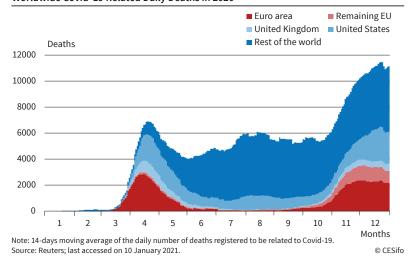
# **Macroeconomic Conditions** and Outlook

Since early 2020, the coronavirus pandemic has been the dominant topic for the European and the world economy at large. Until we reach herd immunity through large-scale vaccination of the population, this is likely to remain the case. Like the pandemic, the economic developments in recent times can best be described as occurring in waves. The first wave shocked us all. It triggered both rapid and sharp changes in social behavior and the swift introduction of policies to curb the virus. This initial "shock wave" went hand in hand with the sharpest post-war reduction in GDP. Nevertheless, it did not prevent 160,000 and 200,000 Covid-19-related fatalities in, respectively, Europe (EU and UK) and the rest of the world during the months of March, April and May 2020 (see Figure 1.1). At least in Europe, the impression existed that, as in Asia, the virus was under control during the summer months. While the death toll continued to rise in the rest of the world (490,000 Covid-19 related registered deaths during July-September 2020), it fell to low levels on the European continent (16,000 persons during that same period). To a large extent, economies recovered in a V-shaped form. Despite being forecasted by many, the second wave in Europe came as a surprise. Both the society at large and politics reacted differently this time. In some sense, the population had already become accustomed to the virus and a kind of pandemic fatigue had set in. At the same time, many viewed that harsh lockdowns imposed during the first wave should be prevented or postponed in this second wave as long as possible in order to reduce economic hardship. This different attitude, together with more knowledge about how

Figure 1.1
Worldwide Covid -19 Related Daily Deaths in 2020



to keep the economy going during a pandemic, circumvented another sharp decline in value added. At the same time, however, the number of deaths in Europe rose by 230,000 during the months of October, November and December 2020, making the second wave from this perspective already worse than the first one before being brought under control.

From a bird's eye perspective, during the first wave, Europe seems to have been somewhat closer to the Asian model, where swift and radical coercive measures were taken to combat the pandemic, than to the American model, where the laissez-faire economy was paramount. During the second wave, however, Europe's position seems to have moved toward the latter.

Fortunately, there is light at the end of this tunnel. The arrival of several highly effective vaccines has increased the likelihood that, later this year, large parts of the world will achieve herd immunity, allowing a slow return to a more social way of life and thereby a further recovery of the economy. Until then, however, social distancing is still warranted.

#### 1.1 CURRENT SITUATION

# 1.1.1 Global Economy

During the first half of 2020, global Gross Domestic Product (GDP) fell by almost 10 percent as compared to value added levels achieved in the last quarter of 2019 (see Figure 1.2). Then, in the summer of 2020, overall economic production picked up strongly again. This was a consequence of the reduction in Covid-19 infections and the associated withdrawal of infection control measures to combat the virus during the first half of the year. This allowed companies to revive production again and households to significantly increase their spending. Nevertheless, overall economic production in the advanced economies was still more than 2 percent below the pre-crisis level in the third quarter.

Not only was the downturn last year much more pronounced than during the financial crisis of 2008/2009, the recovery was also stronger. Moreover, the recovery this time went much faster. During the financial crisis, it took us three quarters to reach the level we have now reached within one quarter. Accordingly, the first wave of the coronavirus crisis can largely be described as having been V-shaped.

The regional differences are, however, quite pronounced. The production slump in the emerging markets during the first half of the year was overall much

more moderate than in the advanced economies. This was not only due to China, whose production recovered rapidly after the shutdown at the beginning of the year and which had already reached pre-crisis levels by June. During the summer, many other Asian countries also exceeded pre-crisis levels again. Most of these countries were much more successful in fighting and controlling the pandemic. First, these governments acted more quickly and thoroughly (see e.g., Nebehay and Shields 2020). Second, citizens in many Asian countries were already experienced in dealing with epidemics in the past and were therefore much more aware of the dangers they pose. Third, their cultural attitude toward collective action and responsibility toward others differ. Furthermore, and for similar reasons, these countries did not lift any restrictions before being quite certain that they would be able to control any new outbreaks. Even if it did not appear that Asian policymakers and society were initially focused on the pandemic's economic consequences, the result is that today, Asian markets are less affected by the pandemic than the European and American economies.

Not only were consumer-related services and thereby international travel and the associated hospitality sectors hit by the crisis, which therefore led to the severe drop in GDP, but also the production of and cross-border trade in goods suffered significant losses in spring. Especially in the advanced economies, industrial production and international trade slumped by respectively almost 18 percent or close to 20 percent, as compared to pre-crisis levels. Both bounced back relatively quickly during the summer and autumn, and almost reached pre-crisis levels. International travel and tourism, on the other hand, have so far failed to recover.

The pandemic created an unprecedented level of uncertainty that is also affecting economic policy and in particular, business investment (see Figure 1.3). In times of uncertainty, companies tend to postpone their investments or abandon their investment plans altogether. Whereas those consumers who kept their job and income have been forced to save, many firms have seen their profits plummet since the beginning of the crisis. Especially small- and medium-sized enterprises finance their investments to a large extent from retained profits. The uncertain outlook, combined with changes in liquidity holdings, make it unlikely that business investment will be able to bounce back as quickly as private consumption.

The rollercoaster that the global economy has been on is also reflected in economic tendency surveys from around the world. While the end of 2019 saw the lowest values of these surveys since the start of the financial crisis of 2008/2009, the beginning of 2020 looked promising: sentiment indicators around the globe recovered. With the arrival of the pandemic and the associated lockdown measures, these survey values fell in an unprecedented manner. By the end

Figure 1.2

Regional Contributions to GDP, Industrial Production and World Trade

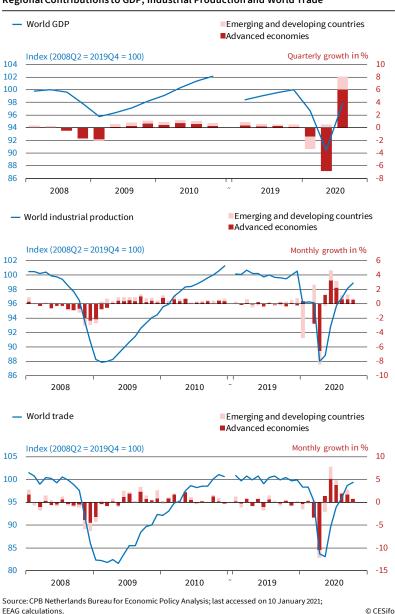
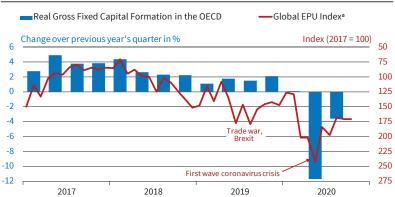


Figure 1.3
Global Economic Policy Uncertainty Index and Investment Growth in the OECD



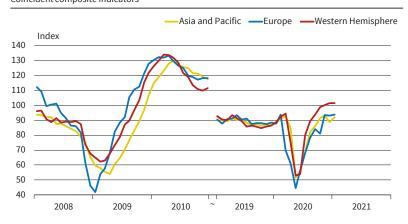
• Global Economic Policy Uncertainty (EPU) is calculated as the GDP-weighted average of monthly EPU index values for the United States, Canada, Brazil, Chile, the United Kingdom, Germany, Italy, Spain, France, Netherlands, Russia, India, China, South Korea, Japan, Ireland and Australia using GDP data in current prices from the IMF World Economic Outlook Database.

 $Source: Baker\ et\ al.\ (2016), www.policyuncertainty.com;\ OECD;\ last\ accessed\ on\ 10\ January\ 2021.$ 

Figure 1.4

Global Economic Barometers

Coincident composite indicators

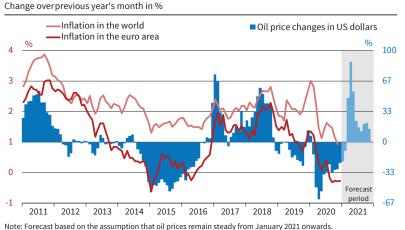


Note: Indicators with an in-sample average of 100 and a standard deviation of 10.

Source: KOF/FGV; last accessed on 10 January 2021.

© CESifo

Figure 1.5
Worldwide Inflation and Oil Price Movements



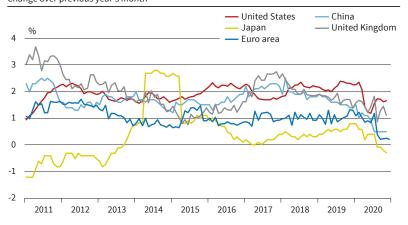
Note: Forecast based on the assumption that oil prices remain steady from January 2021 onwards.

Source: Eurostat; National Statistics; Energy Information Administration;

last accessed on 13 June 2020; EEAG calculations.

Figure 1.6

Core Inflation Rates
Change over previous year's month



Source: US Bureau of Labor Statistics; Statistics Bureau of Japan; National Bureau of Statistics of China; Eurostat; last accessed on 10 January 2021.

of last year, and despite the renewed sharp rise in Covid-19 infections around the world, overall sentiment indicators had not returned to a significant decline. Instead, the recovery in the coincident Global Economic Barometers has basically stalled, and this holds true for all major regions of the world (see Figure 1.4). This is in sharp contrast to the slower but sustained and therefore stronger recovery pattern that these indicators showed during the 2008/2009 financial crisis.

The improved sentiment and the associated increase in economic output in the third quarter also caused the price of crude oil to rise sharply after bottoming out in April. The measures adopted by the oil-exporting countries in May to cut oil production probably also contributed to this. Since the price of oil, however, is still below 2019 levels, this is not yet reflected in inflation rates (see Figure 1.5). Since August, general inflation has been much more subdued, dampened by the trend decline in core inflation rates in Europe, China and Japan (see Figure 1.6). Concerns about renewed increases in infections, rises in unemployment and the increased propensity to save not only put downward pressure on economic activity, but also prices. That said, actual inflation in the current year might be underestimated (see Cavallo 2020, Reinsdorf 2020), since the calculation of price indices is based on last year's basket of goods and services and consumers have moved toward those goods that have become relatively more expensive. On top of that, price data for the months affected by major shutdowns should be interpreted with caution, since many price indices are based on a significantly smaller amount of collected price data or have to be derived entirely from other indices (see Bureau of Labor Statistics 2020, Eurostat 2020).

As for the world economy, the drop in US GDP was swift and strong. Within two quarters, quarterly production levels dropped by more than 10 percent as compared to the pre-crisis level. In the third quarter, a swift recovery still left the US economy about 3.4 percent below the GDP level it had reached by the end of 2019. In the financial crisis of 2008/2009, it took more than 5 quarters to reach this level again, despite the trough being not even 4 percent below pre-crisis levels (see Figure 1.7).

The degree of synchronization among the different spending components has been extraordinary. Whereas during the financial crisis, private consumption functioned as a clear stabilizer, this time around its fall was completely in line with the overall drop in production. At this level of aggregation, the only spending component that could buffer the fall a little bit was public consumption, which managed to increase by 0.8 percent relative to the fourth quarter of 2019. In contrast to the financial crisis that went hand in hand with a real-estate crisis in the United States,

<sup>&</sup>lt;sup>1</sup> This indicator is based upon hundreds of economic tendency survey results conducted in countries worldwide. The index for each region is constructed as such that it has a high correlation with contemporaneous world GDP growth. The index is constructed to have an in-sample average of 100 and a standard deviation of 10. See Abberger et al. (2020) for further information.

gross fixed capital formation this time did not fall as much as international trade or private consumption did. This time around, residential investment stabilized the development of overall investment. Whereas non-residential investment plummeted by nearly 10 percent relative to the end of 2019 in the second quarter and was still 4 percent below pre-crisis level in the third quarter, residential investment only fell by 6 percent in the second quarter and managed to surpass fourth-quarter 2019 levels by close to 6 percent in the third quarter.

