Macroeconomic Conditions and Outlook

1.1 INTRODUCTION

Since the beginning of 2020, the world has been under the shadow of the Corona pandemic. At the beginning of 2021, there was an expectation that humanity could quickly regain control with the availability of vaccines. Various mutations, the scarcity of vaccines in parts of the world, and the resistance of parts of society to vaccination made and still make it more difficult than hoped to end the pandemic quickly. Despite increasing immunization of the population through vaccination or booster shots, the more infectious new variant called Omicron has triggered a new wave this winter in large parts of the world. With the high baseline levels caused by the Delta variant in the summer and autumn of 2021, Omicron has already led to another major strain on health systems in many regions. The tightened containment measures this winter, as well as preventive behavioral changes in the population, again weigh on activities in sectors that have already been particularly affected by the pandemic in the past. In addition, staff shortages due to high infection rates lead more or less randomly to supply shortages in various areas.

Nevertheless, the impact on economic activity is likely to be less than the wave in winter 2020/21 and especially in the first "shock wave" in spring 2020, when there were few or no vaccinated people. Moreover, policymakers and society have to some extent learned to live with the virus and have chosen to be less restrictive in contact restrictions than in the earlier days of the pandemic. Whether this can be associated with more effective policies or differences in viral loads, or whether societal priorities have changed, is difficult to assess. The statistics on the number of deaths associated with Covid-19 do not provide clear evidence in either of these directions. In the last ten months of 2020, about 445,000 Covid-19-related deaths were recorded in the European Union and the United Kingdom, while in the first ten months of 2021 t estimates of excess mortality, these numbers are, on the one hand, partly higher, at 690,000 and 480,000 people overall, while on the other hand, there is a significant decrease (of 30 pcent) between these two periods (see Figure 1.1). The initially higher numbers suggest either measurement problems or strong indirect effects on mortality. Depending on the underlying factors, the interpretation of these numbers can be quite different.

It is not yet possible to say whether the death toll during the current winter wave will be lower than in

previous waves. However, most experts do believe, or at least hope, that, despite future variants, immunization of the population - either through vaccination or infection - will allow a slow return to a more social way of life from spring onwards and thereby a further recovery of the economy. Until then, however, social distancing and the wearing of masks indoors are still in order.

The two other, albeit very related, issues that are at the top of an economist's agenda today are supply chain problems and inflation. The epidemiological situation has led to consumers switching from services to goods. Together with the V-shaped recoveries after the closures, which in many industrialized countries were also made possible by strong government support, this led to a boom in industrial production and global trade, leading to supply chain problems and sharp price increases in relevant commodities and subsequently in producer and consumer prices. The move away from just-in-time production and the resulting desire to stockpile inputs has further exacerbated the situation. In principle, these inflationary pressures are likely to be temporary due to

Figure 1.1



^a 14-days moving average of the daily number of deaths registered to be related to Covid-19. ^b Weekly measures of excess mortality smoothed at a daily frequency Source: Our world in data; last accessed on 4 February 2022; EEAG calculations

10 11

5 6

2020

© CESifo

-500

5 6 2021

7 8 9 10 11 12



the expected turnaround from the pandemic and the associated shift toward services, the reconstruction or reestablishment of value chains, and the only onetime albeit largely permanent increase in inventories. Nevertheless, some fear persistent inflation above the targets communicated by central banks because the fiscal burden built up over the last 13 years puts political pressure on central banks to maintain a low interest rate environment.

1.2 CURRENT SITUATION

1.2.1 Global Economy

Last year, the global economy increasingly recovered from the negative consequences of the first waves

of the Corona pandemic: in the first half of the year world Gross Domestic Product (GDP) already exceeded pre-crisis levels again (see Figure 1.2). Compared to the Great Financial Crisis, the decline in global GDP during the height of the Corona crisis was much more pronounced. However, the speed of recovery was also much higher. Whereas during the financial crisis it took two years for global GDP levels to return to pre-crisis levels, during the Corona crisis this was the case within 1.5 years. This difference in the speed of recovery is even more pronounced when looking at either industrial production or trade at the world level. Back in the financial crisis it took 2 to 3 years to fully recover. This time around this was accomplished within about a year. Both the production of and international trade in goods developed very dynamically and reached new highs during spring, summer and early winter last year.

In the second half of 2021, the dynamic recovery of global GDP continued, albeit at somewhat weaker rates. Many countries scaled back their Covid-19 containment and infection control measures as infection rates fell and vaccination campaigns progressed. This allowed the service sectors in particular to recover, which had previously been constrained by lower levels of interpersonal contact. The goods-producing sectors, on the other hand initially lost momentum.

Sentiment indicators such as the Global Economic Barometers, which traditionally and mainly due to data availability focus on the development of industrial production, did start to cloud in summer (see Figure 1.3).¹ Reasons for this gloom were supply-side production-limiting factors, which further intensified during the second half of 2021. The dynamic recovery following the lifting of many protective measures in the summer, but also the attempt by companies to move away from the just-in-time production model and build up larger intermediate product inventories again, led to a strong increase in overall economic demand. However, supply could not keep up, which led to bottlenecks in intermediate products, raw materials, energy, transport capacities and in some cases also of employees. These bottlenecks led to very sharp price increases for raw material, which affected industry as well as the construction sector.

Both the excess demand in global merchandise trade and the supply-side problems are driving up prices. Raw material prices are well above levels seen in the years before the pandemic, but have not clearly surpassed peak levels witnessed in the recovery phase after the Great Financial Crisis (see Figure 1.4). In the area of industrial raw materials, the bull market was reached in the spring last year, and since then prices have in their tendency been declining.

