



# REFORMING THE ECONOMIC AND MONETARY UNION

## CORONOVIRUS CRISIS

Pavla Netušilová

# REFORMING THE ECONOMIC AND MONETARY UNION: CORONAVIRUS CRISIS



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## List of Abbreviations

EU	European Union
MS	Member States of European Union
AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czechia
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
EL	Greece
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SK	Slovakia
SL	Slovenia
SE	Sweden

# Introduction

*This publication **Reforming the Economic and Monetary Union: Coronavirus Crisis** should help to understand students of my course on European Economic Integration the economic substance of the COVID-19 crisis and its impacts on economies of the EU Member States. COVID-19 pandemic resulted in several lockdowns with strong containment measures in the EU that temporarily hibernated factors of production. As of December 4, 2022, there have been 2,138,988 deaths in Europe overall due to the coronavirus infection since the first recorded death in France on February 15, 2020.*

*Beyond the health and human tragedy of the coronavirus, it is now widely recognised that the pandemic triggered the most serious economic crisis since the Second World War. The nature of the crisis has been unprecedented: beyond the short-term repeated health and economic shocks, there will be the long-term effects on human capital, productivity and behaviour of all economic agents such as households, firms and government.*

*The COVID-19 crisis touched almost every field in economy. International supply chains broke down and put the phenomenon of globalization under question. The dependence on the cheapest of suppliers and a high degree of division of labour revealed lot of drawbacks. Suddenly, the usual way of living and working had to be changed. As a result, the labour market experienced unprecedented levels of short-time work and huge temporary lay-offs.*

*In addition, financial markets tumbled and monetary policy faced new challenges on top of an already tense situation. Governments struggled to provide cash and find ways to compensate affected people and businesses. The importance of epidemiologists and economists increased when government designed containment measures and implemented them. In the absence of a worldwide pandemic for over a century, relatively little research on the economics of pandemics existed.*

*A few working papers on the Spanish flu offered insights into the nature of health–wealth trade-offs<sup>1</sup>, a few others explored long-run consequences of on economic outcomes.<sup>2</sup> The lack of economic literature analysing possible economic impact of pandemic did not last long. On the onset of Covid-19, the major economists dropped their ongoing work and refocused. They started to use well-established economic theories and statistical modelling on quickly expanding real-time data to fill out a scientific vacuum in the economic field.<sup>3</sup>*

*During pandemic, it was not easy to properly assess effectiveness of adopted economic related epidemiologic measures between the EU Member States. However, the backward look on economic data enables it. Therefore, one of the goals of this online publication is to contribute to the evaluation and discussion about national economic and epidemiologic concepts adopted in response to COVID-19. In addition, it should also highlight steps introduced at the EU that speed up the European Economic Integration.*

*Pavla Netušilová*

*Pilsen, 2022*

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<sup>1</sup> Barry, J M (2004), *The Great Influenza: The Epic Story of the Deadliest Plague in History*, Penguin Books. Keogh-Brown, M R, S Wren-Lewis, W J Edmunds, P Beutels and R D Smith (2009), “The possible macroeconomic impact on the UK of an influenza pandemic”, *Health Economics* 19(11). Correia, S., Luck, S. & Verner, E. (2020). Pandemics depress the economy, public health interventions do not: Evidence from the 1918 Flu.

<sup>2</sup> Almond, D. (2006). Is the 1918 influenza pandemic over? Long-term effects of in utero influenza exposure in the post-1940 US population. *Journal of Political Economy*, 114(4), 672–712.

<sup>3</sup> *Economics at the time of COVID-19* edited by Wyplosz, C., Weder di Mauro, B. (2020); Wyplosz, C. (2021). Editor's foreword. *Covid economics: Vetted and real-time papers* (83)

# PART 1:

## THE ECONOMIC DEVELOPMENT IN THE EU BEFORE PANDEMIC COVID-19

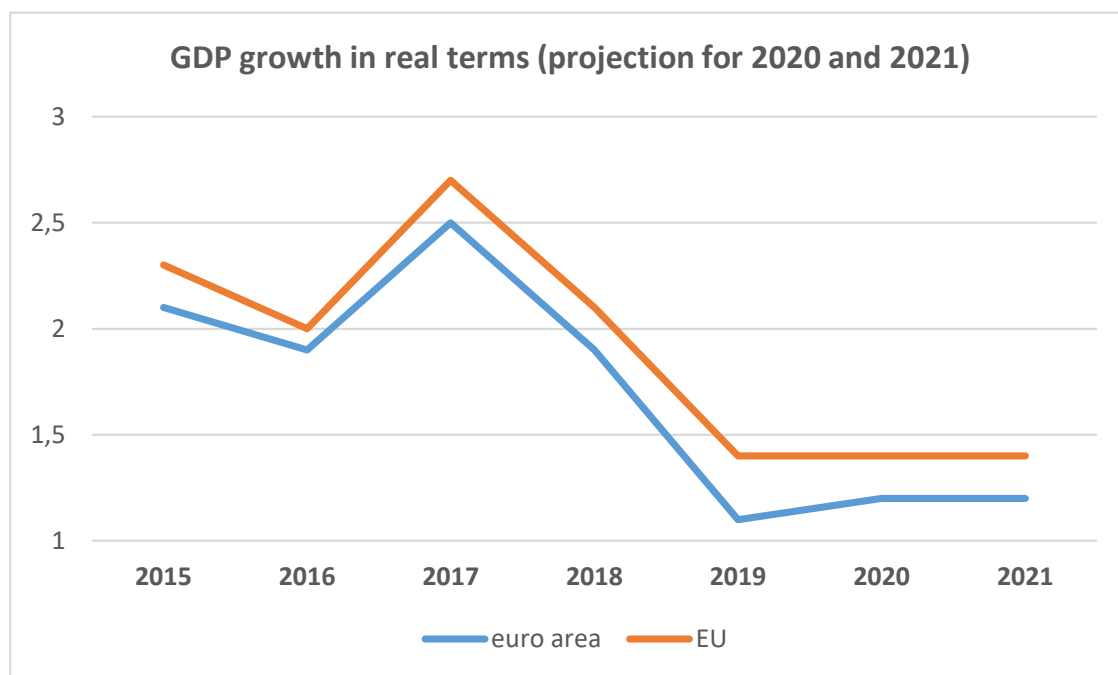
- *Before the outbreak of COVID-19 pandemic in 2019, the EU economy faced very high uncertainty mainly related to pressures from international trade that contributed to global economic slowdown and prospects of subdued economic growth in the EU. According to the Commission's autumn 2019 forecast, GDP should had continued to grow in all MS in 2020*
- *The global outlook for 2020 and 2021 was fragile. The trade volume growth (goods and services) almost stalled at the end of 2019. The US-China trade war<sup>4</sup> significantly contributed to the weakness of global demand. The OECD estimated that the rise in US-China tariffs could had reduced global GDP growth by 0.3-0.4 pp in 2020<sup>5</sup>*
- *In 2019, the monetary policy in euro area remained very loose by historical standards. The ECB decided to renew monthly asset purchases to keep nominal long-term rates very low. The euro area's inflation in 2020 and 2021 was forecast to increase very mildly. Higher inflation was expected in the non-euro area MS*
- *According to the Commission's autumn 2019 forecast, the impact of public finance on economy in euro area was assumed neutral in 2020*

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<sup>4</sup> In January 2018, the US president Donald Trump decided to impose a set of tariffs on Chinese goods in order to force China to change as he thought the Chinese unfair trading practices and intellectual property theft. The China-United State trade war escalated through 2019. In January 2020, both sides reached an agreement. The empirical analyses of ex-post data show that the tariffs imposed in 2018 had strong negative direct effects on US imports of targeted products from China. For example, US imports of affected products have grown by 30 pp less compared to unaffected products. For more information: ECB WP The impact of US tariffs against China on US imports: evidence for trade diversion? Available online at: <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2503-ca71d98a53.en.pdf>

<sup>5</sup> OECD (2019), OECD Economic Outlook, Volume 2019, Issue 2, OECD Publishing, Paris. Available online at: <https://doi.org/10.1787/9b89401b-en>.

In 2019, the European economy was in its seventh consecutive year of growth and was forecasted<sup>6</sup> to expand in 2020 and 2021.



However, the GDP growth was slowing down with the possibility of turning into a mild recession. The EU and euro area were at a crossroad where the main directions are either further weakening and muddling through with a protracted period of low growth and inflation or a rebound in economic activity with a gradual return to higher growth rates. Economic growth in the euro area lost momentum in the first half of 2019 and fell below its average values in recent years. Due to rising tensions in international trade (between US and China)<sup>7</sup> and uncertainty related to impacts of Brexit, the slowdown in external environment was also expected. Obstacles to global trade growth affected the MS, which were highly integrated in global chains and car manufacture<sup>8</sup>. The extent of negative impact depended on the country's exposure. MS such as the Netherlands and Germany, whose high value added has been driven by its gross export facing a decline in manufacturing. However, labour market conditions remained solid with moderate increases in employment despite the low pace of output growth. In addition, the service sector seemed to be strong enough to make a significant contribution to economic growth compensating losses from lower foreign demand.

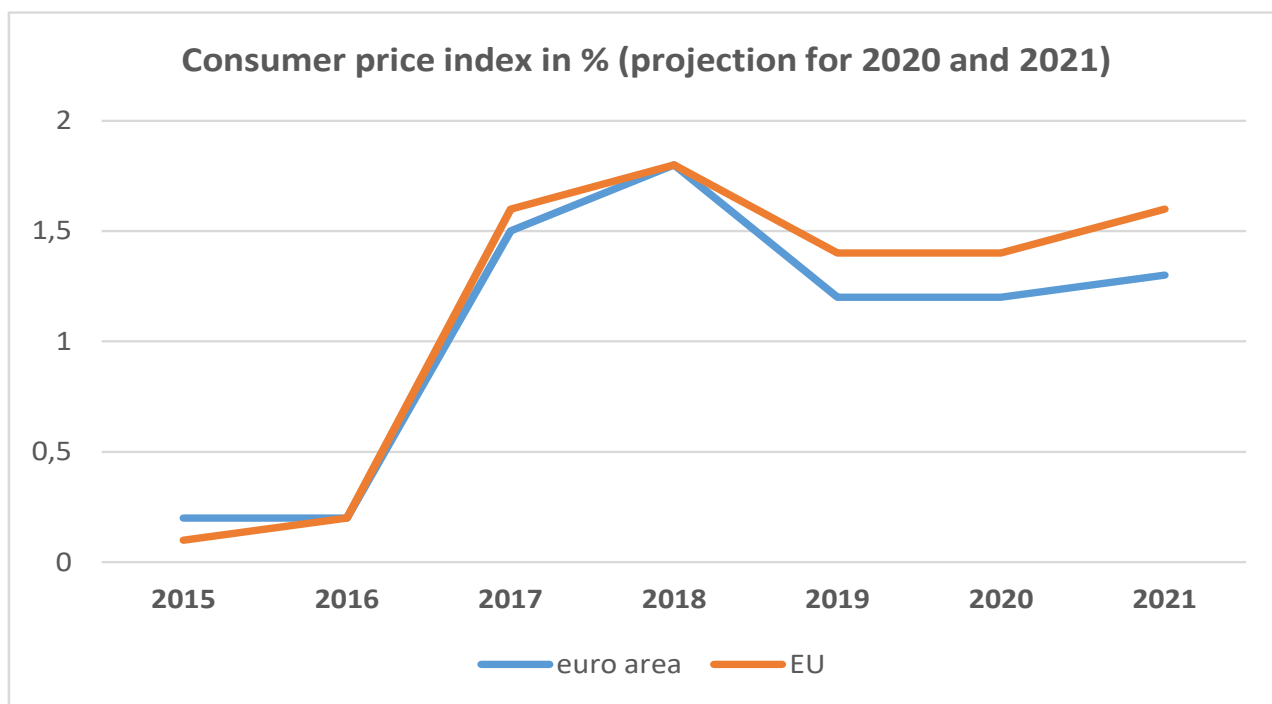
<sup>6</sup> European Commission (2019), Autumn 2019 Economic Forecast, Publications Office of the European Union. ISBN 978-92-79-98862-2.

<sup>7</sup> Not only the mutual introduction and threat of new or higher tariff rates on imports but both countries went beyond implementing tariffs and included actions such as labelling certain companies as threats to national security, calls for firms to leave the country and instructions to companies to refrain from buying on foreign market. All these actions influenced negatively bilateral trade volumes of both countries and significantly increased tension in an international trade.

<sup>8</sup> Apart from a negative impact of the US-China trade war on the European car producers, uncertainty in this sector also related to the scope and duration of technological and regulatory changes in the car industry.



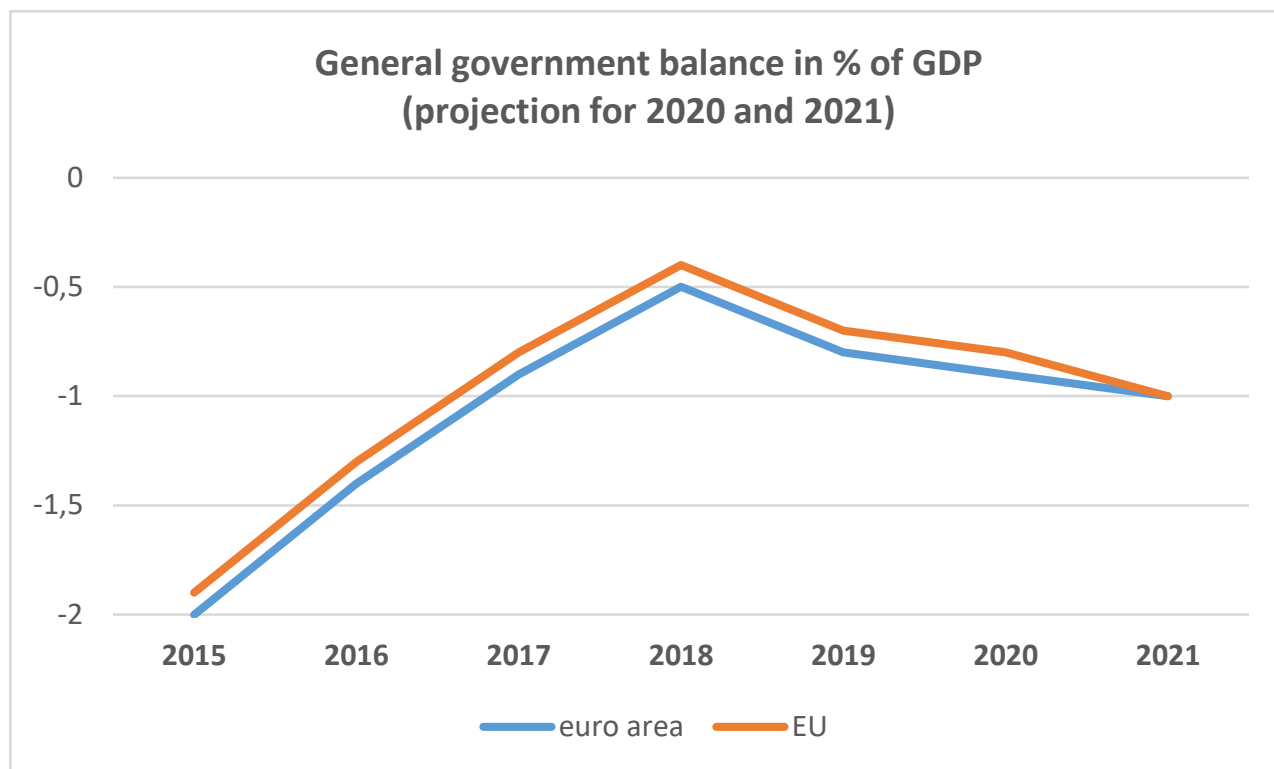
Inflation in the euro area was on a downward path and was assumed to remain low in the coming years.



In the environment of a weaker demand, firms did not have a tendency to raise prices. They benefited from declining energy prices and therefore they were more willing to accept possibly lower profit margins. HICP inflation in the euro area stood at 1.2% in 2019 and then the European Commission projected a slight increase to 1.3% for 2020. The market-based measures of inflation expectations (e.g. inflation-linked swap rates) also indicated the price stability around 1% both in short and medium terms.

Only four euro area MS expected inflation at or above 2% (Estonia, Latvia, Lithuania, Slovakia). Outside the euro area, inflation differentials seemed to be more pronounced since headline inflation rates were projected to range from 1.5% in Denmark to 3.3% in Romania.

The general government deficits in the EU declined for 8 years to their lowest levels.

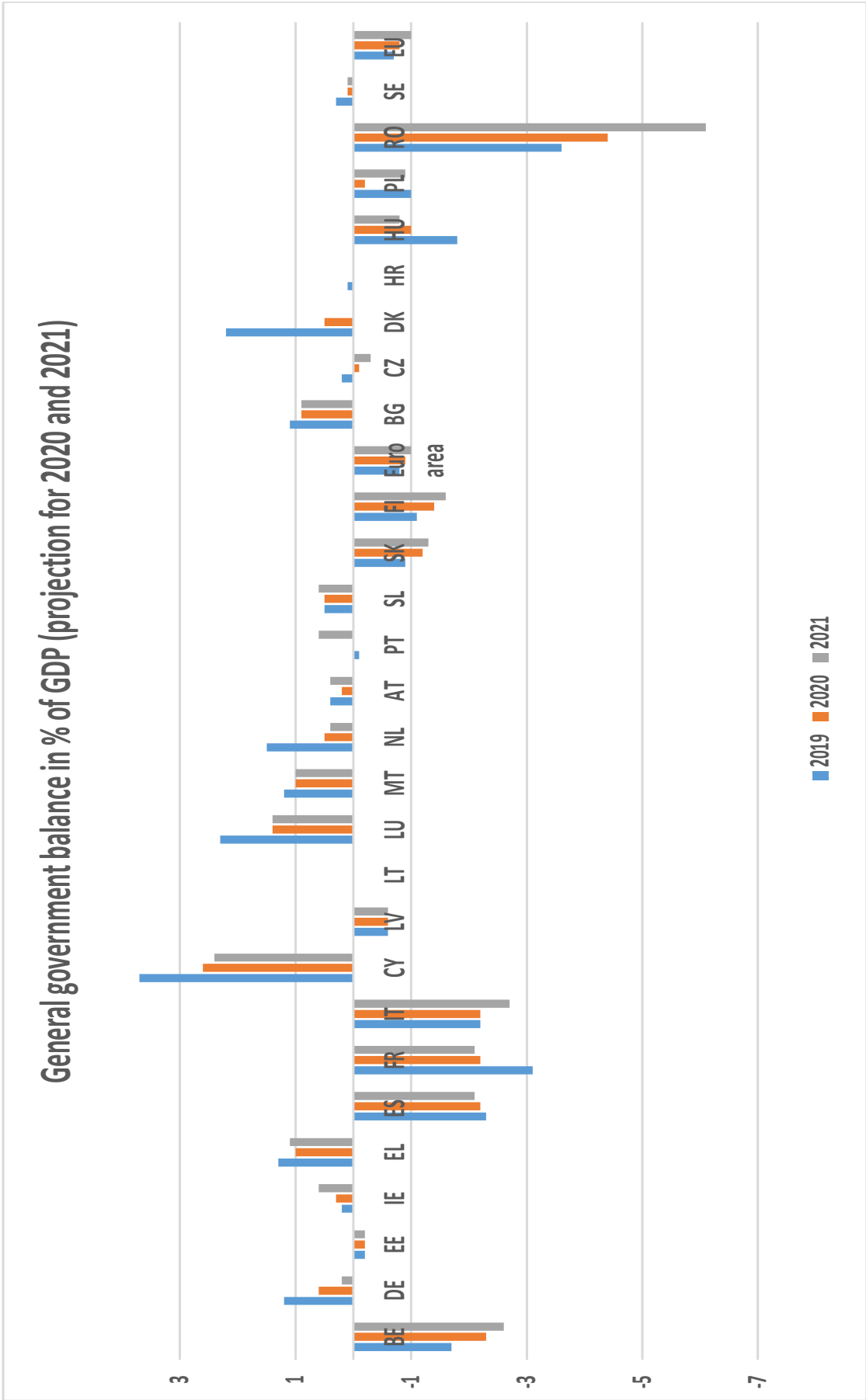


The euro area's general government deficit was continuously decreasing to reach 0.5% of GDP in 2018 then slightly rose at the same level of 0.6% in the EU and euro area in 2019. The fiscal projection for 2020 signalled further rise taking into account discretionary measures of the 2020 budgetary law and lower revenues driven by slowdown in economic activity.

Overall, the projected revenue fall was expected to stay behind the deficit worsening to 0.9% of GDP in 2020. The public investment-to-GDP ratio was projected to rise from 2.7% in 2018 to 2.9% in 2020 driven by the European structural and investment funds. However, the half of the MS remained below the pre-crisis level of public investments (2000-2005).

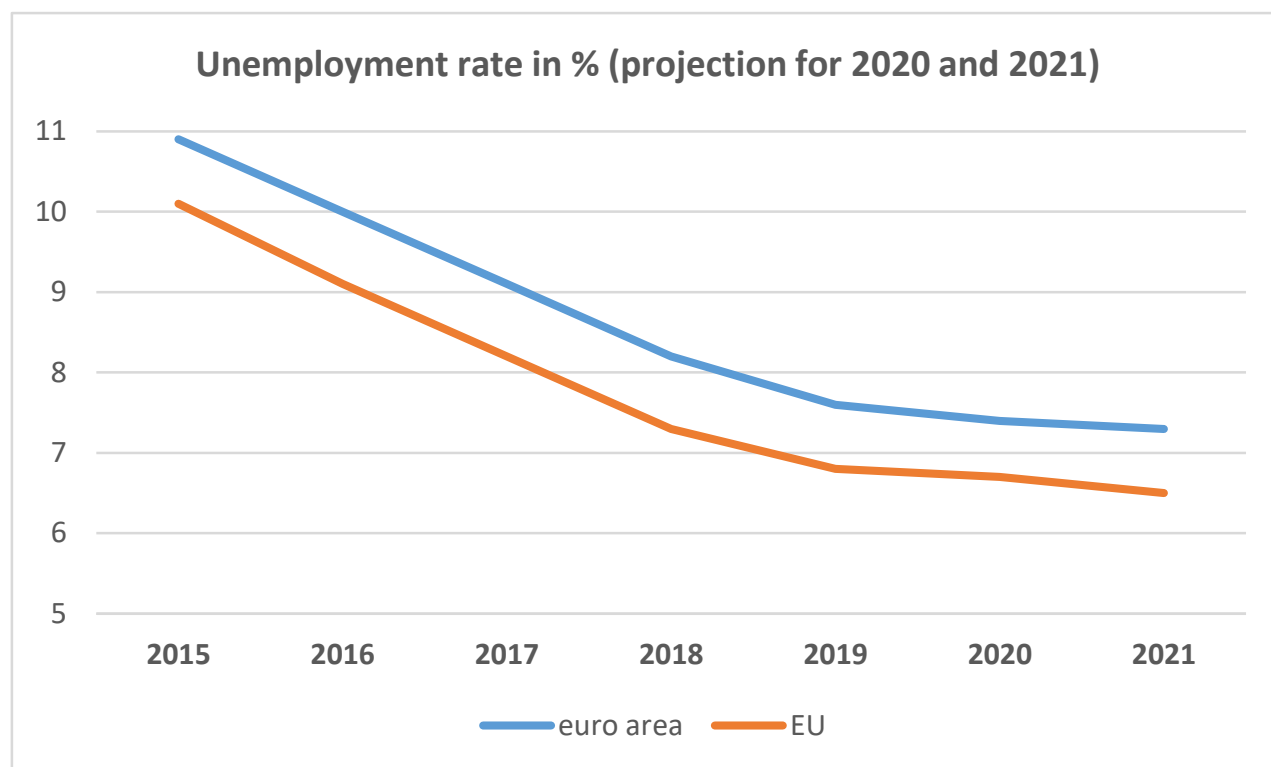
The more profound investment gap about 2pp of GDP were observed in Portugal and Spain and 1.5 pp in Greece, Cyprus, Ireland and Croatia.

At the country level, expected fiscal developments were heterogeneous.



The EU highest deficit in Romania were projected to worsen from 3.6% in 2019 to 4.4% of GDP in 2020. Deficit were also set to increase in Belgium and Italy. Before the outbreak of pandemic in 2019, seventeen MS recorded surplus in the general government sector. However, in structural terms all MS stood in deficits at the time of economic growth. The debt-to-GDP ratio of the euro area was on a declining path since 2014 when it reached a peak of 95.1% (88.7% in the EU). The projected general government debt in euro area decline to 85.1% of GDP (79.4% of GDP in the EU) in 2020, which was primarily driven by historically low interest payments. Before the pandemic almost all MS reduced their general government debts and further debt reductions in 2020 and 2021 with some exceptions were forecast. Among highly indebted countries, the debt-to-GDP ratio was expected to rise in Italy and France in 2020.

**In 2019, the European economy faced a high degree of uncertainty before the outbreak of COVID-19 pandemic.**



The risks stood on downside and their materialization had undermined the expected economic expansion of the EU. On one hand, a further escalation between the US and China could have intensified the de-globalization tendencies resulted in higher price levels. Higher prices and other international barriers could had slowed down the transfer of technologies and disrupted the flow of goods within global chains. Generally, this could have

had negative impact on financial markets including increased volatility and fall in asset prices. On the other hand, the unemployment rate stood at 7.4% in 2019, which was the lowest rate, recorded since May 2008. Therefore, it was assumed that solid performance of the labour market should have helped to sustain private consumption and in this way to keep economic growth in the EU. The new downside risk of the COVID-19 spread was identified and included into baseline macroeconomic scenario of the Commission's winter 2020 forecast. It assumed a peak of the coronavirus "2019-nCoV" in the first quarter 2020 with limited global spill-overs and recovery in the following quarters. The infection spread and possible containment measures enacted constituted a key risk of Commission's forecast published in the middle of February 2020.