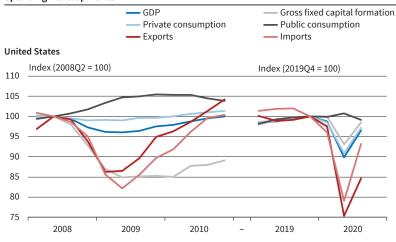
Flexible labor market contracts, together with a lack of job retention measures such as short-time work and wage subsidies, have led to a remarkable increase in the unemployment rate and a strong reduction in the participation rate in the United States (see Figure 1.8). Within two months, the unemployment rate rose from 3.5 percent to 14.7 percent. Despite its rapid decline during the subsequent months, it still stood at a, for the US, very high 6.7 percent in November. The participation rate probably fell by 1.5 percentage points last year. All in all, the number of employed persons is still more than 9 million lower than it was before the onset of the crisis, implying a decline of more than 6 percent as compared to pre-crisis employment. Hence, in contrast to many other countries, employment in the United States has clearly declined more than real GDP has. This also reflects that it is mainly low-wage jobs that have disappeared, and that the crisis is above all a crisis of the non-financial service sector.

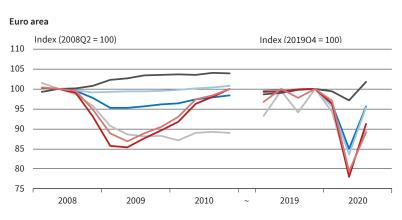
# 1.1.2 European Economy

Europe also went through a V-shaped crisis related to the first wave of the pandemic. Unlike the United States, however, the decline in the domestic demand components and overall GDP was more pronounced. Due to the drastic measures to contain the coronavirus epidemic this past spring, GDP in the euro area

Figure 1.7

Spending Developments



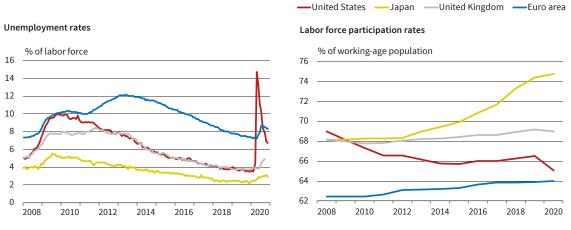


fell 15 percent below pre-crisis levels during the second quarter of this year. With the gradual easing of government restrictions from May onward, economic activity picked up noticeably.

Source: OECD; Eurostat; last accessed 10 January 2021.

Overall, economic output in the third quarter grew by 12.5 percent, the strongest increase since the establishment of the euro area. This made up for a good part of the economic slump. However, GDP in the

Unemployment Rates and Labor Force Participation Rates



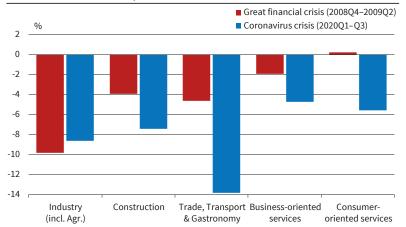
Source: OECD Main Economic Indicators; OECD Economic Outlook; last accessed on 10 January 2021.

© CESifo

@ CFSifo

Figure 1.9

Cumulative Loss in Sector-Specific Value Added in the Euro Area



Note: During the first three quarters of the crisis (relative to the quarter before). Source: Eurostat; last accessed on 10 January 2021.

© CESifo

third quarter was still 4.4 percent below its pre-crisis level (2019Q4). The decisive factor for this rapid recovery was the strong increase in private consumption, which expanded by 14 percent as compared to the previous quarter, thus compensating for a large part of the slump. Gross fixed capital formation also made an important contribution to the recovery. Despite an increase of 13.4 percent compared to the previous quarter, investment activity was still about 10 percent lower than before the outbreak of the crisis.

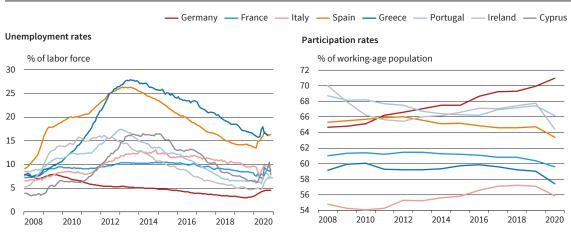
With the easing of infection control measures in summer, household consumption expenditure increased. In May, retail sales rose by a strong 20 percent and industrial production by 12.5 percent compared to the previous month. Retail sales increased so strongly that there was an overshooting of the pre-crisis level in many European countries. Since the outbreak of the pandemic, sales via the internet have increased markedly. Although the importance of online trade compared to stationary trade had already increased in previous years (see Bank of Eng-

land 2020), the latest increases indicate a noticeable acceleration. Nevertheless, the pandemic has left persistently negative traces on private consumption. For the euro area, total consumer spending, for example, was still 4.6 percent below the pre-crisis level in the third guarter of 2020. Demand for contact-intensive services remains subdued. Catering establishments, accommodation facilities and all other tourist businesses were only opened under strict conditions, which included restrictions on occupancy rates. Furthermore, there were also behavioral changes on the part of households, which led to a partial renunciation of such services. In many places, these behavioral changes, as well as the increased uncertainty of many households about their future income, led to a significant increase in the consumer savings rate.

The financial crisis in 2008/2009 turned out to be an industrial crisis that over time also substantially affected construction activity at the euro area level. In contrast, the pandemic and the associated behavioral changes, together with lockdown measures, strongly affected retail and wholesale trade, the transportation sector and gastronomy (see Figure 1.9). While the first two sectors, and especially retail trade, experienced a significant rebound, this was true to a much lesser extent for the hospitality sector. Many service sectors recovered only moderately, since their business activity remained limited due to the hygiene regulations still in force. While retail trade had already reached the pre-crisis level in June, sales levels of the remaining service providers in September were still off by 9 percent.

As a result of the economic slump, the unemployment rate in the euro area also climbed from 7.2 percent in April to 8.7 percent in July. While the increase in Germany was below average, unemployment in France, Italy and Spain increased more than in the euro area as a whole during this period (see Figure 1.10). Nevertheless, this increase was still moderate given the strong decline in economic output (see Figure 1.11). Economic policy measures implemented

Figure 1.10
Unemployment Rates and Participation Rates in Selected Euro Area Countries



Source: Eurostat; OECD Economic Outlook; last accessed on 10 January 2021.

in many euro area countries to temporarily stem job loss have so far prevented greater job losses. The instrument of short-term work, for example, has contributed substantially to the fact that the economic slump has been reflected above all in a significant decline in the number of hours worked instead of actual employment. Since the summer, the unemployment rate has declined slightly thanks to the strong recovery and stood at 8.3 percent in November.

Often the change in the unemployment rate does not fully reflect what is happening to the number of persons employed. In some countries, many have left the labor market or are in the process of doing so, leaving not only employment but also the labor force and therefore are not counted as being unemployed. In Finland, this effect is so strong that the number of unemployed persons actually fell between January and November last year: the reduction in the labor force was stronger than the reduction in jobs (see Figure 1.12). In the United States, the number of those employed fell by about 5.4 percent between January and November of last year. The rise in unemployment accounted for about 55 percent of this – roughly 45 percent reflects a reduction in the labor force.

Price increases have lost considerable momentum since the summer; most recently, inflation rates were even negative (in November, –0.3 percent compared to the previous year). This was due not only to the decline in energy prices compared to the previous year, but also to the weak core inflation rate, which stood at 0.25 percent in November. Core inflation is likely to have come under pressure in the wake of the economic slump and the VAT cut in Germany.

## 1.2 FISCAL AND MONETARY POLICY

#### 1.2.1 Fiscal Policy

As a reaction to the crisis, fiscal policy took a very expansionary course. In the advanced economies, additional spending on discretionary measures, such as one-off payments to households or tax deferrals, amounts to about 9 percent of GDP (see International Monetary Fund 2020). Liquidity support measures, such as equity enhancements and credit guarantees, amount to about 11 percent of GDP. Many emerging markets also saw additional discretionary measures amounting to 3.5 percent of GDP as well as liquidity support of more than 2 percent. Whereas government revenues have also fallen on both sides of the Atlantic, government expenditures have in particular skyrocketed, causing historically extreme increases in public deficits last year (see Figure 1.14). Although this year expenditures will be lowered again substantially and revenue will slowly start to normalize, government deficits will remain at historically high levels. According to IMF estimates, the United States realized a government deficit of 18.7 percent last year that will fall to 8.7 percent this year.

Figure 1.11
Change in Employment in the Euro Area During the First Three Quarters of the Crisis

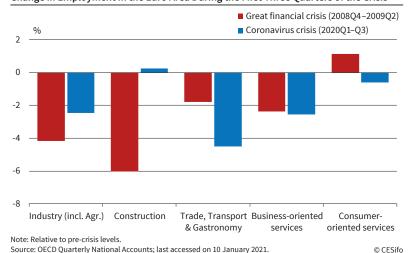


Figure 1.12
Decomposing the Decline in Employment between January and November 2020

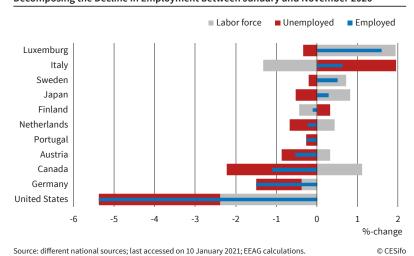


Figure 1.13

Price Developments in the Euro Area
Change overprevious year's month



<sup>a</sup> Harmonized Index of Consumer Prices (HICP). <sup>b</sup> HICP excluding energy, food, alcohol and tobacco. Source: Eurostat: last accessed on 10 January 2021.