¹ This indicator is based upon hundreds of economic tendency survey results conducted in countries all over the world. The index for each region is constructed 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. (2022) for further information.

The cause of the current supply restrictions and the resulting price pressure is not so much the scarcity of the goods themselves, but rather bottlenecks in processing and transport and dependencies within supply chains. This includes the Covid-related closures of large Chinese ports and factories in other Asian economies, as well as the blockade in the Suez Canal in March 2021. As a result of the huge demand, container ships were jammed at cargo ports worldwide. Waiting times have increased significantly due to staff shortages at ports and clearance points. This has been further exacerbated by limited air capacity, which is why much of the air freight, in normal times often piggybacking on passenger transport, has had to be shifted from aircraft to ships.

An acute global energy shortage has further put pressure on fuel prices. For example, China decided to put some of its coal-fired power plants on standby in order to meet its emissions targets. This in turn had consequences for industrial production in Europe, which had to cut back on aluminum production due to a lack of magnesium produced in China. Furthermore, as the global economy recovered, demand for oil increased rapidly, while the Association of Petroleum Producing Countries (OPEC) continued to curb oil demand. This led to massive price increases in the energy component of consumer prices (see Figure 1.5). The current price level of fuel roughly corresponds to that before the introduction of shale oil extraction in the United States in 2014. While crude oil itself has not yet reached this historically high level, the price of natural gas is already far above it due to the massive price increases in recent months.

Supply bottlenecks are also occurring due to structural adjustments in the wake of the pandemic. This accelerated digitalization in many sectors and increased the demand for microchips. The shortage is particularly noticeable in the automotive industry as a result of the bottlenecks and is expected to continue until the second half of 2022.

In short, the overall recovery was slowed by a flattening of industrial production that was already occurring before the Omicron wave of the pandemic was mapped out. Bottlenecks on the supply side, high inflation rates, and a renewed increase in new infections began to dampen the economy again in many countries towards the end of the year.

The individual regions of the world were affected differently by the current events regarding the pandemic and the supply bottlenecks. The European Union and the United Kingdom gained momentum in the third quarter and again expanded strongly. This was mainly due to the slowdown of the pandemic, which allowed most of the infection control measures to be lifted. The United States did not react with a tightening of infection control measures despite high infection figures during the winter of 2020/21, while at the same time providing fiscal stimulus. This prevented a clear drop in private consumption at the beginning

Figure 1.3

Global Economic Barometers Coincident composite indicators



Source: KOF/FGV; last accessed on 10 February 2022

Figure 1.4

Fuel and Primary Raw Material Prices Price levels



Source: HWWI; Intercontinental Exchange; last accessed on 4 February 2022.

© CESifo

Figure 1.5

Worldwide Inflation and Oil Price Movements





2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Note: Forecast based on the assumption that oil prices remain steady from January 2022 onwards Source: Eurostat; National Statistics; Energy Information Administration; last accessed on 4 February; EEAG calculations. © CESifo

of last year, allowing GDP to achieve pre-crisis levels before the euro area (see Figure 1.6). The subsequent slowdown in output growth in the United States was







Figure 1.7

GDP Developments in Major Countries and Regions



last accessed on 4 February 2022.

probably due to the weakening of the fiscal stimulus, increasing problems in the procurement of intermediate goods in industry, and the effects of a hurricane, which severely affected oil production for a longer period. Accordingly, the United States experienced a stronger slowdown in growth during the second half of the year.

The expansion of the Chinese economy slowed down with the start of 2021 (see Figure 1.7). Production increased by only 0.3 to 1.6 percent in a quarter-over-quarter comparison; year-on-year growth was about 4 percent in the fourth guarter. This was not only considerably less than in previous quarters, whose high growth rates of 18.7, 7.8 and 5 percent were, however, largely due to the base effect of the corona-induced slump in production in the first half of 2020, but is also below the pace of growth recorded before the crisis. The weakness in the third quarter was driven by factors that are likely to be temporary. Economic activity was weighed down by the impact of local Covid-19 outbreaks and sharp containment measures on the services sector as a consequence of the strict zero-Covid policy pursued by the Chinese government. In addition, the economy in China was slowed down by problems in energy supply. In recent months, companies were repeatedly forced to shut down production in order to curb electricity consumption. Finally, payment difficulties of large companies in the real estate industry weighed on economic sentiment and led to a rapid slowdown in residential construction, which had a negative impact. In contrast to many of the challenges mentioned above, the financial difficulties in the real estate sector point to problems that are likely to weigh on China's economy for some time to come.

While the Indian economy recovered from the renewed pandemic-related slump in spring, in many other Asian emerging countries the infection figures rose sharply with the spread of the Delta variant and there were associated significant declines in economic activity. Within Latin America, economic developments are quite uneven. While the economies of the Andean countries Chile, Peru, and Colombia continued to expand strongly, production in the large countries of Brazil, Mexico, and Argentina started to decline again, although only in Mexico was this largely due to the pandemic. In Brazil and Argentina, on the other hand, the main reason was that agricultural production declined due to drought, and private consumption was slowed down by the fact that sharply rising prices reduced purchasing power.

© CESifo

The economic recovery has also been clearly noticeable in labor markets across the world. Whereas labor force participation rates mostly started to recover from drops experienced in 2020, unemployment rates have reached historically low pre-crisis levels again in many parts of the world (Figure 1.8). Of the bigger regions, the major exception has been the United Kingdom. Here, the aftermath of Brexit has caused the participation rate to deteriorate further and the unemployment rate to improve but remain somewhat above pre-crisis levels.

