consecutive calendar days as a result of the crisis, for example for self-isolation or a lack of raw materials[293].

**The duration of the measures benefiting the self-employed has also been different in different countries.** Some disbursements started immediately after the first lockdowns but were discontinued later: this was the case for Greece, where the measure ended in April 2021. Other countries launched specific measures targeting the self-employed later, such as Hungary (8 June 2021-18 December 2021). Finally, specific support was put in place at the beginning of the pandemic and is still ongoing in Italy and Belgium (at time of writing), for instance.

**Social partners have been involved to varying degrees in the design and implementation of the measures.** In Italy and Greece, Social partners were not involved at all whereas in Austria, trade unions and employers' organisations were consulted beforehand, approved the package and contributed to its implementation.

**In Member States in which specific measures were put in place for the self-employed, the number of beneficiaries has been substantial.** In Greece, 480,810 individuals benefitted from the measure for the period 17 March to 30 April 2020. The overall cost was EUR 384 million out of a budget of EUR 500 million. In addition, 178,538 beneficiaries received financial support for the period 1 May to 31 May 2020. In Italy, nearly 5 million people have applied for this measure and 83% of applicants received the benefit. In Hungary, the number of beneficiaries amounts to 76,800 for a total of HUF 16.8 billion or approx. EUR 46.7 million paid by national funds. In Austria, as of 31 July 2021, 1,887,598 applications had been submitted, of which 1,577,081 were positively completed and for a total amount of EUR 1,94

[291] Eurofound, 2020, Factsheet for measure AT-2020-13/212 – measure in Austria: Hardship case fund: Safety net for self-employed. Available at: https://static.eurofound.europa.eu/covid19db/cases/AT-2020-13_212.html.

[292] Eurofound, 2021, Factsheet for measure HU-2021-24/1969 – measures in Hungary: Compensation for self-employed. Available at: https://static.eurofound.europa.eu/covid19db/cases/HU-2021-24_1969.html.

[293] Eurofound, 2020, Factsheet for measure BE-2020-16/458 – measures in Belgium: Replacement income for self-employed (bridging right). Available at: https://static.eurofound.europa.eu/covid19db/cases/BE-2020-16_458.html.

billion. The beneficiaries were mainly active in trades, tourism and gastronomy, as well as in the social and health care sectors.

## 7.5 New working practices

### 7.5.1 The normalisation of remote work

**The COVID-19 pandemic has accelerated the digitalisation of work and normalised remote work.** Pre-pandemic, only 5.5% of employed people aged 20-64 in the EU worked from home on a regular basis. In 2021, this proportion reached 13.5%, with important regional differences. The top three NUTS level 2 regions recording the highest share of employed people usually working from home in the EU in 2021 were the Stockholm region of Sweden (40.5%), Eastern and Midlands in Ireland (39.3% of employed people) and Helsinki-Uusimaa in Finland (37%). Some workers found themselves more comfortable working from home, while others realised they preferred working from the office and preferred direct personal contacts. This major and quick shift to remote work during the pandemic also led some companies to put experimental and more flexible policies in place, while others imposed more rigid rules. These divergences can lead companies to compete for talent in a context of economies constrained by labour shortages, whereas debates on the adequate balance between productivity and flexibility are ongoing. The teleworking policy responses taken during the COVID-19 pandemic were diverse. They are summarised in the following table.

**The availability of teleworking varied widely across industries during the pandemic.** Unsurprisingly, industries associated with physical production – such as construction, transport, food services and health and social care - recorded the lowest rates of teleworking, whereas information and communication services, professional, scientific and technical services and financial services, as well as public administration, achieved an average rate of 50% working from home[294]. Moreover, the company's size also seems to play a role. Available data suggest that the larger the company, the higher the teleworking rate. Younger businesses also seemed to be more able to achieve higher rates of teleworking.

Table 11: Type of teleworking policy response with EU countries and regions examples and non-EU examples

| Coverage | Type of policy response | Example countries or regions / cities |
|---|---|---|
| EU and non-EU | Recommendation to adopt teleworking during the COVID-19 outbreak | Austria, Poland, Portugal, Slovakia, Spain |
| EU and non-EU | Long-term plans to maintain teleworking as a preferential option on a permanent basis | Milan (Italy) |
| EU and non-EU | Soft regulations on teleworking, e.g. guidelines | Belgium, France Greece |
| EU and non-EU | Modification of pre-existing regulations on teleworking | France, Hungary, Italy, Slovenia |
| EU and Switzerland | Mutual tax agreements on cross-border workers forced to telecommute during confinement | Belgium, France, Germany, Luxembourg, the Netherlands |
| EU and | Online platforms for teleworking and digital services | Austria, Ireland, Italy, Latvia, Portugal |

[294] Ker, D., Montagnier, P. and Spiezia V., 2021, *Measuring telework in the COVID-19 pandemic*, OECD Digital Economy Papers, No. 314, OECD Publishing, Paris. Available at: https://doi.org/10.1787/0a76109f-en.

| Coverage | Type of policy response | Example countries or regions / cities |
|---|---|---|
| non-EU | | |
| EU | Information and training on teleworking and digital services | Abruzzo (Italy), Braga (Portugal), Barcelona, Basque Country (Spain) |
| EU and Turkey | Remote professional training for SMEs | Île-de-France, Normandy, Occcitanie (France), Friuli Venezia-Giulia, Liguria (Italy) |
| EU and non-EU | Policies to support home-based businesses | The Netherlands, Vienna (Austria), Barcelona (Spain) |
| EU and non-EU | Financial support to SMEs for teleworking uptake | Spain, Styria, Tyrol (Austria), Apulia, Basilicata, Friuli Venezia-Giulia, Liguria, Lombardy, Molise, Piedmont (Italy), Basque Country (Spain) |
| EU | Co-working facilities to attract remote workers | Multiple German regions, Milan (Italy), Ireland |
| EU | E-residency | Estonia |
| Non-EU | Grants to attract remote workers | Vermont, Tulsa – Oklahoma (USA) |
| Non-EU | Start-up visas to attract digital entrepreneurs | Chile and circa 50 countries worldwide |

Source: Table elaborated from the OECD report, available at: https://www.oecd-ilibrary.org/docserver/5738b561-en.pdf?expires=1668516136&id=id&accname=guest&checksum=202AFCFEC3BFC310945600C2F443B2C9.