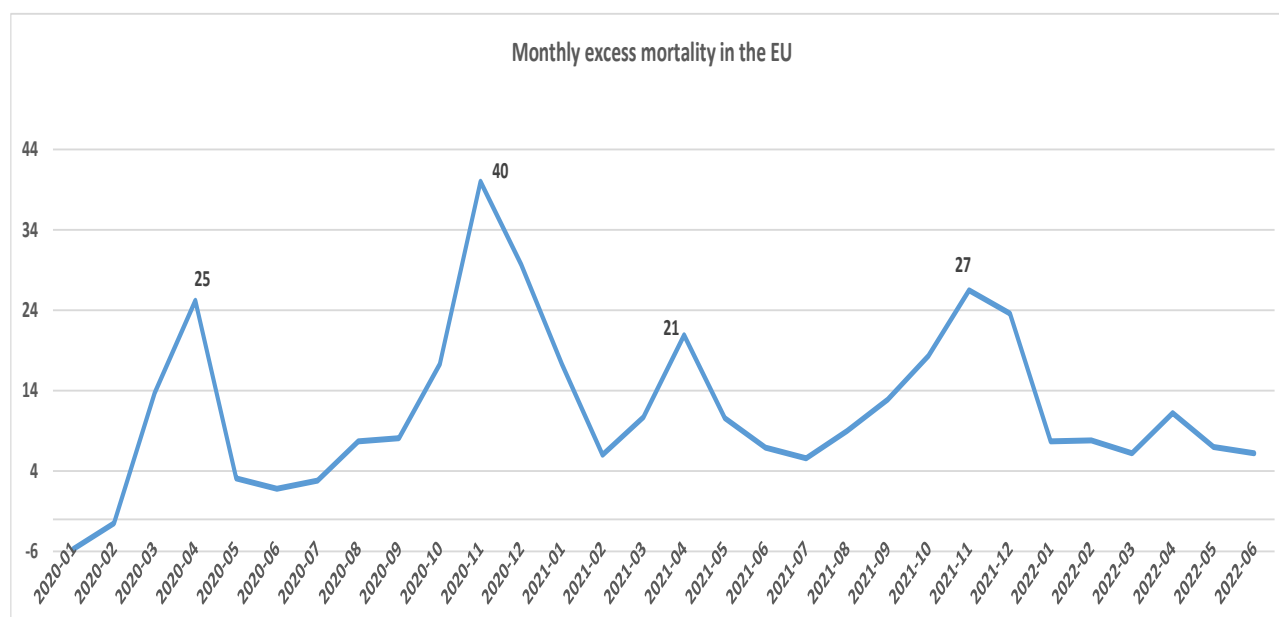
### Further reading:

- [European Commission \(2019\) Autumn 2019 Economic Forecast: A challenging road ahead, November 2019](#)
- [European Commission \(2020\) Winter 2020 Economic Forecast: Offsetting forces confirm subdued growth, February 2020](#)
- [OECD \(2019\) OECD Economic Outlook, Volume 2019 Issue 2, December 2019](#)
- [Cigna S., Meinen P., Schulte P., Steinhoff N. \(2020\) ECB WP The impact of US tariffs against China on US imports: evidence for trade diversion? ISBN 978-92-899-4449-6](#)
- [Fajgelbaum P., Goldberg P., Kennedy P., Khandelwal A., Taglioni D. \(2022\) The US-China Trade War and Global Reallocations. Policy Research Working Paper, No. 9894. World Bank, Washington.](#)

## PART 2:

# REGIONAL DIMENSION OF COVID-19 PANDEMIC IN THE EU

- *In general, four large waves of COVID-19 pandemic could be identified with different peaks in mortality across the EU MS since the spring 2020. In addition, there was a wide variation in the same year among MS in terms of mortality, and from year to year for the same Member State*
- *The COVID-19 pandemic has triggered tremendous interest in data on mortality, hospital admissions and vaccination. Therefore, the national statistical institutes together with the Eurostat set up a special data collection in order to support the policy and research effort related to the pandemic*
- *According to the death statistics, between January 2020 and May 2022, around 1.4 million of additional deaths were recorded in the EU in comparison with the average numbers for the similar period of 2016-2019*
- *In 2020, Latvia, Estonia, Ireland, Denmark and Finland reported an annual excess mortality rate below 5%, while Italy, Spain, Belgium, Slovenia, Czech Republic and Poland recorded rates between 15% and 20%. In 2021, only Sweden and Belgium experienced an annual rise in mortality below 5%. On the other hand, Slovakia and Bulgaria reported rates close to 40% in 2021*

**COVID-19 is a disease caused by coronavirus SARS-CoV-2.**

Its first case was reported from the Chinese Wuhan in December 2019. Since it has spread to every country around the world. Like other viruses, the coronavirus<sup>9</sup> that causes COVID-19 has an ability to mutate. Therefore, there has been different variants of this coronavirus. Some mutations of coronavirus enable to spread faster from person to person as in the case of the latest variants - delta and omicron. In general, people can have mild COVID-19 illness or even have no symptoms at all. On the other hand, in the significant amount of cases COVID-19 can lead to respiratory problems, nervous system failure, and kidney failure or even to the death. In principle, the EU faced four COVID-19 waves defined by the rise in mortality<sup>10</sup>. According to World Health Organization (WHO), vaccination is one of the most important steps, which should help to end the pandemic and stop new variants from emerging. Vaccine rollout shall be planned and co-ordinated among everyone involved at national level. In addition, effective response of government in pandemic COVID-19 requires scientific expertise<sup>11</sup> and strong political leadership<sup>12</sup>.

<sup>9</sup> Coronaviruses (corona = crown) that mainly cause respiratory illness are named for their appearance. The virus's outer layers are covered with spike proteins that looks like a crown. Severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS) and the common cold are from the family of coronaviruses.

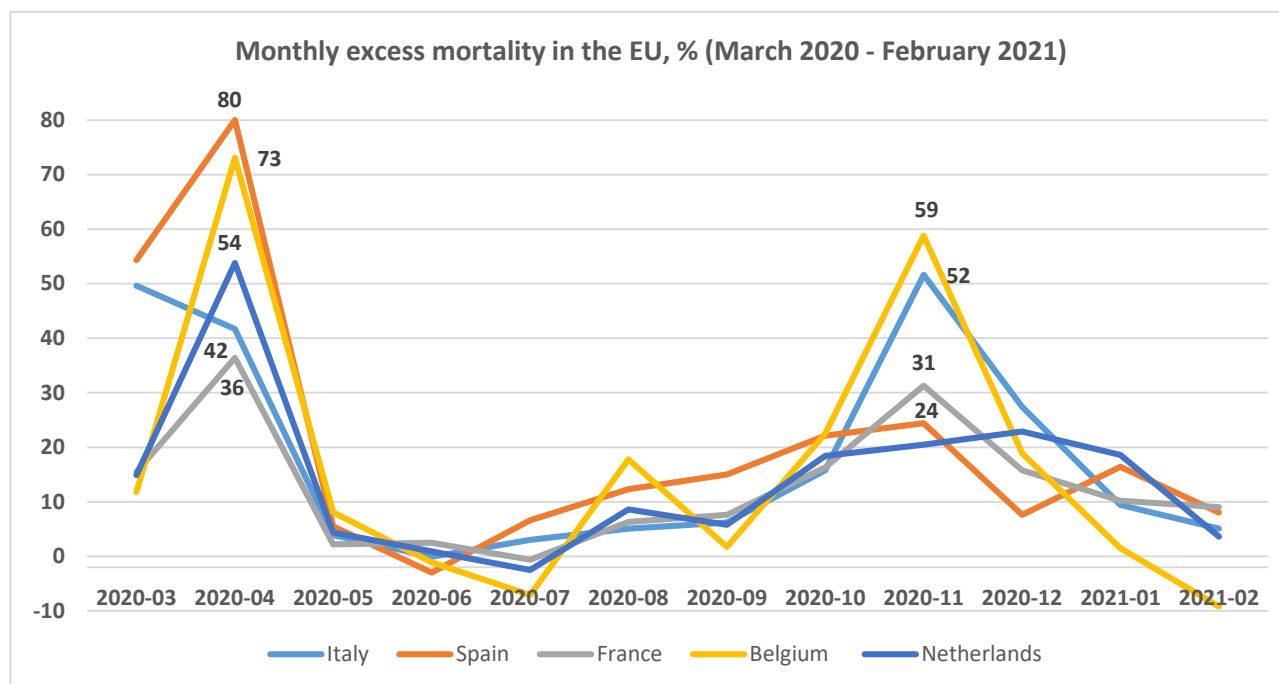
<sup>10</sup> Measuring of excess mortality gives information about the burden of mortality potentially related to the COVID-19 pandemic. The Eurostat has produced this monthly indicator on times series by national statistical institutes of MS. It also accounts for the partial absence of deaths from other causes e.g. accidents that did not occur due to less extent of commuting or travelling during lockdowns. Eurostat database on excess mortality by month is available:

[https://ec.europa.eu/eurostat/databrowser/view/DEMO\\_MEXRT\\_\\_custom\\_309801/bookmark/table?lang=en&bookmarkId=26981184-4241-4855-b18e-8647fc8c0dd2](https://ec.europa.eu/eurostat/databrowser/view/DEMO_MEXRT__custom_309801/bookmark/table?lang=en&bookmarkId=26981184-4241-4855-b18e-8647fc8c0dd2)

<sup>11</sup> Many new initiatives has been established in order to better evaluate steps taken during COVID-19 pandemic. In response to the COVID-19 outbreak the European Commission, European Observatory on Health Systems and Policies and WHO Regional Office for Europe created the COVID-19 Health System Response Monitor (HSRM) in March 2020. The information is collected and regularly updated based on an evolving set of questions that are answered by health policy experts contributing to the platform.

<sup>12</sup> Selina Rajan, Martin McKee, Cristina Hernández-Quevedo, Marina Karanikolos, Erica Richardson, Erin Webb, Jonathan Cylus, What have European countries done to prevent the spread of COVID-19? Lessons from the COVID-19 Health system response monitor, Health Policy, Volume 126, Issue 5, 2022, Pages 355-361, ISSN 0168-8510, <https://doi.org/10.1016/j.healthpol.2022.03.005>.

In Europe, the first cases of COVID-19 were confirmed in late January 2019 and early February 2020.

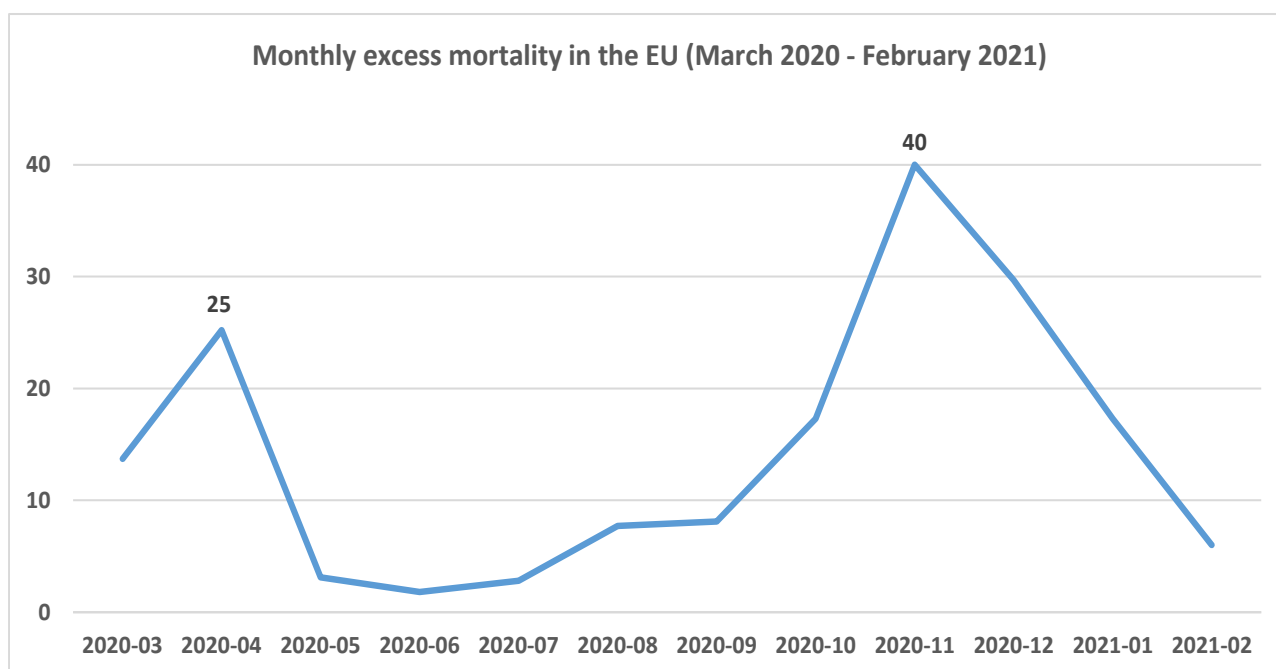


Although international travel restrictions on travelling to and from China were quickly introduced, by late March 2020 about half of the world's reported cases were from Europe. The predominant outbreak of COVID-19 most likely started in Italy and spread from there in spring 2020. The freedom of movement within the EU accelerated the COVID-19 transmission immediately leading to a rise in infected people, hospital admissions and deaths. During March 2020, the number of deaths rose rapidly in several EU MS in comparison with the average number of deaths in the period of 2016-2019. The COVID-19 pandemic affected every part of the EU; however, its impact has not been evenly spread.

The research has shown that virus transmission via social contacts have become a very decisive factor. Therefore, within the first wave of COVID-19 the Southern European countries where intergenerational contact is more frequent than in the less family-oriented Western and Northern European these MS have been severely affected. The COVID-19 evidence indicates that the highest peaks of deaths during the first increase in COVID-19 cases between March and April 2020 were initially recorded in Spain and Italy, followed by Belgium, the Netherlands and France.



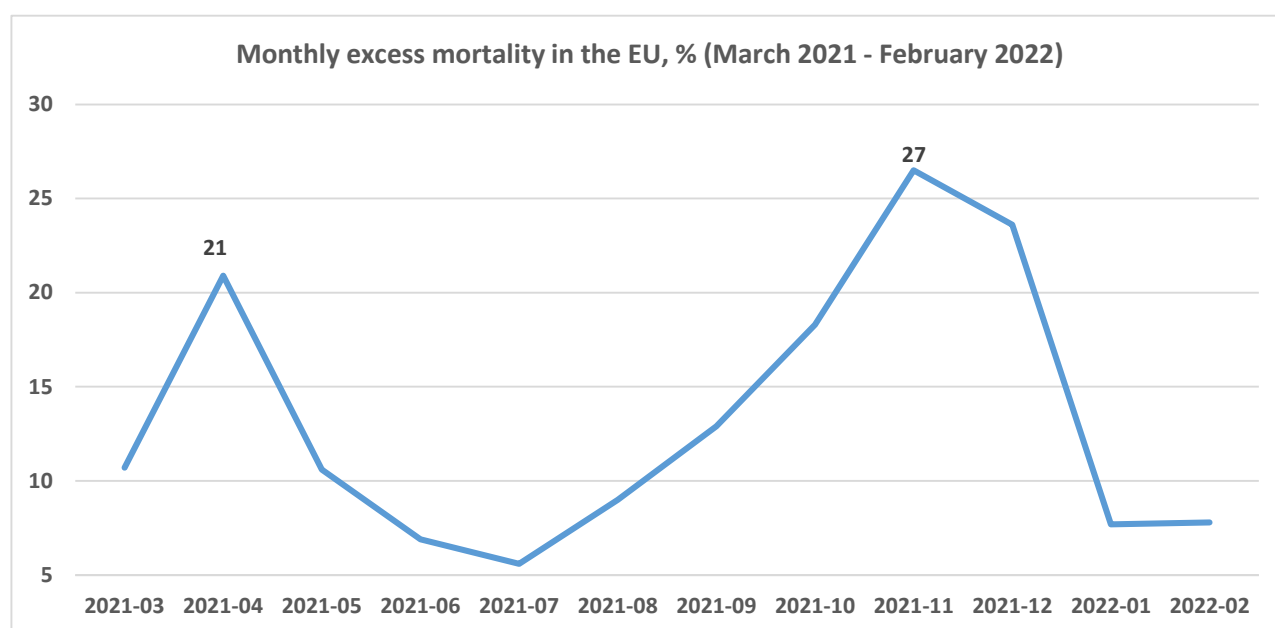
**During the period between March 2020 and February 2021, the EU experienced two waves of excess mortality**



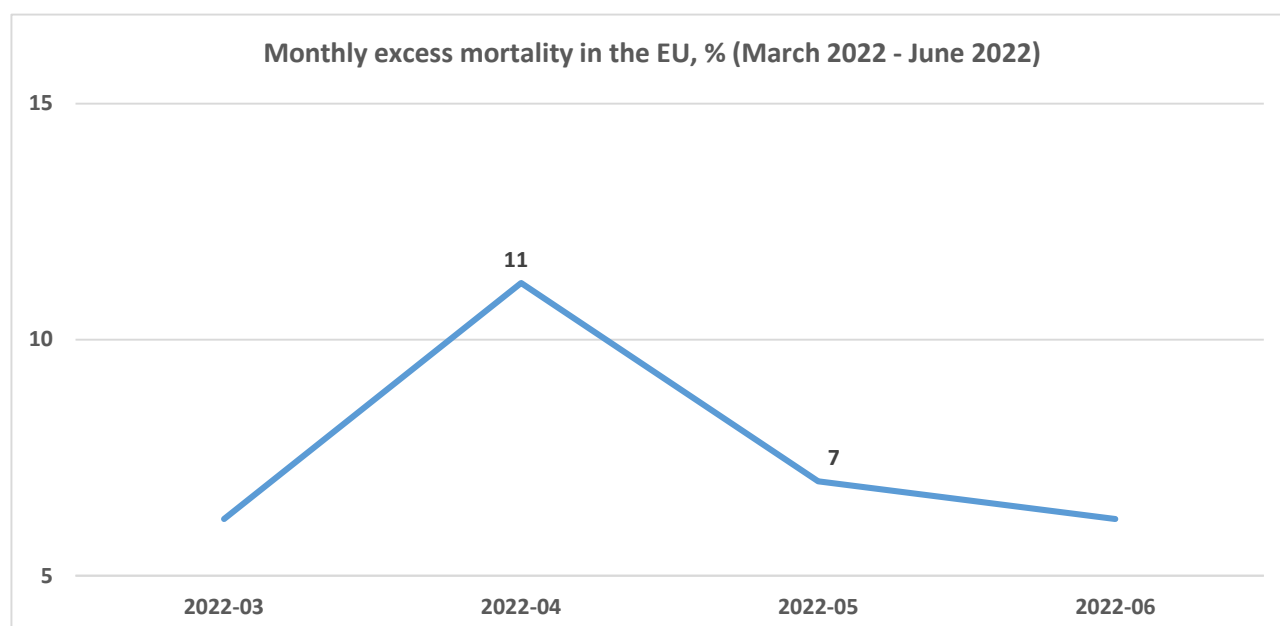
The first one happened between March and May 2020 reaching a 25.2 % excess rate in April 2020 and a second between August 2020 and the end of the year 2020, reaching a 40 % excess rate in November 2020. The peak of deaths in November 2020 has represented the highest rate of the mortality since the outbreak of the pandemic. In this second wave of COVID-19, the excess mortality rose in all MS.

However, the peak of mortality within the second wave has been driven by the Eastern part of Europe. In particular, Poland, Bulgaria and Slovenia reached an excess of mortality more than 90 % in November 2020. Overall, the Eastern region significantly boosted the excess in mortality of the whole EU in autumn 2021.

All waves included deaths directly resulting from COVID-19 and those caused indirectly because of the saturation of hospital capacity and lack of usual care for patients with respiratory difficulties.

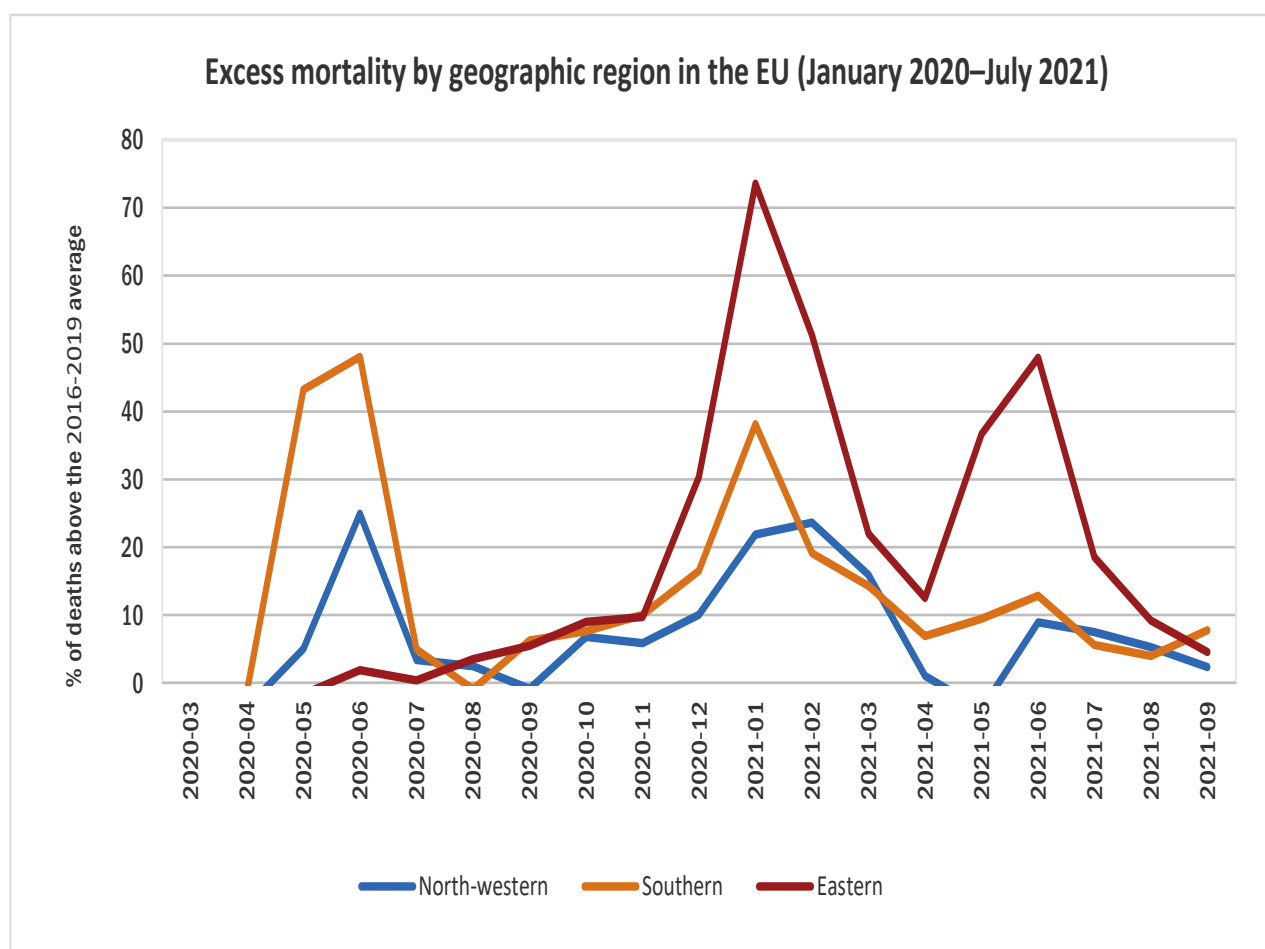
**Excess mortality levels reached a third peak in April 2021 (21 %)**

Then it decreased and fell to a low of 5.6 % in July 2021, when some MS reaching a total number of deaths close to - or even below - the 2016-19 benchmark. Again, Eastern block of countries stood behind the massive rise of mortality in the third wave in 2021. During summer 2021, the downward trend reversed again and the EU rate increased to reach 12.9 % over the baseline period in September 2021. Finally, in autumn and winter 2021, there was a fourth wave of excess mortality, this time with the EU rate reaching 26.4 % in November and 23.5 % in December 2021.

**In the first quarter of 2022, the mortality in the fourth wave has weakened**

It resulted in the overall rate falling to values more than three times lower than the November 2021 peak: 7.6 % in January and 7.6 % in February 2022, followed by 6 % in March 2022. After an increase to 10.7 % in April 2022, in May the EU excess mortality rate reverted to a low value (6.6 %) similar to the levels recorded at the beginning of the year 2022. Therefore, the rise of mortality in April 2022 is not regarded to turn into the fifth wave. However, it is clear that springs and autumns generally represent periods of an excessive mortality when it comes to development of COVID-19 pandemic in the EU. Overall, less developed regions of the EU had the highest excess mortality rate (17% higher) as compared with transition regions (11%) and more developed regions (12%) within the fourth COVID-19 wave.