The increased prices of raw materials, energy, and intermediate goods have resulted in higher production costs for companies. This has translated into

Figure 1.8 **Unemployment Rates and Labor Force Participation Rates**





Source: OECD Main Economic Indicators; OECD Economic Outlook; last accessed on 4 February 2022.

a strong increase in producer prices (see Figure 1.9). The higher production costs either result in profit losses or are passed on to consumers. In the latter case, this increases not only the energy price component but also core inflation. As a consequence, inflation in the euro area rose to 5 percent (core: 2.6 percent) in December 2021, in the United States to 7.1 percent (core: 5.5 percent), and in the United Kingdom to 5.4 percent (core: 4.3 percent). The main drivers in all countries were higher prices in the transport, housing, and food sectors due to higher energy and commodity prices. Only in Japan is consumer inflation still very low.

1.2.2 European Economy

The European economy has experienced a strong and broad-based recovery in recent quarters. The clearly above-average GDP expansion rates were due on the one hand to dynamic foreign trade and on the other hand to an increasing normalization of activities in the services sector. After the restrictions on - in particular contact-intensive - services were gradually lifted over the year, private consumption recovered strongly. For the euro area most sectors of the economy managed to get close to pre-crisis levels again during the second half of last year (see Figure 1.10). However, the sectors particularly affected by the pandemic, such as the event and entertainment industry, remained below the pre-crisis level throughout the year. The hospitality and transport sectors also continue to lag behind, despite a strong recovery during autumn.

In the rest of the European Union, production has recovered considerably despite the pandemic and supply shortages. These economies are recovering comparatively steadily. In general, production growth remained strong during the second half of last year. Exceptions are Romania and Bulgaria, where the health system was particularly strained by Corona

Figure 1.9 Producer Price Inflation





Source: US Bureau of Labor Statistics; Statistics Bureau of Japan; National Bureau of Statistics of China; © CESifo Eurostat; last accessed on 4 February 2022

Figure 1.10

Sector-Specific Value Added in the Euro Area





infections, and Hungary, where industrial production fell particularly sharply in the wake of supply bottlenecks in the automotive industry.



94



2020

Source: Eurostat: last accessed on 4 February 2022

2019

The UK economy continues to be burdened by the pandemic and the impact of Brexit. The economic recovery is less advanced in the United Kingdom than in the euro area. After the middle of last year, the previously strong economic expansion slowed down significantly, although the containment measures were largely lifted in July. While activity in the service sector continued to recover despite a renewed sharp rise in the number of infections, production in industry and construction declined. Beyond the supply bottlenecks for raw materials and intermediate products that could be felt worldwide, a serious shortage of truck drivers in particular made itself felt, which at times led to considerable logistical problems and is probably also a consequence of Brexit, which has made it much more difficult to fill positions with labor migrants.

2021

© CESifo

The economic recovery of the last few quarters has had a clear impact on the labor market. Employment increased strongly in the second half of the year and surpassed pre-crisis levels in the fourth quarter of

2021. However, the development between the sectors was uneven (see Figure 1.11). The worst development was in the hotel and restaurant industry, which nevertheless experienced a very strong increase in employment in the second half of the year. Even in this sector, companies are increasingly complaining about not finding enough staff. Despite the considerable increase in value added, employment in industry was not yet back to pre-crisis levels in the third quarter.

The strengthening of the labor market led to a considerable reduction in the unemployment rate. In the euro area, it returned to pre-crisis levels at the end of last year. In the individual member countries, the overall patterns were quite comparable (see Figure 1.12). Job retention measures, such as short-time work and wage subsidies, prevented unemployment rates from rising much more sharply during the pandemic waves and also enabled the subsequent strong and rapid recoveries. To the extent that the demandand supply-side declines were temporary, these policy measures appear to have paid off.

Also in Europe, inflation has increased sharply over the course of 2021. In autumn last year, it was higher in many countries than it had been for several decades. In the euro area, it reached 5 percent in December (see Figure 1.13). Admittedly, it has probably reached its peak. The contribution of the energy component to inflation, which at the end of last year amounted to just under half, will decline significantly, on the one hand because the pressure coming from year-over-year oil price dynamics will abate, and on the other because the VAT normalization in Germany will wear out. Nevertheless, the core inflation rate, which is calculated without taking energy and food prices into account and therefore reflects the underlying inflation trend better than the rate with these volatile components, has also risen sharply in the course of this year. With 2.6 percent in December last year, it stands higher than the European Central Bank's inflation target.



Unemployment Rates and Participation Rates in Selected Euro Area Countries



Source: Eurostat; OECD Economic Outlook; last accessed on 4 February 2022.

© CESifo

During the last months of 2021, energy markets were characterized by a drastic increase in the price of gas. This was particularly pronounced in Europe. Europe is one of the regions that is most dependent on gas, whereby most of its supply comes from outside the European Union, in particular, from Russia. Here, supplies from Russia in the summer had not been sufficient to replenish stocks to a normal level before the heating season, so that prices exploded with emerging doubts about supply security. The low supplies from Russia are likely to be a major factor in explaining the soaring gas prices. On top of that, France had to temporarily shut down several reactors due to overdue maintenance and detected defects and is now importing electricity instead of exporting nuclear power to neighboring countries. Together with the general price pressure on commodities and energy, this explains not only the difference between core inflation and actual consumer inflation, but also the soaring producer prices.