**Teleworking entails positive and negative implications for the workers themselves, the managers and the firms, but also urban and rural areas and the society as a whole.** Each of these impacts entails opportunities and threats, which were synthesised in a study by the OECD[295]. While remote work is now known to increase overall levels of productivity and reduce absenteeism, it can also lead to difficulties with employees' supervision, a reduced sense of community and mental and physical strain in the absence of safeguards. Some European countries have already legislated to limit the invasiveness of remote work and digitalization of working practices in the private sphere by enforcing a 'right to disconnect'. This means that employees should not be contacted and be expected to respond to communications outside of their normal working hours. Legislation enforcing the right to disconnect exists in France, Portugal and Belgium and discussions are ongoing for an EU-wide right to disconnect[296]. Experimental programmes are being tested to foster remote work in a healthy way. This can be exemplified by a Belgian scheme under the State aid Temporary Framework providing direct grants to companies proposing innovative projects to contribute to the mental and physical health of teleworkers[297]. In Ireland, the government launched a National Remote Working Strategy early 2021 to make remote working a permanent feature of the Irish workplace[298]. The action plan includes developing a "legally admissible code of practice on the right to disconnect from work" and

[295] OECD, 2020, 'Exploring policy options on teleworking: Steering local economic and employment development in the time of remote work', p. 17, *OECD Local Economic and Employment Development (LEED) Papers*, No. 2020/10, OECD Publishing, Paris, available at: https://doi.org/10.1787/5738b561-en.

[296] European Parliament, 2021, *'Right to disconnect' should be an EU-wide fundamental right, MEPs say*, 21 January 2021. Available at: https://www.europarl.europa.eu/news/en/press-room/20210114IPR95618/right-to-disconnect-should-be-an-eu-wide-fundamental-right-meps-say.

[297] European Commission, 2021, *Daily News 01/07/2021*. Available at: https://ec.europa.eu/commission/presscorner/detail/en/mex_21_3383.

[298] Eurofound, 2021, National Remote Work Strategy aims to make remote working a permanent option after the pandemic, Factsheet for measure IE-2021-3/1855 – Updated – measures in Ireland; https://static.eurofound.europa.eu/covid19db/cases/IE-2021-3_1855.html

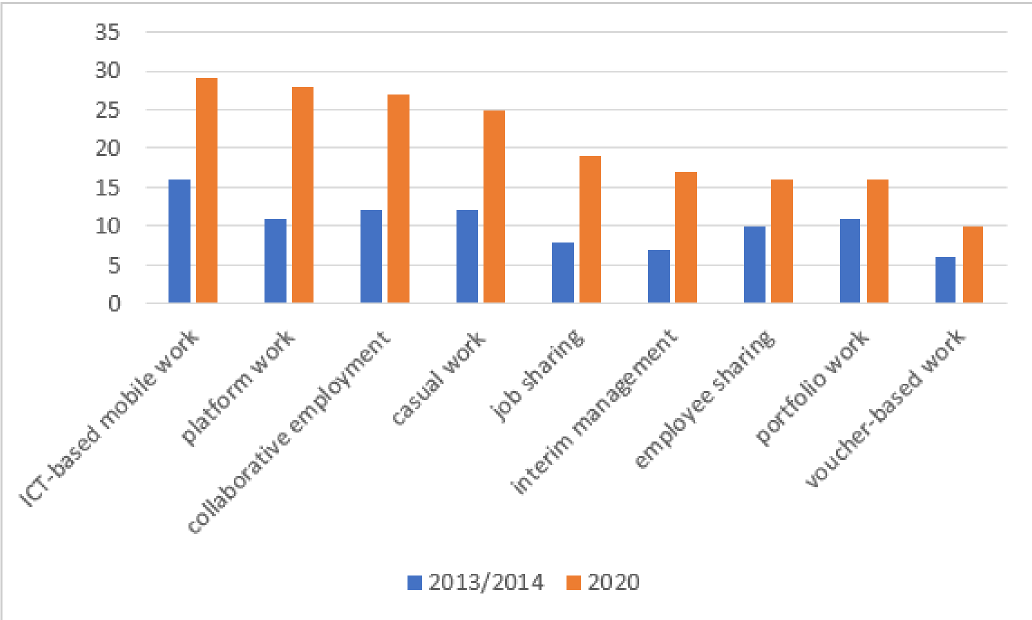
the development of work hubs to facilitate the improvement of work-life balance, especially for commuters and families.

### 7.5.2 New forms of employment

The COVID-19 pandemic has reinforced the development of new forms of employment, namely diversified forms of working activities going beyond the traditional one-to-one employment relationship. This umbrella term synthesises changes in working patterns, the shift towards contractual relationships, transformation in places of work and in the duration and schedule of work, and an increased use of information and communication technologies [299]. Eurofound has been studying these emerging trends since 2013 and mapped them under the following nine categories [300]: employee sharing, job sharing, voucher-based work, interim management, casual work, ICT-based mobile work, platform work, portfolio work, collaborative employment. These are summarised in Annex B.

While these new forms of employment have opened broad opportunities to increase labour market participation and inclusiveness and contribute to economic growth, they also raise issues around the questions of social protection and working conditions. The COVID-19 pandemic has led to an increase in some of these new forms of employment, particularly ICT-based mobile work and platform work. But while these are expected to continue to grow in combination with the digital and ecological transitions, others may have been negatively affected by the measures taken during the pandemic, particularly work requiring a good deal of personal contact between employees and managers.

Figure 41: New forms of employment in Europe in comparison to 2013-2014




*Sources: Eurofound 2015, 2020*

Source: Mandl, I., 2020, New forms of employment in Europe – How new is new?, Eurofound [301].

[299] Eurofound, 2022, *New forms of employment*. Available at: https://www.eurofound.europa.eu/topic/new-forms-of-employment.

[300] Eurofound, 2020, *New forms of employment: 2020 update*, New forms of employment series, Publications Office of the European Union, Luxembourg. Available at: https://www.eurofound.europa.eu/publications/report/2020/new-forms-of-employment-2020-update.

[301] Mandl, I., 2020, *New forms of employment in Europe – How new is new?*, Employment and labour markets, Eurofound, 15 December 2020. Available at: https://www.eurofound.europa.eu/publications/blog/new-forms-of-employment-in-europe-how-new-is-new.

**Platform work has been the object of growing attention since the pandemic**[302]. Indeed, the containment measures put in place to combat the spread of COVID-19 have largely contributed to developing platform work, such as ride-hailing and food delivery platforms[303]. In this context, the pandemic has shed light on the lack of social protection which platform workers face. Whereas these workers endure difficult working conditions, can face safety risks while travelling for work and were often exposed to high health risks during the COVID-19 pandemic, they often do not have access to sick pay and unemployment benefits, nor could they use the income support schemes in place during the pandemic. As independent contractors, these workers are often subordinated to the platforms they work for. Furthermore, vulnerable workers group such as migrants and undocumented workers represent a large share of platform contractors and may not be adequately reported in statistics. The European Commission has recently issued a proposal for a directive to protect the rights of platform workers[304].

**Good practice examples of platform work include the so-called "platform cooperatives".** To avoid the pitfalls of platform work, some workers have established these cooperatives, aimed at ensuring decent working conditions and adequate social protection. These structural changes shift the business model of large digital platforms to a collectively owned and workers friendly one, including adequate social protection. In March 2022, the bulk of these platform cooperatives were situated in France (29 cooperatives), whose legal framework facilitates the creation of such cooperatives, followed by Spain (13) and Germany (8)[305].