In early April, the European Union finance ministers agreed on a 540 billion euros package of measures to combat the economic impact of the global pandemic. The plan includes a 100 billion euros joint

15

Table 1.1 Labor Costs<sup>a</sup>

	ı	npensa employ		com	Real ipensa	tionc	pro	Labor oductiv		U	nit labo	or		lative u			Export forma	
	1999- 2013	2014- 2019	2020	1999- 2013	2014- 2019	2020	1999- 2013	2014- 2019	2020	1999- 2013	2014- 2019	2020	1999- 2013	2014- 2019	2020	1999- 2013	2014- 2019	2020
Germany	1.5	2.7	0.2	0.5	1.0	1.3	0.6	0.6	- 4.6	0.9	2.4	5.2	-1.3	1.1	2.1	0.4	- 0.2	0.0
France	2.6	1.2	-2.6	1.1	0.3	- 1.4	0.8	0.7	- 7.6	1.8	0.4	5.3	-0.1	- 1.1	1.7	- 1.5	-0.1	-8.3
Italy	2.0	0.8	- 3.9	-0.1	-0.1	-0.4	-0.3	0.1	- 7.2	2.4	1.2	3.6	0.3	0.1	0.6	-3.1	-0.4	- 7.5
Spain	2.5	0.9	- 1.3	0.1	0.1	0.0	0.6	0.4	- 7.5	2.0	0.8	6.7	0.1	- 0.5	3.8	- 0.8	0.2	- 9.0
Netherlands	2.7	1.5	3.4	0.8	0.1	-0.9	0.8	0.5	-3.6	1.9	0.9	6.7	- 0.3	-0.2	5.2	- 0.3	0.4	8.6
Belgium	2.7	1.2	-4.1	1.0	- 0.3	0.6	0.9	0.5	- 6.5	1.9	0.7	2.3	0.3	-0.6	- 0.6	- 1.4	-0.1	3.7
Austria	2.2	2.3	0.5	0.6	0.5	1.6	0.8	0.5	- 5.4	1.4	2.0	7.1	- 0.3	0.1	3.0	-0.5	0.0	-2.9
Finland	2.9	0.8	-0.2	1.2	-0.5	- 1.6	0.9	0.6	- 2.5	2.1	0.3	1.6	- 0.7	-0.2	- 0.8	-1.4	0.0	- 1.4
Greece	2.7	-0.4	-2.2	0.7	0.0	0.0	0.7	-0.5	- 7.8	2.9	0.7	5.9	0.4	-0.4	4.1	- 0.9	2.0	- 14.1
Ireland	3.5	2.4	- 4.2	1.3	0.3	0.1	1.8	6.4	1.1	1.9	- 3.3	-5.1	0.7	-4.8	- 10.8	2.3	9.0	15.3
Portugal	2.7	1.5	0.8	0.4	0.0	- 1.4	1.1	0.4	-5.8	1.9	1.7	6.8	-0.1	0.5	2.8	- 0.3	1.2	- 9.6
Slovakia	6.4	4.4	0.4	3.2	3.5	2.4	3.5	1.3	-4.0	2.4	3.5	5.2	1.5	1.6	2.2	4.8	-0.1	2.8
Slovenia	5.7	2.9	0.8	2.0	1.6	0.7	1.9	1.4	-6.0	3.6	1.8	7.2	-0.2	0.1	4.8	0.9	2.2	-2.5
Estonia		6.8	-1.1	- 5.3	4.0	8.1	3.8	2.2	-2.3	5.1	4.2	- 0.7	1.9	3.2	-2.8	1.5	0.1	-0.8
Sweden	3.6	2.8	2.4	2.1	0.7	1.3	1.5	0.9	-1.3	2.3	2.1	3.6	0.3	-2.6	1.0	-0.8	0.5	4.8
Denmark	3.1	1.6	1.0	1.0	0.9	0.4	1.0	1.1	-2.8	2.2	0.5	3.7	0.1	- 0.7	0.6	- 0.6	0.1	- 1.0
Poland	5.2	5.0	3.6	2.0	3.7	1.2	3.4	3.3	-3.0	2.3	2.1	6.2	- 0.7	0.3	- 0.8	2.3	3.1	4.6
Czech Republic	4.9	5.2	-0.6	3.0	3.1	1.5	2.4	2.3	-5.5	2.2	3.1	4.9	2.5	1.5	- 2.3	3.6	0.9	- 2.2
Hungary	6.8	4.0	7.1	1.7	0.4	1.1	2.0	1.4	-2.1	5.1	2.4	7.6	1.5	-1.1	- 4.1	3.8	1.6	- 3.0
United Kingdom	3.7	2.4	1.7	1.6	0.6	-3.5	1.1	0.4	- 10.6	2.5	1.8	15.0	-1.2	0.0	11.6	- 2.2	- 1.7	- 3.4
Switzerland	1.5	0.3	- 4.7	0.7	0.6	0.5	0.8	0.7	-4.3	1.0	-0.2	- 0.9	0.8	0.0	-0.4	-1.2	-2.0	8.3
Norway	4.9	2.7	1.2	0.0	1.7	6.3	0.7	0.5	-0.2	4.4	2.3	1.5	2.8	-2.6	-10.2	- 3.8	-2.2	12.6
Iceland	6.6	7.0	2.2	1.0	3.8	3.3	1.3	1.6	-6.1	5.6	4.6	11.5	-1.2	6.5	- 4.8	0.8	0.3	-20.3
United States	3.3	2.6	6.4	1.2	1.0	1.5	1.7	0.8	1.7	1.6	1.9	4.0	- 1.9	3.5	2.1	-1.3	-0.9	- 2.3
China													4.2	1.1	0.0	9.6	0.5	7.7
Japan	- 0.7	0.8	- 0.7	0.4	0.0	-0.2	1.0	-0.2	- 4.6	- 1.3	1.2	4.2	- 2.7	-0.1	4.2	-2.9	0.3	- 5.3

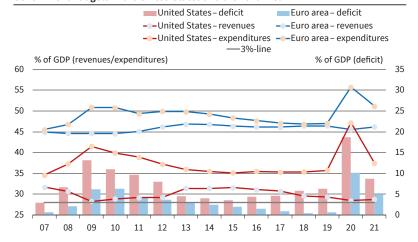
<sup>a</sup> Growth rates for the total economy. <sup>b</sup> Compensation per employee in the private sector. <sup>c</sup> Compensation per employee in the private sector deflated by the GDP deflator. d Competitiveness: weighted relative unit labor costs. Ratio between export volumes and export markets for total goods and services. A positive number indicates gains in market shares and a negative number indicates a loss in market shares

© CESifo

Source: OECD Economic Outlook No. 108, November 2020.

employment insurance fund, a European Investment Bank instrument to provide companies with 200 billion euros in liquidity, and credit lines of up to 240 bil-

Government Budgets in the United States and the Euro Area



Source: IMF World Economic Outlook, October 2020; last accessed on 10 January 2021.

they help to get the economy back on its feet. At the EU summit in early December, the mem-

lion euros from the European Stability Mechanism

—the euro area's bailout fund—to prop up states as

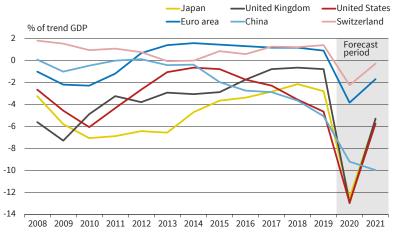
ber states not only agreed on the regular Multiannual Financial Framework for 2021 to 2027 amounting to about 1.1 trillion euros, but also on the construction of the "Next Generation EU" (NGEU) program to cope with the economic consequences of the coronavirus pandemic. This package comprises 750 billion euros, of which 390 billion euros are direct transfers and 360 billion euros are loans to be repaid, and it will be funded through direct borrowing by the EU in capital markets. As we discuss in the next chapter, this is an unprecedented program with potentially far-reaching implications.

In order to finance the reconstruction fund, the EU Commission itself is taking on debt on the capital market for the first time in history in the amount of 750 billion euros, which is to be repaid by 2058 at the latest. The member states are the guarantors and are liable up to a maximum of their share of the EU budget. In order to repay the debt, EU-wide taxes will be levied for the first time. For example, a tax on non-recyclable plastic is to be introduced in all member states this year. A digital tax and a  $\rm CO_2$  border tax are to follow by 2023 at the latest. Furthermore, a financial transaction tax is planned by 2026.

The bulk of the direct aid will probably not flow until mid-2021. Therefore, the reconstruction fund is not primarily intended as a cyclical support to cushion the coronavirus crisis. Rather, the economies in the member countries are to be structurally strengthened and prepared for future developments. In order to be able to draw on the funds, national governments must submit development and resilience plans to the EU Commission, which must ultimately be approved by the EU Council. This is to ensure that a large part of the reconstruction fund is invested in line with EU policy guidelines, especially regarding climate change and the digital transformation of the economy. A large part of the aid is to go to Italy and Spain, which were particularly affected by the pandemic but which already had ongoing structural problems.

The experience from the 540-billion-euro-rescue package adopted in April indicates that there may not be too much demand for credit assistance from the reconstruction fund for the time being. Low-interest rate loans from the ESM of over 240 billion euros as part of the rescue package have so far remained untouched. This suggests that the member states have so far been able to finance themselves independently thanks to the extensive interventions by the ECB through which good capital market conditions were created. National borrowing also offers the member states the advan-

Figure 1.15
Government Structural Primary Budget Balances

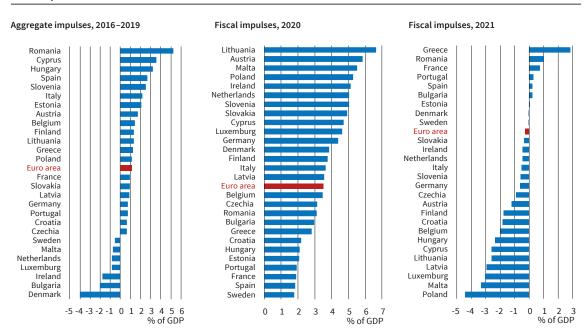


Source: IMF World Economic Outlook, October 2020; last accessed on 10 January 2021.

© CESife

tage that they do not have to expose themselves to the reform conditions of the EU Commission. Should bond interest rates remain low as expected, national governments will probably only resort to the repayable 360 billion euros from the reconstruction fund in an emergency. The guarantee fund for corporate loans has also hardly been touched as of yet, with only one billion euros of the available 200 billion euros approved so far. In contrast, there has been strong demand for the European Short-Time Workers' Compensation from the April aid package. Of the 100 billion euros, the EU Commission had already approved applications from member states for 90 billion euros by mid-December.

Figure 1.16
Fiscal Impulses in EU Member Countries<sup>a</sup>



<sup>&</sup>lt;sup>a</sup> Defined as changes in structural primary fiscal balances. A positive value implies a deterioration of the structural primary fiscal balance position and thereby a positive fiscal impulse for the economy.

Source: European Commission; last accessed on 10 January 2021; EEAG calculations.