1.3 FISCAL AND MONETARY POLICY

1.3.1 Fiscal Policy

The corona pandemic continues to set the stage for the fiscal policy environment in most if not all countries in the world. Whereas in the euro area government revenues as percentage of GDP remained relatively stable, last year's fiscal policy continued to be shaped by high expenditures to combat the consequences of the pandemic (see Figure 1.14). Besides the automatic stabilizers, the pandemic-related additional expenditures consisted largely of transfer payments, for example through the assumption of short-time work compensation and participation in hardship assistance for companies that were particularly hard hit. Consumptive expenditures of the public sector also increased noticeably through the provision of social benefits in kind, due to the procurement of vaccines and the assumption of costs for diagnostic tests. As a consequence, public deficits overall stayed at historically high levels. Although this year's expenditures will be lowered substantially, government deficits will remain at high levels. In line with the assumption that pandemic-related constraints will decrease as immunization progresses, the use of support programs will also decrease. However, new expansionary fiscal stimuli will be put in place in the United States. The Infrastructure and Investment Act provides USD 550 billion in new spending over the next 10 years. Under the Build Back Better Act, which includes elements of the American Jobs Plan and the American Families Plan, further fiscal measures are being put in place. Nevertheless, according to IMF estimates, the United States realized a government deficit of 11.4 percent last year that will fall to 7.9 percent this year.

In almost all European countries, too, government activities to support the health sector and the overall

Figure 1.13

Price Developments in the Euro Area Percentage change overprevious year's month





economy will be gradually scaled back this year. However, this fiscal normalization is likely to be slow and it will take more than a year for government spending to return to pre-crisis levels. According to European Commission estimates, the deficit for the euro area and the European Union will fall from 7.1 and 6.6 percent, respectively, last year to 3.9 and 3.6 percent this year (see Table 1.1).

Part of this deficit reduction will be absorbed by the new Next Generation EU (NGEU) program. At a summit in December 2020, EU member states adopted the NGEU program as an extension to its regular budget to address the economic consequences of the coronavirus pandemic. This package includes EUR 750 billion (in 2018 prices), of which EUR 390 billion are direct transfers and EUR 360 billion are loans to be repaid. The loans and grants are intended to support Europe's recovery through post-pandemic reforms and investments across the European Union, while enabling digital and environmental transformation in a cohesive society across Europe. To access these

Figure 1.14



Source: IMF World Economic Outlook, October 2021; last accessed on 4 February 2022