**Looking ahead, the impulse given by the COVID-19 pandemic to some new forms of employment could be used as an opportunity to enhance labour market integration of specific groups, foster entrepreneurship and innovation, enhance workers' employability and improve the quality and meaning of work.** This requires adequate support and careful consideration of the social protection and working conditions of these workers. At the EU level, key policy documents relevant for workers' social protection in the context of new forms of employment include the European Pillar of Social Rights in 20 principles[306] and the 2021 European Pillar of Social Rights Action Plan[307]. The latter underlines that digitalisation and the pandemic brought about changes that are of concern to levels of labour market participation and adequate working conditions. This issue was also raised by the Commission in its communication on Shaping Europe's Digital Future.

However, at the same time, the pandemic will have had a negative effect on other new forms of employment.

302 See e.g. the upcoming 2022 OECD Report on Platform economy.

303 Mandl, I., 2021, *Charting a positive path for platform workers*, Eurofound blog, 24 February 2021. Available at: https://www.eurofound.europa.eu/publications/blog/charting-a-positive-path-for-platform-workers.

304 European Commission, Proposal for a Directive of the European Parliament and of the Council on improving working conditions in platform work, COM (2021) 762 final, Brussels, 9.12.2021.

305 Steurer, B., 2022, *Platform cooperatives ensure caring in the sharing economy*, Eurofound blog, 31 March 2022. Available at: https://www.eurofound.europa.eu/publications/blog/platform-cooperatives-ensure-caring-in-the-sharing-economy.

306 The European Parliament, the Council and the Commission; European Pillar of Social Rights, European Union. https://commission.europa.eu/system/files/2017-11/social-summit-european-pillar-social-rights-booklet_en.pdf.

307 European Commission, 2021, The European Pillar of Social Rights Action Plan, Luxembourg. https://op.europa.eu/webpub/empl/european-pillar-of-social-rights/en/.

Case Study 10: Labour shortages

| **The return to work:** ***challenges in the labour market following the lifting of restrictions*** |
|---|
| **Issue of labour shortages and their drivers** |
| **Labour shortages increased in the aftermath of the pandemic.** Whereas EU SMEs had already identified the "availability of skilled staff or experienced managers" as an issue pre-pandemic[308], this became one of their main concerns in 2021. SMEs surveyed in the period between September-October 2021 declared that hiring suitable staff was the most important issue, especially for small enterprises in Austria and Bulgaria and for medium-sized enterprises in Austria, Bulgaria, Germany, Ireland and Romania[309]. This was especially so in the sectors which were most affected by closures – hospitality and tourism –, and in some countries more than others, the phenomenon of quitting job or switching employment sector increased a pre-existing mismatch between labour supply and needs. Evidence suggests that numerous companies across Europe ended up short-staffed as restrictions were lifted and the economy rebounded. In Ireland, an estimated 30% of the workers previously employed in the hospitality sector switched jobs and moved to other sectors[310].<br><br>**At the same time, the share of people available for work reached high levels in 2021.** In the first quarter of 2021, the unmet demand for employment – labour market slack - amounted to 15.5%[311] of the extended labour force – people working or potentially available to work. According to Eurostat, the term 'slack' includes part-time workers who want to work more, people who are available to work but do not look for work, and people who are looking for work but are not immediately available[312].<br><br>**The phenomenon known as the Great Resignation in the United States took place in Europe but to a lesser extent.** The COVID-19 pandemic may have been a catalyst to a phenomenon known as the "Great Resignation" in the United States, which also took place in other regions to a smaller degree, including Europe. In 2021, almost 4 million people left their job each month in the US, half a million more than 2019's monthly average[313]. The situation has been different in Europe. Pre-pandemic, the employment situation was marked by important diversities between countries[314]. Unlike the United States, European governments resorted to temporary measures to support companies and prevent job losses, especially through the use of short-time working schemes. |

[308] Muller, P. et al., 2021, *Annual Report on European SMEs 2020/2021: Digitalisation of SMEs*, Report prepared for the European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Publication Office of the European Union, Luxembourg. Available at: https://single-market-economy.ec.europa.eu/smes/sme-strategy/sme-performance-review_en.

[309] Table 2: Economy-wide assessment by SMEs in Member States of importance (on a scale of 1 to 10) of various challenges and issues faced by SMEs – September – October 2021, in: Muller, P. et al., 2022, *Annual Report on European SMEs 2021/2022: SMEs and environmental sustainability*, Report prepared for the European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Publication Office of the European Union, Luxembourg. Available at: https://single-market-economy.ec.europa.eu/smes/sme-strategy/sme-performance-review_en.

[310] Carswell, S., 2021, *The Great Recruitment of 2021: Pandemic leaves chronic staff shortages*, 20 November 2021. Available at: https://www.irishtimes.com/business/the-great-recruitment-of-2021-pandemic-leaves-chronic-staff-shortages-1.4733308.

[311] Eurostat, 2021, *Labour market slack – unmet need for employment – quarterly statistics*. According to Eurostat 'labour market slack' includes part-time workers who want to work more, people who are available to work but do not look for work, and people who are looking for work but are not immediately available. This compares to 'unemployed' which includes someone who is not working, is actively looking for a job, and is available to start working within two weeks. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Labour_market_slack_-_unmet_need_for_employment_-_quarterly_statistics.

[312] Ibid.

[313] Carbonaro, G., 2022, *No end in sight for the 'Great Resignation' as inflation pushes workers to seek better-paid jobs*, Euronews, 25 May 2022. Available at: https://www.euronews.com/next/2022/05/25/no-end-in-sight-for-the-great-resignation-as-inflation-pushes-workers-to-seek-better-paid-.

[314] Llach, L., 2021, *The Great Resignation: Is the American workplace revolution coming to Europe?*, Euronews, 1 December 2021. Available at: https://www.euronews.com/next/2021/12/01/the-great-resignation-is-it-an-american-revolution-or-is-the-trend-coming-to-europe.

These measures could have delayed the already planned resignations and a phenomenon of "big quit" in Europe [315] on a scale equivalent to the US, whereby European employees could think about a career transition while being protected by short-time work benefits. Employees also used the opportunity to change sectors. This meant that when the return to work happened in Europe, there were many vacancies in some sectors such as hospitality and tourism. In the US on the other hand, unemployment rates and resignation increased dramatically in that period as people withdrew from the labour force completely.

**Underlying motivators for withdrawing from the labour force are believed to be driven by a cultural change regarding individuals' priorities in life, adverse working conditions and insufficient remuneration.** The pandemic and the containment measures triggered or accelerated a shift in values whereby workers increasingly re-evaluated their jobs and careers in their lives. Simultaneously, many frontline workers experienced burn-out or decided to leave jobs with challenging working conditions characterised by low remuneration and few benefits or social protection. The lack of interaction with managers and colleagues [316], of career opportunities, of recognition and personal development aspirations also appear to drive decisions to quit [317]. Although the phenomenon took place on a smaller scale in Europe than in the US, this trend is still ongoing, as one in five employees surveyed in 44 countries in 2022 said they were considering changing job in the next 12 months [318].