Table 1.2

Public Finances

	Gross debt <sup>a</sup>		Fiscal balance <sup>a</sup>			Primary fiscal balance <sup>a</sup>				Cyclically-adjusted primary fiscal balance <sup>a</sup>						
	2011- 2013	2014- 2019	2020	2021	2011- 2013	2014- 2019	2020	2021	2011- 2013	2014- 2019	2020	2021	2011- 2013	2014- 2019	2020	2021
Germany	79.9	67.3	71.2	70.1	- 0.3	1.2	- 6.0	- 4.0	1.9	2.4	- 5.3	- 3.4	1.9	2.1	- 2.7	- 2.1
France	90.6	97.2	115.9	117.8	- 4.7	-3.2	- 10.5	- 8.3	- 2.2	- 1.4	- 9.1	- 7.1	- 1.7	- 1.3	-3.8	- 4.5
Italy	126.2	134.8	159.6	159.5	- 3.1	- 2.4	- 10.8	- 7.8	1.7	1.5	- 7.2	-4.4	3.0	2.4	- 2.2	- 1.7
Spain	84.0	98.4	120.3	122.0	- 9.2	-4.0	- 12.2	- 9.6	-6.2	- 1.2	- 9.9	- 7.4	- 0.3	0.1	- 3.6	- 3.8
Netherlands	65.2	58.7	60.0	63.5	- 3.8	0.0	- 7.2	- 5.7	-2.1	1.1	-6.5	- 5.3	- 0.9	1.0	- 3.9	- 3.5
Belgium	104.6	102.8	117.7	117.8	- 3.9	- 1.9	- 11.2	- 7.1	- 0.5	0.7	-9.2	- 5.2	- 0.1	0.0	- 4.8	-2.8
Austria	81.9	79.1	84.2	85.2	- 2.2	- 0.9	- 9.6	- 6.4	0.5	1.1	-8.2	- 5.2	1.0	1.2	- 5.2	- 3.9
Ireland	116.9	73.7	63.1	66.0	- 9.0	- 1.0	-6.8	- 5.8	- 5.1	1.3	-5.7	-4.9	- 2.8	0.1	- 4.3	- 3.9
Finland	52.7	61.1	69.8	71.8	-1.9	- 1.6	- 7.6	- 4.8	- 0.5	- 0.6	- 6.9	- 4.2	0.4	- 0.1	- 4.6	-2.9
Portugal	125.0	126.7	135.1	130.3	- 6.3	- 2.8	- 7.3	- 4.5	- 1.6	1.1	-4.4	- 1.8	0.0	2.2	-0.3	- 0.6
Greece	171.9	180.7	207.1	200.7	- 10.9	- 0.9	-6.9	- 6.3	- 5.2	2.5	-3.8	- 3.6	6.1	7.7	3.0	0.1
Slovakia	49.9	51.3	63.4	65.7	- 3.9	-1.9	- 9.6	- 7.9	- 2.1	- 0.4	-8.3	-6.7	- 1.3	- 0.7	- 6.5	- 6.2
Luxemburg	21.6	21.7	25.4	27.3	0.7	1.9	- 5.1	- 1.3	1.2	2.2	-4.8	- 1.0	2.8	2.4	- 1.9	1.1
Slovenia	56.7	75.2	82.2	80.2	- 8.4	- 1.5	- 8.7	- 6.4	- 6.3	1.1	- 7.0	-4.8	- 3.9	1.5	- 5.2	- 4.6
Lithuania	38.5	38.6	47.2	50.7	- 4.9	0.1	- 8.4	- 6.0	-3.0	1.3	- 7.8	- 5.5	- 0.5	0.3	- 7.1	- 4.5
Latvia	42.0	38.7	47.5	45.9	-2.3	- 0.8	- 7.4	- 3.5	- 0.6	0.1	- 6.7	- 2.8	0.5	-0.6	- 5.0	- 2.1
Estonia	8.7	9.4	17.2	22.5	0.3	-0.1	- 5.9	- 5.9	0.4	-0.1	- 5.8	- 5.8	0.2	- 1.2	-4.0	- 4.1
Cyprus	83.4	101.0	112.6	108.2	- 5.7	- 1.6	-6.1	- 2.3	-2.8	1.1	-3.7	-0.2	-0.4	4.5	- 2.4	0.2
Malta	67.0	51.4	55.2	60.0	- 2.7	0.7	- 9.4	- 6.3	0.3	2.6	-8.4	- 5.1	0.7	0.7	- 5.8	- 2.5
Euro area	92.0	90.6	101.7	102.3	- 3.7	- 1.3	- 8.8	-6.4	- 0.7	0.8	- 7.2	- 5.0	0.7	1.0	-3.2	- 2.9
Sweden	38.3	41.0	39.9	40.5	- 0.9	0.4	- 3.9	- 2.5	0.1	0.9	-3.5	- 2.6	0.9	0.7	- 1.0	- 1.0
Poland	55.1	50.3	56.6	57.3	- 4.3	-1.8	-8.8	- 4.2	- 1.7	-0.2	- 7.4	- 2.8	- 1.6	- 0.6	-6.8	- 2.4
Denmark	45.0	37.4	45.0	41.1	-2.3	1.0	-4.2	- 2.5	- 0.4	2.1	-3.5	- 1.8	1.4	2.0	0.3	0.3
Czech Republic	42.7	35.8	37.9	40.6	- 2.6	0.1	- 6.2	- 4.7	-1.3	1.0	- 5.4	-4.0	0.0	0.7	- 3.4	- 2.5
Romania	36.2	36.6	46.7	54.6	- 3.7	- 2.4	- 10.3	- 11.3	- 2.0	- 1.0	-8.6	- 9.4	- 0.8	-1.0	-6.9	- 8.0
Hungary	78.7	72.4	78.0	77.9	- 3.4	- 2.2	- 8.4	-5.4	1.0	0.8	- 5.9	- 3.0	2.5	-0.1	- 4.2	- 1.8
Bulgaria	16.3	25.0	25.7	26.4	- 0.9	-0.3	-3.0	-3.0	- 0.2	0.4	-2.4	-2.3	0.0	0.8	- 1.5	- 1.7
Croatia	71.7	79.1	86.6	82.3	- 6.3	- 1.4	- 6.5	-2.8	-3.4	1.4	- 4.2	- 0.7	- 2.0	1.1	- 1.7	0.1
United States	102.7	106.2	131.2	133.6	- 7.4	- 4.8	- 18.7	- 8.7	- 5.3	- 2.8	- 16.7	- 6.9	- 2.7	- 2.3	- 12.9	- 5.8
China	35.1	45.6	61.7	66.5	-0.4	- 3.7	- 11.9	- 11.8	0.1	-3.0	- 10.9	- 10.9	-0.1	- 2.8	- 9.2	- 10.0
Japan	227.6	235.4	266.2	264.0	- 8.7	- 3.7	- 14.2	- 6.4	- 7.6	- 3.1	-13.9	- 6.2	- 6.6	- 3.3	- 12.5	- 5.4
United Kingdom	82.5	86.2	104.4	111.0	- 7.0	- 3.4	-13.3	-8.9	- 4.1	- 1.0	- 11.4	- 7.1	- 2.7	- 1.6	- 6.7	- 4.0
Switzerland	43.2	42.3	48.7	48.5	0.2	0.7	-4.2	- 1.4	0.5	0.9	- 4.0	- 1.2	0.6	0.9	- 2.2	- 0.3

<sup>&</sup>lt;sup>a</sup> As a percentage of (potential) gross domestic product (in case of cyclically adjusted (primary) fiscal balances). For countries of the European Union and the United Kingdom, definitions are according to the Excessive Deficit Procedure. For the United States, China, Japan and Switzerland, definitions are according to the IMF.

Source: European Commission, Autumn 2020; IMF World Economic Outlook, October 2020.

In 2020, all euro area countries are expected to have provided strong expansionary fiscal stimulus. Measures such as short-time allowances aimed at preserving jobs contributed to this. There was also additional spending on health care systems and support for the private sector through liquidity support and reimbursement of lost sales. The strength of the expansionary impulses in the countries can be measured by the changes in the structural primary fiscal balances. Declines in these balances correspond to expansionary fiscal impulses.

According to IMF estimates, the governments of the United States, Japan and the United Kingdom have seen sharp increases in their structural primary deficits of 8.3, 9.7 and 12.2 percent, respectively (see Figure 1.15). Albeit historically still high, these estimated fiscal impulses have only been 4.2 and 4.7 percent for China and the euro area.

According to estimates by the European Commission, among the five largest members, the strongest stimuli are expected in the Netherlands, Germany and Italy, while the stimuli in Spain and France are likely to be significantly lower (see Figure 1.16). This year in the euro area, the fiscal stimulus is on average likely to become more restrictive than what has been observed for 2016-2019, i.e., the four years before the coronavirus pandemic hit. In Germany, the Netherlands and Italy, they are likely to be slightly restrictive this year.

## ILLUSTRATIVE ANALYSIS REGARDING GROWTH DIFFERENTIALS WITHIN THE EUROPEAN UNION IN 2020

The coronavirus pandemic does not appear to have affected all member countries of the European Union equally. Looking at overall economic growth during 2020, potential key drivers have been the severity of the pandemic and the policy responses to these. Obviously, these are all interconnected: countries with more cases and more fatalities are probably also the ones that have introduced both more public health and economic support measures to cope with these. Using cross-section data for all EU member countries, except Malta (for which no Oxford Stringency Index is available) and simple regression techniques, this box explores the relationship between these three key drivers and economic growth.<sup>1</sup> To capture more structural differences in growth, all regressions shown will include GDP growth as realized in 2019; those countries that experienced high growth in 2019 are more likely to perform better in 2020. As indicated by the R-squared at the bottom of the first column in Table 1.3, almost 18 percent of the variation in GDP growth rates across these countries can already be explained this way. A one percentage point higher growth rate in 2019 is associated with an almost 34 percentage point higher growth rate in 2020.

The next three columns individually add proxies for each of the main drivers. Countries that registered more pandemic-related deaths during the year relative to their population sizes are those that also experienced lower growth (column (2)). Countries with on average more stringent public health measures (as proxied by the Oxford Stringency Index) witnessed low-er economic growth last year (Column (3)). Finally, those countries where the economic stimulus measures undertaken by

the government were more pronounced were able to alleviate some of the downfall in production. To measure the so-called fiscal impulse, we use the change in the structural primary balance as published by Eurostat (see Figure 1.16). A deterioration in this balance receives a positive sign and reflects the short-term positive stimulus to the economy set by the authorities. An increase in the structural deficit of one percentage point is associated with a 0.67 percentage points higher growth rate. All three variables are individually significantly different from zero and help explain a substantial portion of the observed variation in economic growth. However, all three drivers are interrelated and looking at only one at a time might overestimate the importance of each.

For that reason, column (5) includes all in one specification. By combining the information, we are now able to explain almost 50 percent of the variation in growth rates. As to be expected, the coefficient estimates of all variables are reduced (in an absolute sense). However, both the Oxford Stringency Index and our Fiscal Impulse measure remain statistically significant. Regarding the latter, the coefficient estimate implies that of those countries with the same growth performance in 2019, the same number of (relative) fatalities and the same level of stringency measures in place, those that increased their structural deficit by one percentage point were on average able to reduce the drop in GDP by almost 0.6 percentage points.

What is perhaps even more interesting is that the coefficient in front of the number of deaths becomes insignificant, albeit still with a negative sign. When controlling for preventive health measures, countries with

Table 1.3

Illustrative Analysis Regarding Growth Differentials within the European Union in 2020

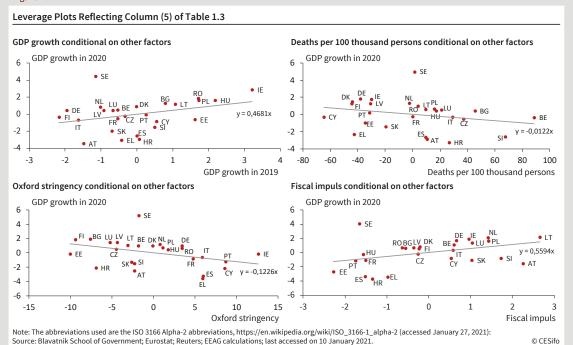
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	GDP growth in 2020					
GDP growth in 2019	0.744**	0.654**	0.552*	0.658**	0.468	0.620**
	(2.288)	(2.115)	(1.763)	(2.159)	(1.624)	(2.616)
Deaths per 100 thousand		-0.0219*			-0.0122	- 0.0125
persons in 2020		(-2.036)			(-1.185)	(- 1.496)
Oxford Stringency in 2020			- 0.153**		- 0.123*	-0.110*
			(-2.241)		(-1.875)	(-2.084)
Fiscal Impulse in 2020				0.671**	0.559*	0.773***
				(2.198)	(1.964)	(3.245)
Constant	- 8.034***	- 6.215***	- 0.195	- 10.28***	- 2.627	- 4.606
	(- 8.316)	(-4.876)	(- 0.0541)	(- 7.562)	(-0.752)	(-1.598)
Observations	26	26	26	26	26	25
R- squared	0.179	0.304	0.326	0.321	0.485	0.657

Notes: t- statistics in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. No Stringency data for Malta available and therefore not in the sample. In Column (6), Sweden (SD) is removed from the sample.

Sources: Blavatnik School of Government, Eurostat, Reuters, EEAG; last accessed on 10 January 2021.