© CESifo

Table 1.1
Public Finances

		Gross	s debtª			Fiscal b	oalanceª		Pri	mary fis	cal balar	nceª	C prii	yclically mary fis	-adjuste cal balar	ed nceª
	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022
Germany	67.0	68.7	71.4	69.2	1.2	- 4.3	- 6.5	- 2.5	2.4	- 3.7	- 5.9	- 2.0	2.2	- 1.5	- 4.5	- 2.1
France	97.0	115.0	114.6	113.7	- 3.2	- 9.1	- 8.1	- 5.3	- 1.4	- 7.8	- 6.9	- 4.2	- 1.0	- 3.3	- 5.6	- 4.1
Italy	134.7	155.6	154.4	151.4	- 2.3	- 9.6	- 9.4	- 5.8	1.6	-6.1	- 5.9	- 2.9	2.4	- 1.5	- 4.6	- 3.1
Spain	98.5	120.0	120.6	118.2	- 4.0	- 11.0	- 8.1	- 5.2	- 1.2	- 8.7	- 5.9	- 3.1	0.1	- 2.2	- 2.5	- 2.0
Nether- lands	58.7	54.3	57.5	56.8	0.0	- 4.2	- 5.3	- 2.1	1.1	- 3.5	- 4.8	- 1.7	1.2	- 1.2	- 3.9	- 2.0
Belgium	102.8	112.8	112.7	113.1	- 1.9	- 9.1	- 7.8	- 5.1	0.7	- 7.1	- 6.1	- 3.7	0.1	- 3.9	- 5.2	- 3.5
Austria	79.1	83.2	82.9	79.4	- 0.9	- 8.3	- 5.9	- 2.3	1.1	- 7.0	- 4.7	- 1.4	1.3	- 3.7	- 3.1	- 1.5
Ireland	73.9	58.4	55.6	52.3	- 1.0	- 4.9	- 3.2	- 1.7	1.3	- 3.9	- 2.4	- 1.0	0.7	- 1.4	- 4.0	- 2.4
Finland	61.2	69.5	71.2	71.2	- 1.6	- 5.5	- 3.8	-2.4	- 0.6	- 4.8	- 3.3	- 2.0	0.0	- 2.7	- 2.3	- 1.7
Portugal	126.6	135.2	128.1	123.9	- 2.8	- 5.8	- 4.5	- 3.4	1.1	- 2.9	- 1.9	- 1.1	2.4	1.0	- 0.4	- 0.9
Greece	180.7	206.3	202.9	196.9	- 1.1	- 10.1	- 9.9	- 3.9	2.3	- 7.1	- 7.3	- 1.4	7.3	- 2.1	- 5.4	- 0.9
Slovakia	51.2	59.7	61.8	60.0	- 1.9	- 5.5	- 7.3	- 4.2	- 0.4	- 4.3	-6.1	- 3.1	- 0.5	- 2.9	- 5.3	- 3.2
Luxem- burg	21.3	24.8	25.9	25.6	1.9	- 3.5	- 0.2	0.2	2.2	- 3.3	0.0	0.3	2.5	- 1.3	0.8	0.7
Slovenia	75.2	79.8	77.7	76.4	- 1.5	- 7.7	- 7.2	- 5.2	1.1	-6.1	- 5.8	- 3.9	1.8	- 4.8	- 6.2	- 4.9
Lithuania	38.6	46.6	45.3	44.1	0.1	- 7.2	- 4.1	- 3.1	1.3	- 6.5	- 3.7	- 2.9	0.5	- 6.1	- 3.6	- 2.5
Latvia	38.6	43.2	48.2	50.7	- 0.8	- 4.5	- 9.5	- 4.2	0.1	- 3.8	- 8.9	- 3.6	- 0.5	- 2.5	- 7.9	- 3.4
Estonia	9.4	19.0	18.4	20.4	- 0.1	- 5.6	- 3.1	- 2.5	0.0	- 5.6	- 3.1	- 2.5	- 0.3	- 3.0	- 3.7	- 2.3
Cyprus	100.3	115.3	104.1	97.6	- 1.6	- 5.7	- 4.9	- 1.4	1.1	- 3.6	- 3.0	0.2	4.7	- 2.3	- 2.9	- 0.2
Malta	50.6	53.4	61.4	62.4	0.7	- 9.7	- 11.1	- 5.8	2.7	- 8.4	- 10.0	- 4.7	0.9	- 5.6	- 8.0	- 3.9
Euro area	90.5	99.3	100.0	97.9	- 1.3	- 7.2	- 7.1	- 3.9	0.7	- 5.7	- 5.7	- 2.7	1.1	- 2.1	- 4.3	- 2.6
Sweden	40.9	39.7	37.3	34.2	0.4	- 2.8	- 0.9	0.3	0.9	- 2.5	- 0.8	0.5	0.8	- 0.2	0.3	0.8
Poland	50.3	57.4	54.7	51.0	- 1.8	- 7.1	- 3.3	- 1.8	- 0.2	- 5.8	- 2.2	- 0.8	- 0.4	- 4.8	- 1.7	- 1.0
Denmark	37.5	42.1	41.0	38.8	1.1	- 0.2	- 0.9	1.3	2.2	0.4	- 0.2	1.8	2.2	3.3	- 1.3	3.8
Czech Republic	35.7	37.7	42.4	44.3	0.1	- 5.6	- 7.0	- 4.3	1.0	- 4.8	- 6.2	- 3.5	0.8	- 3.1	- 5.0	- 3.1
Romania	36.6	47.4	49.3	51.8	- 2.4	- 9.4	- 8.0	- 6.9	- 1.0	- 7.9	- 6.4	- 5.1	- 0.9	- 6.1	- 5.5	- 4.6
Hungary	72.3	80.1	79.2	77.2	- 2.2	- 8.0	- 7.5	- 5.7	0.7	- 5.6	- 5.1	- 3.3	0.0	- 3.4	- 4.5	- 3.3
Bulgaria	24.9	24.7	26.7	26.7	- 0.2	- 4.0	- 3.6	-2.8	0.5	- 3.5	- 3.0	-2.2	1.1	-2.4	-2.5	- 2.2
Croatia	78.0	87.3	82.3	79.2	- 1.4	- 7.4	- 4.1	- 2.9	1.4	- 5.4	- 2.4	- 1.4	1.3	- 2.8	- 1.8	- 1.9
European Union	84.0	91.8	92.1	90.0	- 1.2	- 6.9	- 6.6	- 3.6	0.7	- 5.5	- 5.3	- 2.4	1.1	- 2.1	- 4.0	- 2.4
United States	106.3	127.0	129.3	128.6	- 5.4	- 15.8	- 11.4	- 7.9	- 1.5	- 11.9	-8.1	- 4.7	- 2.0	- 8.6	- 7.1	- 7.0
China	48.7	66.3	68.9	72.1	- 3.7	-11.2	- 7.5	- 6.8	- 3.0	- 10.2	- 6.6	- 5.9	- 2.8	- 8.6	- 6.0	- 5.5
Japan	232.2	253.9	256.8	253.9	- 3.6	- 10.9	- 9.1	- 5.0	- 1.9	- 9.3	- 7.6	- 3.6	- 2.9	- 8.5	- 7.5	- 3.3
United Kingdom	85.1	102.3	103.0	103.9	- 3.4	- 12.9	- 10.1	- 5.5	- 0.8	- 10.9	- 8.3	- 3.8	- 1.7	2.5	- 6.5	- 3.7
Switzer- land	40.7	42.4	42.7	41.6	0.7	- 2.8	- 1.0	- 0.3	1.1	- 2.5	- 0.7	0.0	0.8	- 1.9	- 1.4	0.2

^a As a percentage of (potential) gross domestic product (in case of cyclically adjusted (primary) fiscal balances). For countries of the European Union, definitions are according to the Excessive Deficit Procedure. For the United States, China, Japan, the United Kingdom and Switzerland, definitions are according to the IMF. For the United Kingdom forecasts of the European Commission are shown.

Source: European Commission, Autumn 2021; IMF World Economic Outlook, October 2021.

special funds, member states must submit their recovery and resilience plan to the European Commission, which will verify consistency with EU priorities and specific country recommendations. With a few exceptions, most countries have submitted their proposals. Grants are committed after approval of the recovery and resilience plans. Member states must spend at least 37 percent on climate investments and reforms and at least 20 percent on digital transformation.

The NGEU program amounts to nearly 5 percent of euro area GDP of 2019 and is targeted at weaker countries. Countries are generally eligible for loans

of up to 6.8 percent of their Gross National Income. In 2021-22, 70 percent of the funds will be allocated according to a backward-looking formula that allocates more funds to countries who had lower GDP per capita, larger populations, and higher unemployment rates in 2015-19. More than half of the aid will thereby go to Italy and Spain, which were particularly affected by the pandemic and already had ongoing structural problems. Thirty percent of the funds will not be allocated until 2023. As a rule, the principle of additionality of EU-financed spending should be respected. However, countries could designate some already planned expenditures as part of the recovery and resilience plans, effectively opening the possibility of using some NGEU funds for debt reduction. While the total grants requested are above the maximum amount available, the loans requested are currently less than 20 percent of the maximum amounts available. This indicates that member states have so far been able to finance themselves independently thanks to the European Central Bank's extensive interventions, which have created favorable capital market conditions for them. National borrowing also offers the member states the advantage that they do not have to expose themselves to the reform requirements of the EU Commission.