**Labour shortages cannot be ascribed solely to the "big quit" phenomenon in Europe in the aftermath of the pandemic.** The disruption of intra-EU mobility and migration flows [319] including migrant workers returning home permanently during the pandemic, workers' reluctance to work in low-wage sectors and often with difficult working conditions also contributed to labour shortages in agriculture, healthcare, and many other sectors. In addition, some pre-existing shortages worsened with the pandemic: this is especially true for the healthcare sector, which is affected by a structural deficit of labour in the EU according to the World Health Organisation [320]. Eurofound notes that short-term working schemes did not discourage workers from returning to work; on the contrary, they have prevented massive lay-offs and a "disastrous shock to the labour market" [321] that would have led to massive increase in unemployment rates. Rather, the underlying motivations for labour shortages in some sectors would be driven by income insecurity, poor career prospects and the demanding nature of work combined with low pay and poor working conditions. This is further supported by the analysis

[315] Llach, L., 2021, *The Great Resignation: Is the American workplace revolution coming to Europe?*, Euronews, 1 December 2021. Available at: https://www.euronews.com/next/2021/12/01/the-great-resignation-is-it-an-american-revolution-or-is-the-trend-coming-to-europe.

[316] Gleeson, C., 2022, Big number of Irish staff threaten to leave jobs over lack of face time: New survey suggests a correlation between fall in output and morale for professionals, The Irish Times, 14 February 2022. Available at: https://www.irishtimes.com/business/work/big-number-of-irish-staff-threaten-to-leave-jobs-over-lack-of-face-time-1.4801904.

[317] AllesoverHR, 2021, *Bijna 1 op de 2 Nederlandse werknemers will de komende 12 Maanden op Zoek naar een andere baan*, 24 June 2021. Available at: https://www.allesoverhr.nl/nieuws/bijna-1-op-de-2-nederlandse-werknemers-wil-de-komende-12-maanden-op-zoek-naar-een-andere-baan/.

[318] PwC, 2022, *What 52,000 people think about work today*, PwC's Global Workforce Hopes and Fears Survey 2022. Available at: https://www.pwc.com/workforcehopesandfears.

[319] The Local, 2021, *Germany 'desperately searching' for skilled workers to plug shortage*, 23 June 2021. Available at: https://www.thelocal.de/20210623/germany-desperately-searching-for-skilled-workers-to-plug-shortage/.

[320] World Health Organization, 2022, *Ticking timebomb: Without immediate action, health and care workforce gaps In the European Region could spell disaster*, Media release, 14 September 2022. Available at: https://www.who.int/europe/news/item/14-09-2022-ticking-timebomb--without-immediate-action--health-and-care-workforce-gaps-in-the-european-region-could-spell-disaster.

[321] Adăscăliței, D. and Weber, T., 2021, *The pandemic aggravated labour shortages in some sectors; the problem is now emerging in others*, Eurfound 20 Juli 2021. Available at: https://www.eurofound.europa.eu/nb/publications/blog/the-pandemic-aggravated-labour-shortages-in-some-sectors-the-problem-is-now-emerging-in-others.

of surveys carried out with employees intending to resign[322]. Decisions regarding sectors to work in and working conditions by employees during the pandemic have led to shifts between sectors resulting in labour shortages in some sectors. The ECB warns against undesirable effects of short-time work schemes, in particular subsidising jobs that would not have been lost and conversely, subsidising economically unviable jobs[323]. Adverse effects could be mitigated by limiting job retention schemes in duration in order not to delay necessary economic restructuring, while ensuring that viable jobs are supported.

**Early retirement increased moderately in Europe during the pandemic.** COVID-19 caused a temporary decrease in the labour market activity of older workers in the eurozone between the end of 2019 and the beginning of 2021[324]. This can partially be explained by a marginal increase in early retirements in 2020 following the outbreak of COVID-19. From the results of the Survey of Health, Ageing and Retirement in Europe carried out between March-April 2020 and June 2021, it was possible to estimate that 8.7% of all active workers who retired after the outbreak of the pandemic stopped working earlier than planned directly because of the pandemic. This represents an estimate of 175,000 workers in the euro area, a phenomenon driven by containment measures, anxiety about health risks and policy measures protecting jobs. Early retirement due to the pandemic was more pronounced among individuals assessing their own personal state of health as relatively low and individuals who have not been vaccinated, which suggest that health concerns played a major role in the timing of retirement for older people during the pandemic. However, the adverse impact on the labour market has been relatively low in contrast with the United States. Since 2021, the European labour market and economy have largely recovered and the participation of older workers has exceeded pre-pandemic levels. In the first quarter of 2022, 41.5% of people aged 55-74 were active in the Eurozone, against 40.5% in the last quarter of 2019.

### Impact and lessons learnt

**The drivers of labour shortages in the EU are multiple and complex.** The issue of a mismatch in the labour market existed in several sectors before the pandemic and was aggravated by the experience of COVID. During the pandemic, many workers, especially from the less protected sectors such as hospitality, catering and tourism, increasingly looked for jobs with better quality, fair remuneration and more scope for personal fulfilment through work. This resulted in a mismatch which had the effect of shifting the power balance to the employees' benefit in some sectors. Some companies have reacted by offering competitive remuneration and more attractive working conditions[325]. This pressure on firms has resulted in benefits of various kinds, including private health insurance, support for training, reduced working hours, extra annual leave and a shorter work week to improve retention of the workforce[326]. The factors driving labour shortages in the aftermath of the lifting of containment measures also include issues of disrupted migration flows and inclusiveness of the labour markets for vulnerable social groups. As active workers remain reluctant to work in certain

[322] PwC, 2022, What 52,000 people think about work today, op. cit.

[323] Anderton, R. et al., 2020, *The impact of the COVID-19 pandemic on the euro area labour market*, ECB Economic Bulletin, Issue 8/2020, European Central Bank. Available at: https://www.ecb.europa.eu/pub/economic-bulletin/articles/2021/html/ecb.ebart202008_02~bc749d90e7.en.html.

[324] Botelho, V. and Weissler, M., 2022, *COVID-19 and retirement decisions of order workers in the euro area*, ECB Economic Bulletin, Issue 6/2022, European Central Bank. Available at: https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202206_02~67d6677c0e.en.html.

[325] EURACTIV Network and Allenbach-Ammann J., 2020, *Labour shortages felt all over Europe*, EURACTIV, 14 September 2022. Available at: https://www.euractiv.com/section/politics/news/labour-shortages-felt-all-over-europe/.

[326] Usano, C. and Paterson, A., 2022, *The Great Resignation: The Reaction in Places*, OECD Cognito, 14 June 2022. Available at: https://oecdcogito.blog/2022/06/14/the-great-resignation-the-reaction-in-places/.

sectors almost three years after the outbreak of the pandemic, the issue of mismatch between labour supplies and needs appears to be long-lasting. Resolving the problem will require a complex policy mix[327]. The OECD recommends local action to improve the matching of worker skills and jobs and creating better opportunities for youth, such as the "Continuing education and training employer's networks" started in the region of Berlin, Germany[328].