 $<sup>^{1}\,\,</sup>$  The growth rates for (2019 and) 2020 as used in this analysis are shown in Figure 1.39 and Table 1.A.2.

Figure 1.17



more fatalities did not achieve higher growth.<sup>2</sup> Not only was there no trade-off between health and wealth in an absolute sense (Column (2)), but also when controlling for stringency measures, countries with high growth did not pay a price by experiencing a higher number of deaths.

Or, both unconditional and conditional on the stringency level, a country with more fatalities did not experience higher economic growth. This can be interpreted such that the public health measures did not overshoot their target. If anything, the negative sign still in front of the variable measuring the relative number of fatalities indicates the opposite to have been the case.

Figure 1.17 visualizes these results. It shows so-called leverage plots for the regression shown in Column (5) of Table 1.3. These indicate that Sweden (SE) is not represent-

ative for this analysis along any dimension. It witnessed exceptionally high growth rates according to the drivers we distinguish. Indeed, as shown by Column (6) in Table 1.3, when removing Sweden from the sample, the overall fit improves substantially, allowing us to explain nearly two-thirds of the variation in cross-country growth, and increasing the significance of all variables in our admittedly simple model.

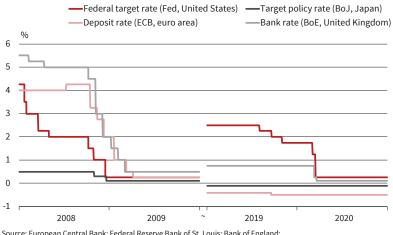
tries. For the euro area, this ratio probably rose over

Of the larger countries this year, the stimulus will be only slightly expansionary in Spain and France.

The expansive fiscal policy will result in an increase in the debt ratio as a percentage of the respective gross domestic product in all euro area coun-

Figure 1.18

Central Bank Interest Rates



Source: European Central Bank; Federal Reserve Bank of St. Louis; Bank of England; Bank of Japan: last accessed on 10 January 2021.

100 percent last year (see Table 1.2). Among the five largest economies, the picture remains very heterogeneous, and the differences are likely to widen further. The Netherlands and Germany, for example, were able to reduce their debt-to-GDP ratios to 49 percent and 60 percent, respectively, in the years before the coronavirus crisis. This year, these two countries will probably only see an increase to 64 percent and 70 percent respectively. In contrast, the debt-to-GDP ratios in Italy, France and Spain were already well above the Maastricht reference value in 2019, at 135 percent, 98 percent and 96 percent of their respective GDPs. This year, these ratios are expected to increase to 160 percent, 118 percent and 122 percent. However, it is still uncertain when the fiscal rules from the Maastricht Treaty and the Fiscal Compact, which are currently suspended due to the coronavirus crisis, will be reinstated or whether the rules will be relaxed.

#### 1.2.2 Monetary Conditions and Financial Markets

Like fiscal policy, monetary policy reacted expansionary to the coronavirus crisis in spring last year.

<sup>&</sup>lt;sup>2</sup> The highest (absolute) correlation between the variables on the right is between the number of deaths and the stringency measure and is 0.31. Multicollinearity is not as severe a problem as some might expect.

Central banks in advanced economies have significantly increased their purchases of securities as well as lending programs to commercial banks, resulting in a strong expansion of central bank balance sheets (see Figure 1.18). In contrast to the situation during the financial crisis of 2008/2009, however, this time the central banks started from a situation in which monetary policy was already considered extremely expansionary, leaving less leeway. Moreover, at least so far, the coronavirus crisis has not turned into a banking crisis that would have required the central banks to act as lenders of last resort on a similar scale as back then.

The European Central Bank (ECB) has increased the size of its balance sheet in response to the coronavirus crisis to a similar extent just as it did during the financial crisis. After the pandemic emergency purchase program for the purchase of bonds of public and private debtors, which was decided in March, was already increased during the summer, the ECB readjusted it again at its December meeting last year. It has been increased by a further 500 billion euros to a total of 1,850 billion euros and will run until at least March 2022. Funds released by maturing bonds will be reinvested until at least the end of 2023. In addition, further longer-term refinancing operations for banks were decided, and the conditions for long-term loans already underway were eased and extended. All of this allowed fiscal policy to become more expansionary while circumventing a sovereign debt crisis.

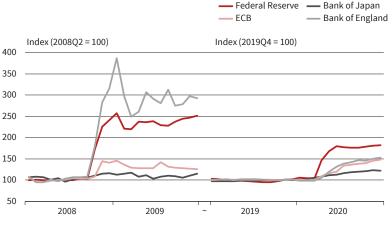
In contrast to the situation during the financial crisis, this time around, interest rates were already at all-time lows. Throughout the year, the interest rate for the main refinancing operations remained at 0.0 percent, the marginal lending rate at 0.25 percent and the deposit rate at – 0.5 percent (see Figure 1.19).

The US Federal Reserve had set itself a different starting point before the pandemic hit. Besides a stronger increase in its balance sheet, it allowed for two interest rate cuts totaling 150 basis points in March last year. Furthermore, the Federal Reserve adjusted its monetary policy strategy at the end of August and now has somewhat more leeway in targeting inflation. The inflation rate may remain above 2 percent for longer if it had previously been below this level for some time. This means that the US Federal Reserve is likely to keep interest rates low for longer than previously expected. Although the review of the ECB's monetary policy strategy was expected to be completed by the end of 2020, it remains to be seen whether similar adjustments will be made in the euro area.

Nevertheless, monetary policy is likely to remain very expansionary in the forecast period in Europe as well. In its December decisions, the ECB's Governing Council reaffirmed its intention to leave key interest rates at their current level or to lower them until the inflation outlook moves significantly closer to the price stability target. In addition, the European Cen-

Figure 1.19

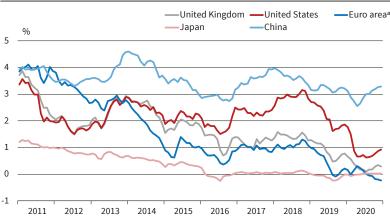
Balance Sheet Sizes of Major Central Banks



Source: Federal Reserve; Bank of Japan; European Central Bank; Bank of England; last accessed on 10 January 2021; EEAG calculations.

© CESifo

Figure 1.20
10-Year Government Bond Yields



<sup>a</sup> The synthetic euro area benchmark bond refers to the weighted average yield of the benchmark bond series from each Economic and Monetary Union member.

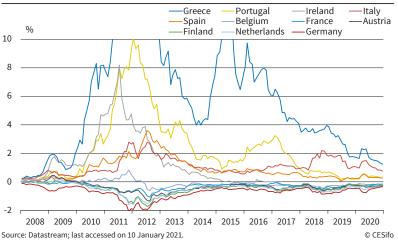
Source: Datastream; last accessed on 10 January 2021.

© CESifo

Figure 1.21

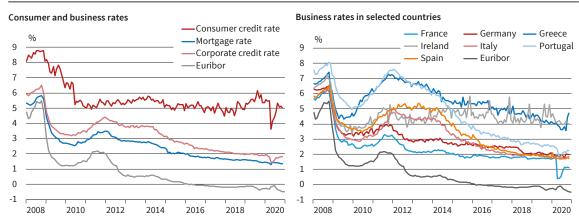
Regional Disparties in Government Bond Yields in the Euro Area

Differences between 10-year national and synthetic euro area benchmark bond yields



tral Bank has reaffirmed its willingness to expand its monetary policy instruments once again, should this be necessary as a result of the ongoing pandemic. For those companies, households and government that do

Figure 1.22
Interest Rates on Loans in the Euro Area<sup>a</sup>



a New loans to households and non-financial corporates up to one million euros using floating rates or up to 1 year initial rate fixation.

The Euribor rate is based on secured interbank loans with a maturity of one year. Source: European Central Bank: last accessed on 10 January 2021.

© CESifo

Figure 1.23
Credit Developments in the Euro Area<sup>a</sup>

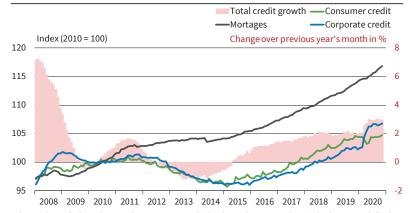
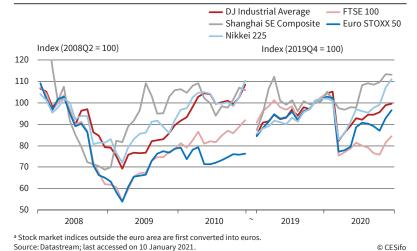


Figure 1.24

Developments in International Stock Markets from a Euro Area Perspective<sup>a</sup>



not face other constraints, financing conditions will therefore remain very favorable.

In the euro area, yields for 10-year government bonds with the highest credit rating (AAA) have on average been slowly falling during 2020 (see Figure 1.20). The synthetic euro area benchmark interest rate for 10-year government bonds has been in negative territory since August, after first having seen an increase in spring last year. This behavior has contrasted with that of long-term government bond yields in the United States, China and the United Kingdom. In these three countries, yields on these safe assets fell significantly during the first wave of the pandemic, only to rise again somewhat afterward. This difference can be fully explained by the temporary increase in risk premiums on government bonds in Greece, Italy, Portugal and Spain, which exceeded the increase in the safe-haven premium on government bonds of triple-A countries like Germany and the Netherlands (see Figure 1.21).

Interest rates for three-month money (EURIBOR) have fallen to an even more negative level after a slight increase in April (see Figure 1.22). Average interest rates on new corporate credits rose slightly to 1.8 percent from their temporary low of 1.4 percent in May last year. The same pattern, albeit more pronounced, applies to consumer credit rates, which rose to about 5 percent at the end of autumn last year after having witnessed a short trough at 3.6 percent in April. In comparison, the cost of real-estate financing for private households remained relatively stable at 1.4 percent. As usual, the differences across euro area countries remained large.

The outstanding volumes of corporate and consumer loans followed opposing trends this year: while corporate loans rose strongly into the summer due to the crisis-related liquidity needs of companies, demand for consumer loans slumped during the same period (see Figure 1.23). Since summer, the level of corporate loans has stagnated just as it has for consumer loans. In comparison, real estate loan portfo-

lios have remained on a relatively steady growth path throughout last year.

The extensive monetary and fiscal policy measures have led to a strong improvement in financing conditions in advanced economies and many emerging markets since last spring. As a result, equity markets have regained much of the ground they lost between March and April, when stock markets around the world crashed (see Figure 1.24). Key equity indices, particularly for Asian markets, are now well above their pre-crisis levels. For example, the Nikkei 225 and the Shanghai Stock Exchange Composite were up about 13 and 12 percent, respectively, in euro terms in December last year. In contrast, from a euro area perspective, the FTSE 100 and the Euro STOXX 50 lost around 20 and 5 percent respectively in 2020. Given the relatively stable development of the euro in the past year, despite the extent of the crisis, the stock market returns calculated in local currency are also quite similar to those calculated in euros. The biggest exception was the United States, where the return of the Dow Jones Industrial Average in local currency was around 7 percent, while in euros, it declined by 1 percent. This reflects the depreciation of the dollar by about 8 percent. In the case of the FTSE 100, the more than 5 percent depreciation of the British pound made its return look worse from a euro area perspective than from a UK perspective.

Although nowhere near as heterogeneous as during the financial crisis, stock market returns among euro area member states were still quite divergent last year. While the German FAZ index essentially stagnated in a year-end comparison, the year-end rallies failed to bring the leading indices in Spain, France and Italy back to their pre-crisis levels. Spain's IBEX 35 was by the end of 2020 still more than 15 percent below its level at the beginning of the year. In sharp contrast, neighboring Portugal saw its PSI rise by 9 percent in such a year-end comparison.