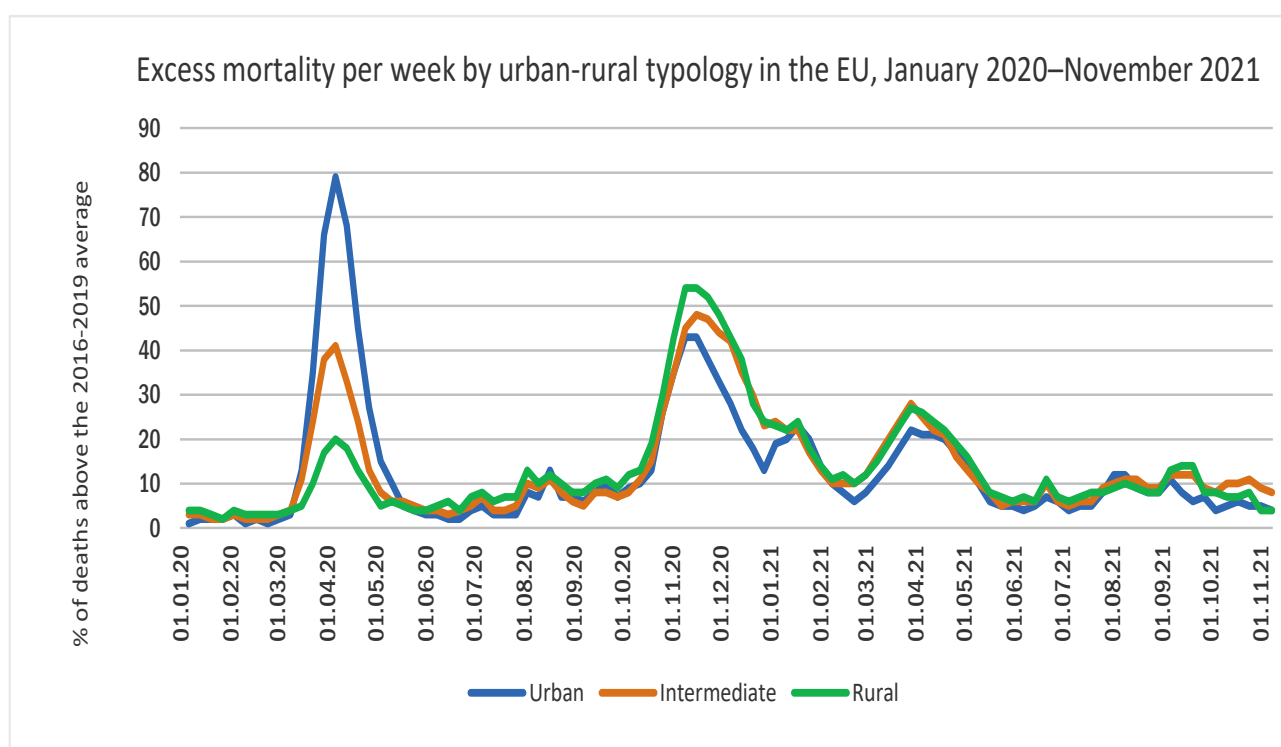
### The excess in mortality differed among regions in the EU



While the excess mortality during the first COVID-19 wave mainly affected southern part of the EU, MS in the Eastern Europe had driven the following waves. Within the second wave at turn of 2020 a 2021, when the so-called British variant of COVID-19 became widespread, the mortality reached the highest figures since the outbreak of COVID-19 pandemic. In mostly affected countries such as Bulgaria, Poland, Slovakia, Czechia, Hungary and

Romania the mortality exceeded values mostly affected countries in the first wave (Spain and Italy). One could assume that after this experience the Eastern countries would had speeded up with the uptake of vaccinations in spring 2021 when the vaccines occurred. However, the opposite was true. In November 2021, less than 20% of the population was fully vaccinated with two doses in Romania and Bulgaria, while in Belgium, France and Spain more than 80% of the population was fully vaccinated.

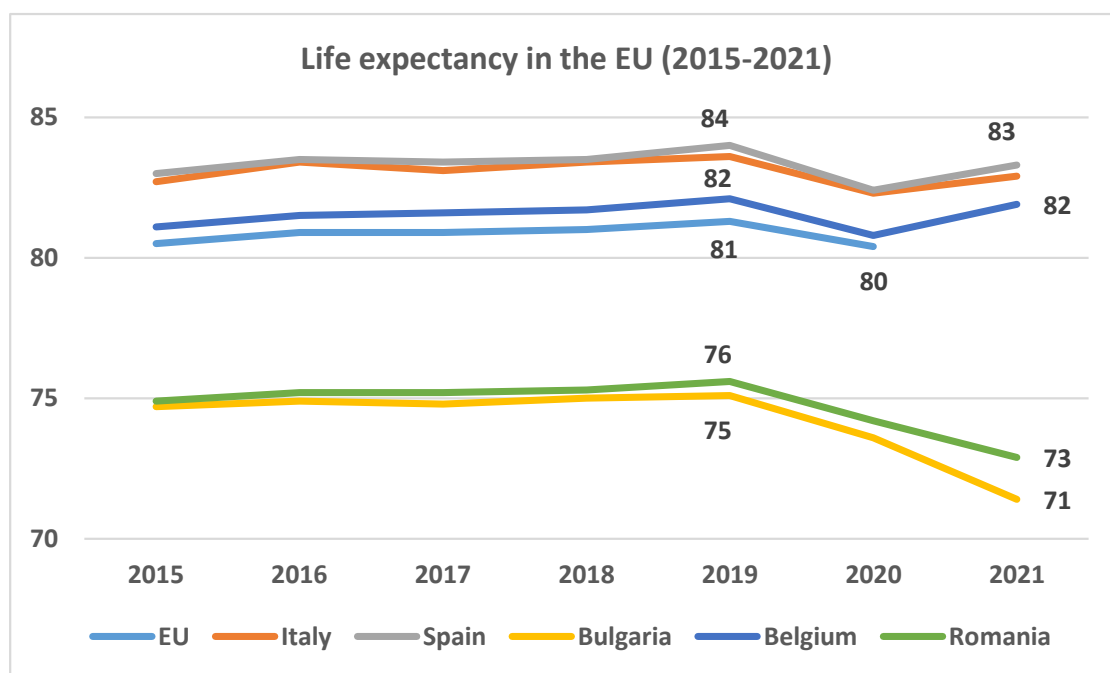
**Uneven impact of COVID-19 pandemic has been also evident between regions (urban versus rural areas)**



Urban regions of MS experienced the highest peak in excess mortality at 80% during the first wave in April 2020. At the same time, rural regions of MS had been only affected by the COVID-19 mortality at 20%.

On the other hand, rural regions had the highest excess rate within the second wave, which peaked at 55%, in towns and suburb it was somewhat lower (43-48%). In the following waves, differences between regions became less relevant.

## Due to COVID-19, life expectancy<sup>13</sup> in 2020 fell in almost all MS



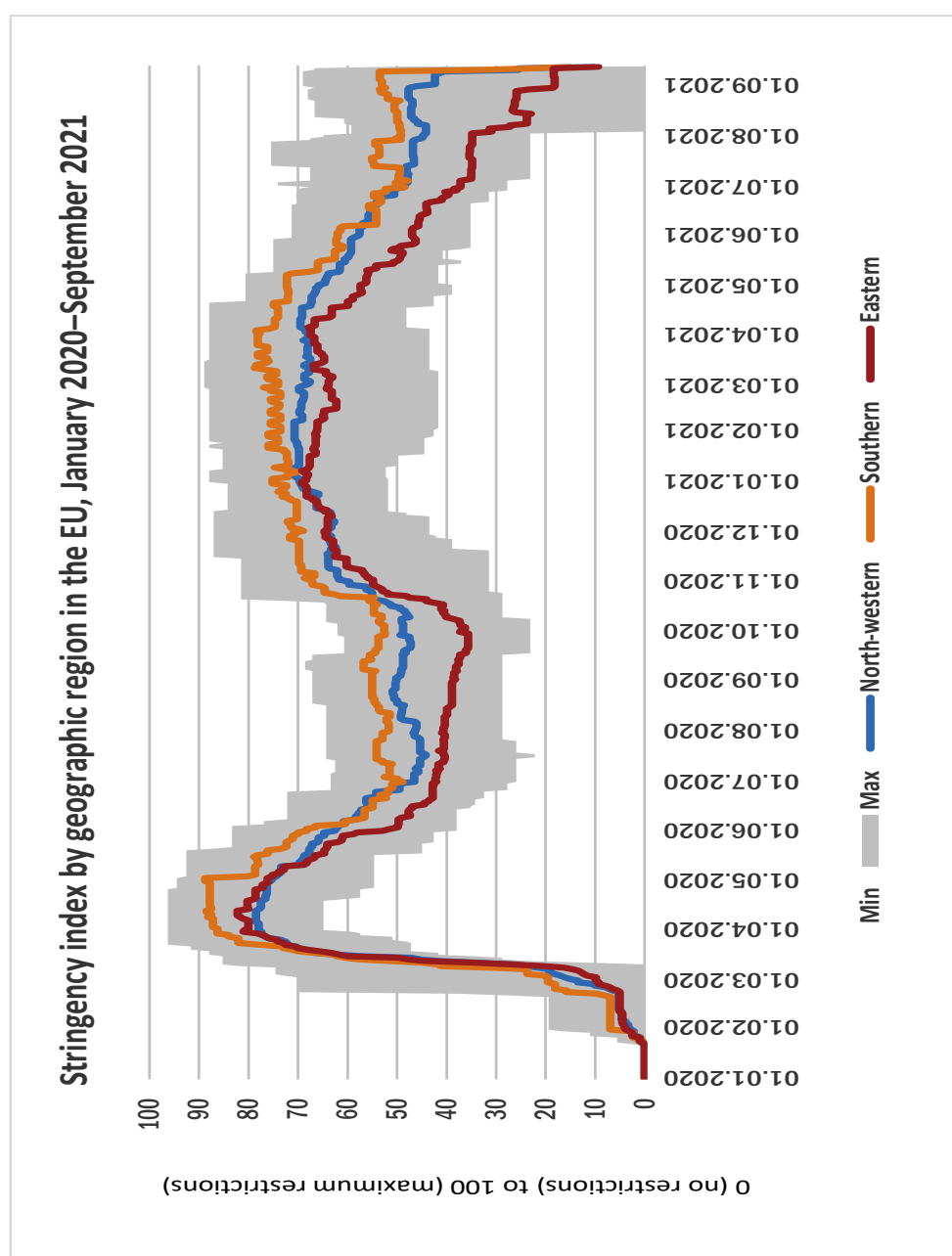
Life expectancy had been increasing over the past decade in the EU. However, this positive trend in lives of EU citizens was disrupted by the pandemic COVID-19. The EU average fell from 81.3 in 2019 to 80.4 years in 2020. The biggest reduction in life expectancy were recorded in Spain (-1.6 years) and Bulgaria (-1.5 years) in 2020. Only in Denmark and Finland, the life expectancy marginally increased in 2020. According to preliminary 2021 data<sup>14</sup>, life expectancies have further worsened in 2021 in some MS.

The largest decreases in life expectancy compared with 2019 were shown in Bulgaria (-3.7 years), Slovakia (-3.0 years) and Romania (-2.7). Based on the Eurostat life expectancy data one could conclude that MS such as Italy, Spain and Belgium hit by the first wave of COVID-19 effectively adopted measures preventing citizens from further severe life consequences in the following COVID-19 waves.

<sup>13</sup> According to the Eurostat definition: life expectancy at a certain age is the mean additional number of years that a person of that age can expect to live, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying, i.e. the death rates observed for the current period).

<sup>14</sup> Life expectancy statistics available on Eurostat website: [https://ec.europa.eu/eurostat/databrowser/view/DEMO\\_MLEXPEC/bookmark/table?lang=en&bookmarkId=eb24a8d3-8cc6-483a-b320-b7b0f55064f9](https://ec.europa.eu/eurostat/databrowser/view/DEMO_MLEXPEC/bookmark/table?lang=en&bookmarkId=eb24a8d3-8cc6-483a-b320-b7b0f55064f9)

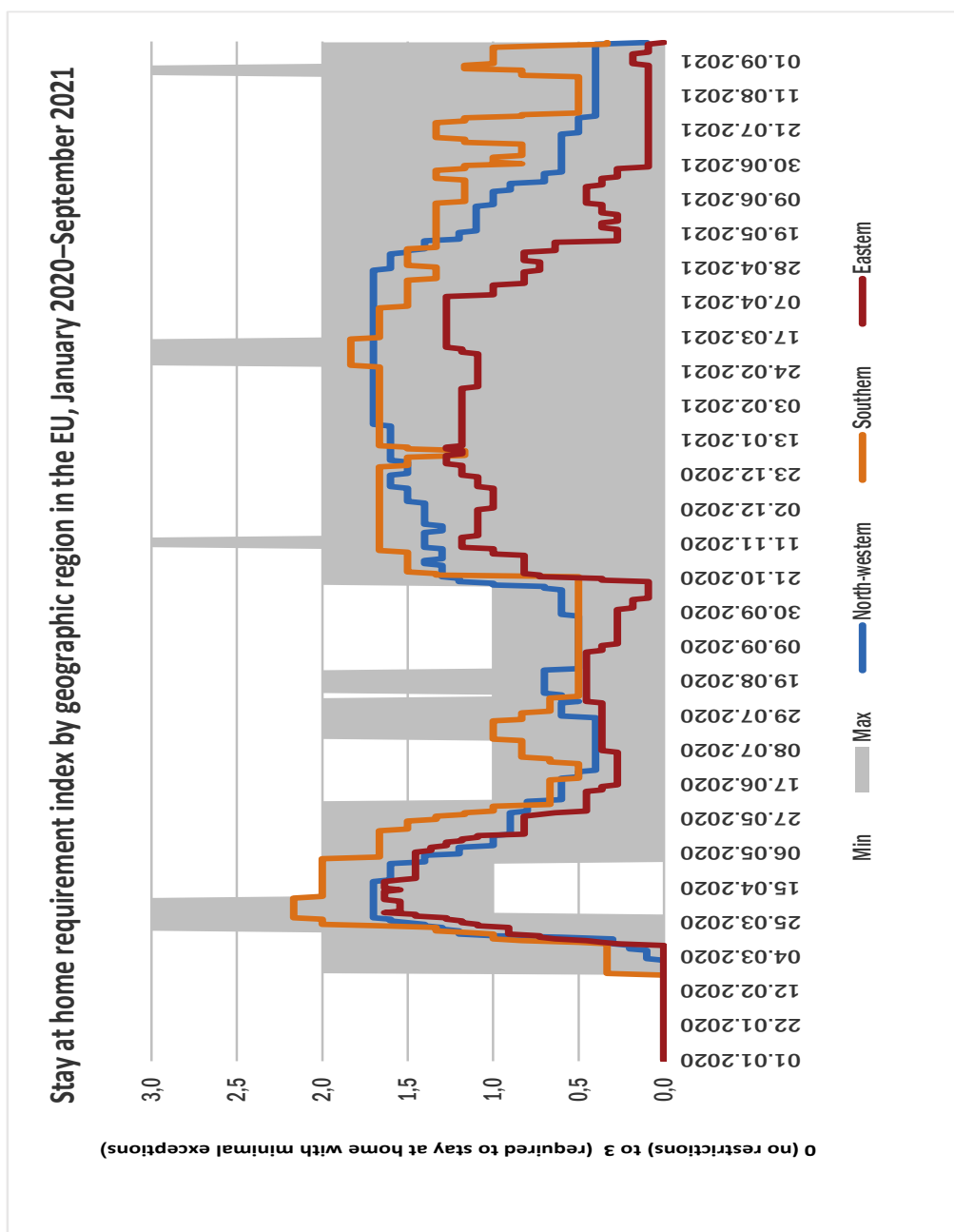
## Restrictions imposed in response to the COVID-19 pandemic differ between MS



In general, restrictions peaked in April 2020, were relaxed in summer 2020, and were increased again during autumn and winter 2020-2021. The COVID-19 Stringency index<sup>15</sup> by geographic block of MS shows that protective measures in Eastern MS were slightly less strict, while southern MS introduced the tightest ones. The north-Western block of MS was somewhere in the middle of these two groups. The differences in imposed measures mainly stem from the length of requirement to work or study from home and the travel limitations.

<sup>15</sup> COVID-19 Stringency index is a composite measure based on nine response indicators such as school closures, workplace closures, travel bans, cancellation of public events, and restrictions on public gatherings, stay-at-home requirements, and closures of public transport, public information campaigns, and international travel controls. Since 2021, the indicator have included policies to the vaccinated and non-vaccinated people. A higher score indicates a stricter response (100 = strictest response). This index is compiled by experts from University of Oxford with the aim to compare government responses to the coronavirus outbreak worldwide in a consistent way.

Eastern MS tended to have the fewest restrictions and the southern ones the most<sup>16</sup>.



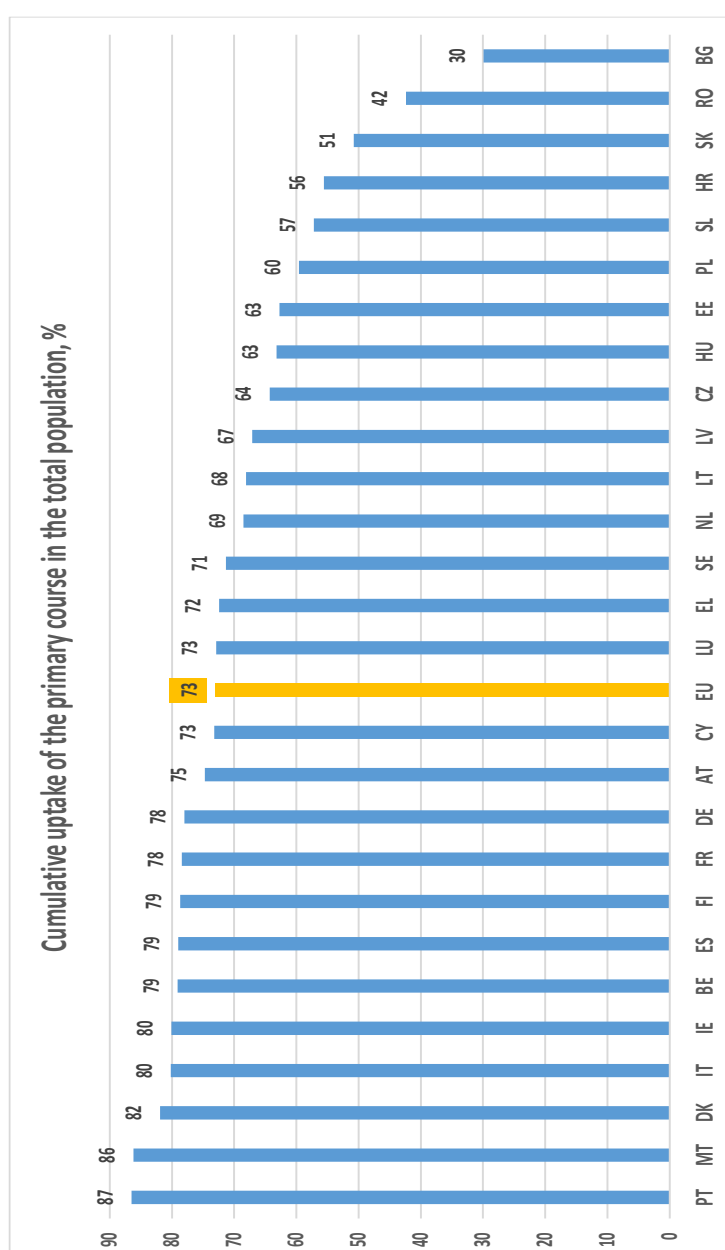
Some MS faced long periods during which people were required not to leave their homes except for grocery shopping or essential walks outside their homes. In general, stay at home requirement was required mainly in Southern MS, which forced people to rely more on local facilities and environment. The requirement of working from home along with the closure of school caused that people especially in urban areas were crowded into small living places. Therefore, the benefit of any maintained green spaces in public places was reinforced in cities and towns. According to Commission’s data analysis<sup>17</sup>, in accessibility of green areas

<sup>16</sup> The assessment of containment measures introduced in 2021 by academics from several MS is available on: [https://www.robertschuman.eu/en/doc/divers/Covid-19\\_Through\\_Europe.pdf](https://www.robertschuman.eu/en/doc/divers/Covid-19_Through_Europe.pdf)

<sup>17</sup> EC Working paper 01/2016 by Hugo Poelman: A walk to the park? Assessing access to green areas in Europe’s cities

within cities there are also difference among MS. Almost all cities in Romania, Belgium and Germany have a green area within 400 metres walking distance of their home. On the other hand, only some big cities in France, Portugal and Italy have these green parts. Citizens of rural green parts suffered from different problems mainly related to the fast internet connection during lockdowns, which has been naturally less available compared to urban areas of MS.

**Vaccines offered the best way out of the pandemic COVID-19. In August 2022, approximately 73% of the total EU population had been fully vaccinated with two doses (i.e. primary course) but there have been significant differences among MS<sup>18</sup>**



<sup>18</sup> Updated evidence related to vaccination against COVID-19 is available on the European Centre for Disease Prevention and Control (an Agency of the European Union): <https://www.ecdc.europa.eu/en/covid-19/country-overviews>



The European Commission together with MS adopted a common EU approach in securing sufficient amount of vaccine supplies and their distribution. This joint initiative prevented the possible competition between countries in which bigger MS would naturally have an advantage of a bigger purchaser. The EU on behalf of EU countries signed advance purchase agreements on 1.8 billion doses with vaccine developers to be delivered between end of 2021 until 2023.

The development of vaccine within 12-18 months was significantly faster since normally a vaccine takes many years to be produced. Despite the time pressure, COVID-19 vaccines were developed in line with the same standards for quality and safety as for other vaccines. To do so, the EU supported it in redirecting research funding that was focusing on the most promising leads. In the EU, vaccination against COVID-19 officially started on 27 December 2020.

Data reported in August 2022 indicated that regions with relatively high excess in mortality such as Romania and Bulgaria where less than 45% of the population was fully vaccinated, while in many regions in Belgium, France and Spain more than 80% of the population was fully vaccinated.

In the EU, the leader in vaccinating was Portugal, which has roughly 87% of its population of 10 million vaccinated with two doses and 67% with the first booster. Much of Portugal's success has been attributed to Vice Admiral Henrique de Gouveia e Melo who has been leading the COVID-19 vaccination task force including mathematicians, medical doctors, analysts and strategic experts from the Portuguese army, navy and air force. His expert team developed the national strategy outside the impact of politicians. He used soldiers to figure out the fastest flow of people through large sport facilities where the process of vaccination was based on principle of the production line. Apart from that, the traditional consenting attitude in Portugal toward national vaccination programs and no significant anti-vaccination movement significantly contributed to the world's highest vaccination rate in Portugal.