**Although the impact of the pandemic-driven early retirements in Europe was relatively low, this event highlighted some shortcomings in ensuring workers' occupational safety and health, especially of individuals with higher health risks** (see case study above)**.** Future policies could seek to improve the resilience of the European labour market in the event of future pandemics[329]. As many occupations cannot be performed remotely, sufficient Personal Protective Equipment and adequate protective measures would need to be foreseen and provided for[330].

**The long term impact of the containment measures on the youth has not yet been fully evaluated**. Yet, the consequences at the individual and micro-economic levels could be significant and long-lasting. Future policies could act proactively to consider the potential adverse effects of schooling interruptions for extended period of time and delayed entries into the labour market, taking into account disparities among social groups.

## 7.6 Concluding remarks

The pandemic and measures to deal with it have had wide ranging impacts on workers. The employed were relatively well-protected, through a range of support schemes, from the reduced demand for labour as a result of the effects of the crisis and measures to contain it on enterprises. Countering the reduced demand for workers overall, in a few sectors and some Member States there was a growth in demand for employment – for example in home deliveries and remote working digital technologies.

However, in the area of self-employment the situation was not as stable. Protecting employment had been the first priority and the self-employed only came into focus in a second phase of employment-related support measures. There were also significant variations between the self-employment related support measures operating in in Member States.

The pandemic and related support measures also highlighted areas where workers were more vulnerable to experiencing the negative consequences of the pandemic and could not always access support measures. Those working in 'essential' industries (e.g. food, schools, healthcare, etc.) remained exposed and were dependent on protective equipment. Some sectors also were particularly exposed, for example tourism and hospitality, the cultural and creative industries (see section 6.3), and retail. Highlighting such vulnerabilities on occasion had positive unintended consequences in that measures to protect such workers were legislated (e.g. Irish meat packers). Impacts on part-time employees, women, the youth and foreign born (migrants) also were more severe than for other workers. The challenge for the future is to ensure that such workers are better protected should a similar crisis eventuate.

[327] Weber, T. and Adăscăliței, D., 2021, *Tackling labour shortages in EU Member States,* Eurofound, 20 Juli 2021. Available at: https://www.eurofound.europa.eu/nb/publications/report/2021/tackling-labour-shortages-in-eu-member-states.

[328] Usano, C. and Paterson, A., 2022, *The Great Resignation: The Reaction in Places*, OECD Cognito, 14 June 2022. Available at: https://oecdcogito.blog/2022/06/14/the-great-resignation-the-reaction-in-places/.

[329] Botelho and Weissler (2022). "*COVID-19 and retirement decisions of order workers in the euro area*", ECB Economic Bulletin, Issue 6/2022. Available at: https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202206_02~67d6677c0e.en.html.

[330] Pouliakas, K. and Branka, J., 2020, *EU Jobs at Highest Risk of Covid-19 Social Distancing: Will the Pandemic Exacerbate Labour Market Divide?*. IZA Discussion Paper No. 13281, Available at: https://ssrn.com/abstract=3608530 or http://dx.doi.org/10.2139/ssrn.3608530.

The pandemic and measures to combat it also supported the digital transition in existing industries (for example by increasing home-based work) and new forms of employment enabled by digital technologies such as the platform economy.

Emerging from the pandemic it appeared that there has been a mismatch in labour demand and supply in some sectors as workers who had been at home using various forms of income support had decided to shift sector, and in some instances older workers had decided not to return to employment.

# 8 CONCLUSIONS AND LESSONS LEARNED

KEY FINDINGS

The measures adopted to combat the COVID-19 pandemic succeeded in averting a large-scale economic collapse of unprecedented proportions in the EU economy and society. From a social point of view the main conclusions are that:

- The measures adopted succeeded in protecting household incomes overall. Although the position of the self-employed did not get as much attention initially, efforts to look after the self-employed did follow the initial focus on the employed.
- The crisis revealed that there are groups of workers that are not covered by social security nets. These include workers in various forms of precarious and non-standard employment. In some instances, as a result of attempts to access support measures, there have been ameliorations in working conditions. More should be done to prepare for future crises.
- In the medium to longer term, indirect consequences of measures to combat the pandemic have contributed to a mismatch of the labour supply and demand in some sectors, resulting in inefficient resource allocation between firms and sectors.

From an economic perspective, the main conclusions are that:

- There was a wide variation in the effect of measures on various sectors in the economy. However, at the end of 2021, considerable efforts were still required in some hardest hit sectors compared to pre-pandemic levels.
- The massive financial support provided to industry has protected the economy from collapse but has also created an overhang of bankruptcies that did not occur. This has implications for the management of industrial policy: how to design a soft landing for industry that will ensure continued sustainable future innovation and growth.
- Several key lessons have been identified, including the need for greater co-ordination, evaluation of instruments such as the Temporary Framework and the EUDCC, the need to act to protect fragile groups of workers and to be better prepared for future events similar to the COVID-19 pandemic.

In this section we draw conclusions and make recommendations for the future with regards to the social and economic consequences of COVID-19 related measures, based on the research presented in the preceding sections. First we will look at social consequences, then economic consequences, and then we will move to assessing the lessons learned and industrial policy implications.

## 8.1 Social consequences

Based on previous experience with the crisis of 2008, the COVID-19 related measures were taken rapidly, and at a large scale. The most immediate and wide-ranging social consequence of the COVID-19 measures was the retention of high levels of employment in the face of a potentially catastrophic level of business bankruptcies. The reduction in employment was substantially smaller than that warranted by the declines in turnover experienced by organisations, public and private. The continued payment of wages and salaries enabled the continuation of some level of social normality in very abnormal circumstances. Had that not been the case, the consequences might have been extreme. This was achieved through the various TF support schemes and other measures such as SURE.

In general, the immediate focus of COVID-19 measures was on the employed and safeguarding household income. This often meant that attention to the self-employed only followed with a lag, which sometimes had unfortunate consequences for the self-employed, especially for those who had trouble accessing other forms of support.

The way in which support was provided also revealed the fragility of those involved in precarious and non-standard work, as for example in some segments of the cultural and creative industries. Such individuals often fall through various social safety nets because of the nature of their work – official statistics do not capture their activities and support systems are not devised for them. Others include gig/digital platform workers, young people, the low-skilled, migrants, people with health limitations and women with care responsibilities. A good deal of the burden of adjustment fell on them.

There were also positive unintended consequences because of the difficulties in accessing COVID-19 support measures where the workers involved were unionised and could take collective action at national level to improve working conditions for the future, as was the case in the meat processing industry in Ireland and Germany.

There has also been a medium-long term consequence, because while at home not working, or working from home, some employees re-assessed their situation and aspirations and have either not returned to work (particularly older workers) while others, such as workers in the hospitality and catering industry, have decided on career changes that provide better quality of work and in-work protection. In sectors where workers have not returned there have been shortages of supply and particularly of experienced workers as conditions normalise.