The NGEU program enables the European Commission to issue bonds on a large scale backed by the EU budget to help member states fight the crisis and build resilience. To help repay the bonds, the EU institutions have agreed to introduce new own resources. The new own resources will prevent repayments under NGEU program from leading to cuts in other EU programs or excessive increases in member state contributions. It does, however, imply that parts of national deficits are raised to a supra-national level.

Late last year, the European Commission proposed three new revenue sources to finance the grant component of the NGEU program. The first is based on revenue from emissions trading, the second on funds generated by the proposed EU carbon cap adjustment mechanism, and the third on the share of residual profits of multinational companies allocated to EU member states under the recent OECD/ G20 agreement on the reallocation of taxing rights.² These new own resources will also finance the Social Climate Fund, which is a key element of the Fit-for-55 package adopted in July 2021 and includes an overhaul of the EU Emissions Trading Scheme to support the transition to a low-carbon economy.

Fiscal policy continues to support the economy for the time being. In the advanced economies – and to a lesser extent in many emerging economies – substantial additional spending and tax deferrals were adopted during the past two years to mitigate the economic impact of the pandemic and the measures taken to combat it. In the face of the current new

Figure 1.15

Fiscal Impulses in EU Member Countries^a



^a Defined as the average annual changes in structural primary fiscal balances over the respective period under consideration. 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 4 February 2022; EEAG calculations.

© CESifo

² Last October, more than 130 countries agreed to reform the international tax framework toward a two-pillar system to combat tax avoidance and ensure that profits are taxed where economic activity and value creation take place. Under the first pillar, participating countries will receive a right to tax a portion of the residual profits of the world's largest multinationals with annual global sales of more than 20 billion euros and a profitability of 10 percent. The Commission proposes own resources equal to 15 percent of the share attributable to EU member states of the residual profits of companies covered by the scope. The second pillar stipulates that multinational groups with an annual turnover of more than 750 million euros must pay at least 15 percent in taxes.

wave of infections, fiscal support programs remain at least to some extent effective this year. While expenditures to finance pandemic-related burdens are clearly declining as economic activity continues to normalize, the focus is more and more on public investments and programs aimed at addressing structural challenges such as climate change or demographic aging.

Overall, as a consequence of the expiry of the pandemic-related support programs, the negative fiscal impulse, as measured by the change in the cyclically-adjusted budget deficit, is likely to be moderate; policymakers are likely to act cautiously in possible consolidation steps so as not to jeopardize the economic recovery. In the European Union this is supported by the fiscal rules to remain suspended in 2022. Also supportive is that financing conditions remain very favorable. For the euro area at large, after two years with an average positive fiscal impulse of 4.7 percent of GDP, a negative fiscal impulse of around 1.7 percent is to be expected for 2022 (see Figure 1.15).





Figure 1.17



Internationally, inflation rates have risen beyond the implicit or explicit target ranges of central banks in many countries in recent months. Rising commodity and energy prices, catch-up effects from falling prices during the first year of the pandemic, supply bottlenecks, and pandemic-related special factors contributed significantly to rising prices. Many central banks are at a crossroads. For the first time since the outbreak of the financial crisis, inflation rates in the major currency areas are above their respective inflation targets. Although most central banks still consider the rise in inflation to be temporary, many of them has at least started announcing that they will reduce the strong degree of monetary expansion.

The US Federal Reserve indicated in December that its ultra-loose policy, pursued since the beginning of the pandemic, is coming to an end, responding to rising inflation. First, the central bank will reduce its monthly bond purchases at an accelerated pace. While it was still buying USD 120 billion worth of bonds per month in autumn last year, it will stop asset purchases completely by March this year. Second, the central bank expects to start raising interest rates thereafter. Current projections indicate that the Fed expects three to four hikes in 2022 and several more the following year. The Bank of England already increased its main interest rate by 15 basis points in mid-December last year (see Figure 1.16).

The European Central Bank will end its net asset purchases under the Pandemic Emergency Purchase Program (PEPP) by the end of March 2022 that has led to a further clear increase in the size of its balance sheet (see Figure 1.17). However, at the same time it extended the period for reinvesting maturing bonds by one year to the end of 2024.³ Furthermore, bond buys under the Asset Purchase Programme (APP) will be ramped up to serve as a quantitative easing bridge through the end of the PEPP, having continued at a monthly pace of EUR 20 billion in conjunction with the PEPP until now. During the second quarter it will be raised to EUR 40 billion monthly and to EUR 30 billion during the third quarter. From the fourth quarter onwards, it will be scaled back to EUR 20 billion per month without defining an exact ending. The Governing Council expects net purchases to end shortly before it starts raising the European Central Bank's key interest rates, which is getting likely to happen this year. The European Central Bank has thus far struck a more dovish tone as compared to those of the Bank of England and the US Federal Reserve.

³ The PEPP has been an important source of financing flexibility for Greece, whose government bonds are ineligible for other European Central Bank purchase programs due to their sub-investment-grade status. By the end of last year, the European Central Bank had bought the maximum amount of Greek government bonds allowed.