### Further reading:

- Potential impacts of COVID-19 on regions and cities of the EU, Committee of the Regions 2020, ISBN 978-92-895-1061-5
- Nazrul, I.: Effects of covid-19 pandemic on life expectancy and premature mortality in 2020: time series analysis in 37 countries, *BMJ* 2021; 375:e066768
- Ugofilippo Basellini & Carlo Giovanni Camarda (2022) Explaining regional differences in mortality during the first wave of Covid-19 in Italy, *Population Studies*, 76:1, 99-118
- The Effect of COVID certificates on vaccine uptake, health outcomes and the economy, WP 1/2022, January 2022
- Dabla-Norris E., Khan H., Lima F., Sollaci A.: Who Doesn't Want to be Vaccinated? Determinants of Vaccine Hesitancy During COVID-19, IMF Working Paper 21/130, 2021
- The European Commission's website dealing with the impact of demographic change in Europe. Available online at: [https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/impact-demographic-change-europe\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/impact-demographic-change-europe_en)

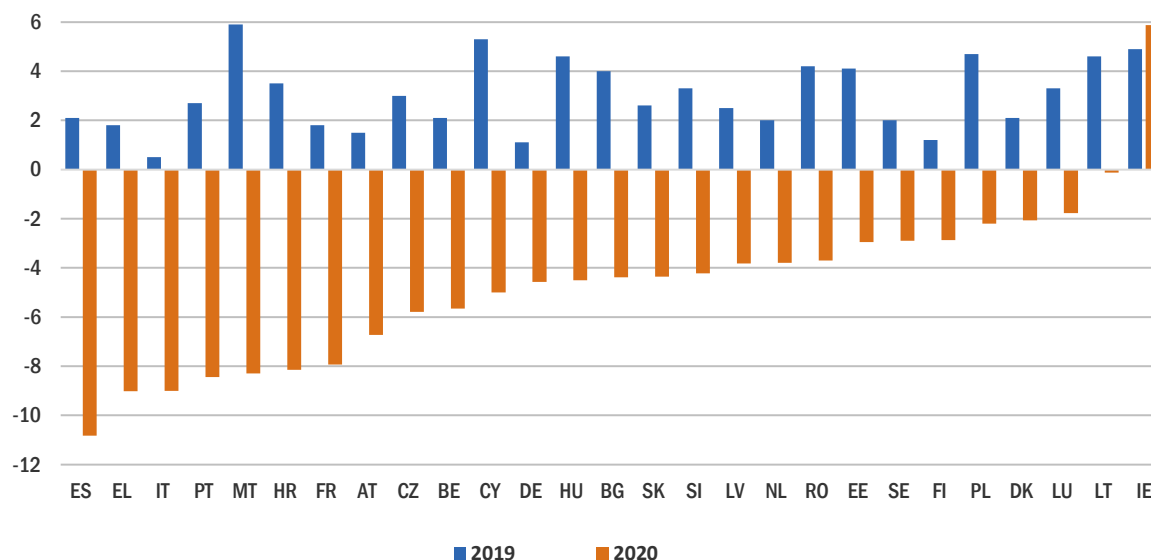
## PART 2:

# MACROECONOMIC DIMENSION OF COVID-19 PANDEMIC IN THE EU

- *COVID-19 has caused several shocks: economic shock driven by public and private containment measures, medical shock in the form of extra pressure on health care system and perception shock representing fears and worry in people's heads*
- *Manufacturing sector has got several hits: supply-shock when world's manufacturing heartland has been affected and resulted in supply-chain contagion*
- *Households have been restricted in consumption and mobility: demand-shock when lockdowns, social distancing reduced the European household spending and brought new consumer habits*
- *The depth of the economic recession during the pandemic in the EU MS has been driven by three factors: the length and the strictness of lockdown measures, the structure of economy, the scope and intensity of policy responses*

## Since spring 2020, all EU MS have been affected by Covid-19

Impact of COVID-19 crisis on real GDP of Member States, %



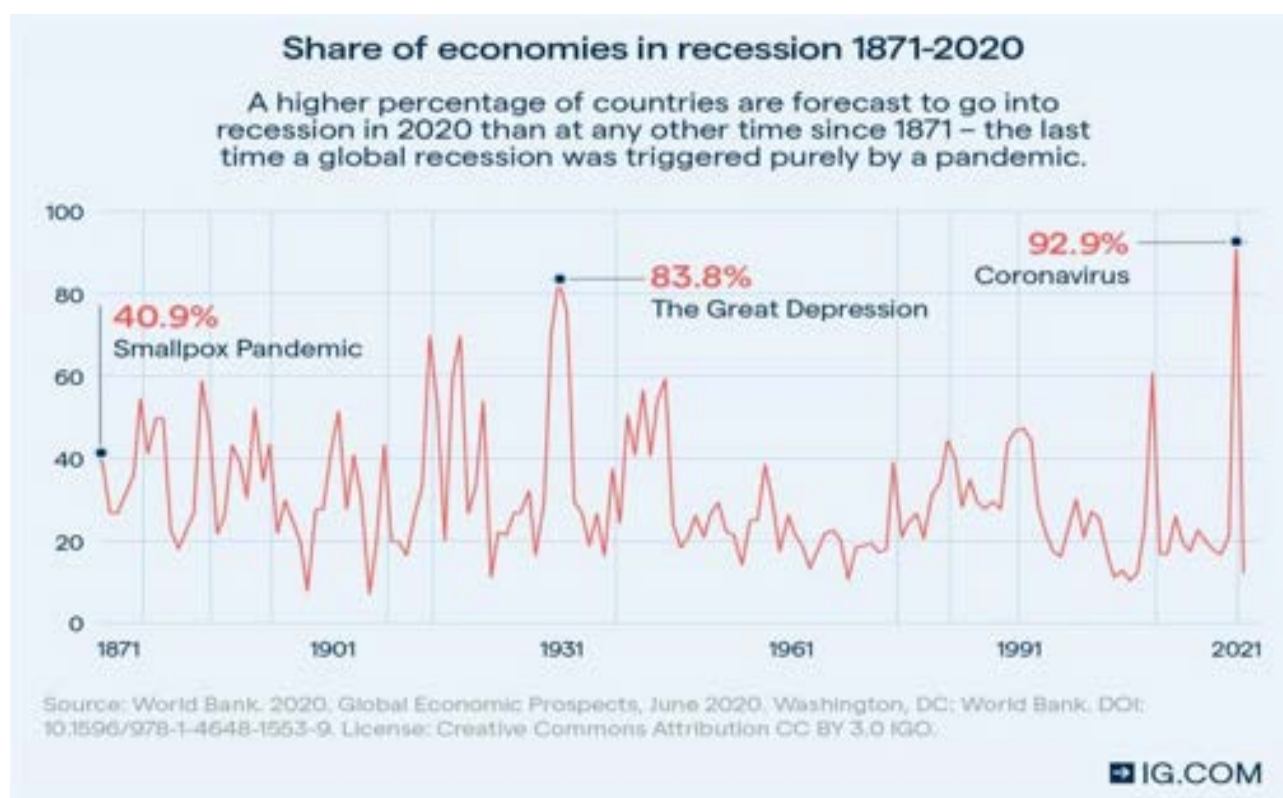
The national governments operating under a high level of uncertainty have been facing with difficult trade-offs between public health, social and economic consequences of their steps. The European population experienced several lockdowns<sup>19</sup> with strong containment measures. Beyond the health and human tragedy of the coronavirus, it is now widely recognised that the pandemic triggered the most serious economic crisis since the Second World War.

The nature of the crisis was unprecedented: beyond the short-term repeated health and economic shocks, there will be the long-term effects on human capital, productivity and behaviour of economic agents (households, firms and government). The crisis has massively accelerated some existing trends, in particular digitalisation of many fields in society (e.g. retail, work, education, public administration).

On the other hand, some phenomenon such as globalization and division of labour have been called to the question, showing not just their bright sides.

<sup>19</sup> A lockdown is the government restriction policy imposed on citizens to stay at home to protect them from danger (e.g. spread of disease). The first lockdown implemented during COVID-19 was in the Chinese city of Wuhan on 23<sup>rd</sup> January 2020. In Europe, Italy was the first country entered lockdown on 9<sup>th</sup> March 2020.

From economic point of view, the COVID-19 recession is different in many respects



Firstly, this is the first global recession in the post-war period, which has been purely triggered by a pandemic. The previous economic crisis have been associated with some economy-wide stress, mostly in high-income countries while COVID-19 recession was born outside of the global economic system severely affecting both high and low-income countries alike.

Secondly, the number of affected countries all over the world is larger compared to any crises. In spring 2020, the hardest-hit nations include the G7<sup>20</sup> and China and later in 2021, other countries from the list of the ten largest economies<sup>21</sup> (India and Brazil) have been also affected. The US, China, Japan, Germany, France, Italy and the UK represent 65% of worlds manufacturing<sup>22</sup>. These countries (especially the US, China, Japan and Germany) are also part of global chains that have been disrupted by containment measures.

<sup>20</sup> The Group of Seven (G7) consists of the world's largest IMF advanced economies with liberal democracies (Canada, France, Germany, Italy, Japan, the UK and the US). These countries account for 46% of global GDP and 10% of the world's population in 2019. Their heads of state or government meet annually at the G7 summit with the EU representatives.

<sup>21</sup> According to the share on the world's GDP, the ten world's largest economies include the US (24%), China (16%), Japan (6%), Germany (5%), the UK (3%), France (3%), India (3%), Italy (3%), Brazil (2%) and Canada (2%) in 2019. Together they account for 67% of global GDP in 2019.

<sup>22</sup> The countries representing 65 % of world manufacturing output in 2019 cover China (29%), the US (16%), Japan (8%), Germany (6%), France (2%), Italy (2%) and the UK (2%).

As a result, businesses around the world face the shortage or delayed supply of production inputs. Thirdly, the national governments have been managed to some extent the scope and timing of economic crisis when they gradually close their economies in order to prevent the spread of COVID-19. Restrictions on the movement of people and business activity intend to reduce the pressure on domestic health care systems and contribute to protecting the health of population. However, the containments have led the European economy into a deep recession. In the past, the reduction in production capacity typically related to natural disaster or war conflict ended up with the destruction of infrastructure or large-scale permanent loss in labour force.

This does not apply to COVID-19 recession, when factors of production have been only temporarily hibernated. All EU MS introduced wage subsidy schemes in order to preserve jobs at firms experiencing a temporary decline in their business activity. Presuming that this switch-off of economies is temporary, the main objective of such step is to preserve labour market relations between employees and employers. Since re-establishing labour links is essentially a costly and lengthy process.

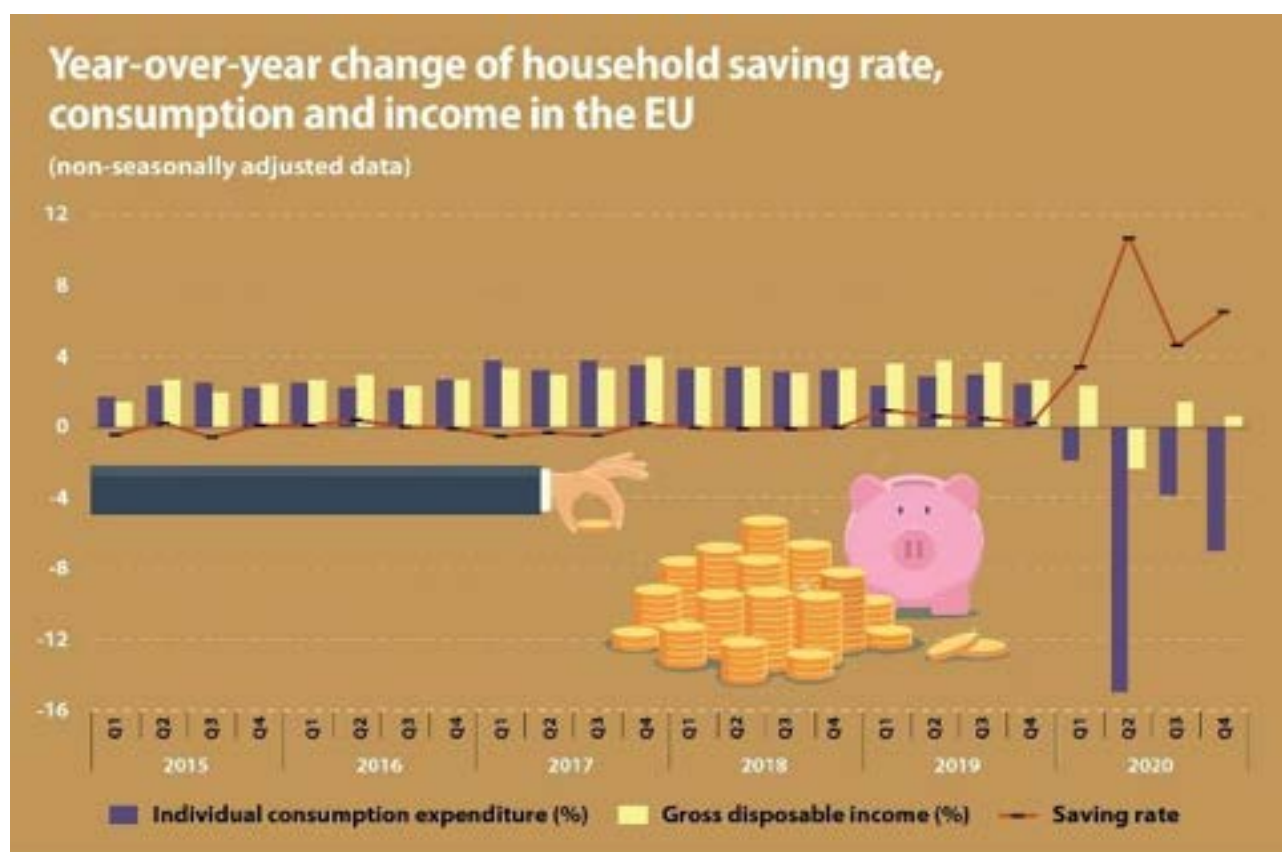
### **Both negative supply and demand shocks contribute to economic contraction**

On the supply side, workplaces have been either partly suspended or even closed in order to prevent the Covid-19 spread, which significantly halt production. Disrupted supply chains have further amplified these negative supply effects. Sectors involved in supply chains have been hit harder than others have.

In addition, sectors that have relied on personal interactions or travel have recorded significant losses. These have included accommodation (e.g. hotels), food services (e.g. restaurants, cafes) and recreational services (e.g. gyms, beauty salons, spas, travel agencies). In general, there have been large differences in the ability of workers to work from home, due both to the type of business and to limitations in productivity of employees with children at home.

On the demand side, households are less likely to leave their homes because of containment measures including restricted purchase of hospitality, entertainment and travel services and of the fear of becoming infected, which ultimately reduces household consumption.

## At the time of economic uncertainty, households tend to accumulate their savings



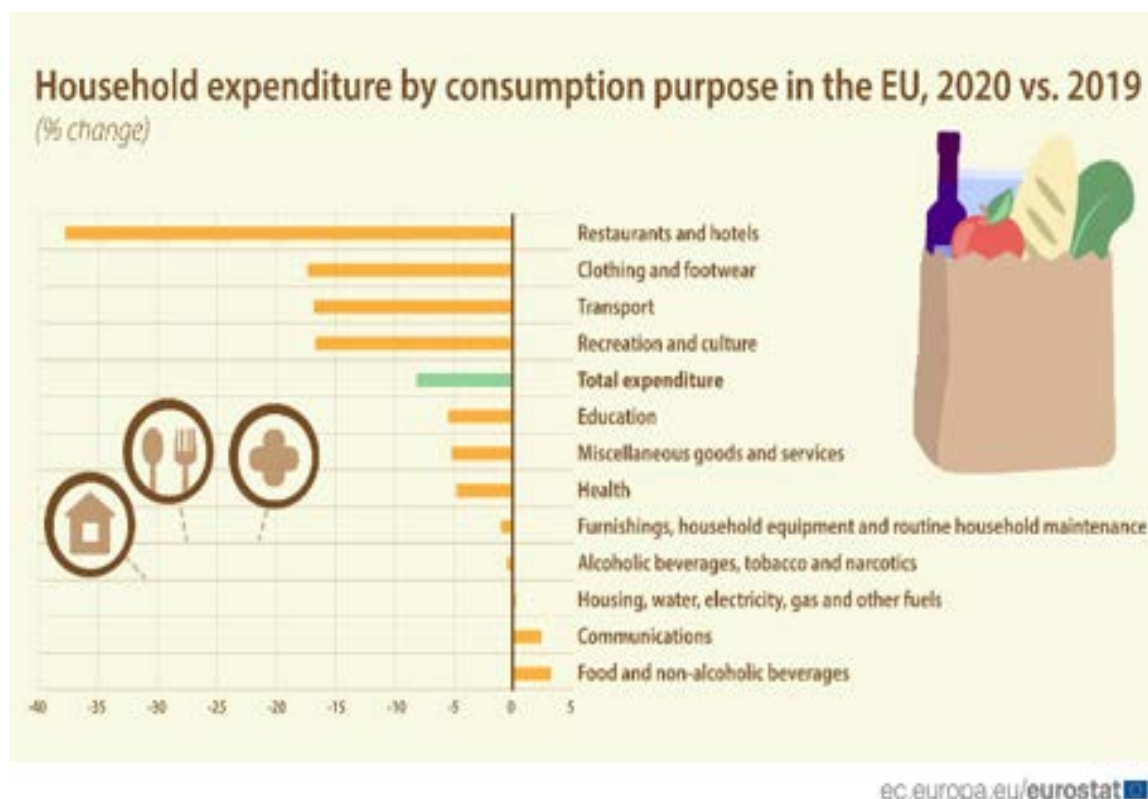
In the environment of falling consumption expenditure in 2020, the household saving rate<sup>23</sup> reached record level of 19.4% in euro area and 18.3% in the EU. None of the MS experienced a negative saving rate in 2020. However, some MS reached saving rates below 10%, among which the lowest was 2.6% in Greece.

On the other hand, uncertainty related to the outbreak of COVID-19 did not have a strong impact on the household investment rate<sup>24</sup>. In 2020, households in the EU invested 8.4% of their disposable income, reaching similar levels as compared to 2019.

<sup>23</sup> The household saving rate is defined as gross household saving divided by gross disposable income, which is adjusted for changes in net equity of households in pension fund reserves.

<sup>24</sup> The household investment rate is defined as gross fixed capital formation (mainly the purchase and renovation of dwellings) divided by gross disposable income, which is adjusted for changes in net equity of households in pension fund reserves. This indicator provides a means of housing market developments. The household investment statistics also include investments made by unincorporated enterprises (principally sole proprietors).

**COVID-19 reduced household expenditure by 8% in 2020 compared with 2019, which presents the largest annual decline recorded since it has been measured**



The largest decreases in household expenditure were observed in the category of restaurants and hotels (-38%). People also spent less on clothing, transport, recreation and culture (all together -17%). Surprisingly, spending on health also declined. On the other hand, the largest rise in spending were recorded for food and non-alcoholic beverages (+3%) and communication (+2%). As regards the EU MS Malta faced the sharpest drop in household spending (22%), followed by Croatia (16.2%), Spain (15.8%) and Greece (15.6%). Meanwhile, Slovakia (2%), Denmark (2.4%), Lithuania (2.8%) and Poland (3.3%) faced the smallest decreases. Despite spending less overall, food, utilities and transport still accounted for more than half of total household expenditure in 2020.

### **The aggregate demand-supply model shows rounds of negatives COVID-19 shocks**

Firstly, the lockdown<sup>25</sup> introduced by government has reduced Aggregate Supply (AS), presented by move from  $AS^0$  to  $AS^1$ . In spite of the fact that sectors have been affected unequally, in general, quarantine and social distancing have led to a decrease in the number

<sup>25</sup> A lockdown is a government restriction policy imposed on citizens to stay at home to protect them from danger (e.g. spread of disease). The first lockdown implemented during COVID-19 was in the Chinese city of Wuhan on 23<sup>rd</sup> January 2020. In Europe, Italy was the first country entered lockdown on 9<sup>th</sup> March 2020.



of working hours. Secondly, the uncertainty in people's health, their finances and their business prospects have stopped household from spending, and therefore Aggregate Demand (AD) has gone down, presented as a move from  $AD^0$  to  $AD^1$ . Usually, non-permanent workers have lost their income at this stage of economic crisis. Then, producers facing a lack of liquidity have been wary of producing and investing. Some of them have decided to closed down, and this has brought AS down again from  $AS^1$  to  $AS^2$ .

Finally, an increase in unemployment and a fall in income further exacerbate negative demand effects. Consumers have been forced to reduce consumption even further, presented as a move from  $AD^1$  to  $AD^2$ . The final impact on product and inflation depend on both the size of AD and AS shift and scope of AD and AS. However, It should be noted that fiscal and monetary authorities have entered into interactions between AS and AD with their supportive measures at various stages of COVID-19 recession in order to diminish negative impacts of lockdown on output and inflation.

### **Different expert views on which negative shock has finally prevailed**

At the beginning of the coronavirus pandemic, it has been very difficult to estimate of the cyclical position of economies. The unprecedented nature of the shock has significantly increased fundamental uncertainty about the breakdown of the slump in economic activity, and thus the composition of demand and supply factors of coronavirus crisis. In particular, at the beginning of the coronavirus pandemic, in the absence of observed data, it was not easy to identify whether the effects of the shock can be attributed more to the negative output gap (anti-inflation negative demand shock) or rather to a downturn of product trend (pro-inflation negative supply shock).

Majority of financial institutions<sup>26</sup> concluded that about a half of the decline in economic activity in 2020 could be attributed to aggregate supply and the second half to aggregate demand. On the other hand, in September 2020 the ECB interpreted the decline in euro area GDP largely as a negative demand effect, i.e. similar to the global financial and economic crisis through a markedly negative output gap. However, the statistical data released already in 2021 rather confirmed the negative supply shock accompanied by inflationary pressures.

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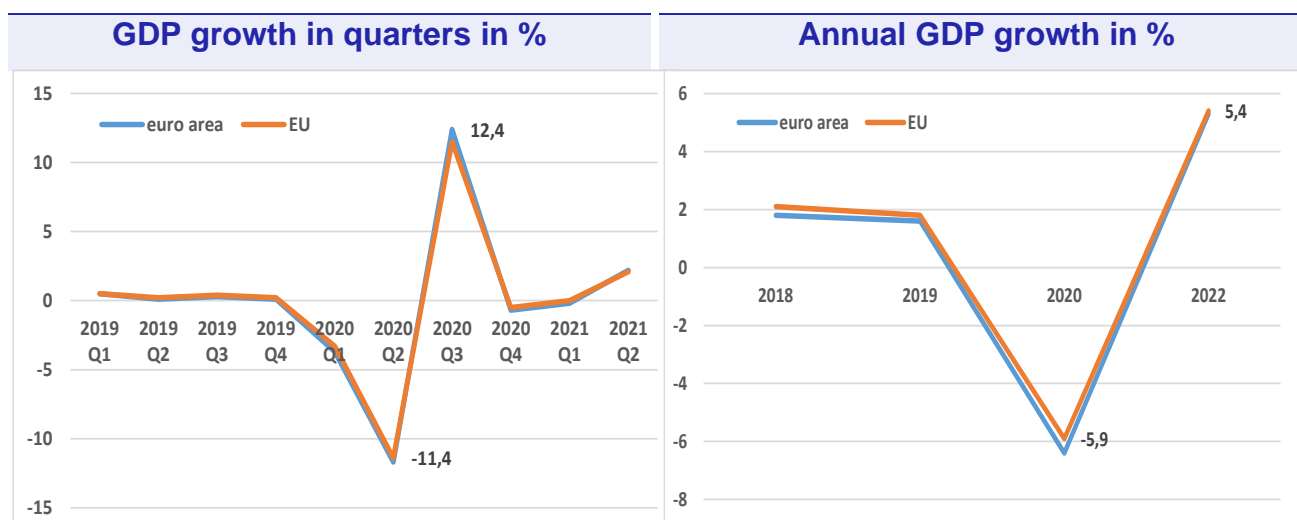
<sup>26</sup> Conclusions from monetary policy reports by Bank of England, Bank of Japan, Bank of Canada.

### Since the COVID-19 outbreak containment measures affecting the economic output

After the significant decline in economic activity recorded in the first part of 2020 and the rebound in the summer 2020, the EU economy faced another setback in late 2020 related to new round of containment measures. The EU has been pushed back into recession by economic output falling again in the last quarter of 2020 and the first of 2021<sup>27</sup>.

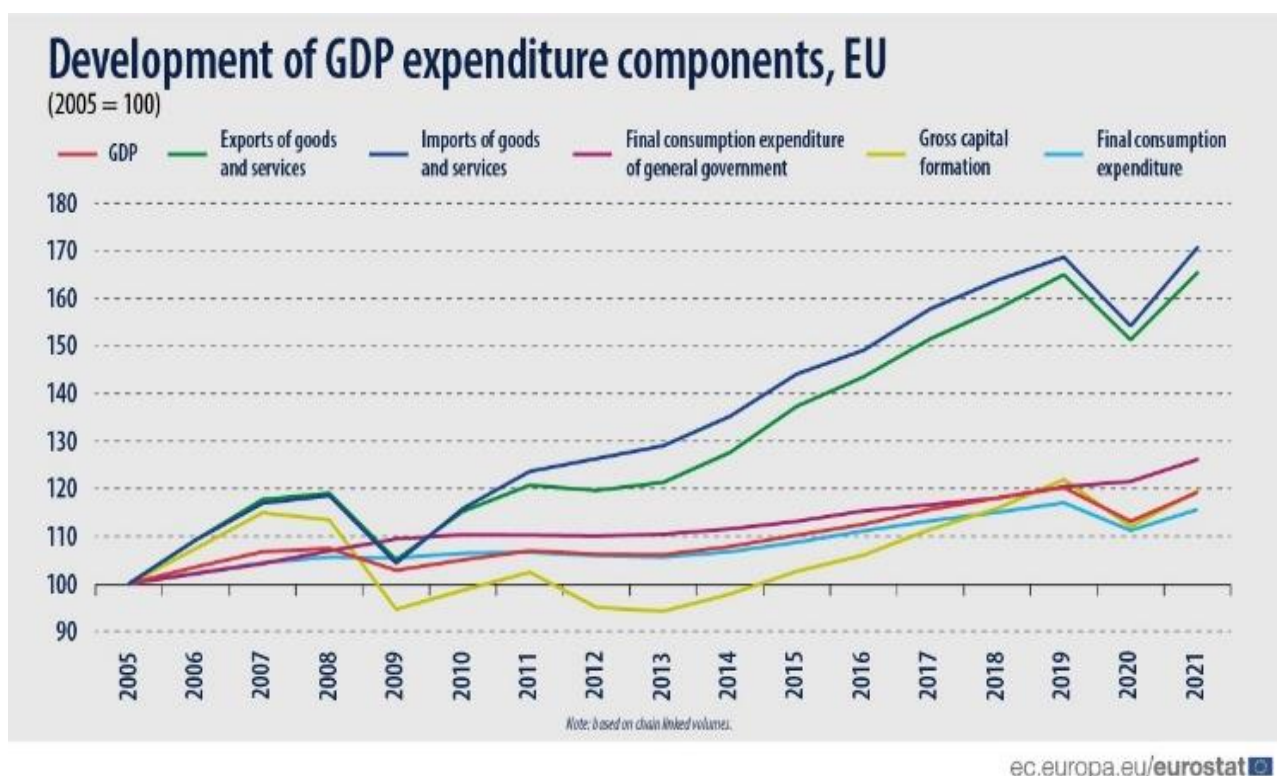
However, considering the stringency of the restrictions, the decline in activity was far milder than the downturn in the first half of 2020. Better adaptation of firms and households to the constraints of the pandemic environment, stronger support from global growth and trade, and continued strong policy support helped economic agents cope better with the economic challenges.

In 2021, the GDP showed a strong economic rebound and increased by 5.4% in the EU. However, GDP remained 0.8% below the pre-pandemic level, as the economic fallout of the EU in 2020 resulted in a decrease by 5.9%. Regarding the economic development of MS in 2020, all countries except Ireland fall into recession and experienced the negative economic growth. On the other hand, all countries recovered and turned into positive economic figures in 2021.



<sup>27</sup> Eurostat euroindicators released on 7 September 2021. Available on: <https://ec.europa.eu/eurostat/documents/2995521/11563259/2-07092021-AP-EN.pdf/5adabdef-cc74-9c1c-fc2b-223171814f39?t=1631003082241>

## Development of GDP components showed a strong decline in net export in 2020 and the rebound of all GDP components in 2021



The government final consumption was the only component of GDP, which did not decline during the coronavirus pandemic. The containment measures adopted all over the world in order to prevent the COVID-19 spread primarily hit international trade. This resulted in a decrease of both export and import in the EU in 2020. Investments and household consumption also dropped down when the COVID-19 crisis started. In 2021, all GDP components bounced off the bottom and started to grow.

However, consumption expenditure and investments were still lower than their 2019 levels, while the export and import were fully recovered and reached to their pre-pandemic levels. The expenditure of general government which increased by 0.9% in 2020 further rose by 3.8% in 2021. The recovery of investment presented as gross capital formation by 6.7% in 2021 are essential for sustainable restoration of GDP.