## 8.2 Economic consequences

From an economic/industry point of view, the avoidance of a cataclysmic collapse was the main achievement of the COVID-19 related measures. Different sectors were impacted to different degrees and recovered by the end of 2021/ 2022 to a different extent, but overall, the economy could survive until such time as vaccines were developed at the end of 2020 and mass vaccination roll-outs got under way during 2021. Support provided was delivered and amended in such a way as to make it flexible (e.g. through the TF) and able to meet business needs.

The other side of the massive financial support provided to industry was the 'over-reduction' in declarations of bankruptcies – well below what would be expected during the normal course of business. This has had some knock-on consequences because it means that businesses that would not in the normal course of things have survived, have been kept going. Such businesses then retain labour that would normally have been released to more competitive businesses in the on-going process of creative destruction underlying an innovative economy.

The implications of such an overhang of bankruptcies for the near to medium term are challenging, especially when combined, as at time of writing, with the energy crisis and the fall-out of Russia's invasion of Ukraine.

The closure of borders and break down of supply chains both within the EU and globally has also focused attention on interdependencies and the need for robust supply chains and development of organisational resilience. The Commission's Updated Industrial Strategy has already taken these issues on board.

One further important consequence of measures to combat the pandemic has been the support for the Digital Transition. Employees not able to go to their normal place of work due to COVID-19 related restrictions have been linked to their offices through digital means and working from home became much more acceptable. Cultural institutions found ways to provide performances online, business meetings and international trade fairs were conducted online, and so forth. The extent to which these changes will be permanent will emerge over the coming year or two.

## 8.3 Lessons learned and recommendations

The experience of dealing with the pandemic has provided several lessons.

In the first place, there is the value of co-ordinated action at EU level when implementing measures. This was most obvious when the consequences of Member States' border closures became apparent throughout the EU. However, the value of such co-ordinated action was also apparent with regards to for example vaccine acquisition.

Throughout the interview programme, stakeholders how important it was for the parties involved to work together: industry/ industry associations, workers' organisations/ unions and regional/ national governments and liaison with the EU when developing approaches to combat the pandemic and ensuring that they are relevant and implementable.

There is scope for improving the measures developed, whether the EUDCC or TF instruments. This includes reviewing the design, administration and evaluation of the measures in question in some depth and detail. The scope of this study has not been such as to provide specific feedback on measures, but there is clearly room for improvement.

The study has highlighted the plight of some more fragile groups in society, for example some segments of the cultural and creative industries where employment is non-standard and precarious, and food processing. From the literature surrounding these groups and their situation it is clear that this is not always the first time that such weaknesses have become apparent – each time there is a crisis this happens. However, as soon as the crisis is over, their situation is forgotten. Action needs to be taken.

Finally, there is a need to be better prepared in the future for an eventuality such as the COVID-19 pandemic. Some form of generic preparation can be done – for example how to keep the economy going in the case of a nuclear event, or a major climate event – or series of events. Those involved in delivering support often noted that they were making things up as they went along, which did not always have ideal results.

With regards to future industrial policy, the research suggests that the key issue is about how to ensure that the EU's business population remains dynamic and can effectively and efficiently reallocate resources in order to remain competitive, particularly in a global context. This requires supporting the transition of SMEs and start-ups to adopt more productive digital business models, and undertake the green transition. To achieve these goals substantial support for skills development and appropriate access to finance is required.

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# ANNEX A: AMENDMENTS TO THE TEMPORARY FRAMEWORK

**The first amendment**

A first amendment to the TF was brought on 03 April. It provided for 5 additional types of aid:

(i) Support for coronavirus and other relevant antiviral related research and development (R&D) through grant aid in the form of direct grants, repayable advances or tax advantages. A bonus could be granted for cross border cooperation projects between Member States.

(ii) Support for the construction and upscaling of testing facilities through direct grants, tax advantages, repayable advances and no-loss guarantees to support investments enabling the construction or upscaling of infrastructures needed to develop and test products useful to tackle the coronavirus outbreak, up to first industrial deployment. A bonus could be granted for cross border cooperation projects between Member States and if investment was concluded within two months after the granting of the aid.

(iii) Support for the production of products relevant to tackle the coronavirus outbreak through direct grants, tax advantages, repayable advances and no-loss guarantees to support investments enabling the rapid production of coronavirus-relevant products. A bonus could be granted for cross border cooperation projects between Member States and if investment was concluded within two months after the granting of the aid.

(iv) Targeted support in the form of deferral of tax payments and/or suspensions of social security contributions to further reduce liquidity constraints on companies and to preserve employment in those sectors, regions or for types of companies that are hardest hit by the outbreak.

(v) Targeted support in the form of wage subsidies for employees to help limit the impact on workers by contributing to the wage costs of companies in sectors or regions hardest hit by the outbreak and would otherwise have had to lay off personnel.

The amendment also expanded on existing types of support that can be provided. For example, it enabled granting up to the nominal value of EUR 800 000 per company, zero-interest loans, guarantees on loans covering 100% of the risk, or provide equity. This could be combined also with de minimis aid (to bring the aid per company to up to EUR 1 million) and other types of aid. It should be particularly useful to address urgent liquidity needs of SMEs promptly. The amendment would be in place until the end of December 2020. To ensure legal certainty, the Commission would assess before then if extension is needed.

**The second amendment**

The second amendment was implemented on 08 May 2020. The focus of the second amendment was on the needs of businesses to have sufficient capital to remain afloat. There would also be provision for support through subordinated debt.

*Recapitalisation aid to companies*

Emergency measures taken by Member States to manage the coronavirus outbreak have affected the ability of many companies to produce goods or supply services, resulting in losses that have decreased their equity and reduced their ability to borrow. The second amendment therefore expanded the TF to enable well-targeted public interventions in the form of recapitalisation aid to non-financial companies in need, to reduce the risk to the EU economy. The TF provides for safeguards to avoid undue distortions of competition in the Single Market.

i. Conditions on the necessity, appropriateness and size of intervention through recapitalisation aid specify that it should only be granted if no other appropriate solution is available. It must also be in the common interest to intervene as in the case of avoiding social hardship and market failure due to significant loss of employment, the exit of an innovative or a systemically important company, or the risk of disruption to an important service. Finally, the aid must just enable the viability of the company and not go beyond restoring the beneficiary's capital structure to before the coronavirus outbreak.

ii. Conditions on the State's entry in the capital of companies and remuneration specify that the State must be sufficiently remunerated for the risks it assumes through the recapitalisation aid. Moreover, the remuneration mechanism needs to incentivise beneficiaries and/or their owners to buy out the shares acquired by the State using State aid to ensure the temporary nature of the intervention.

iii. Conditions regarding the exit of the State from the capital of the companies concerned specify that beneficiaries and Member States are required to develop an exit strategy, in particular as regards large companies that have received significant recapitalisation aid. A restructuring plan for the beneficiary will have to be notified to the Commission If after six years the exit of the State is in doubt for publicly listed companies, or up to seven years for other companies.

iv. Beneficiaries would be subject to bans on dividends and share buybacks until the State has exited in full. Moreover, until at least 75% of the recapitalisation is redeemed, there is a strict limit on the remuneration of management, including a ban on bonus payments, applied with a view to incentivising beneficiaries and their owners to buy out the state-owned shares as soon as the economic situation allows.

v. A prohibition of cross-subsidisation and an acquisition ban was put in place to ensure that beneficiaries do not unduly benefit from the recapitalisation aid by the State to the detriment of fair competition in the Single Market. They cannot use the aid to support economic activities of integrated companies that were in economic difficulties prior to 31 December 2019. Moreover, until at least 75% of the recapitalisation is redeemed, beneficiaries other than SMEs are in principle prevented from acquiring a stake of more than 10% in competitors or other operators in the same line of business, including upstream and downstream operations.