As compared to other crises situations, the currencies of the major economies remained largely stable in 2020. The one with the overall largest, albeit historically still small, movement was the euro. In real effective terms, it appreciated by less than 4 percent over the course of the year (see Figure 1.26). This general appreciation has also been reflected in the euro-dollar exchange rate. After being undervalued against the US dollar for five years in a row, at the end of 2020 the euro is approaching a more neutral range from a purchasing power parity perspective. Of these major currencies, the British pound, on the other hand, depreciated in real effective terms by somewhat more than 2 percent throughout 2020. The United Kingdom is both more affected by the Covid-19 virus and from having to face the economic consequences of Brexit.

Figure 1.25

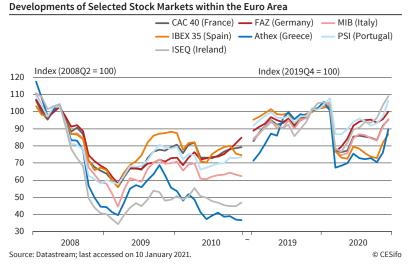
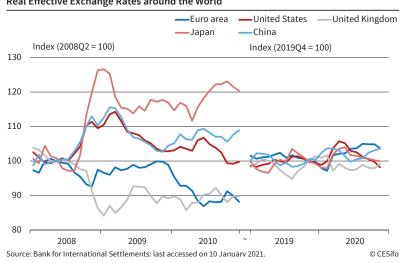


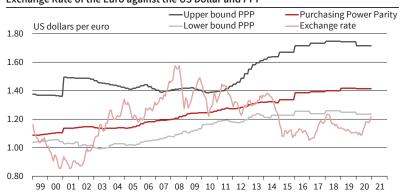
Figure 1.26

Real Effective Exchange Rates around the World



Exchange Rate of the Euro against the US Dollar and PPPa

Figure 1.27



\*The nominal exchange rate is based on monthly data, while the exchange rate based on purchasing power parity (PPP) is given at a quarterly frequency. The US dollar-euro PPP rate is calculated as the GDP-weighted average of the euro country-specific PPP estimates vis-à-vis the US dollar. The PPP upper bound represents the 90th percentile of the euro country-specific PPP estimates vis-à-vis the US dollar; the lower bound the 10th percentile. In calculating these bounds the 11 euro area member countries with the largest GDP weights are used.
Source: OECD, OECD Economic Outlook; European Central Bank; last accessed on 10 January 2021.
© CES

#### 1.3 MACROECONOMIC OUTLOOK<sup>2</sup>

## 1.3.1 Assumptions, Risks and Uncertainties

This forecast assumes that the price of a barrel of Brent crude oil will average around USD 50 this year (after on average USD 41.5 last year). It also assumes that the euro will trade around USD 1.20 this year.

The pandemic situation is expected to improve only slowly as we approach spring. Although the current wave will level off in the coming months, restrictions will continue to be necessary—at least locally and will be strict in some cases. For instance, in the United States, increased containment measures are likely to be implemented during the first quarter. After that, the effects of mass vaccination, together with warmer weather conditions in the northern hemisphere, will allow a more rapid normalization. By summer, it is assumed that a large part of the measures in Europe and the United States will be eased and that social behavior will also have partially normalized. The further course of the pandemic and the associated infection control measures are currently the most critical assumptions for economic forecasts, since it is associated with great uncertainty.

The downside risk to the forecast presented is that new infections, in part due to the spreading of new faster-moving variations of the virus, cannot be sufficiently controlled and might even further increase the intensity of the pandemic in many countries. This would lead to even more widespread lockdowns of economies. There may also be unexpected (further) supply shortages and distribution problems of the new Covid-19 vaccines reducing the pace by which herd immunity is reached. In addition, it is possible that the population's willingness to be vaccinated is too low to achieve herd immunity. However, there are also arguments in favor of upside risks to our forecast. For example, new infections could decline more rapidly than assumed, or vaccination campaigns could be more successful and be rolled out faster, so that infection control measures can be scaled back more quickly than assumed.

The further course of trade relations—especially between the United States and China, but also between the United States and Europe—is still uncertain. It is true that the change of presidency in the United States probably means a de-escalation of the trade conflicts and thus tends to be an upside risk. However, statements by the new US president show that a quick and complete lifting of all trade restrictions is not to be expected.

China's financial stability is subject to significant risks, and not only since the outbreak of the pandemic. The non-financial sector, which was already highly indebted before the crisis, has become even more indebted in the wake of the pandemic (see

Organization for Economic Co-operation and Development 2020). If the number of insolvencies in China were to increase, this would make a reassessment of risks more likely and could lead to sudden sales of certain financial assets on a larger scale.

In recent years, the debt of non-financial corporations has also increased significantly in many advanced economies, primarily through the issuance of bonds (see Organization for Economic Co-operation and Development 2019). An ever-increasing proportion of these bonds are just rated investment grade (see Çelik and Isaksson 2019). The longer the corona pandemic weighs on economic activity, the more likely it will be that these bonds are downgraded to non-investment grade. Institutional investors would have to dump them due to regulatory requirements, which could lead to price declines in bond markets and possibly revaluations of other asset classes.

In addition to the above, the significant increase in government debt poses a risk for some euro countries. Due to the fiscal stabilization measures, all countries had to massively increase their new debt. Countries that already had high debt ratios before the coronavirus crisis run the risk of losing the confidence of financial markets. If risk premiums on government debt increase, this could again endanger the stability of government finances and the banking system, as it did during the euro area crisis in 2011/2012. Currently, however, the ECB is actively countering this with its bond-buying programs.

Overall, the downside risks to the projected global and European economic development clearly dominate the upside risks.

Finally, what has to be realized is that there is not only uncertainty in society and economy regarding both the current situation and the outlook, but that this also holds regarding the data as we measure it in the System of National Account or regarding price statistics. During the lockdown many data underlying the statistics we use at least temporarily lost quality. When over time more and more information about the crisis is revealed, it is also quite likely that current statistics we have regarding the year 2020 will be revised accordingly. Furthermore, the lockdown placed statistical agencies for difficult choices. How do we treat prices of airplane tickets when they are no longer sold, but nevertheless part of the basket underlying consumer price indices? How do we treat the value added of schoolteachers, or university professors who are still paid even when schools and universities are closed? Given the uniqueness of this crisis, how to deal with these and other questions has not been ex ante specified in the manuals underlying macroeconomic statistics. It is therefore quite likely that not all statistical agencies in Europe, let alone the world, have made similar decisions. While we must always be careful when comparing statistics across countries (and over time), this general warning is likely to be even more relevant for data collected

<sup>&</sup>lt;sup>2</sup> The forecasts presented are updates of Wollmershäuser et al. (2019) and Abberger et al. (2019).

and constructed during crisis times as witnessed in the recent past.

#### 1.3.2 Global Economy

Economic development is likely to be very subdued in many countries in the winter of 2020/21 and often even decline again. A second wave of coronavirus infections started up again in the summer in several countries, such as Spain, France, the United States and Brazil. This wave then spread to other countries such as Italy, Germany, the United Kingdom and Eastern Europe at the end of autumn. European governments initially resorted to targeted local restrictions on certain regions or activities. However, these measures were not enough to slow the pandemic. The continued rise in intensive care bed occupancy forced many governments to impose nationwide and more stringent measures such as closing catering establishments and places of accommodation. Movements of people in the retail and leisure sectors identified from mobile phone data indicate a decline in economic activity in the affected countries, especially in Europe, since September, albeit less than during the spring.

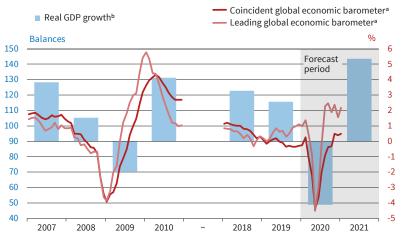
Of the larger advanced economies, the United States is one of the countries with the highest infection rates. Although infection control measures vary quite a bit from state to state, overall, they are less stringent than in Europe. This has so far only slightly restricted mobility there, so real activity is likely to be less affected than in Europe. However, the relatively high unemployment and the long absence of further fiscal measures are likely to slow overall economic production in the United States during the second half of the year. Also, because many restrictions remained in place in Asian countries, most of them were spared another severe outbreak of coronavirus in the autumn.

Overall, the pandemic is likely to have had a much smaller negative impact on economic activity in the second half 2020 than in spring 2020. At that time, large-scale plants were temporarily shuttered in many manufacturing sectors. The assessments of companies and households in the manufacturing sector have, as the Global Barometers show, only deteriorated slightly in recent months compared to the contractions in April (see Figure 1.28).

As mentioned in Section 1.4.1, this forecast assumes that infection control measures and the current limited mobility will broadly remain in place until the end of the first quarter. Thereafter, the increasing number of vaccinations against Covid-19 will contribute to normalization. As a result, economic activity in Europe and the United States should increase quite sharply during the second quarter of 2021, after which, growth will somewhat weaken again. Asia has a better overall grip on stemming the spread of the virus. Therefore, developing real

Figure 1.28

World Economic Growth and the Global Economic Barometers



<sup>a</sup> Both barometers have an in-sample average of 100 and a standard deviation of 10.

<sup>b</sup> Countries are weighted according to previous year's nominal GDP in US dollars and market exchange rates.

Source: National statistical offices; KOF/FGV; EEAG calculations; last accessed on 10 January 2021;

GDP 2020 and 2021: EEAG forecast.

© CESifo

Figure 1.29
Regional Contributions to World GDP Growth<sup>a</sup>

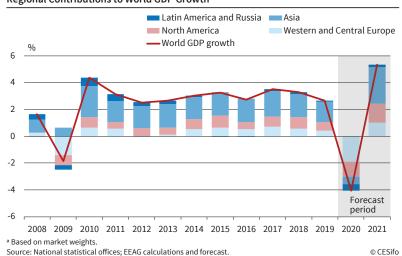
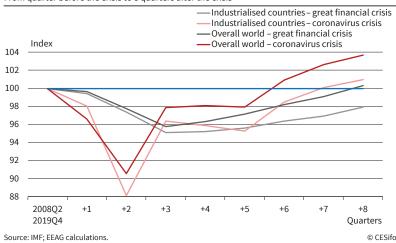


Figure 1.30

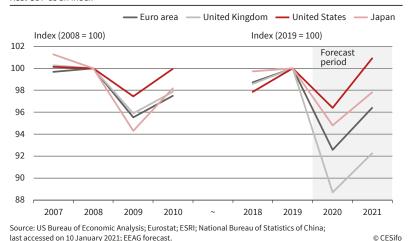
Comparing GDP Developments for the Advanced Economies and the World From quarter before the crisis to 8 quarters after the crisis



activity in this region should be less affected, so that economic growth is spread more evenly over the entire year. While last year the strongest negative

Figure 1.31

Economic Growth by Country and Region
Real GDP as an index



contribution came from the European continent, this year Asia will make the biggest contribution to the recovery (see Figure 1.29).

Overall, world GDP is expected to have declined by 4.1 percent last year and to grow by 5.4 percent in 2021 (see Table 1.A.1). Total production for the advanced economies will remain below pre-crisis levels until the second half of 2021. The world at large will reach pre-crisis production levels again mid-year. Even though the impact of the coronavirus crisis was much more pronounced than that of the financial crisis and we are going through a stagnation if not a double-dip this winter, this time around we will return to pre-crisis levels more quickly than back then (see Figure 1.30). Fundamental structural adjustments on a scale like after the financial crisis are not necessary this time.