### **Supply side bottlenecks in global chains emerged in 2H 2020 and in 2021**

Not just lockdowns but also series of natural disasters and emerging labour shortages in various sectors caused delays in supplies or even their shortage. The supply side bottlenecks were affected by logistic disruptions in the transport sector, mainly container shipping that struggled to cater for the surge in merchandise trade in the post-lockdown opening. Waiting times at ports increased because of higher import volumes, containment measures at port facilities and temporal lack of service staff<sup>28</sup>. Therefore, shipping costs significantly jumped up by five times higher than before pandemic. Highly cyclical input components such as microprocessors faced with a surge in orders admit a capacity. The demand for electronic devices rose during lockdowns. At the same time, the automobile producers cut their microchips order due to the faltering demand for cars. Furthermore, US restrictions in 2019 on export of chip software and equipment weakened production of chips in China. Due to the imbalance between supply and demand for chips, their delivery times almost doubled in 2021. The disruption in supply chains lifted prices of other production commodities (e.g. metals, wood, and construction materials), not just microprocessors and chips. All of these bottlenecks appeared at the time of global rebound and hampered the return to pre-pandemic economic levels in the EU MS.

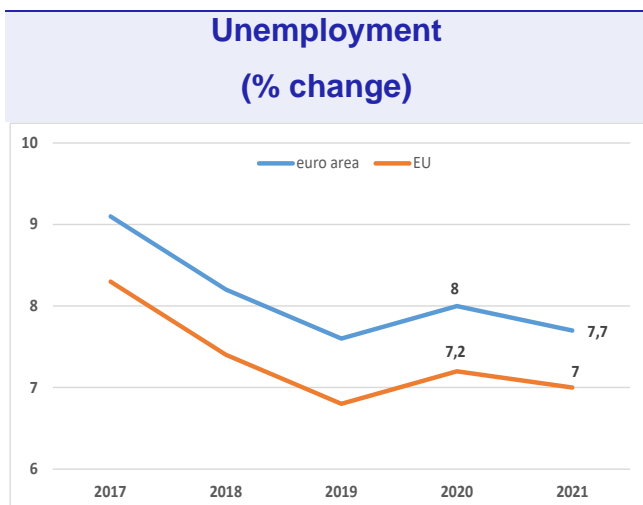
### **Rise in unemployment have been damped by government supportive measures**

After a long period of relaxation, the EU-wide monthly unemployment rate rose slightly in April 2020 for the first time in more than seven years. Government measures, such as the reduced hour's compensation (known as Kurzarbeitergeld in Germany) or other short-term employment schemes, are one of the reasons why the increase has been relatively moderate. The unemployment rate started to decrease in the middle of 2021. In July 2021, the euro area seasonally-adjusted unemployment rate was 7.6%, down from 7.8% in June 2021 and from 8.4% in July 2020. The EU unemployment rate which has been slightly lower reached 6.9% in July 2021, down from 7.1% in June 2021 and from 7.6% in July 2020. In an uncertain economic situation, young people have a particularly difficult time: as new entrants without substantial work experience and often only employed based on limited-term contracts, they are more than twice as likely to be unemployed as an average member of the EU labour force. However, the coronavirus crisis did not push youth unemployment rate to significantly high levels.

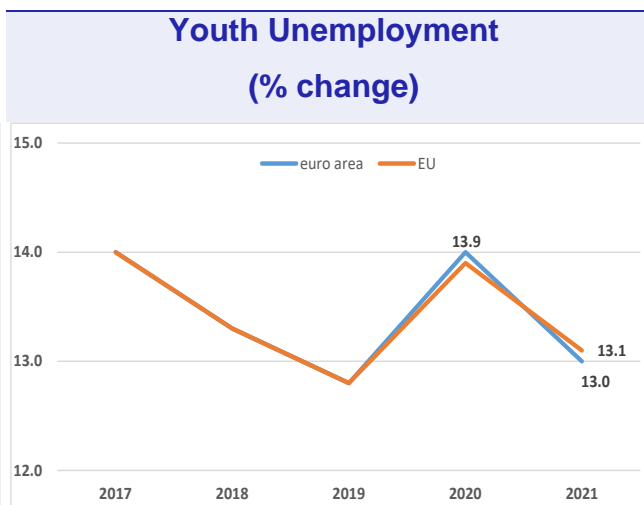
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<sup>28</sup> The container ship grounding in the Suez Canal in March 2021 further added to the backlogs.

Employment prospects in general have become significantly more volatile

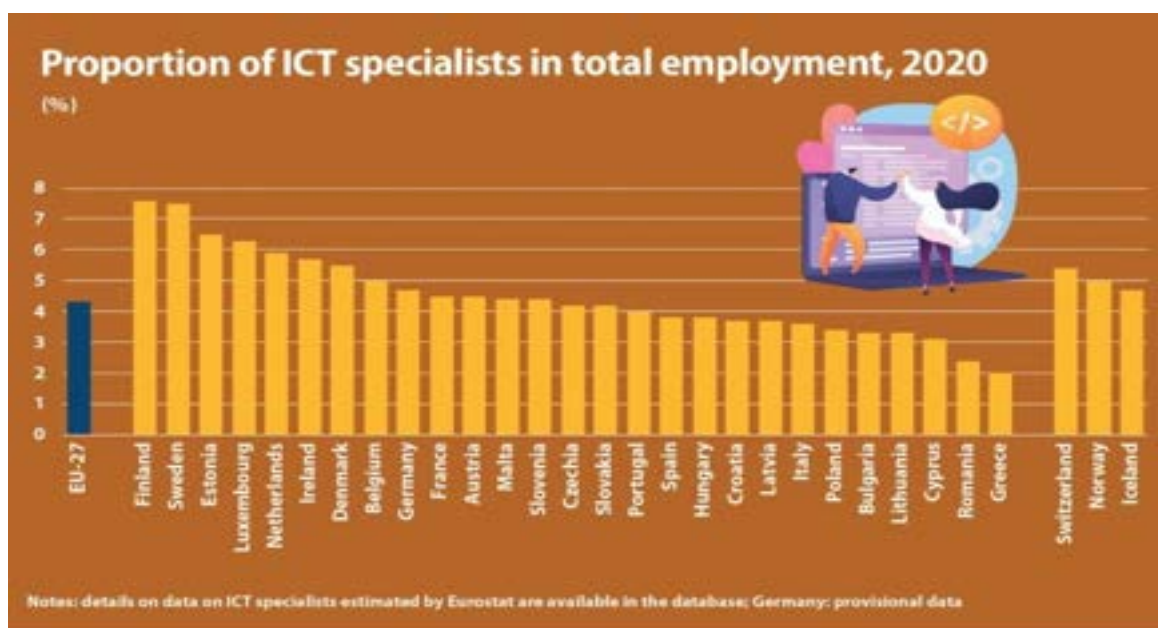


Source: Eurostat



Source: Eurostat

The manufacturing industry has been faced with interrupted supply chains and collapsing sales markets. In the retail, the employment prospects have been rather mixed. Employees in shops that remained open throughout to supply the population with basic goods, such as supermarkets and pharmacies, faced with an increased workload, while other shops were forced to temporarily shut down completely. The pandemic has also negatively affected workers in the hotel and restaurant industry, as restaurants and hotels had to close for a substantial period of time in many places and cross-border tourism came to a standstill.



Notes: details on data on ICT specialists estimated by Eurostat are available in the database; Germany: provisional data

On the other hand, the need for ICT specialists has been increasing. Between 2019 and 2020, the growth rate in this profession reached 7.5 % compared to the average annual growth rate of 5.2 % over the past decade. This trend could be linked to the acceleration of the digital transformation. In the EU MS, ICT specialists represent less than 10% of employed persons. At the national level, the share of ICT specialists in employment was highest in Finland and Sweden, while relatively high shares were also observed in Estonia, Luxembourg, Netherlands, Ireland and Denmark (all above 5%). The smallest shares were recorded in Greece and Romania.

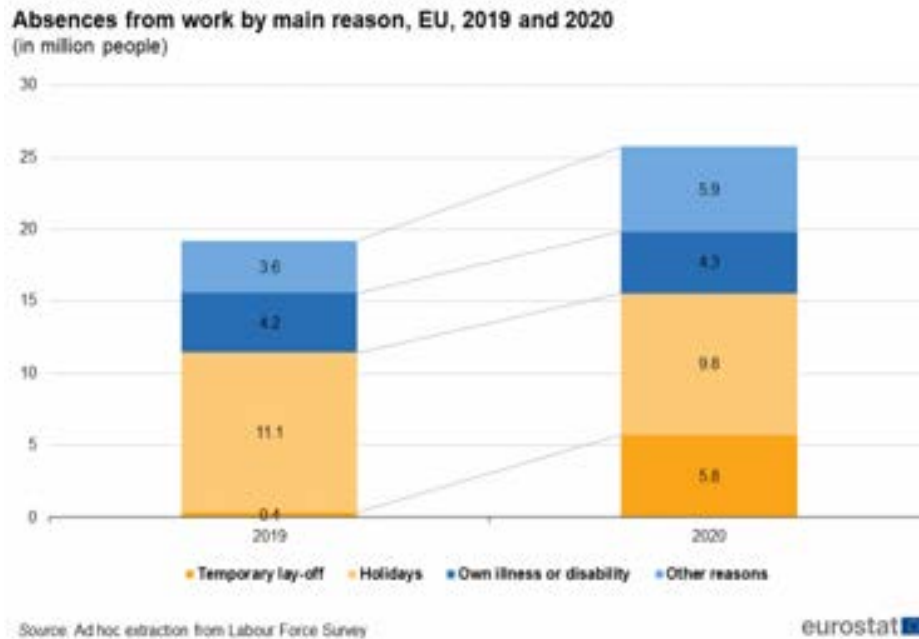
### The containment measures have caused a decline in number of hours worked



[ec.europa.eu/eurostat](https://ec.europa.eu/eurostat)

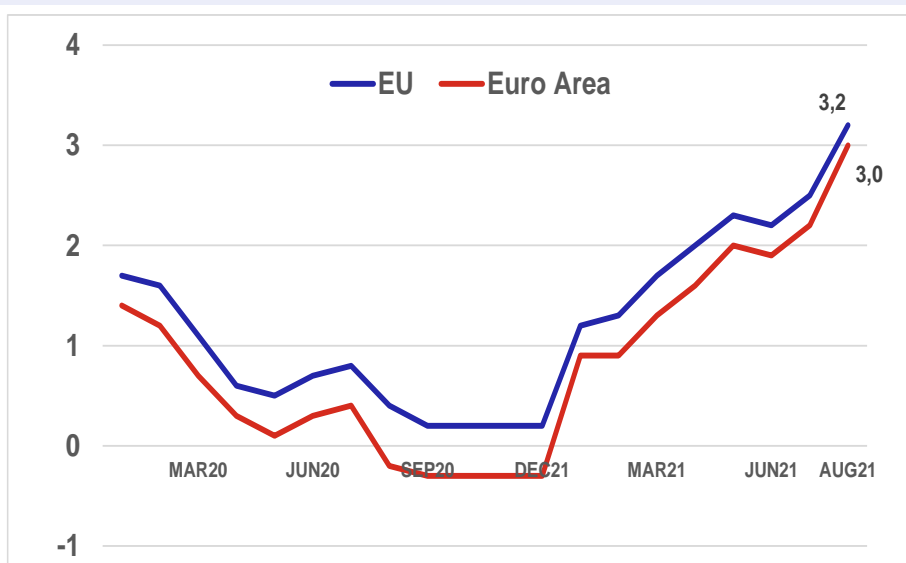
In 2020, the number of actual hours worked in the main job decreased by 12% compared with 2019 in the EU. This decrease can be explained by containment and supportive measures taken in response to the COVID-19 pandemic, which led many people to alternate between of work and absence from work in 2020. As a result, more people worked fewer hours than usual and were absent from their jobs. At the national level, there was a decline in hours worked across all MS. The highest declines were recorded for Greece (-19.7%), Spain (-19.5%), Portugal and Italy (both -19.0%). The EU countries where there was little

change in hours worked (with a reduction of less than 5%) were Finland (-4.4%), Denmark and Luxembourg (both -4.1%) and the Netherlands (-3.2%). The higher absence from work was primarily driven by the rise in the number of temporary lay-offs, which jumped from 0.4 million in 2019 to 5.8 million in 2020. Other reasons including taking care about school children at home also played a role.



After a decrease in the EU annual inflation<sup>29</sup> in 2020, the inflation accelerated in 2021

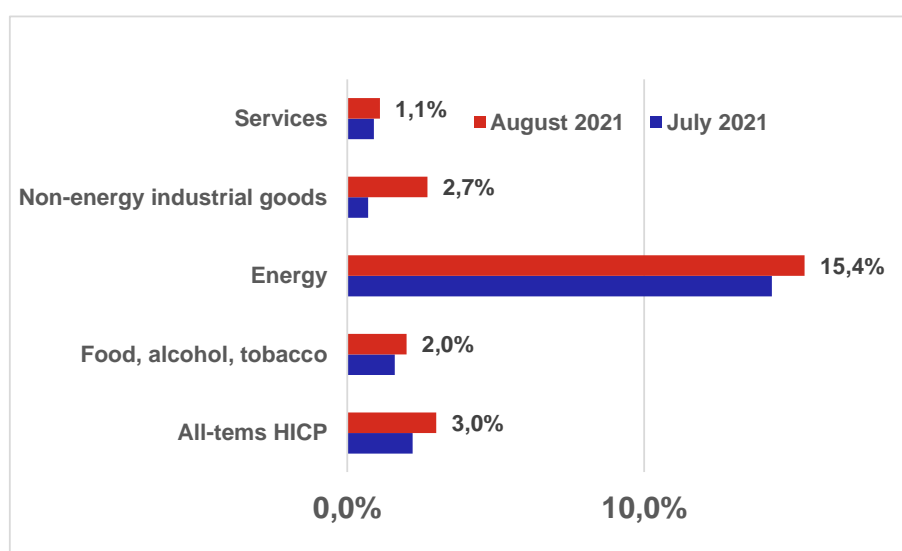
Annual inflation rate (%)



<sup>29</sup> Annual inflation is the change of the price level of consumer goods and services between the current month and the same month of the previous year. In the EU, the consumer price inflation is measured on the basis of Harmonised Index of Consumer Prices (HICP).

Euro area annual inflation reached 3.0%<sup>30</sup> in August 2021, up from 2.2% in July 2021. The 3% rate, the highest in the Eurozone since the end of 2011, exceeded the European Central Bank's goal of 2% although the bank considers the nature of inflation to be temporary. In contrast, the EU inflation rate stood at 0.3% one year ago, in August 2019. In the period of January 2020-August 2021, the EU had behind three waves of COVID-19 and ahead of the fourth wave, which started in September 2021. In August 2021, Germany as a country among the larger countries in the euro area experienced particularly high inflation (3.4%), as did Spain (3.3%). On the other hand, Italy (2.5%) and France (2.4%) remained below the average. In general, the MS outside euro area faced the higher annual inflation compared to euro area countries. In August 2021, the highest annual inflation within the group of MS outside euro area reached 5% in Poland.

### Main components of euro area inflation



It could be concluded that the first and second wave of COVID-19 in 2020 was surrounded by the decline in a price level. However, at the beginning of 2021 annual inflation started to accelerate. The European economies reopened slowly in 2021 when various restrictions were relaxed. Households started to spend more on going to restaurants, travelling and buying more stuff for accumulated financial resources during the lockdowns. At the same time, firms responded to this renewed demand but the hibernated economic relations was not easy to get back on track. Therefore, the third wave of COVID-19 in spring 2021 took

<sup>30</sup> Eurostat euroindicators released on 31 August 2021. Available on: <https://ec.europa.eu/eurostat/documents/2995521/11563243/2-31082021-AP-EN.pdf/80c7e6d5-2700-b95d-6518-1f74e1458d4f?t=1630398005392>

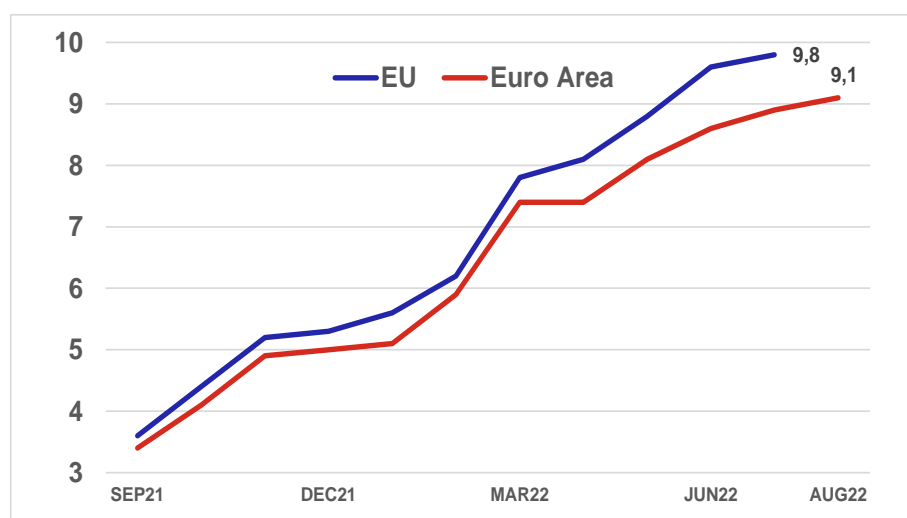


place in an environment of rising price level in the EU when the aggregate demand and supply mismatched. Having look at the main components of euro area inflation, energy had the highest annual rate in August 2021, followed by food, alcohol and tobacco, services and non-energy industrial goods.

### Price level rise further continued in 2022 when the pandemic situation improved

At the beginning of 2022 after the fourth COVID-19 wave, the European economy was on the way to the economic recovery. However, Russian invasion to Ukraine, which started in February 2022, interrupted the economic expansionary phase in the EU. The war completely change the economic prospects, by bringing renewed disruptions in global supply resulted in further commodity price pressure and heightening uncertainty regarding inflationary developments. The EU as a region heavily reliant on imported fossil fuels from Russia took the sharp hit, especially MS in geographical proximity to Russia and Ukraine. Energy commodity prices had already increased before the war. However, the pressure on price level was broadening beyond energy since food commodity had been absorbing the rise of higher energy costs. In addition, the risk of interrupted export of grains, oil seeds and other agricultural commodities from Ukraine and Russia as key exporters of these commodities contributed to the imbalance in the food markets. In general, energy prices, bottlenecks in international transportation and output disruption have been driving inflation numbers in the EU.

EU inflation in 2021-2022



Six months after Russia's attack on Ukraine, the annual inflation in the EU has been continuously rising, reaching 9.1% in August 2022 with high differences among MS. Just one year earlier, the inflation rate was only 3%. The highest annual rates exceeding 20% were recorded in so-called Baltic countries in August 2022. On the other hand, the lowest annual rates were recorded in France, Malta (6.8%) and Finland (8%). As regards the inflationary components, they remain the similar ones a year ago, i.e. the highest contribution to the annual euro area inflation represents energy, followed by food, alcohol and tobacco, services and non-energy industrial goods.

### Further reading:

- Milasi, S., I. González-Vázquez and E. Fernández-Macías (2021), "Telework before the COVID-19 pandemic: Trends and drivers of differences across the EU", OECD Productivity Working Papers, No. 21, OECD Publishing, Paris
- Gagnon, J., Kamin, S., Kearns, J. "The impact of the COVID-19 Pandemic on global GDP growth" AEI Economics Working Paper 2022-08, June 2022
- Baldwin, R., Weder di Mauro B., (2020) Economics in the time of COVID-19, ISBN 978-912179-28-2

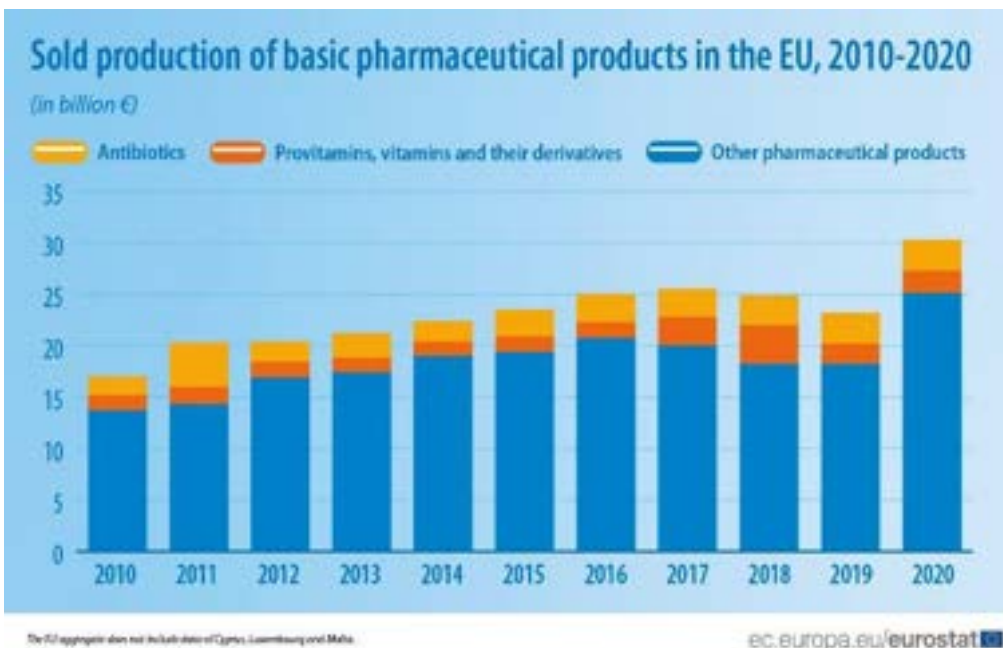
## PART 3:

# ECONOMIC WINNERS AND LOSERS OF CORONAVIRUS CRISIS

- *COVID-19 has been adversely affecting the health, well-being and lifestyle of people not just in the EU but all around the world*
- *People have adjusted to their life with the coronavirus. Their behaviours and habits have been quickly changing. Some economic sectors have benefited from these changes more than others*
- *Several sectors have found themselves serendipitously on the right side of history such as e-commerce marketplaces, pharmaceuticals, logistics and delivery, entertainment streaming and gaming, on-line studying and video conferencing*
- *On the other hand, there are sectors, which have been losing a lot. Their managements would need a Herculean effort to pull them through the crisis. Even if they succeeded, some of them might be seriously damaged. Companies in these sectors such as airline industry, tourism, traditional retails have been forced to cut cost, implement de-risk operations and be ready to return when conditions improve*

**The containment measures have differently affected sales of different products**

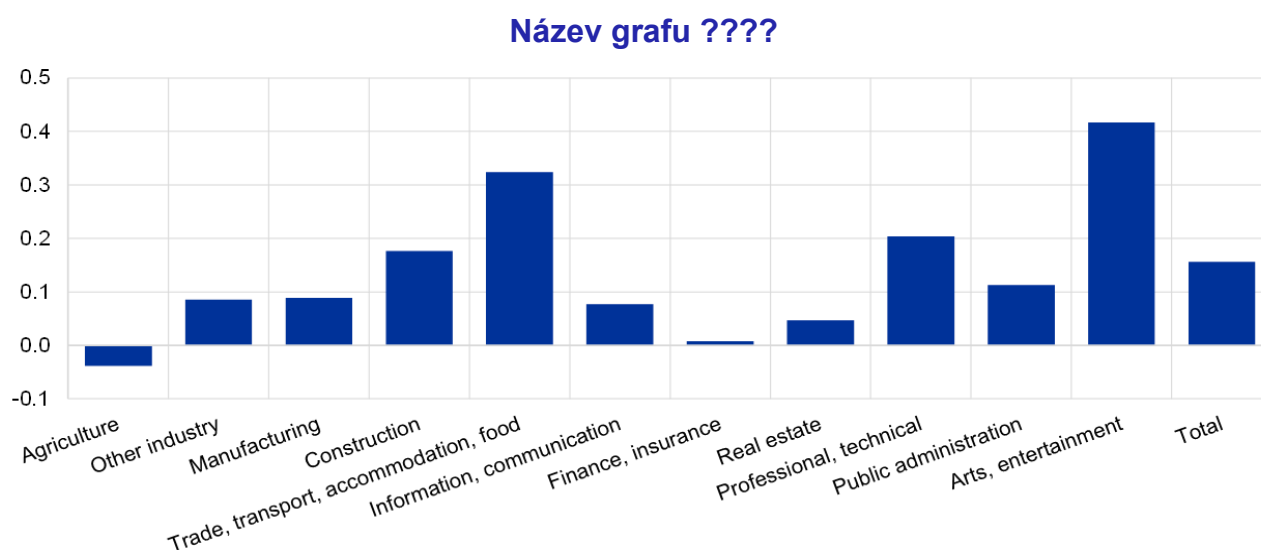
In 2020, the EU's sold production of manufactured goods decreased of 7% compared with 2019. This large decline in 2020 was primarily driven by a decrease in the manufacturing of motor vehicles, trailers, and other transport equipment, manufacturing of furniture, machinery, equipment and metal products. Despite the general decrease in production in 2020, the value of sold production of basic pharmaceutical products increased by almost a third (31%) compared with 2019.



The contraction of economic activities measured by sold products has varied across sectors and the pattern of the sectoral impact has been very different from the past economic downturns. Sectors typically pro-cyclically evolved (e.g. industry and construction) have been somewhat less impacted than some services relatively insensitive to the economic cycle. On the other hand, services with high-skilled workers and high scope for working from home (e.g. ICT, finance, real estate) contracted very slightly. In conclusion, the containment measures have caused a rather atypical sectoral recession.