Under this amendment, Member States could notify recapitalisation schemes or individual aid measures. Companies that were already in difficulty on 31 December 2019 are not eligible for aid under the Temporary Framework.

From the point of view of public transparency and reporting, where recapitalisation aid was granted, Member States have to publish details on the identity of the companies that have received aid and the amount within three months of the recapitalisation. Beneficiaries, other than SMEs, also have to publish information on the use of the aid received (including on how aid supports obligations linked to the green and digital transformation).

The Commission recognised in this amendment that in the recovery phase companies will require additional large-scale private and public investments to deal with the challenges and seize the opportunities of the green and digital twin transitions.

**The third amendment**

On 29 June 2020 the third amendment to the TF was set out. There was to be a focus on support to SMEs and start-ups; incentives to encourage private investors to participate in recapitalisation and protection of the single market.

*Support to support micro and small companies including start-ups*

SMEs had been particularly affected by the liquidity shortage caused by the economic impact of the coronavirus outbreak, exacerbating their existing difficulties to access financing compared to larger enterprises. The third amendment extended the TF so that public support under the TF could be provided to all micro and small companies, even if they were already in financial difficulty on 31 December 2019. This would apply, unless such companies are in insolvency proceedings, have received rescue aid that has not been repaid, or are subject to a restructuring plan under State aid rules. Given their limited size and involvement in cross-border transactions, temporary State aid to micro and small companies is less likely to distort competition in the Internal Market than State aid to larger companies.

This amendment also effectively increases the possibilities to support start-up companies, the vast majority of which fall are micro or small-enterprises, especially innovative ones which may be loss-making in their high-growth phase and are key to the economic recovery of the Union.

*Incentives for private investors to participate in coronavirus-related recapitalisation aid measures*

The conditions for recapitalisation measures under the TF for those cases where private investors contribute to the capital increase of companies together with the State were amended to encourage capital injections with significant private participation in companies with a view to limiting the need for State aid and the risk of competition distortions.

Where the State grants recapitalisation aid and private investors also make a significant contribution (at least 30% of new equity) at the same conditions as the State, the acquisition ban and the cap on the remuneration of the management are limited to three years. The dividend ban is lifted for the holders of the new shares as well as for existing shares, provided that the holders of those existing shares are altogether diluted to below 10% in the company. In line with the principle of neutrality towards public or private ownership of the TFEU this will also enable companies with an existing State shareholding to raise capital from their shareholders similar to private companies.

*Protection of the Single Market and ensuring a level playing field*

The amendment clarified that aid should not be conditioned on the relocation of the production activity or of another activity of the beneficiary from another country within the European Economic Area (EEA) to the territory of the Member State granting the aid, since such a condition would be particularly harmful for the internal market.

**The fourth amendment**[331]

On 13 October 2020 further amendments were brought about.

*Prolongation of the Temporary Framework*

The TF was to expire on 31 December 2020, except for recapitalisation measures that could be granted until 30 June 2021. This amendment prolonged the provisions of the TF until 30 June 2021, with recapitalisation measures being prolonged until 30 September 2021. The Commission undertook to review and examine the need to further prolong or adapt the TF before 30 June 2021.

*Support for uncovered fixed costs of companies*

This amendment enabled Member States to provide targeted aid to support companies facing a decline in turnover during the eligible period of at least 30% compared to the same period of 2019 due

[331] European Commission - Press release State aid: Commission prolongs and expands Temporary Framework to further support companies facing significant turnover losses Brussels, 13 October 2020

to the coronavirus outbreak. The support would contribute to beneficiaries' fixed costs that are not covered by their revenues, up to a maximum amount of EUR 3 million per undertaking. The aim of this temporary support was to help prevent the deterioration of their capital, maintain their business activity and provide a strong recovery platform.

*Exit of the State from previously State-owned companies*

Conditions for recapitalisation measures under the Temporary Framework were amended, in particular for the State's exit from the recapitalisation of enterprises where the State was an existing shareholder prior to the recapitalisation. The amendment allowed the State to exit from the equity of such enterprises through an independent valuation, whilst restoring its previous shareholding and maintaining safeguards to preserve effective competition in the Single Market.

*Extension of the temporary removal of all countries from the list of "marketable risk" countries under the Short-term export-credit insurance Communication*

Finally, taking into account the continued general lack of sufficient private capacity to cover all economically justifiable risks for exports to countries from the list of marketable risk countries, the amendment provides for an extension until 30 June 2021 of the temporary removal of all countries from the list of "marketable risk" countries under the Short-term export-credit insurance Communication.

**The fifth amendment**

28 January 2021 a further amendment to the TF was carried out.[332]

*Prolongation of the Temporary Framework*

Set to expire on 30 June 2021, except for recapitalisation measures that could be granted until 30 September 2021, all measures set out in the TF, including recapitalisation measures, are prolonged until 31 December 2021.

*Increased aid ceilings*

Ceilings set out in the TF for certain support measures were increased (effectively doubled). The new ceilings are 225,000 per company active in the primary production (agriculture) - (previously €100,000), EUR 270,000 per company active in the fishery and aquaculture sector (previously EUR 120,000), and EUR 1.8 million per company active in all other sectors (previously EUR 800,000). As before, these could be combined with de minimis aid of up to EUR 200,000 per company (up to EUR 30,000 per company operating in the fishery and aquaculture sector and up to EUR 25,000 per company operating in the agriculture sector) over three financial years, subject to compliance with the requirements of the relevant de minimis.

For companies especially hit by the coronavirus crisis, with turnover losses of at least 30% during the eligible period compared to the same period of 2019, the State can contribute to the part of the fixed costs of companies that are not covered by their revenues, in an amount up to EUR 10 million per company (previously EUR 3 million).

*Conversion of repayable instruments into direct grants*

Until 31 December 2022, Member States could convert repayable instruments (e.g. guarantees, loans, repayable advances) granted under the TF into other forms of aid, such as direct grants, provided the

[332] European Commission - Press release, State aid: Commission prolongs and further expands Temporary Framework to support economy in context of coronavirus outbreak, Brussels, 28 January 2021

conditions of the TF were met. In principle, such conversion may not exceed the new ceilings for limited amounts of aid as set out above. This aims to provide incentives for Member States to choose, in the first place, repayable instruments as a form of aid.