However, there are significant differences between countries in how much of the output losses will be recovered this year. Focusing on the advanced world, the United States will have an overall GDP level this year slightly above that of the pre-crisis year 2019 (see Figure 1.31). This pre-crisis gap will, however, not be closed for the euro area and Japan this year. The United Kingdom will even remain almost 8 percent below its 2019 output level this year, partly because of Brexit.

Although a trade and cooperation agreement between the European Union and the United Kingdom was reached at the end of last year, the relationship between the two will not be the same anymore. Compared to the UK's previous status as a member of the European Union, the beginning of this year saw the end of, for example, freedom of movement, its membership in the European Single Market and the Customs Union, and its participation in most EU programs. The agreement does provide for free trade in goods and limited mutual market access in services, as well as for cooperation mechanisms in a range of policy areas, transitional provisions about EU

access to UK fisheries, and UK participation in some EU programs.

To be somewhat more precise, trade in goods between the European Union and the United Kingdom remains free of customs duties or quotas. Traders can self-certify compliance with the agreed rules of origin. However, customs formalities are required, and VAT and certain other duties are payable on importation. There are rules to facilitate the cross-border provision of services in certain areas, such as digital services, public procurement, business travel and the posting of highly qualified staff. But there is no longer general access to each other's services markets. For example, UK financial services lose the ability to easily offer services across to customers in EU member states. That loss is especially painful for the United Kingdom, which ran a surplus of 20 billion euros on trade in financial and other services with the European Union in 2019. Furthermore, there is no free movement of persons between the European Union and the United Kingdom. Visitors planning stays of more than 90 days in any 180-day period need a visa. Those planning any work other than routine business meetings and conferences need an appropriate visa. Professional qualifications will no longer be automatically mutually recognized. This realized Brexit is likely to weigh on trade between the United Kingdom and European Union countries and have a dampening effect on economic activity.

Inflation in the advanced economies was at 0.8 percent very weak last year. This year, prices will rise somewhat more strongly, but at 1.1 percent inflation will remain quite subdued overall. First, higher wage increases are unlikely this year in view of the already significant increase in unemployment in many countries. Second, although improving, capacities will not be fully utilized by the end of the year. Third, households' propensity to save is also likely to remain elevated in view of increased income risks. Fourth, inflation in emerging markets is likely to be lower this year than in 2020, mainly due to developments in China and India. In China, the sharp increase in pork prices between June 2019 and February 2020, which account for a relatively large portion of the Chinese basket of goods, still had an impact on inflation in 2020. In India, the overall very high food prices pushed consumer prices up sharply at the turn of 2019/20. These base effects are now disappearing. On the other hand, the increased crude oil prices in the second half of 2020 will exert some upward pressure on prices this year.

World trade will probably continue to recover in the winter of 2020/21 and exceed the pre-crisis level again in the summer. This means that global trade in goods is likely to be less affected by the economic slump this winter than global GDP. The reason for this is that the infection control measures are unlikely to restrict the cross-border exchange of goods to a great extent. All in all, global trade in goods is expected

to have shrunk by 6.1 percent last year and rise by 6.6 percent in 2021. The delimitation used here only considers trade in goods, but not trade in services, so that the decline in total world trade is likely to have been even greater in 2020. Even more than during the first wave, this time around, it is a crisis of the service sector.

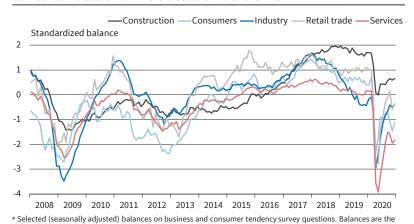
#### 1.3.3 European Economy

Since the end of last October, stricter measures to contain the second wave of the coronavirus epidemic in Europe have been reintroduced in several EU countries. The economic impact of these renewed restrictions is reflected in a marked decline in personal mobility, indicating a slowdown in economic activity toward the end of last year. The economic tendency survey indicators available for December from the service sectors also show that the restrictions have dampened sentiment there (see Figure 1.32). By contrast, industry seems to have been less affected so far. According to these surveys, new orders were even continuing to rise until recently. This suggests that, in contrast to last spring, value creation in industry is likely to be largely spared from the current lockdown measures. Households also revised their assessments downward in November, but again clearly less than in the spring. There was even a small rebound in December. Nevertheless, consumer confidence has not returned to pre-crisis levels over the summer and remains well off normal levels.

The last quarter of 2020 will have again resulted in a decline in output for the euro area. However, with a contraction of around 3 percent in GDP, it will be far less than what was observed for the second guarter of 2020 (-11.7 percent). Assuming that the government restrictions introduced until the end of last year and the fact that social behavior remain largely unchanged until March, economic output is likely to fall in the first quarter of 2021. Only with the gradual lifting of restrictions from April onwards which depends on the success of the vaccination campaigns rolled out worldwide, will economic activity pick up significantly and GDP expand at an above-average rate in the second quarter of 2021. In the further course, it is assumed that as the vaccination coverage of the population progresses, any remaining infection protection measures will be lifted completely. Thus, the economic recovery is expected to continue from the third quarter of 2021, although growth rates will probably gradually weaken. However, they will remain above potential, so that the production gap might close by the end of 2022. From an annual perspective, real GDP in the euro area has most likely declined by 7.4 percent in 2020 and will increase 4.9 percent this year (see Figure 1.33).

As compared to other crises, such as the financial crisis of 2008/2009, or the euro area crisis, the coronavirus crisis has caused a strong drop in consumer demand. Together with the drop in investment, it can

Figure 1.32 Confidence Indicatorsa for Different Sectors in the Euro Area

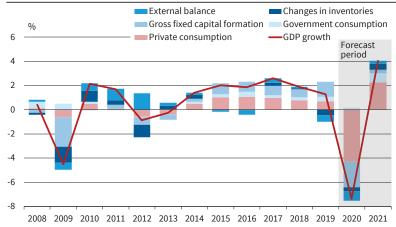


differences between the percentages of positive and negative replies. These are subsequently normalized to have an average of 0 and variance of 1 for the period from 1985 onward

Source: European Commission; last accessed on 10 January 2021; EEAG calculations.

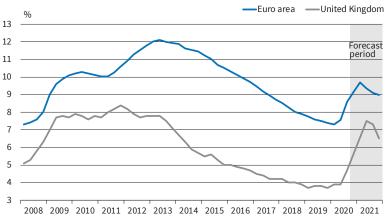
© CESifo

Figure 1.33 Demand Contributions to GDP Growth in the Euro Areaa



<sup>a</sup> Gross domestic product at market prices (prices of the previous year). Annual percentage change. @ CFSifo Source: Eurostat; last accessed on 10 January 2021; EEAG calculations and forecast

Figure 1.34 Unemployment Rates in the Euro Area and the United Kingdom Seasonally adjusted data

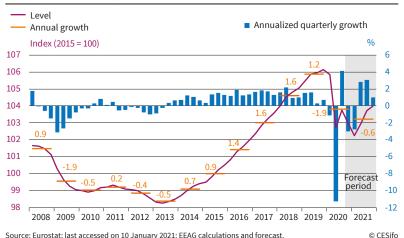


Source: Eurostat; last accessed on 10 January 2021; EEAG calculations and forecast.

@ CFSifo

explain most of the decline in overall GDP last year. Given the assumed normalization in social behavior and the lifting of stringency measures, this year's

Figure 1.35
Employment in the Euro Area
Seasonally and work-day adjusted data



rebound in consumption will also be the main driver of overall growth. The stimulus measures that are already in place and that are planned for the future, including the Next Generation EU (NGEU) program, will also provide an unprecedented fiscal boost to the European economy, just based on their sheer size alone.

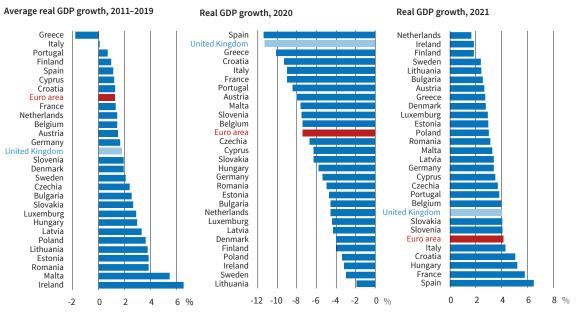
The unemployment rate is likely to have averaged 8.0 percent last year, only slightly higher than in 2019 (7.6 percent). This overlooks the strong dynamics in both 2019 and last year. The sustained decline in 2019 was abruptly reversed into a steep increase in 2020 caused by the pandemic (see Figure 1.34). This upward trend will not be broken until GDP picks up sustainably. Spare capacities, as also reflected in the high number of short-time workers, will slow the recovery

of the labor market. For this reason, unemployment is expected to rise to an average of 9.3 percent in the euro area this year.

Looking at the euro area labor market from the employment side, nearly 2 percent of all jobs were lost last year (see Figure 1.35). Some of these will reappear next year when restrictions are lifted. However, this will not be the case for all of them. Structural changes that received a boost during the crisis will most likely imply that structural unemployment will also remain higher for a while.

Although all countries were affected by the coronavirus pandemic, the intensity of the collapse in economic activity across Europe varied quite significantly. While Spain and the United Kingdom were the hardest hit, according to official statistics and forecasts for the last quarter of 2020, losing more than 11 percent of GDP over 2020 as a whole compared to 2019, Poland, Ireland, Sweden and Lithuania recorded declines of around 3, or even only 2 percent (see Figure 1.36). The decline in 2020 largely explains the recovery in 2021. Of all countries, the GDP growth rate this year will be highest in Spain, and the United Kingdom will also record a high growth rate, although both will remain well below pre-crisis output levels. About 50 percent of the variation in projected growth rates for 2021 can be explained solely by the growth collapse in 2020. Another important determinant is the degree to which countries are affected by the second wave of the coronavirus pandemic.

Economic Growth in EU Member Countries and the United Kingdom



Source: Eurostat; European Commission; last accessed on 10 January 2021. The United Kingdom is shown in lighter blue.

#### **REFERENCES**

Abberger, K., Y. Abrahamsen, M. Anderes, F. Eckert, A. K. Funk, M. I. Graff, F. Hälg, P. Kronenberg, H. Mikosch, N. Mühlebach, S. Neuwirth, A. Rathke, S. Sarferaz, P. Seiler, M. Siegenthaler, S. Streicher, A. Stücker and J.-E. Sturm (2020), "Konjunkturanalyse: Prognose 2021/2022. Zweite Welle lastet auf dem Arbeitsmarkt", KOF Analysen, 2019:4, 1–28, Zurich: KOF Swiss Economic Institute, ETH Zurich, https://doi.org/10.3929/ethz-b-000458775.

Abberger, K., R. Marotta Bastos Vieira, A. Campelo Jr., M. Graff, A. C. Lemos Gouveia, O. Müller and J.-E. Sturm (2020), "The Global Economic Barometers: Composite Indicators for the World Economy", KOF Working Papers 471, February 2020, https://doi.org/10.3929/ethz-b-000401651.

Baker, S. R., N. Bloom, S. J. Davis (2016), "Measuring Economic Policy Uncertainty", *The Quarterly Journal of Economics*, 131(4), 1593–1636, https://doi.org/10.1093/qje/qjw024.

Bank of England (2020), Monetary Policy Report, November 5, 2020.

Bureau of Labor Statistics (2020), "Effects of COVID-19 Pandemic and Response on the Consumer Price Index", BLS Information, June 10, https://www.bls.gov/covid19/effects-of-covid-19-pandemic-on-consumer-price-index.htm (accessed December 29, 2020).