^{1.3.2} MONETARY CONDITIONS AND FINANCIAL MARKETS

In Japan, where inflation is still low, there are no signs of an end to the extremely loose monetary policy. Smaller central banks – for example in Brazil, Chile, Czech Republic, Hungary, Mexico, New Zealand, Norway, Poland, South Africa, and South Korea – have already reacted to the economic recovery and higher inflation and have even raised their interest rates. In the emerging markets in particular, a cycle of interest rate hikes has already been underway since the middle of the year to counter downward pressure on exchange rates and curb inflationary dynamics. Further tightening of monetary policy in Central and Eastern European countries is likely but moderate given the continued extremely low interest rates in the euro area.

The tightening of monetary policy in advanced economies poses risks to the recovery in emerging markets. Economic activity in emerging markets has recently suffered, mainly from the effects of the pandemic. For the most part, however, financial conditions have remained favorable. High commodity prices are also a stimulating factor for many emerging markets. Thus, a fairly strong economic recovery in this group of countries is to be expected this year. However, the prospect of an upcoming tightening of monetary policy in the United States has put pressure on the exchange rates of most countries. Many central banks have now raised their interest rates, in some cases significantly, to avoid capital outflows and to limit the inflationary pressures resulting from devaluation. In the wake of interest rate hikes by the US Federal Reserve, the financial framework for emerging markets could tighten further and a more restrictive monetary policy could become necessary in order to stabilize the external value and avoid a situation such as can currently be observed in Turkey, where the external value of the currency is almost in a free fall (see Figure 1.18).

The currencies of the major economies remained largely stable in 2021. The one with the overall largest movement was the Japanese yen. In real effective terms, it depreciated by more than 10 percent over the course of the year. From a purchasing power parity perspective, the euro also depreciated. Given the real appreciation of the US dollar, this implies that is has now been undervalued against the US dollar since 2015 (see Figure 1.19). Currently, this is increasingly caused by the (expected) difference in monetary policy stance between the United States and the euro area.

Although government bond yields recovered somewhat relative to 2020, they remained historically low all around the world (see Figure 1.20). Japanese bonds and bonds of several European countries even continued to hover around zero yields. This behavior has contrasted with that of long-term government bond yields in the United States and the United Kingdom. In these two countries, yields on these safe assets increased significantly at the beginning of last

Figure 1.18





Figure 1.19

Exchange Rate of the Euro against the US Dollar and PPP^a



^a 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 4 February 2022.

© CESifo

© CESifo

Figure 1.20

10-Year Government Bond Yields



from each Economic and Monetary Union member. Source: Datastream; last accessed on 4 February 2022.

year, only to fall again during summer to recover afterwards. Given the turn in monetary policy, it is to be expected that bond yields will slowly start to





^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 4 February 2022.

Figure 1.22





Figure 1.23





rise again. Furthermore, financial market participants should start attaching less and less importance to

the economic downside risk and further shift their portfolios from government bonds to equities.

© CESifo

While the overall funding costs of the banking sector continued to be historically low last year, as reflected by the Euribor rate, this was not necessarily the case for consumer credit rates (see Figure 1.21). A clear increase in rates has been observed for personal lending rates on new consumer credit loans with a maturity of less than one year. Like money market rates, interest rates on firm loans stayed stable and low. Also, average interest rates for newly granted real estate loans to private households kept in line with money market rates. As usual, the differences across euro area countries remained large.

Consumer credit growth remained subdued over the course of last year. The level shift in corporate credit that occurred during the first wave of the pandemic did not lead to a counter-reaction last year. On the contrary, especially in the second half of last year, corporate credit growth took on some positive momentum. At the aggregate level, overall credit growth in the euro area remained around 2 percent last year, driven in particular by the relatively steady growth dynamics in mortgage credit (see Figure 1.22).

Although the private economy barely recovered from the initial waves of the pandemic, stock markets generally performed well last year (see Figure 1.23). Except for the Japanese Nikkei 225, which largely stagnated throughout the year, all major markets posted double-digit gains over the year from a euro area perspective, and performance differences between countries were relatively small. For example, the Euro STOXX 50 and the UK's FTSE 100 were up around 20 percent during 2020 when measured in euros. The Shanghai Stock Exchange Composite, like the major US and European stock market indexes, also surpassed the 15 percent mark last year. Part of these gains on the Chinese stock markets can be attributed to the appreciation of the Chinese currency during the year. The return on the FTSE 100, calculated in British

pounds, was also significantly lower – the roughly 6½ percent nominal appreciation of the British pound did offset part of this difference.

In Europe, too, stock markets were generally bullish last year (see Figure 1.24). The French CAC 40, which tracks the 40 largest public companies traded on the French stock exchange in terms of market capitalization, recorded a year-end return of almost 30 percent. While most stock market indices improved to levels well above pre-crisis levels, Spain's IBEX 35 and, to a lesser extent, Greece's Athex were clear exceptions. After a strong recovery, both stagnated at levels still below or just above those seen at the end of 2019.

1.4. MACROECONOMIC OUTLOOK⁴

1.4.1 Assumptions, Risks, and Uncertainties

As always, the forecast presented is based on various assumptions and thus involves various risks and uncertainties. For example, it is assumed that the price of a barrel of Brent crude oil will average around USD 71 this year (after on average USD 76 last year). It is also assumed that the euro will trade around an average of USD 1.13 this year (after USD 1.18 last year).

The pandemic situation is expected to gradually improve as spring approaches. The current Omicron wave will level off in the coming months, and social and economic activities will be able to return to a feasible level of normalcy. Continued vaccination and immunization of society, as well as warmer weather conditions in the Northern Hemisphere, will support this next phase of normalization. By summer, Covid-19 is expected to have become endemic in much of the Western world, meaning that large segments of the population have either been infected and/or vaccinated and have thereby gained a level of immunity, even to new variants, that will not overwhelm the health care system and other segments of society anymore. The further course of the pandemic and the associated social distancing and infection control measures remain the most critical assumptions for economic forecasts, as they are still associated with high uncertainty. The Omicron wave appears to be different as compared to previous waves.