### The impact of containment measures has differed and changed over time

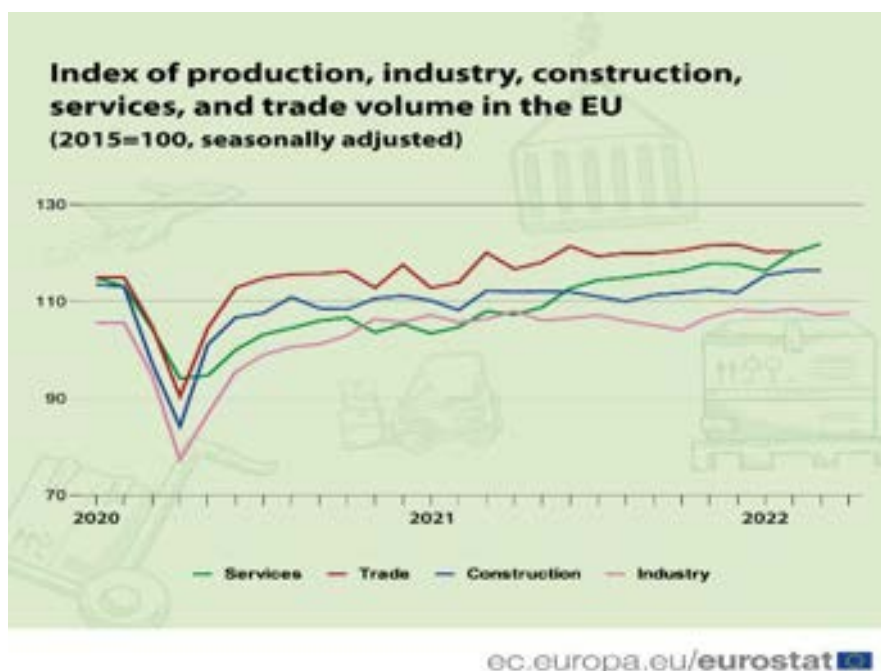
The nature of the containment measures largely explains the different impacts on economic activities. Sector elasticities to the stringency of containment<sup>31</sup> in the euro area indicate that the contact-intensive parts of economy (e.g. transport, accommodation and entertainment) have been the most affected.



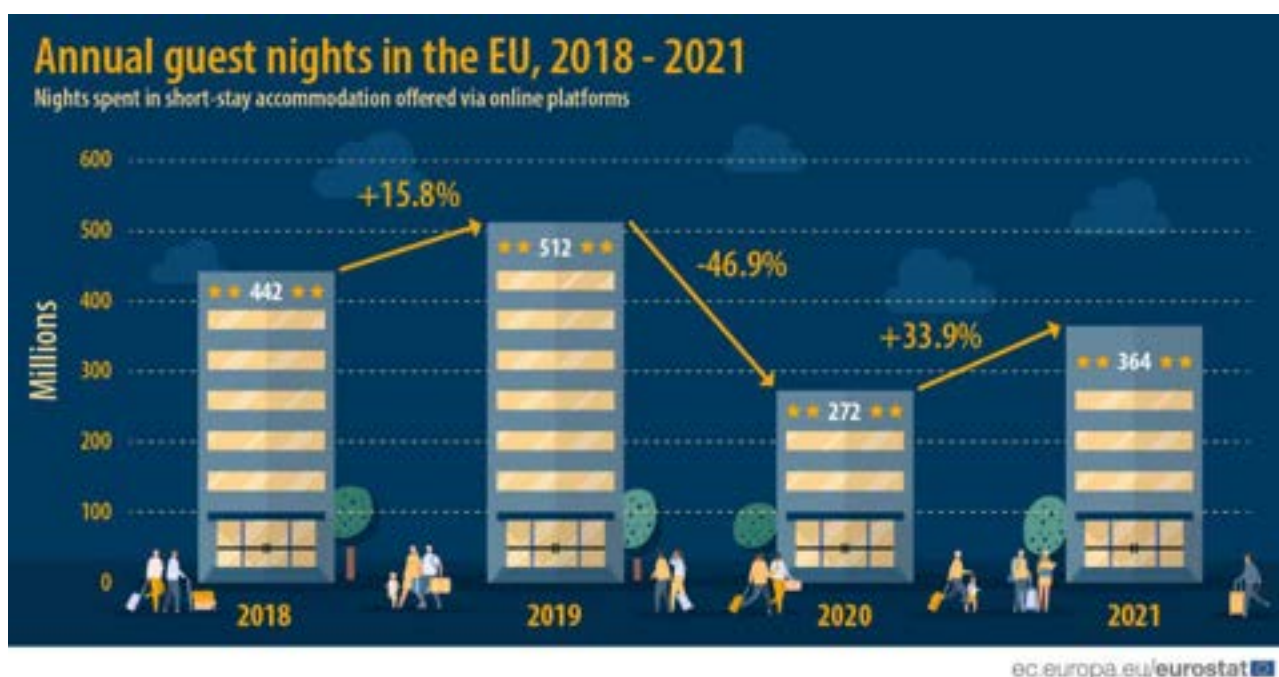
Over time, the negative impacts on sales have been partly mitigated in sectors where a contact is easier to avoid or teleworking is an alternative to face-to-face work or client interactions. The adverse impact of containment measures has continuously diminished, as economic agents have learned how to cope with restrictions. However, in some sectors such as transport, accommodation and entertainment the change in elasticities to containment measures has been very limited even in the medium-term perspective. On the other hand, there are sectors (e.g. finance, real estate) with a high level of flexibility in a short-term

<sup>31</sup> Stringency of containment is measured by the Oxford COVID-19 Stringency Index, which is based on nine response indicators including school closures, workplace closures, travel bans etc.

perspective. Trade volume index shows unprecedented decreases in March and April 2020. All four economic areas (industry, construction, services and trade) have recovered to, and even surpassed, to different degrees, pre-crisis levels as of February 2020.

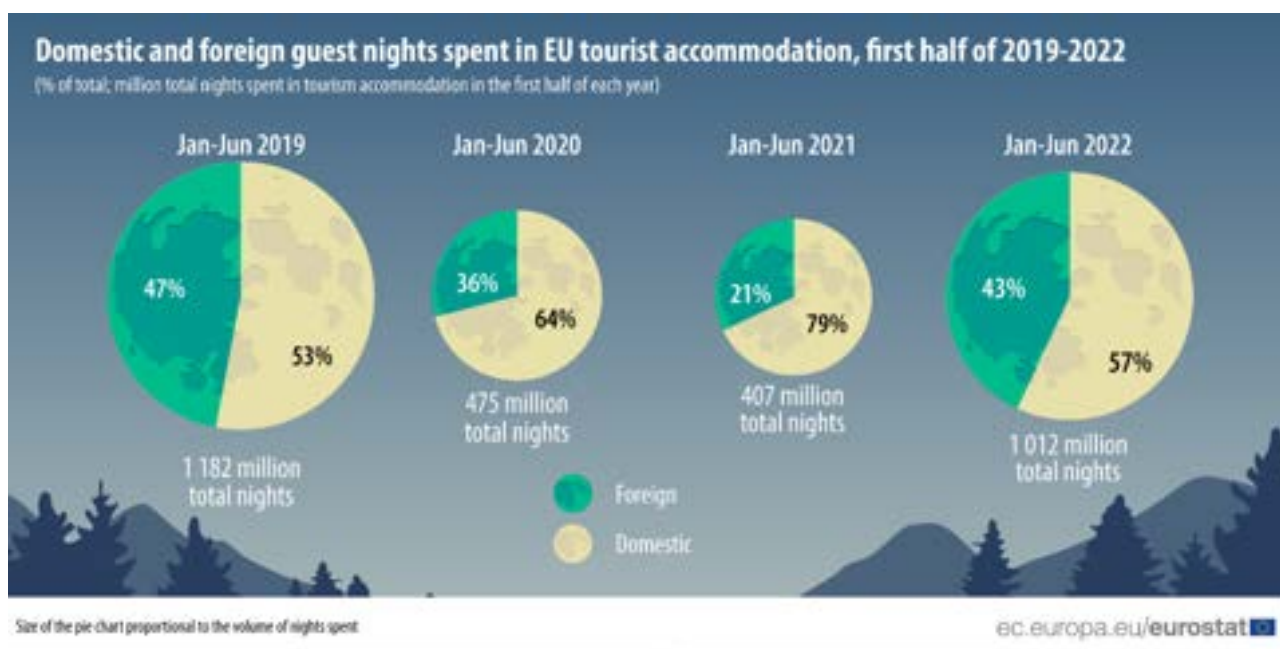


### Strong negative impact of containment measures on tourism



In 2020, tourism was among the sectors most affected by the COVID-19 pandemic, due to the travel restrictions as well as other precautionary measures taken by the EU MS. The number of nights spent at EU tourist accommodation establishments dropped by 61%

between April 2020 and March 2021 (1.1 billion EUR), compared with the 12 months prior to the pandemic (April 2019 to March 2020: 2.8 billion EUR). Between the EU MS, the highest decreases were recorded in Malta (-80%) and Spain (-78%), followed by Greece (-74%), Portugal (-70%) and Hungary (-66%). On the other hand, the Netherlands and Denmark both reported lower drops of 36%. The tourism nights booked online via Airbnb, Booking or Tripadvisor severely declined by 47% in 2020 compared to 2019.



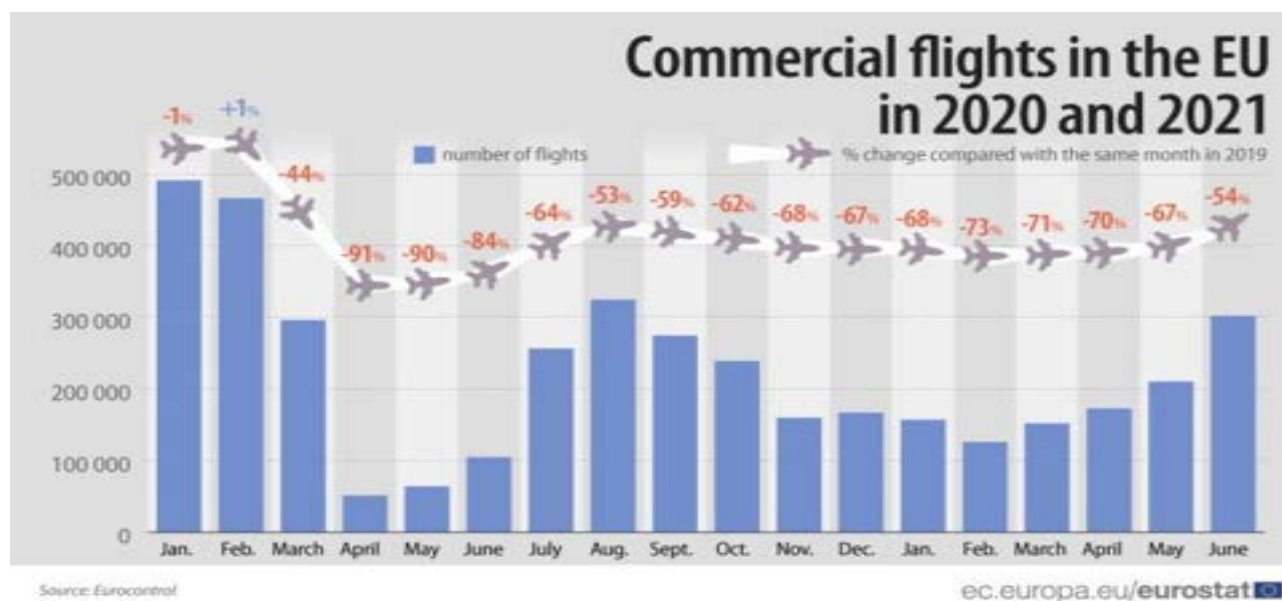
However, the ability to recover and get back to the 2019 levels in tourism seems to be very strong in this sector. Data for the first half year of 2022 show that nights spent by foreigners in the EU tourist accommodation during this period increased by 154% compared with the same period in 2020 and by 401% compared with 2021. However, compared with the same period of 2019, there is still a 22% decline. In addition, figures show a shift to domestic tourism during pandemic years.

### City tourism has been the hardest-hit segment of tourism

City tourism normally accounts for about 60% of customer reviews across the EU. Its decline contributed the most to the overall decline in tourism activity. After being down by about 80% in 2020, city tourism remained just as low in the first five months of 2021, as compared to the same months in 2019. On the contrary, coastal and rural tourism performed better, and on average contributed less to the decline. Coastal regions in Denmark, Germany, France, the Netherlands, and Poland in particular saw activity in the third quarter of 2020 close to,

or even exceeding, normal levels. The decline in coastal tourism in most Mediterranean MS was less pronounced than in their major cities. Therefore, it has become clear that not all regions were affected to the same extent and could possibly rebound to the pre-pandemic levels at the same time.

**Containment measures have had strong negative impact on commercial flights.**



Air transport industry has been immediately hit by lockdown. The first impact on commercial air transport was visible in March 2020, with a 44% decrease in the total number of commercial flights in the EU compared with the same month in 2019. The change in travel preferences related to COVID-19 restrictions stood behind the most substantial falls in the number of commercial flights.

During the peak summer months, there was only a partial recovery, with falls of 64% in July and 53% in August, with further decreases observed in the second half of 2020. However, the first months of 2021 showed no signs of recovery: January (-68% compared with same month in 2019), February (-73%), March (-71%) and April (-70%). In these months, the EU MS had been forced to re-introduce restriction measures. The situation started to improve in May (-67%) and June (-54%).

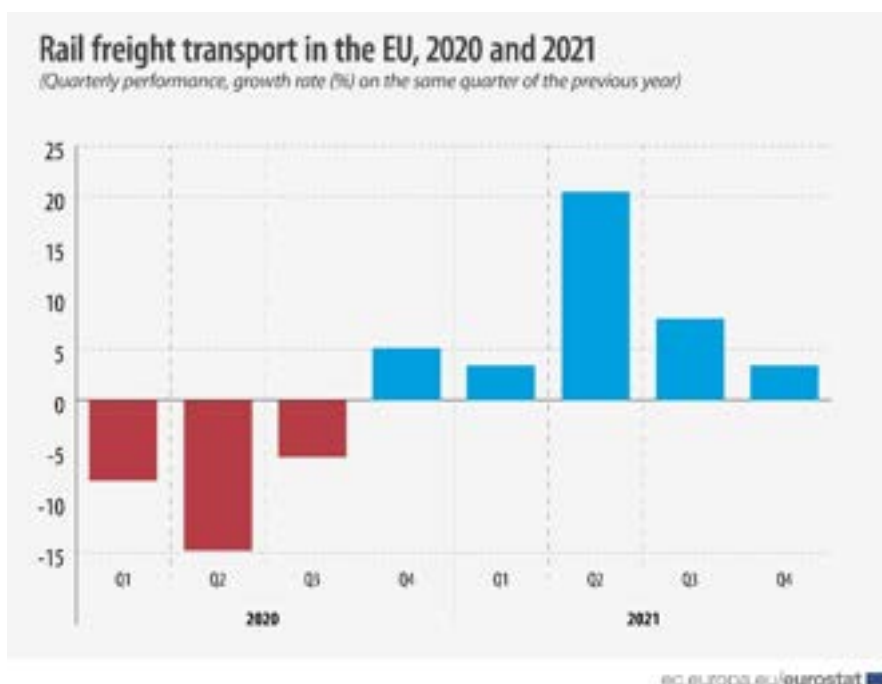
In absolute terms, the number of commercial flights stood at 302 200 in June 2021 compared with 663 000 in June 2019.



In 2020, road freight and rail freight transport were also negatively affected due to lockdowns and restrictions on cross-border movements

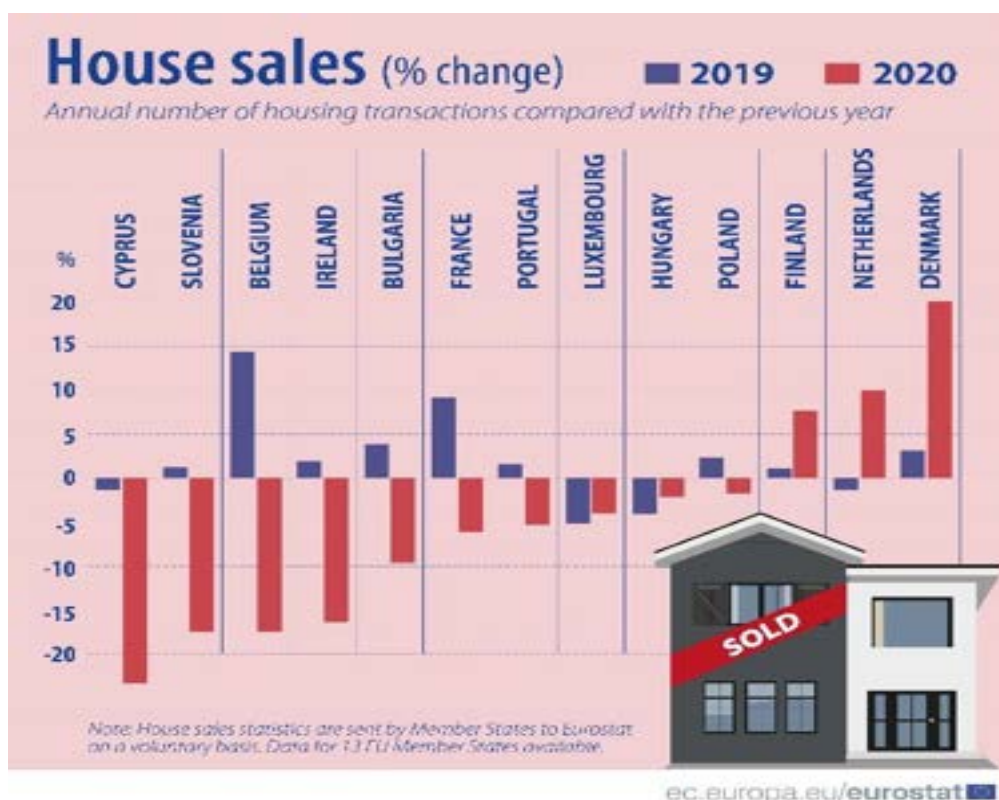


The effects on road freight transport of the COVID-related lockdowns and restrictions on cross-border movements were clearly seen in the quarterly data. The second quarter of the year usually represent the highest number of tkm performed. However, the second quarter of 2020 experienced the height of the restrictive measures to counter the COVID-19 pandemic, while the third and fourth quarters of 2020 showed road freight transport recovering to levels even higher than before the pandemic. In 2021, total road freight transport in the EU increased by 7% in terms of tonne-kilometres compared with 2020.

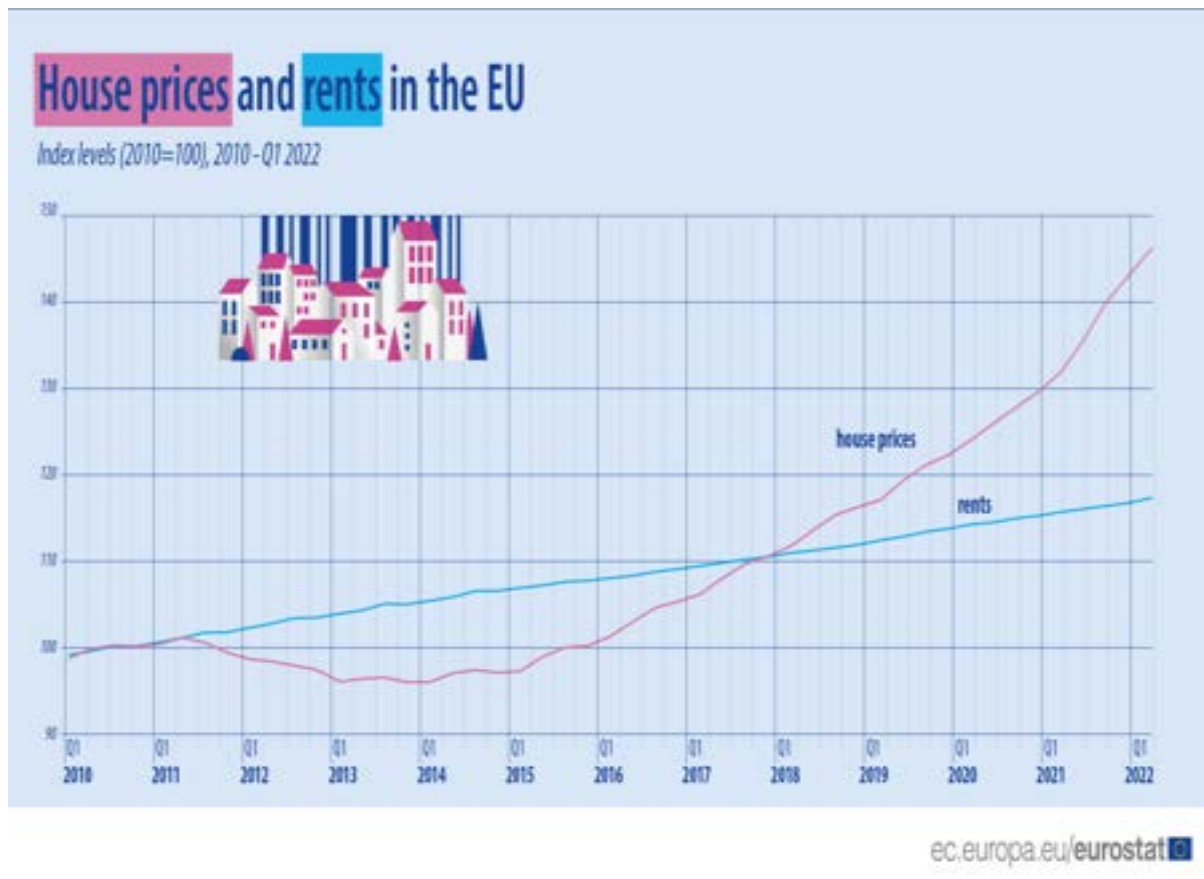


The similar pattern worked for rail freight transport as well when the first signs of recovery were observed in the fourth quarter of 2020 when data pointed to a 5.1% increase compared with the same quarter of the previous year. This positive trend gradually continued in all quarters of 2021. The highest growth rate in rail freight transport was recorded in the second quarter of 2021, followed by the third quarter. The first and fourth quarters increased each by 3.4 % compared to the same quarters of 2020 in the EU.

**The COVID-19 recession has differently affected housing purchases in the MS**



In 2020, the number of housing transactions decreased in several EU countries compared to 2019 despite a continued upwards trend in house prices. Data on the number of housing transactions are only available for 13 EU countries. However, the largest decreases in the number of transactions in 2020 were recorded in Cyprus (-23.3%), Slovenia (-17.5%), Belgium (-17.4%) and Ireland (-16.4%). Interestingly, three countries recorded an increase in the number of housing transactions Denmark (+20.1%), the Netherlands (+10.0%) and Finland (+7.7%). The decline in the number of transactions could be attributed to COVID-19 lockdown measures, in particular in the second quarter of 2020, which included a temporary suspension of real estate activity.



The Eurostat statistics on property markets further demonstrates that rents and house prices in the EU have been continuously rising during the coronavirus crisis as part of the long-term trend.

### Further reading:

- Abay, Kibrom A.; Tafere, Kibrom; Woldemichael, Andinet. 2020. Winners and Losers from COVID-19 : Global Evidence from Google Search. Policy Research Working Paper;No. 9268. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/33852> License: CC BY 3.0 IGO.
- European Commission: "The sectoral impact of the COVID-19 crisis", 2021
- Canton, E., Colasanti, F., Durán, J., "The sectoral impact of the COVID-19 crisis: an unprecedented and atypical crisis", ISBN 978-92-76-29624-9
- Čadil, J., Beránek, M. and Kovář, V. (2021), "Likely winners and losers in upcoming COVID-19 economic crisis – lessons learned from the GFC", Journal of Entrepreneurship in Emerging Economies, Vol. 13 No. 4, pp. 575-587. <https://doi.org/10.1108/JEEE-10-2020-0374>

## PART 4:

# COMPARISON OF COVID-19 CRISIS AND EUROZONE CRISIS

- *In the impact of the COVID-19 crisis and Eurozone crisis on the living standards of households in the EU Member States seems to be profoundly different. Analyses conclude the significant rise of household saving rates and increased household investments in the time of Covid-19 crisis compared by the Eurozone crisis when both economic indicators declined.*
- *The number of companies in the EU based on business registrations and bankruptcies were only affected in the second quarter of 2020 when the pandemic was broken out and economic activities were frozen by unexpected lockdowns.*
- *Unlike the previous dual crisis in the EU (the global financial and economic crisis 2007-2008 and the related European sovereign debt crisis 2009-2012), the EU banking system demonstrated its resilience in the good performance of financial institutions during the COVID-19 crisis.*
- *Two crises are not comparable in terms of their origins and major long-term consequences. Nevertheless, there have been some similarities of both crises visible such as uncertainty, decline in economic activity and stock exchange at the beginning of crises. In addition, one can also bear in mind the massive support of fiscal and monetary policies in order to limit impact of such economic shocks caused by both crises.*

**The European last crises driven by the global Great Recession and followed by the sovereign debt crisis also referred to as “the Eurozone crisis”<sup>32</sup> could serve as a benchmark for assessing supply and demand shocks in the coronavirus crisis.**

The Eurozone crisis peaked between 2009 and 2012 and it also started with a significant decline in GDP. However, from the backward perspective, the 2009 crisis was mainly demand-driven, i.e. the fall in economic activity was caused by a sudden financial market response to accumulated imbalances in several European economies. The resulting sharp fall in real economic activity was followed by significant and prolonged deflationary pressures including a deterioration in the labour market and by monetary easing by central banks. Thus, the downturn in economic activity was largely reflected in the opening of the output gap to deeply negative values, i.e. as a negative demand effect.