Cavallo, A (2020), "Inflation with Covid Consumption Baskets", NBER Working Paper Nr. 27352.

Çelik, S. and M. Isaksson (2019), "Corporate Bond Markets in a Time of Unconventional Monetary Policy", OECD Capital Market Series, OECD Publishing, Paris.

European Central Bank (2010), "Euro Area Statistics, Technical Notes," Monthly Bulletin, December.

Eurostat (2020), "Guidance on the Compilation of the HICP in the Context of the COVID-19 Crisis", Methodological Note, Directorate C, Unit C4, April 3, 2020.

International Monetary Fund (2020), World Economic Outlook: A Long and Difficult Ascent, Washington, D.C., October.

Nebehay, S. und M. Shields (2020), "Europe, North American should learn from Asia on COVID-19 – WHO expert", press release 20 October, available under https://www.reuters.com/article/us-health-corona-virus-who/europe-north-america-should-learn-from-asia-on-covid-19-who-expert-idUSKBNZ7425E (accessed December 29, 2020).

Organisation for Economic Co-operation and Development (2019), "OECD Economic Outlook", 105, 2019/1, May.

Organisation for Economic Co-operation and Development (2020), "OECD Economic Outlook", 108, 2020/2, December.

Reinsdorf, M. (2020), "COVID-19 and the CPI: Is Inflation Underestimated?", IMF Working Paper WP/20/224.

Wollmershäuser, T., M. Göttert, C. Grimme, S. Lautenbacher, R. Lehmann, S. Link, M. Menkhoff, S. Möhrle, A.-C. Rathje, M. Reif, P. Sandqvist, R. Šauer, M. Stöckli and A. Wolf (2020), "ifo Konjunkturprognose Winter 2020: Das Coronavirus schlägt zurück – erneuter Shutdown bremst Konjunktur ein zweites Mal aus", ifo Schnelldienst, ifo Institute – Leibniz Institute for Economic Research at the University of Munich, 73, Sonderausgabe, December 2020.

## APPENDIX 1.A

Table 1.A1

GDP Growth, Inflation and Unemployment in Various Countries

	Share of							Unemployment rate <sup>e</sup>				
	total GDP	in %							in %			
	in %	2019	2020	2021	2019	2020	2021	2019	2020	2021		
Industrialized countries:												
United States	28.1	2.2	-3.6	4.7	1.8	1.2	1.4	3.7	8.1	6.8		
EU27	20.5	1.6	- 7.0	4.0	1.4	0.6	1.1	6.5	7.3	8.3		
Euro area	17.5	1.3	- 7.4	4.1	1.2	0.3	0.9	7.6	8.2	9.3		
Japan	6.7	0.3	- 5.2	3.2	2.0	0.1	0.3	2.4	2.8	2.9		
United Kingdom	3.7	1.3	- 11.3	4.0	1.8	0.9	1.4	3.8	4.5	7.0		
Canada	2.3	1.9	- 5.7	4.0	2.0	0.7	0.9	5.7	9.6	8.3		
Switzerland	0.9	1.1	- 3.5	2.5	0.4	- 0.7	0.1	4.4	4.9	5.3		
Norway	0.5	0.9	- 1.5	3.0	2.2	1.4	2.0	3.7	4.5	5.0		
Industrialized countries (total)	62.6	1.6	- 4.7	4.0	1.6	0.8	1.1	4.8	6.8	6.9		
Newly industrialized countries:										,		
China	18.9	6.1	1.9	9.7	2.9	2.7	2.2			•		
East Asia <sup>a</sup>	7.1	2.9	- 3.5	4.1	1.3	0.6	1.5					
Latin America <sup>b</sup>	5.4	0.5	- 7.8	2.9	8.9	7.6	6.8					
India	3.8	4.2	-8.2	10.7	3.7	6.7	4.4					
Russia	2.2	1.3	-3.1	1.8	3.0	3.5	4.0					
Newly industrialized countries (total)	37.4	4.2	-1.8	7.3	3.6	3.5	3.1					
Total <sup>c</sup>	100.0	2.6	- 4.1	5.4	2.4	1.8	1.9		•	•		
World trade growth in %d		- 0.5	-6.1	6.0								

<sup>a</sup> Weighted average of Indonesia, Korea, Malaysia, Tawain, Thailand, Philippines, Singapore, and Hong Kong. Weighted with the 2018 levels of GDP in US dollars; <sup>c</sup> Weighted average of Brazil, Mexico, Argentina, Colombia, and Chile. Weighted with the 2018 level of GDP in US dollars; <sup>c</sup> Weighted average of the listed groups of countries. <sup>d</sup> Trade of goods. <sup>e</sup> Standardized unemployment rate.

Source: EU; OECD; IMF; ILO; National Statistical Offices; CPB; 2020 and 2021: EEAG forecast.

Table 1.A2

GDP Growth, Inflation and Unemployment in the EU Countries

	Share of		GDP growth	a		Inflation <sup>b</sup>		Unemployment rate <sup>c</sup>			
	total GDP					in %					
	in %	2019	2020	2021	2019	2020	2021	2019	2020	2021	
Germany	24.7	0.6	- 5.4	3.4	1.4	0.5	1.9	3.2	3.9	3.9	
France	17.4	1.5	- 9.0	5.8	1.3	0.6	0.6	8.5	8.4	10.4	
Italy	12.8	0.3	- 9.0	4.3	0.6	-0.1	0.3	9.9	9.5	11.1	
Spain	8.9	2.0	- 11.4	6.5	0.8	- 0.4	0.3	14.1	15.8	17.7	
Netherlands	5.8	1.6	- 4.6	1.6	2.7	1.0	0.9	3.4	4.2	6.2	
Belgium	3.4	1.7	- 7.5	4.0	1.2	0.5	0.7	5.4	5.8	8.0	
Austria	2.8	1.4	-8.0	2.7	1.5	1.2	1.3	4.5	5.7	5.7	
Ireland	2.5	5.9	-3.2	1.9	0.9	-0.4	0.5	5.0	5.4	8.0	
Finland	1.7	1.1	-4.0	1.9	1.1	0.5	1.1	6.7	8.1	8.4	
Portugal	1.5	2.3	-8.4	3.8	0.3	-0.2	0.0	6.5	7.4	9.6	
Greece	1.3	1.6	- 10.1	2.7	0.5	- 1.2	- 0.1	17.3	17.0	17.9	
Slovakia	0.7	2.3	- 6.3	4.1	2.8	1.9	1.0	5.8	6.9	7.5	
Luxemburg	0.5	2.3	-4.4	2.9	1.6	0.1	0.9	5.6	6.6	7.1	
Lithuania	0.3	4.3	- 2.0	2.4	2.2	1.2	1.5	6.3	8.9	8.2	
Slovenia	0.3	3.2	- 7.5	4.1	1.7	0.1	1.6	4.5	5.6	5.7	
Latvia	0.2	2.1	- 4.3	3.4	2.7	0.1	0.5	6.3	8.5	8.9	
Estonia	0.2	4.7	- 4.7	3.0	2.3	- 0.7	1.2	4.5	7.0	7.7	
Cyprus	0.2	3.1	- 6.3	3.5	0.5	- 0.8	1.0	7.1	8.2	7.5	
Malta	0.1	5.4	- 7.6	3.3	1.5	0.8	1.1	3.4	4.8	4.5	
Euro aread	85.5	1.3	- 7.4	4.1	1.2	0.3	0.9	7.6	8.2	9.3	
Poland	3.8	4.6	- 3.4	3.0	2.1	3.6	2.0	3.3	3.9	5.4	
Sweden	3.4	1.4	- 3.0	2.4	1.7	0.4	0.8	6.8	8.7	9.2	
Denmark	2.2	2.9	-4.0	2.8	0.7	0.5	0.9	5.0	5.8	6.1	
Czech Rpublic	1.6	2.3	- 6.7	3.7	2.6	3.4	2.3	2.0	2.8	3.5	
Romania	1.6	4.2	- 5.0	3.1	3.9	2.7	2.4	3.9	7.0	6.2	
Hungary	1.0	4.6	- 5.8	5.2	3.4	3.4	3.3	3.4	5.2	5.3	
Bulgaria	0.4	3.6	- 4.6	2.5	2.5	1.2	1.4	4.2	5.8	5.1	
Croatia	0.4	2.9	- 9.3	5.1	0.8	0.2	0.9	6.7	8.6	9.0	
Non-euro area EU <sup>d</sup>	14.5	3.2	- 4.3	3.1	2.1	2.1	1.7	3.9	5.4	5.9	
EU 27 <sup>d</sup>	100.0	1.6	- 7.0	4.0	1.4	0.6	1.1	6.5	7.3	8.3	

<sup>&</sup>lt;sup>a</sup> GDP growth rates are based on the calender adjusted series except for Ireland, Slovakia and Romania for which EUROSTAT does not provide working-day adjusted GDP series. <sup>b</sup> Harmonized consumer price index (HICP). <sup>c</sup> Standardized unemployment rate. <sup>d</sup> Weighted average of the listed countries.

Table 1.A3
Key Forecast Figures for the European Union (EU27)

	2019	2020	2021			
	e change over p	revious year				
Real GDP	1.6	- 7.0	4.0			
Private consumption	1.6	- 7.5	4.0			
Government consumption	2.0	0.8	3.0			
Gross fixed capital formation	5.6	-8.8	1.3			
Exports of goods and services	2.8	- 10.6	2.5			
Imports of goods and services	3.8	- 9.8	2.3			
Net exports <sup>a</sup>	- 0.4	- 0.8	0.1			
Consumer prices <sup>b</sup>	1.4	0.6	1.1			
	Percent	tage of nominal	GDP			
Government fiscal balance <sup>c</sup>	- 0.5	-8.4	- 6.5			
	Percentage of labor force					
Unemployment rated	6.5	7.3	8.3			

 $<sup>^{\</sup>rm a}$  Contributions to changes in real GDP (percentage of real GDP in previous year).  $^{\rm b}$  Harmonized consumer price index (HCPI).  $^{\rm c}$  2020 and 2021: forecast of the European Commission.  $^{\rm d}$  Standardized unemployment rate.

Table 1.A4

Key Forecast Figures for the Euro Area

	2019	2020	2021			
	Percentage change over previous year					
Real GDP	1.3	- 7.4	4.1			
Private consumption	1.4	-8.0	4.2			
Government consumption	1.9	0.9	3.3			
Gross fixed capital formation	5.7	- 9.7	1.5			
Exports of goods and services	2.5	- 11.2	2.4			
Imports of goods and services	3.9	- 10.4	2.0			
Net exports <sup>a</sup>	- 0.5	- 0.8	0.3			
Consumer prices <sup>b</sup>	1.2	0.3	0.9			
	Perce	ntage of nomin	al GDP			
Government fiscal balance <sup>c</sup>	- 0.6	- 8.8	- 6.8			
	Percentage of labor force					
Unemployment rated	7.6	8.2	9.3			

 $<sup>^{\</sup>rm a}$  Contributions to changes in real GDP (percentage of real GDP in previous year).

Source: Eurostat; 2020 and 2021: EEAG forecast.

Source: Eurostat; 2020 and 2021: EEAG forecast.

 $<sup>^{\</sup>rm b}$  Harmonized consumer price index (HCPI).  $^{\rm c}$  2019 and 2020: forecast of the European Commission.  $^{\rm d}$  Standardized unemployment rate.

Source: Eurostat; 2020 and 2021: EEAG forecast.