*Extension of the temporary removal of all countries from the list of "marketable risk" countries under the Short-term export-credit insurance Communication*

The amendment provides for an extension until 31 December 2021 (currently until 30 June 2021) of the temporary removal of all countries from the list of "marketable risk" countries under the Short-term export credit insurance.

**The sixth amendment**

*State aid: future of the Temporary Framework to support economic recovery*

The sixth amendment, of 18 November 2021, prolonged until 30 June 2022 the State aid TF (currently set to expire by 31 December 2021). The limited prolongation would provide the opportunity for a progressive and coordinated phase-out of crisis measures, without creating cliff-edge effects. At the same time the Commission would continue to monitor the rise in COVID-19 infections and other risks to the economic recovery.

To accelerate the recovery, two new measures were introduced to incentivise forward-looking private investment and solvency support measures, for an additional limited period.

*Investment support* measures to help Member States address the investment gap left behind by the crisis (particularly to accelerate the green and digital transitions). The measure includes safeguards to avoid undue distortions to competition (e.g. to target a wide group of beneficiaries and the aid amounts should be limited in size). This instrument is available to Member States until 31 December 2022.

*Solvency support* measures to leverage private funds and make them available for investments in SMEs, including start-ups, and small midcaps by grant of guarantees to private intermediaries, creating incentives to invest in these types of companies and provide them with easier access to such equity financing. This would mitigate the increasing levels of indebtedness of companies. This instrument would be available until 31 December 2023.

Furthermore the amendment also i) prolonged from 30 June 2022 until 30 June 2023 the possibility for Member States to convert repayable instruments granted under the TF into other forms of aid, such as direct grants; ii) proportionally adapted to the extended duration the maximum amounts of certain types of aid; iii) clarified the use of the exceptional flexibility provisions of the Commission's Rescue and Restructuring Guidelines; and iv) prolonged the adjusted list of non-marketable risk countries, in the context of the short-term export credit insurance (STEC), for an additional 3 months (from 31 December 2021 to 31 March 2022).

# ANNEX B: EUROFOUND'S CATEGORISATION OF NEW FORMS OF EMPLOYMENT

| Category | Description |
|---|---|
| Employee sharing | May be strategic or ad hoc. Strategic employee sharing is an innovative form of cooperative HR management, where a group of employers forms a network that hires one or several workers to be sent on individual work assignments with the participating employer companies. Workers regularly rotate among the employers and work exclusively for them, but the network itself does not aim to make a profit. Ad hoc employee sharing is a tool for dealing with temporary crisis situations within individual companies where an employer that temporarily cannot provide work for its staff sends them to work at another company. The employment contract between the initial employer and the worker is maintained while the worker is incorporated into the work organisation of the receiving employer. The intention is that the placement is temporary and the worker will return to work with the initial employer. |
| Job sharing | Refers to employment relationships in which one employer hires several workers, but normally just two, to jointly fill a single full-time position. It is a form of part-time work, where the purpose is to ensure that the shared job is permanently staffed. The job sharers are a group formed by the employer as opposed to a self-constituted employee group. In some countries, job sharers have their own individual contracts of employment while sharing the pay and benefits of a full-time job on a pro rata basis. In other countries, job sharing is based on a single contract including two or more workers. Job sharing should not be confused with work sharing, with the latter corresponding to the short-term reduction in working hours to spread work among workers, often used as an alternative to job losses. |
| Voucher-based work | A form of employment relation where an employer acquires a voucher from a third party (typically a governmental authority) to be used as payment for a service from a worker, as opposed to cash. Vouchers cover both pay and social security contributions. The services provided are often specific tasks or fixed-term assignments. Eurofound's research on new forms of employment identified the emergence of voucher-based work mainly within household services and agriculture. Concentration in these two sectors has occurred because they are often core areas of undeclared work, and such systems aim to provide a tool for formalisation of the activity, and especially simplifying the process of hiring a worker by either private households or farmers. |
| Interim management | Is where a company 'leases out' workers to other companies temporarily and for a specific purpose. Interim managers are highly specialised experts who are expected to solve a specific management or technical challenge or assist in economically difficult times. Receiving companies thus often use interim managers in times of crisis or restructuring or to strategically prepare for company growth, innovation or diversification. Such companies are looking for temporary additional management capacity to achieve a specific objective and an interim manager gives access to specialist knowledge without long-term commitments. |
| Casual work | Is 'work which is irregular or intermittent with no expectation of continuous employment', as defined by the European Parliament.' It is a type of work where the employment is not stable and continuous, and the employer is not obliged to regularly provide the worker with work, but has the flexibility of calling them in on demand, with workers' prospects of getting such work dependent on fluctuations in the employers' workload. Casual work is typically characterised by low income, job insecurity, poor social protection and little or no access to human resources benefits. |
| ICT-based mobile work | Refers to work arrangements carried out at least partly, but regularly, outside the 'main office', be that the employer's premises or a customised home office, using information and communication technologies (ICT) for online connection to shared company computer systems. Work thus takes place wherever and at any time it suits the work |

| Category | Description |
|---|---|
| | activities, task, business schedule and lifestyle of the worker, not necessarily at a specific place but also 'on the road.' Consequently, ICT-based mobile work takes place in ever-changing situations, but with a need to collaborate with other workers or clients, hence the requirement to be connected to shared resources to achieve a joint goal. |
| Platform work | Uses an online platform to enable organisations or individuals to access other organisations or individuals to solve specific problems or to provide specific services in exchange for payment. It is work based on the performance of individual tasks or projects rather than a continuous employment relationship. A larger task is usually divided up into smaller subtasks, or 'micro tasks', that are independent, homogenous and produce a specific output. These tasks are carried out separately, resulting in a widespread, even global, division of tasks. |
| Portfolio work | In Eurofound's research is understood as small-scale contracting by freelancers, the self-employed or micro-enterprises who work for a large number of clients simultaneously. The main features of portfolio work are that it is self-managed, income-generating work which can span across industries. Moreover, portfolio workers undertake a range of work that is not dependent on any single organisation and as such, it requires continuous adaptation to different work situations and clients' requirements. |
| Collaborative employment | Is where freelancers, the self-employed or micro enterprises cooperate in some way to overcome limitations of size and professional isolation. Eurofound research into new forms of employment identified the following types of collaborative employment: umbrella organisations, which offer specific administrative services such as invoicing clients or dealing with tax issues; co-working, involving the sharing of work space and back-office and support tasks; and cooperatives, which are jointly owned and democratically controlled enterprises characterised by intensive cooperation among the members in the fields of production, marketing and strategic management. |

Source: Table elaborated from Eurofound, *New forms of employment*, 2022, op. cit.. Available at: https://www.eurofound.europa.eu/topic/new-forms-of-employment.

This study considers the consequences of measures aimed at countering the effects of COVID-19, in particular the Temporary Framework for State aid, EU Digital COVID Certificates and other measures implemented by EU Member States. The study examines the consequences of the measures on industry, small and medium-sized enterprises and focuses on the cultural and creative industries. Consequences for workers and working practices were also considered, and lessons learnt identified.

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