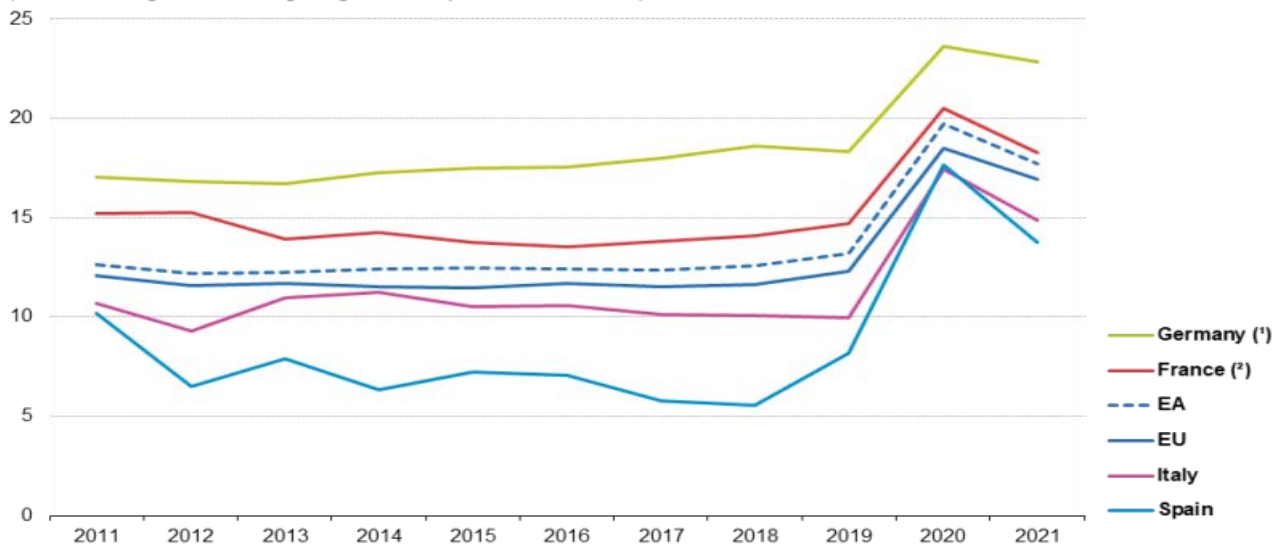
Over time, however, available evidence has confirmed doubts about the analogy between the sharp drop in GDP caused by the coronavirus pandemic and the last financial and economic crisis. Compared to the standard demand crisis of 2009, the pandemic crisis has the character of a shock, where a large part of economic agents would like to continue to consume or produce, but containment measures prevented from it.

This feature was confirmed by the rapid recovery in economic activity and sentiment, reflecting the very strong demand for easing closures in the first half of 2020, and from the evolution of the household savings rate, which shot up strongly in the second quarter of 2020. The EU household saving rate increase by 0.2 pp between 2011 and 2019 and then increase by 4.6 pp between 2019 and 2021, which it is in sharp contrast to the downward development of household savings during sovereign debt crisis.

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<sup>32</sup> The European sovereign debt crisis began in Greece and then spread to Ireland, Portugal Cyprus and, Spain when these countries were unable to refinance their government debt or to bail out domestic banks affected by the global financial crisis. Several events played a role in this debt crisis in the EU. Since the introduction of the single currency, countries like Greece and Portugal have been borrowing and spending beyond their limits and benefiting from low costs of borrowing. The global financial crisis in 2008 brought shockwaves that resulted in investors demand for higher interest rates and in this way increasing the cost of borrowing. Several euro area Member States needed multiple bailouts to pay back their creditors. However, “no bail-out” clause (Article 125 TFEU) ensured that the responsibility for repaying public debt remains at the national level. In the end, sovereign bailout programs for Member States under financial stress were provided jointly by “the Troinka” (International Monetary Fund, the European Commission and the European Central Bank). Although the three most affected countries Greece, Ireland and Portugal jointly representing 6% of the Eurozone’s gross domestic product, it became a perceived problem for the Eurozone as a whole. The Eurozone crisis led to economic contraction, job destruction and austerity measures included cutting down public wages and pensions.

**Gross household saving rate, 2011–2021**  
(%, ratio of gross saving to gross disposable income)



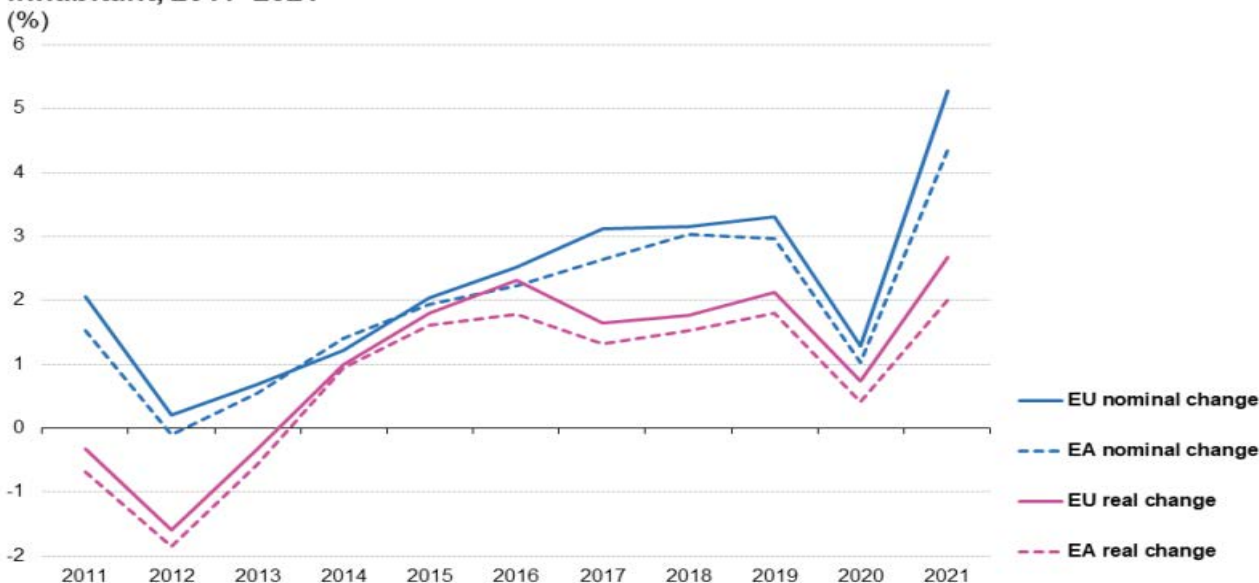
Note: gross disposable income is adjusted for changes in net equity of households in pension fund reserves.  
 (\*) 2019 to 2021: provisional.  
 (\*) 2020 and 2021: provisional.  
 Source: Eurostat (online data code: nasa\_10\_ki)



**In both crises gross household adjusted disposable income per inhabitant declined**

During the Eurozone crisis, the real rate of disposable income reached a negative level in 2011 and fell at a faster rate in 2012 since the economic recovery was not sustained. The disposable income also remained negative in 2013 and later turned in positive increasing nominal and real terms in both the EU and euro area. In 2020, the first year of the COVID-19 crisis, the rate of disposable income remained positive, although considerably lower than in recent years, but significantly rebounded in 2021 to the highest real rates for the whole period analysed: up 2.7 % in EU and up 2.0 % in the euro area.

**Developments for gross household adjusted disposable income per inhabitant, 2011–2021**



Note: growth rates for the EU may be affected by movements in exchange rates.  
 Source: Eurostat (online data code: nasa\_10\_ki)

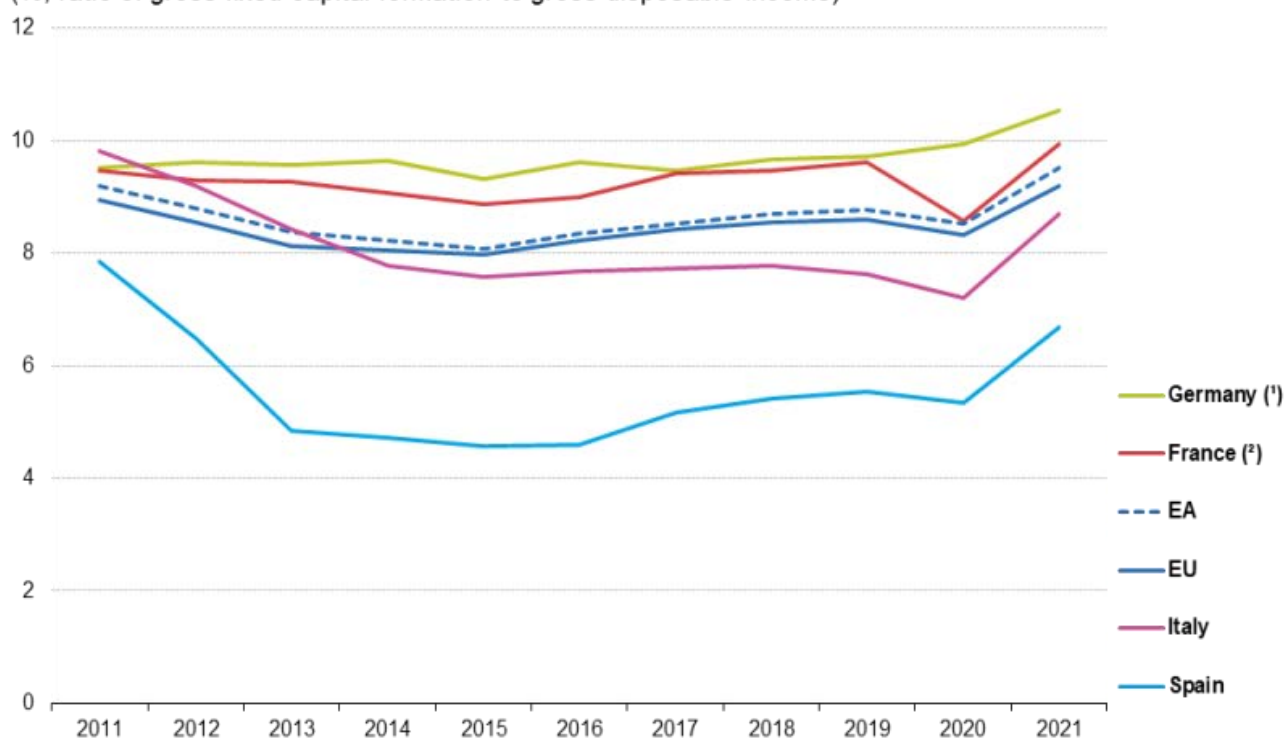


### The different character of the coronavirus crisis is also evident from the development of investment rates of households<sup>33</sup> compared to the Eurozone crisis

In the EU, the impact of the aftermath of the global financial and economic crisis was apparent, with the household investment rate falling at a rapid pace from 9.0 % in 2011 to 8.0 % in 2015. This development was reversed in 2016, with the rate increasing each year to reach 8.6 % by 2019. This upward development was interrupted in 2020 by a fall to 8.3 %. Subsequently the rate jumped to 9.2 % in 2021, higher than in any other year studied.

#### Gross household investment rate, 2011–2021

(%, ratio of gross fixed capital formation to gross disposable income)



Note: gross disposable income is adjusted for changes in net equity of households in pension fund reserves.

(¹) 2019 to 2021: provisional.

(²) 2020 and 2021: provisional.

Source: Eurostat (online data code: nasa\_10\_ki)

eurostat 

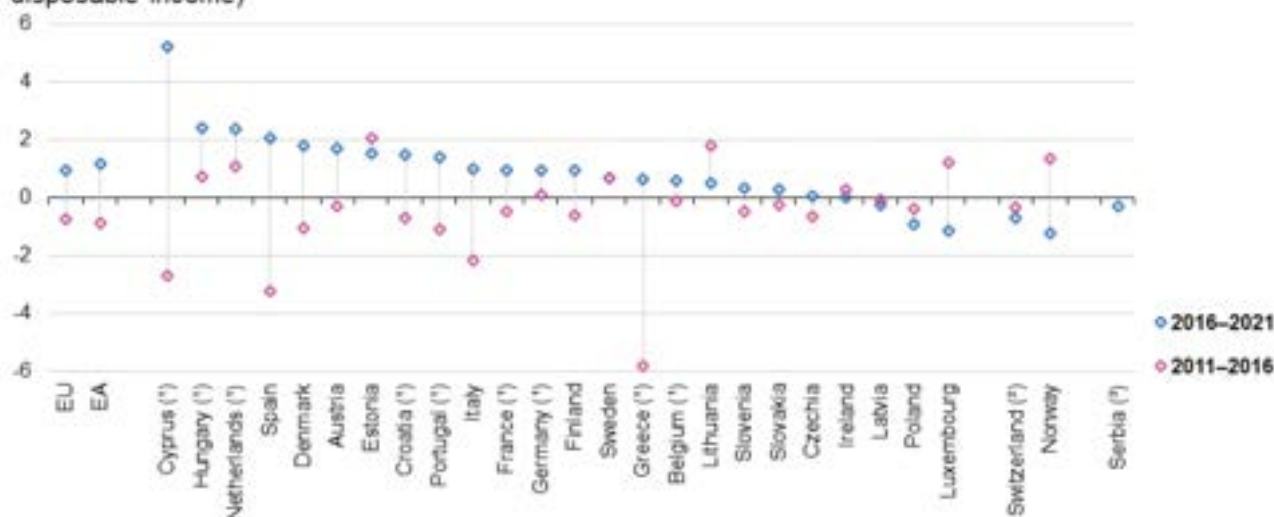
<sup>33</sup> The Eurostat defines the household investment rate as a gross fixed capital formation (mainly dwellings) divided by gross disposable income, with the latter being adjusted for changes in net equity of households in pension fund reserves. Among other uses, this indicator provides a means of analysing the crash experienced in housing markets – linked to the subprime mortgage and credit crisis – during the global financial and economic crisis. In particular, household investment mainly consists of the purchase and renovation of dwellings; expenditure on consumer durables (such as passenger cars) is not considered part of this component (and is included in final consumption) nor are financial investments. Note also that the investment statistics also include investments made by unincorporated enterprises (principally sole proprietors).

### In some EU Member States, the global financial and economic crisis had a particularly strong impact on the household investment rate

For example, with the sovereign debt crisis following on from the global financial and economic crisis household investment rates in Greece, Spain, Cyprus and Italy fell by 5.8, 3.3, 2.7 and 2.1 pp, respectively. A comparison of changes for the household investment rate between the two periods shows that – with several exceptions among the EU Member States – investment rates were rising at a faster pace (or rising rather than falling) between 2016 and 2021 than had been the case between 2011 and 2016.

#### Changes in gross household investment rate, 2011–2016 and 2016–2021

(percentage points, based on ratio of gross fixed capital formation to gross disposable income)



Note: gross disposable income is adjusted for changes in net equity of households in pension fund reserves. The difference in percentage points is calculated as the rate for the later period minus the rate for the earlier period. Bulgaria, Malta and Romania: not available.

(\*) 2016–2021: provisional.

(\*) 2016–2020 instead of 2016–2021, provisional.

(\*) Provisional. 2011–2016: not available. 2016–2020 instead of 2016–2021.

Source: Eurostat (online data code: nasa\_10\_k)

eurostat

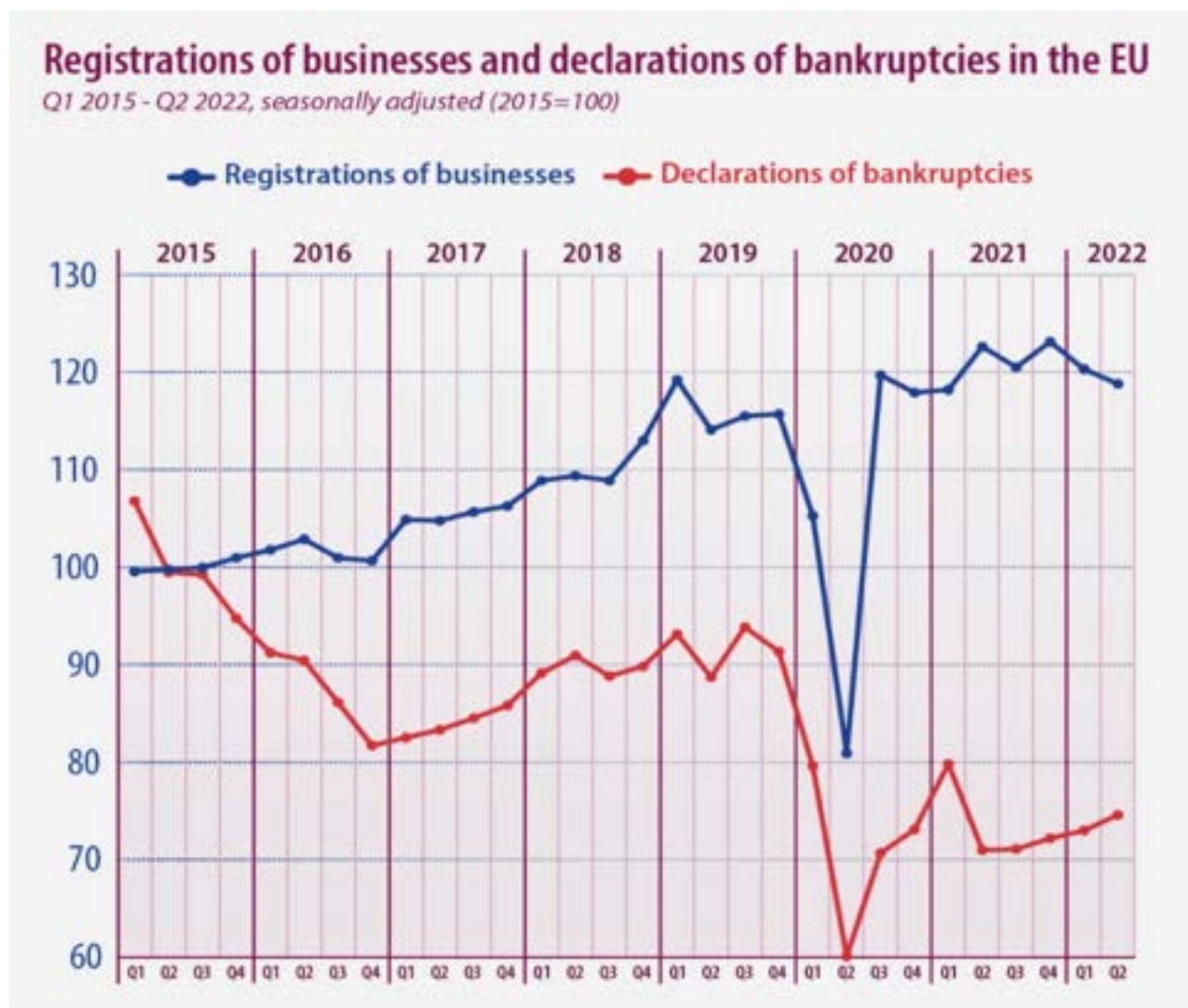
Gross household adjusted disposable income represents the financial resources that are available to households, after taxes and other deductions have been made. This statistical indicator is used as a building block within national accounts to develop a range of derived indicators to look in more detail at issues such as discretionary income, gross household saving rates and gross household investment rates. Analyses of household disposable income and investment became vital for understanding of developments in living standards in the EU Member States. Housing costs have taken an increasing share of disposable income, with a particular impact on younger generations, many of whom may find it increasingly difficult to afford to leave the family home when they move into the labour



market. Various crises – such as the global financial and economic crisis that started in 2007 and 2008, the related European sovereign debt crisis in 2008 and 2009, and subsequent recession, the COVID-19 crisis and recent higher levels of inflation – have disturbed economic and social developments. In general, these have often led to a slowdown in economic activity, sluggish real wage growth and higher levels of unemployment.

**Similarly to households, the business sector characterized by registration and bankruptcies of business was only temporarily affected during the COVID-19 crisis**

Within the first COVID-19 wave, both registration and declaration of businesses severely declined due to the unexpected freezing of economies. In the following quarters of 2020 and 2021 registrations and declarations got back to the usual track. Unfortunately, the comparison of crises in the EU in this case is not possible due to limited data time line. However, it seems that the number of companies based on the registration of businesses and declarations of bankruptcies were only affected when the pandemic was broken out.



**Besides the various effect of the coronavirus pandemic on economic agents compared to the last financial and economic crisis, the economic and financial environment differed**

Unlike the COVID-19 crisis, the financial crisis and Eurozone debt crisis originated in an overinflated and under-regulated financial sector in the euro area. Uncoordinated banking supervision significantly contributed to the spread of financial crisis in the EU. At the same time, poorly coordinated government bailouts of large banks led to deterioration of public finance and contributed to the sovereign debt crisis.

However, the EU banking sector was much more resilient than ten years ago. Capital buffers of financial institutions were increased and risk levels reduced, mainly due to more effective regulation and supervision by the ECB's Single Supervisory Mechanism, which was established in 2014 as a part of the Banking union.

This can explain the good performance of financial institutions during coronavirus crisis. As for the price level conditions inflation was very low during the sovereign debt crisis and the pandemic that enabled the ECB to intervene decisively with bond buying programs and the promise to do whatever it takes to save the single currency.

**Policymakers had learned lessons from the financial crisis since the adoption of support measures during the coronavirus crisis were efficient and swift**

In particular, there was almost no real debate that time as to whether the government should support economy in the form of short-time working schemes and subsidies to businesses hit particularly by a lockdown with containment measures. As a result, public indebtedness significantly increased in both crises. However, after the financial and economic crises the public debt did not return to pre-crisis levels.

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- European Parliament Think Tank Briefing: A Decade on from the Financial Crisis: Key Data.
- European Parliament Think Tank Briefing: A Decade on from the Financial Crisis: Main Responses and Remaining Challenges.

## PART 5: EU RESPONSE TO COVID-19 PANDEMIC

- *Health policy in the EU has a fundamental contradiction at its core. On one hand, the EU law states explicitly that healthcare is the responsibility of Member States. On the other hand, healthcare systems of Member States involve interactions between citizens (patients and staff), goods (pharmaceuticals and devices) and services in the EU single market.*
- *The European Commission has limited authority in the healthcare policy since every Member State is responsible for organising and financing its own health system. However, the EU cohesion instruments such as REACT-EU and SURE provided new financial resource to Member States to diminish adverse effects of COVID-19.*
- *The EU largest stimulus package "Next Generation EU" of EUR 806.9 billion which shall help repair economic and social damage brought about by the COVID-19 pandemic has been designed for a long-term perspective of 2021-2026. The NGEU represents a milestone in the European Economic Integration since the Commission has borrowed at such large amount on financial markets.*
- *The activation of the general escape clause of the Stability and Growth Pact in March 2020 allowed Member States to undertake stimulus measures, while departing from the budgetary requirements that would apply under the European fiscal framework.*

### **The COVID-19 pandemic has become an unprecedented challenge in the history of the European integration<sup>34</sup>**

The interconnections between Member States have been very tight due to the single market shaped by the EU common policies. However, the most sensitive areas to national sovereignty such as taxation, social affairs, and defence or health care policy have remained in the competence of governments. This means that Member States have not codified competences for the EU and have not set general rules reducing their sovereignty in these fields. Citizens of Member States expect that their governments to ensure high-quality health care at national level. Furthermore, citizens of other Member States would not be unwilling to subsidize hospital care in other poorer European states, which would be very financially demanding. National governments were not particularly interested in protection of fellow Europeans, but they mainly focused on safety of their own population.

### **EU kept principle of subsidiarity in responses to the COVID-19 health crisis**

A joint European reaction, such as lockdowns, would be not politically feasible and not in line with the EU law since so called “the subsidiary principle”<sup>35</sup> in the health care policy has been applied at the EU level. Therefore, the EU represented by EU institutions could have not automatically acted as a major player organizing medical response to COVID-19 crisis as its institutional framework and powers were not built for it. The EU action in the health policy requires consensus on steps of all Member States. Joint purchase of vaccines at the EU level<sup>36</sup> become a good example of such practice<sup>37</sup>. It was a decision of all governments to entrust the purchase of the COVID-19 vaccines to the European Commission for all EU countries that pushed down a dose price for the EU as a major global customer. This step disadvantaged in particular large Member States, which themselves would also be important customers. However, they decided to put Union's interest above their own in order to prevent competition between Member States at the time of ordering supplies of vaccines.

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<sup>34</sup> Since the end of the World War II and the beginning of the European Economic Integration Europe has not faced any pandemic. The 20<sup>th</sup> century witnessed three pandemics: the Spanish Influenza in 1918, the Asian flu in 1957 and the Hong Kong flue in 1968. The 21<sup>st</sup> century has seen four pandemic outbreaks: N1H1 in 2009 ('bird flu'), Severe Acute Respiratory Syndrome (SARS) in 2002, Middle East Respiratory Syndrome (MERS) in 2012, and Ebola which peaked in 2013-2014

<sup>35</sup> In areas in which the European Union does not have exclusive competence, the principle of subsidiarity, laid down in the Treaty on European Union, defines the circumstances in which it is preferable for action to be taken by the Union, rather than the Member States.

<sup>36</sup> EU COVID-19 vaccine procurement summarized in the special report available on: <https://www.politico.eu/wp-content/uploads/2022/09/12/SR-19-2022-COVID-19-vaccine-procurement.pdf>

<sup>37</sup> The opposite case when Member States did not find consensus happened on the outbreak of COVID-19 in Europe. At early stage of COVID-19 EU Member States did not cooperate in order to ensure sufficient amount of face masks, disinfection etc.

### **However, steps and initiatives in the fight against COVID-19 pandemic were taken under other the EU policies with stronger competencies of EU institutions<sup>38</sup>**

In the face of the socio-economic crisis caused by the pandemic, cohesion policy became in the forefront of the EU response. The European institutions enacted sets of measures very quickly. In spring 2020, the European Commission started to extend the flexibility of cohesion policy funds and offered to programming authorities for the reprogramming of existing EU support under “Coronavirus Response Investment Initiatives (CRII/CRII+)”.<sup>39</sup> The EU funding was reallocated to the areas of need (e.g. vital personal protective equipment, ventilators and ambulances). In addition, simplification measures were introduced and the EU rules were adjusted to assist with the pressure on public budgets. These Initiatives<sup>40</sup> prevented a fall in the uptake of EU programmes at the lockdowns during the pandemic. Therefore, cohesion policy spending did not decline in the COVID-19 crisis as happened during the last financial and economic crisis in the EU.

Later on 23 December 2020, the existing REACT-EU (Recovery Assistance for Cohesion and the Territories of Europe)<sup>41</sup> extended the crisis response and crisis repair measures delivered through the CRII packages by providing a bridge to the long-term recovery plan. Due to its high rate of pre-financing, Member States were able to start working on new projects to help medical institutions, business owners, employees and vulnerable people. This injection of EU funds allowed the resumption of projects previously halted in favour of emergency needs. Overall, cohesion policy<sup>42</sup> has proved to be agile and effective in adapting rapidly to the crisis, providing Member States, regions and cities with a comprehensive and tailored toolkit to address the uneven territorial social and economic effects of the pandemic. These measures were taken up in different ways according to the needs and choices made by national and regional authorities.

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<sup>38</sup> Coronavirus Dashboard: EU cohesion policy response to the crisis available on <https://cohesiondata.ec.europa.eu/stories/s/4e2z-pw8r>

<sup>39</sup> The European Commission launched in March and April 2020 two packages of measures: the Coronavirus Response Investment Initiative (CRII) and the Coronavirus Response Investment Initiative Plus (CRII+). The two proposals were swiftly adopted by the European Parliament and the Council of the EU. The CRII packages did not offer new EU financial resources but provided flexibility to use existing, unspent resources and re-direct them to where they are most needed. Flexibilities available included transferring unallocated EU funding between funds and categories of regions, an immediate increase of liquidity to improve cash flow, an option to increase the EU co-financing rate to 100% for the 2020-21.

<sup>40</sup> CRII - Coronavirus Response investment initiative dashboard provides information by Member State on reprogramming and the take-up of elements of the CRII initiatives.

<sup>41</sup> Fostering crisis repair and resilience dashboard provides regularly updated information on the formal adoption and planned use of the additional EU budget resources made available in 2021-2022 under REACT-EU.

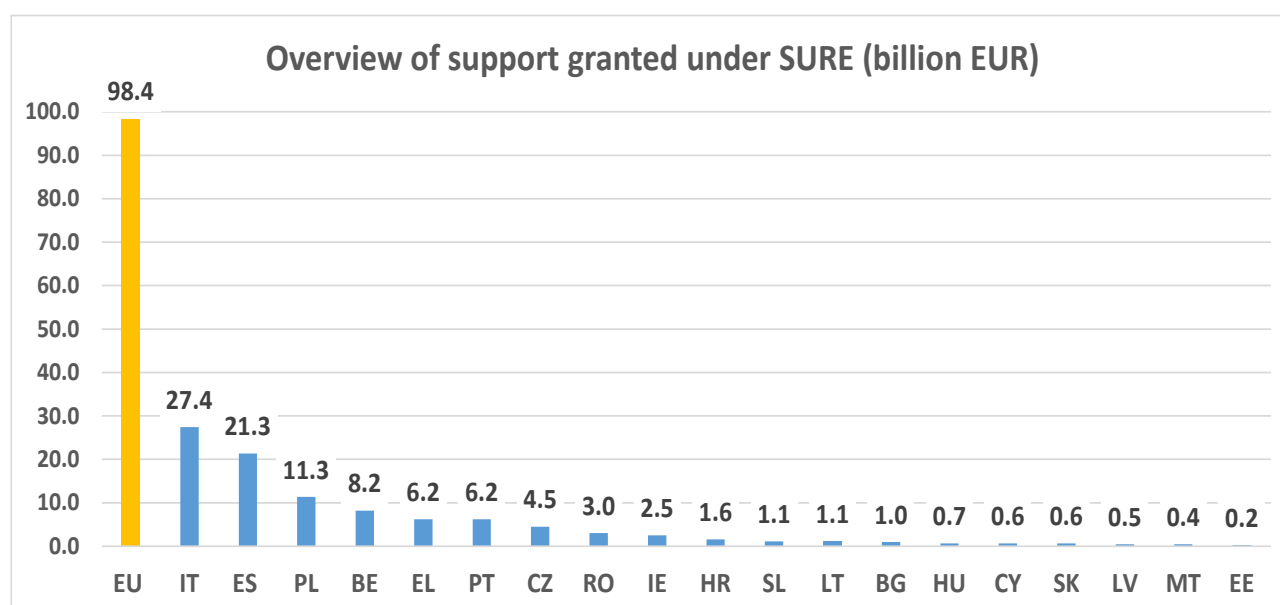
<sup>42</sup> Overview of Cohesion Policy coronavirus indicators provides an overview of the data available on the Coronavirus-specific indicators tracking specific cohesion policy actions year-on-year since 2020 (aggregated across the CRII and REACT-EU initiatives and showing the data reported on progress towards the targets in 2020) on the Cohesion Open Data Platform.

### Apart from REACT-EU, the Commission designed a new instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE)

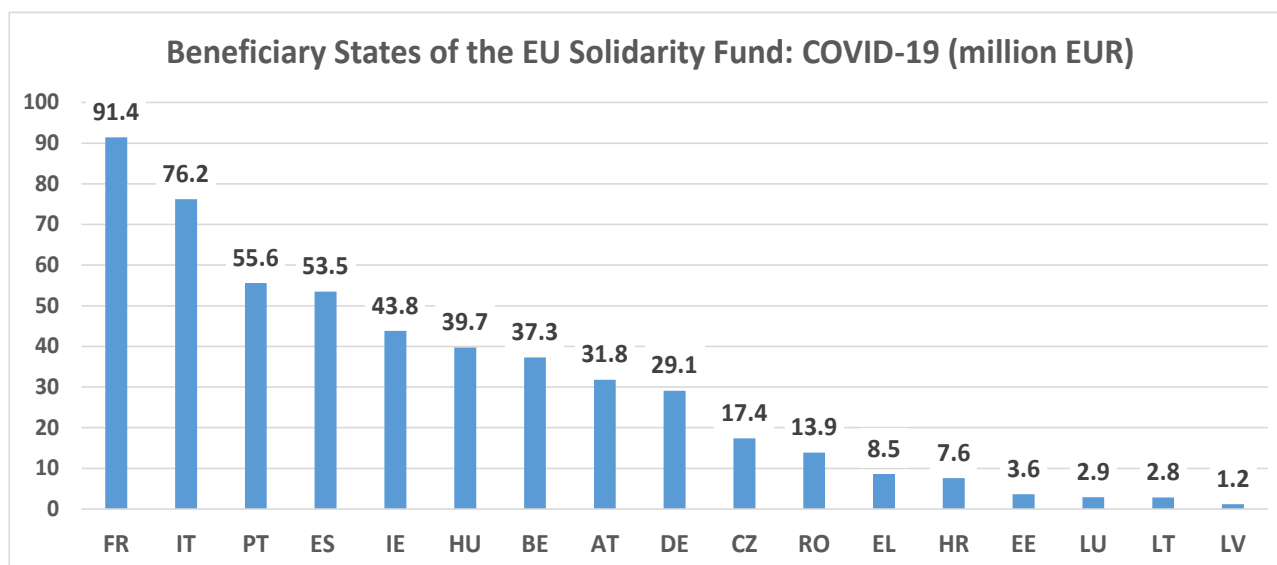
It provided financial assistance in the form of loans granted on favourable terms for the EU to Member States, of up to EUR 100 billion in total. These loans helped the Member States to cover the costs directly related to the national short-time work schemes, and other similar measures they put in place for the self-employed, as a response to the COVID-19 crisis. It helped to sustain families' incomes and preserve the productive capacity and human capital in the economy.

However, these supportive measures led to sudden increases in public spending. Once the Council approved the instrument SURE in autumn 2020, the Member States started to make requests to the Commission for financial support through SURE. To finance the instrument, the Commission issued social bonds and listed them on the Luxembourg Stock Exchange. The issuances consisted for bonds ranging from 5 to 30 years.

Terms of EU loans consulted with the Member States were more convenient than the national terms for financing public debt. EUR 100 billion of loans provided to Member States were backed by EUR 25 billion of guarantees committed by Member States to the EU budget to leverage the financial power of SURE.



As part of the Coronavirus Response Investment Initiative, in 2020 the scope of the EU Solidarity Fund (EUSF) rules was extended, enabling the EU to help countries respond to major public health emergencies<sup>43</sup>



In 2002, the Solidarity Fund was set up in order to provide assistance in the event of major or regional natural disaster<sup>44</sup> in the Member States. Since then, 100 disaster including floods, forest fires, earthquakes, storms and drought in the different European Members have received support through the fund of EUR 7 billion. In general, the state affected have to submit an application for assistance from the EU Solidary Fund to the Commission no later than 12 weeks after the first effects of the particular event. When the scope of events had covered by the Fund were widen for the public health emergencies, the Member States quantified the cost of the measures required and submitted their requests to the Commission.

The financial support requested from the Fund concerned with the medical assistance, the purchase and administration of vaccines, personal protective equipment and medical devices, costs of healthcare, laboratory analyses, emergency support to the population and measures of prevention, monitoring and control of the spread of disease, thus safeguarding the public health.

<sup>43</sup> A 'major public health emergency' is any life-threatening or otherwise serious hazard to health of biological origin seriously affecting human health and requiring decisive action to contain further spreading, leading to emergency response measures estimated to cost over EUR 1.5 billion (2011 prices), or more than 0.3 % of the gross national income of the beneficiary state.

<sup>44</sup> A natural disaster is regarded as 'major' if it results in direct damage (in the Member State or country applying for accession) in excess of EUR 3 billion (2011 prices) or more than 0.6% of the gross national income of the beneficiary state. A 'regional natural disaster' is defined as any natural disaster in a NUTS 2 region (3.1.6) that results in direct damage in excess of 1.5% of that region's gross domestic product (GDP). In the case of outermost regions, within the meaning of Article 349 of the TFEU, this latter threshold is set at 1% of the region's GDP.



As for January 2022, the Commission completed the payments of the EU Solidarity Fund assistance to tackle the coronavirus health emergency to 19 countries for a total amount of almost EUR 516.3 million.<sup>45</sup>

### **Due to the pandemic, rules for the spending of EU funds were loosened and implementation rules of EU fiscal responsibility were also relaxed**

The European Commission, for the first time ever, activated the general escape clause of the Stability and Growth Pact as part of its strategy to quickly and forcefully respond to the coronavirus outbreak in a timely and coordinated manner. In spring 2020, this enabled national governments to better support the national economies as the budgetary rules have been significantly relaxed.

Following the approval of the Council, the general escape clause allowed Member States to undertake measures to deal adequately with the crisis, while departing from the budgetary requirements that would apply under the European fiscal framework. The measure represents an important step in fulfilling the Commission's commitment to use all economic policy tools at its disposal to support Member States' in protecting their citizens and mitigating the pandemic's severely negative economic consequences. The application of the general escape clause was further extended for the years 2022 and 2023.

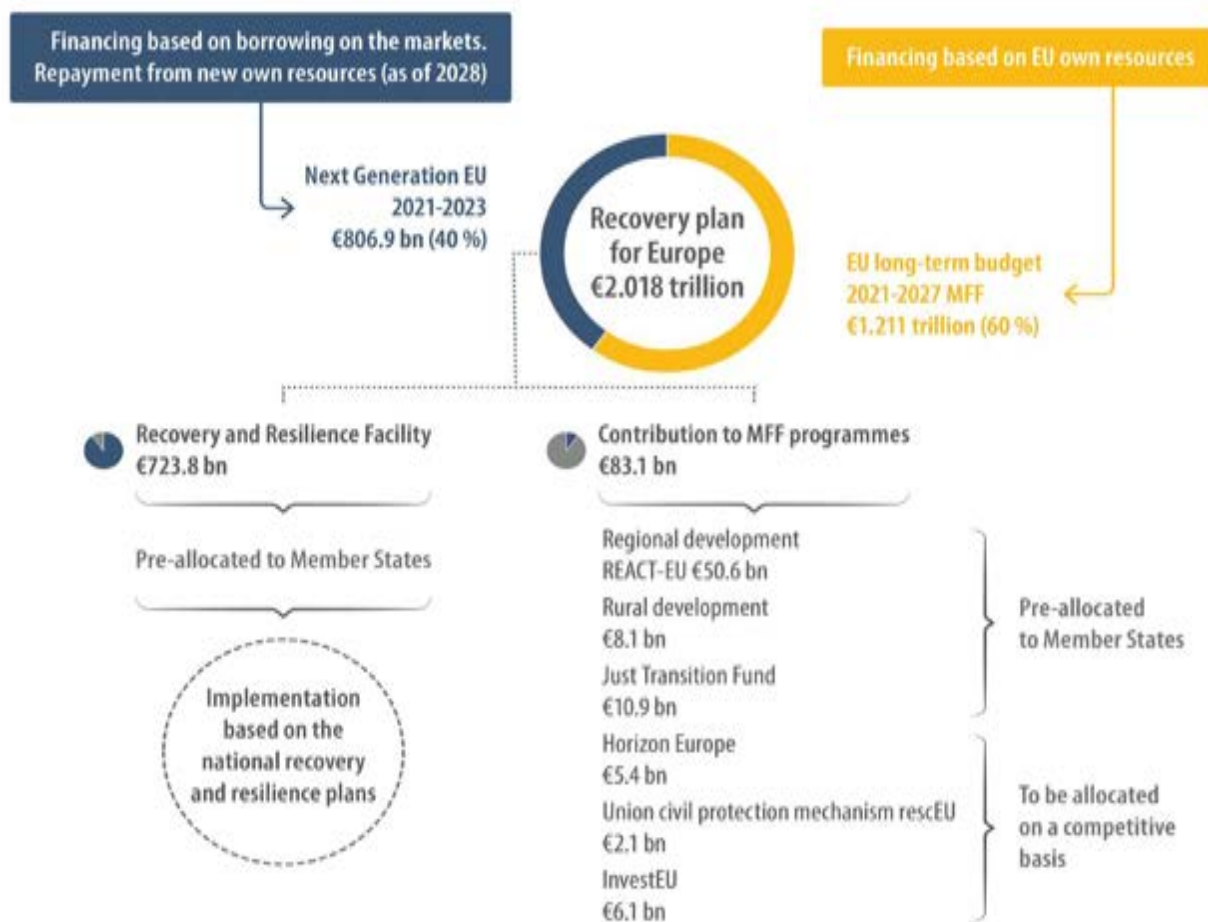
On 3 March 2021, the Commission adopted a Communication providing Member States with broad guidance on the conduct of fiscal policy in the period ahead. The Communication sets out guidance for coordinated fiscal policies in Member States, essential to support the economic recovery. It laid out principles for the proper design and quality of fiscal measures, as well as general fiscal policy indications in 2022 and over medium-term, including the link with funds of the Recovery and Resilience Facility.

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<sup>45</sup> Seven Member States and three candidate countries had requested the EUSF support: Austria, Belgium, Croatia, Czechia, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Portugal, Romania and Spain; Albania, Montenegro and Serbia.

**NextGenerationEU (NGEU) represents the European Union’s instrument for recovery from the coronavirus pandemic and constitutes the largest fiscal transfer in history of European integration**

In the past, European policies and priorities were mainly financed from the EU budget. In July 2020, NGEU of up to EUR 806.9 billion, was approved in addition to the multiannual financial framework (MFF) as a temporary crisis instrument. For the first time in its history, the EU has embarked on large-scale support for its members’ economies financed by the issuance of bonds guaranteed by the EU budget. NGEU covers several spending packages, with a key role played by the new Recovery and Resilience Facility (RRF), which accounts for 90% of NGEU funding. This fund of up to EUR 723.8 billion is distributed on the basis of national recovery plans to help the Union to the recover from the coronavirus pandemic. The NGEU also contributes EUR 83.1 billion to MFF programmes such as REACT-EU, Rural development, Just Transition Fund, Horizon Europe, rescEU and InvestEU.



### **Projects included in the national Recovery and Resilience Plans focus mainly on digital and green transformation of the economies of the EU Member States**

The economic areas supported are thus largely determined by a mandatory minimum share of green and digital spending (37% and 20%). Investment activity is vital aspect of projects included into Plans which shall prevent a repeat of the significant decline in investment activity during the financial and debt crisis. The investments and reforms of the Recovery and Resilience Plans have been implemented in 2021–2026. Unlike cohesion allocations under 2021-2027, where reimbursement of expenditure in most cases takes place only after successful completion of projects, reimbursement of projects in national Plans depend on the fulfilment of so-called milestones and targets already during their implementation. The fulfilment of these quantitative and qualitative indicators in individual projects has been supervised by the European Commission.

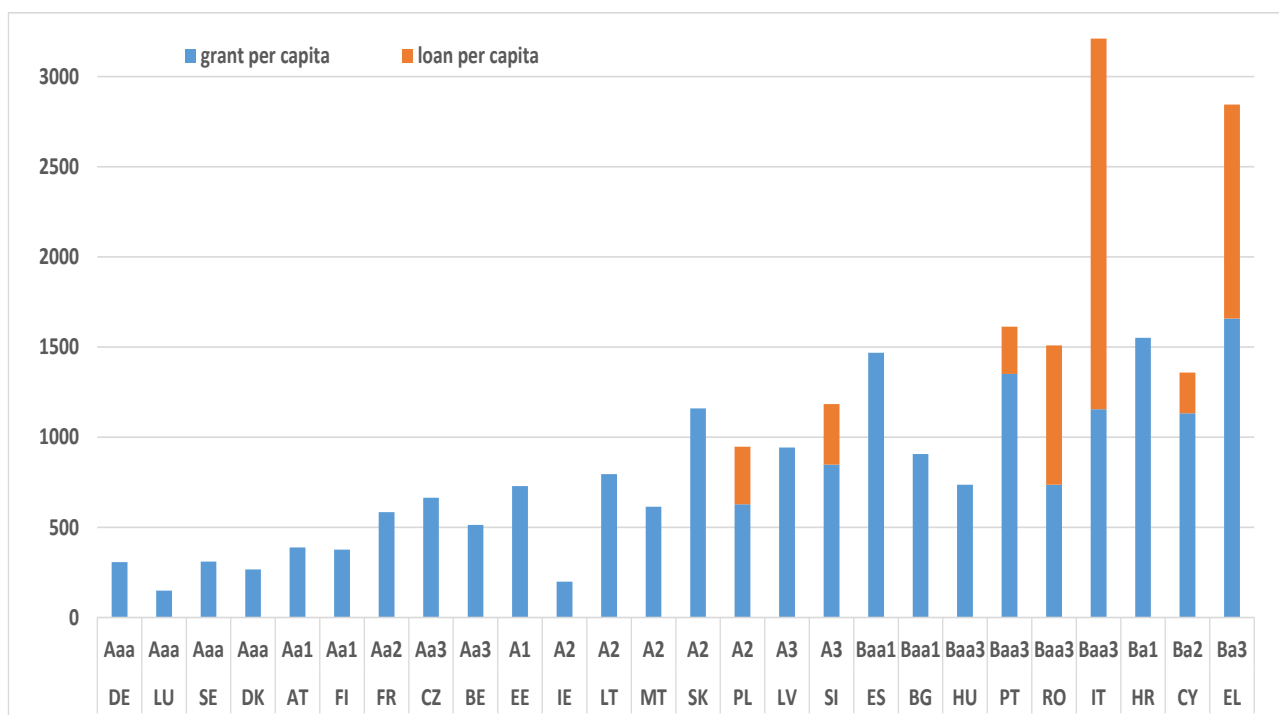
### **While the Multiannual Financial Framework 2021-2027 is financed by Member States' contributions, the European Commission borrows funds for the NGEU on the financial markets**

The Commission is not new to issuing debt securities, but the new task is an order of magnitude larger than previous programmes. NGEU and SURE more than doubled the volume of EU bonds. The EU can thus now be counted among the "large" issuers that raise financing resources on the capital markets on a regular basis and whose bonds cover the entire yield curve with sufficient liquidity. This is the first time that the EU has used auctions to sell bonds, the first time that it has issued short-term instruments and the first time that the funds raised will also be made available to Member States in the form of a non-repayable grant.

### **Roughly half of the Recovery and Resilience Facility (EUR 338 billion) has been made available to Member States in the form of non-repayable grants, while Member States may draw the other half (EUR 386 billion) in the form of loans**

However, only seven countries (Poland, Slovenia, Portugal, Romania, Italy, Cyprus and Greece) have expressed interest in those in their Recovery and Resilience plans, therefore only EUR 166 billion has been expected to be drawn down. These are mainly countries with worse financial market ratings in relation to national bond issuance. However, EU Member States can also apply for financing of the plans through loans retrospectively until the end of August 2023.

National Recovery Plans shall be further adjusted in the context of the recalculation of grant allocations in the first half of 2022 based on the actual evolution of the economies in 2020-2021<sup>46</sup>. In addition, the update Plan shall also reflect the “REPowerEU package” in 2023. However, based on already approved Recovery and Resilience Plans Italy and Greece shall receive the largest amount of funding, while Luxembourg and Ireland shall receive the lowest amount per capita in relation to Moody’s rating (at the time of Plan’s submission).



**Although NGEU is defined as one-off and time-limited solution to a post-pandemic economic recovery, it pushes the European economic integration further**

It shifts boundaries of what is possible and the creation of common EU bonds in the future can therefore no longer be seen as a pipe dream, but rather as one of the realistic options for solving any future economic crisis in the EU. The strategic economic importance of the NGEU can therefore be compared to the creation of an EU single market or introduction of the euro. The actual contours of a permanent mechanism that could replace the NGEU in the future cannot be precisely identified at this moment, but strong tendencies towards the introduction of such a permanent solution one can expect. The NGEU could thus be a kind of Hamiltonian moment for the EU, which effectively created the US capital market and earned the credibility of financial markets for the US.

<sup>46</sup> A key for the RRF grant allocation based on the predicted GDP decline was recalculated to take into account the actual GDP developments in 2020 and 2021.

### **The NGEU is clearly different from crisis instruments used in the past at the EU level, and not only in its larger scope**

While the EFSF and ESM were introduced to fix the budgetary problems of only a few countries in Eurozone crisis, the COVID-19 crisis affected all of them. Therefore, all EU Member States participate in the NGEU. Thus, the EU directly mobilises finance on the capital markets, not a special institution set up by an international treaty as in the case of EFSF and ESM<sup>47</sup>. In contrast to the EFSF and ESM, the NGEU provides non-repayable grants to EU Member States in addition to loans, and the conditions of disbursement are different. While the NGEU aims to transform the European economy through large-scale investment and structural reforms, the debt crisis was primarily about returning the public finance of affected countries on the sustainable track. To qualify for financial support, the borrowing countries<sup>48</sup> from EFSF/ESM had to make significant expenditure cuts and reforms in socially sensitive areas or tax systems. The NGEU finances a broader scope of activities that shall help to advance the EU's previously planned environmental and digital objectives. In addition, the NGEU is based on the principle of a single and solidary EU since it concerns with all EU Member States.

#### **Reading:**

- Baldwin, R., Wyplosz, Ch. *The Economics of European Integration*, Sixth edition, McGraw-Hill, 2019, ISBN 13-9781526847218
- Forman R., Mossialos E. *The EU Response to COVID-19: From Reactive Policies to Strategic Decision-Making*
- *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*
- Stoykova, P., Matin, C. *Modifying the National Recovery and Resilience Plans: existing opportunities and proposed changes under REPowerEU*, EIPA July 2022

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<sup>47</sup> European sovereign debt crisis that resulted in the lending of money to Member States led to the creation of a loan mechanism such as the European Financial Stability Facility (EFSF) and the European Financial Stability Mechanism (EFSM). These, together with the International Monetary Fund lend money to EU Member States threaten by severe financial distress, in the same way that the European Central Bank lend money to European banks. However, the EFSF and EFSM were a temporary measure expiring in 2013 due to the lack of a legal basis in the EU treaties. The successor of the European Financial Stability Facility that provided financial assistance to Ireland, Portugal and Greece became the European Stability Mechanism established by Member States of euro area in 2012 as an intergovernmental organisation.

<sup>48</sup> Euro area countries: Ireland, Portugal, Greece, Spain and Cyprus. Non euro area countries: Hungary and Romania.

- The main building blocks of the Recovery and Resilience Facility, In-depth analysis of Think Tank European Parliament, October 2022
- EC Guidance to Member States: Recovery and Resilience Plans from January 2021 focuses on the preparation and submission of the original plans, not on the provisions for modification- EC SWD (2021) 12 [https://ec.europa.eu/info/files/guidance-member-states-recovery-and-resilience-plans\\_en](https://ec.europa.eu/info/files/guidance-member-states-recovery-and-resilience-plans_en)
- 2 Regulation (EU) 2021/241
- 3 The legislative proposal is with the Council and with the EP, BUDG Committee responsible. See Procedure File: 2022/0164(COD) | Legislative Observatory | European Parliament (europa.eu) (last accessed 10 July 2022)
- 4 Proposed amendments are integrated with track changes
- 5 Article 21c(1); see also EC Guidance on Recovery and resilience Plans in the context of REPowerEU, 18 May 2022, pages 20 and 21-  
[https://ec.europa.eu/info/files/commission-notice-guidance-recovery-and-resilience-plans-context-repowereu\\_en\\_1](https://ec.europa.eu/info/files/commission-notice-guidance-recovery-and-resilience-plans-context-repowereu_en_1)