The forecast risks are once again on the downside. While vaccination progress could accelerate due to, e.g., making vaccination compulsory in several European countries, emerging virus variants, such as the Omicron variant at present, pose new challenges for pandemic control. In particular, the spread of the Omicron variant, which is particularly contagious and against which the available vaccines appear to be less effective, harbors great uncertainties. Within many European countries with a highly vaccinated population, the risk to individuals of becoming se-

Figure 1.24



riously ill appears low and decreases significantly from previous waves, but the risk to society might be higher because of the increased demand for health care due to very high infection rates and the decline in the labor force that accompanies the wave. At the time of preparing this forecast, well-founded knowledge about the short- and long-run characteristics of the Omicron variant is still limited. Over time it will become clearer how dangerous the mutation is, how well existing vaccines do work, and to what extent governments have learned to deal with it. From an economic perspective, this new variant leads to an increase in the uncertainty of economic actors in the short term as it is unclear to what extent it will induce new infection control measures, behavioral adjustments, and workforce shortfalls. Even if there is no global return to government-imposed lockdowns, normalization steps such as opening national borders to tourism and resuming business travel could be withdrawn or postponed further into the future. In the process, there is a danger that the economic structures in the particularly affected service sectors will also be damaged in the longer term in the wake of ever new business slumps, especially since the fiscal capacities to counteract effectively may already be exhausted in some countries. Nevertheless, the new variant carries not only pronounced downside but also possible upside risks. Whereas higher transmissibility as well as a loss of efficacy of existing vaccines could further harm the economy, there is the possibility that an attenuated course of the disease together with a successful vaccination strategy could unexpectedly relieve the burden on the health care system, allowing the economy to pick up again faster than expected.

There are also downside risks from a sharp rise in inflation, geopolitics, the real estate bubble in China, and persistent supply bottlenecks. Further recovery will depend on how quickly supply-side shortages resolve. These might, however, also get exacerbated by

⁴ The forecasts presented are updates of Wollmershäuser et al. (2021) and Abberger et al. (2021).

a strong Omicron wave creating personnel shortages in many parts of the economy. These could therefore last longer than expected, continue to weigh on industry, and create further upward pressure on prices. This in turn would pose difficult trade-offs for central banks, as tightening monetary policy would not only dampen inflation but also economic growth. Accordingly, the upswing is likely to take longer. Should production capacities even reach their macroeconomic limits, bottlenecks could not be resolved by expanding capacity and the pent-up demand could fizzle out as prices continue to rise. Postponed wage negotiations due to the pandemic carry the risk that the increased inflation will last longer than forecasted via second-round effects. Furthermore, so far it is difficult to assess whether consumers will continue to build up higher savings out of caution and exercise consumer restraint or whether savings will be reduced more than expected in the medium term. On a political level, there are risks regarding the negotiations between the European Union and the United Kingdom on the Northern Ireland Protocol as well as the foreign trade agreement between the United States and China in 2022. Other risks include a possible Russian invasion of Ukraine and a stronger than expected economic slowdown in China. The Chinese real estate market with its highly indebted players has been a risk factor for years. A sharp downturn in China or a war-like event in Ukraine could affect the entire global economy.

The upcoming withdrawal of loose monetary policy, especially in the United States, also poses the risk of negative spillover effects for emerging markets, as in previous tapering episodes. A rise in interest rates and thus bond yields in the United States results in global portfolio shifts. Capital is withdrawn from risky higher-yielding bonds, i.e., also from emerging market government bonds. This can lead to currency devaluation, an acceleration of national inflation rates, de-

Figure 1.25





^a Both barometers have an in-sample average of 100 and a standard deviation of 10.
 ^b 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 February 2022;
 GDP 2021 and 2022: EEAG forecast.

faults on foreign currency loans, and even recession in the affected countries.

Furthermore, there is still uncertainty about how the solvency of crisis-ridden companies will develop once public support measures are scaled back and tax deferrals and other debt moratoria are ended. In the worst case, the volume of non-performing loans could increase significantly, reduce bank lending, and weigh on the public finances. This would not only have a negative impact on investment, but also on private consumption (especially of durable goods) and thus dampen economic growth.

On the other hand, an expansion of commodity production volumes could sustainably dampen the currently very high prices. This could effectively weaken inflation, allow central banks to continue their loose monetary policy, and thus lead to stronger economic growth than forecasted, as there is a very high consumption potential in view of the strong increase in involuntary savings at simultaneously low interest rates.

1.4.2 Global Economy

The emergence of the Omicron variant, the uncertainty about its impact, and the existing problems in international supply chains will determine the development of the global economy this year and have led economic activity to be noticeably subdued this winter. The corona pandemic and supply shortages are affecting different regions around the world quite differently. In many countries, some health policy measures have been taken again to restrict economic and social activities. In those with high vaccination rates, the restrictions are less severe, provided that the decline in vaccination protection is compensated for by follow-up vaccinations. The resulting economic slump this winter will probably be followed by a strong recovery, as experience with previous pandemic waves have shown. The share of companies that perceive material shortages as hampering production is historically high. However, adjustments in production processes, an easing of the pandemic situation and price allocation mechanisms should alleviate the excess demand this year. This is also indicated by the fact that the majority of companies in most countries remain optimistic. Although the Global Barometers have been low for quite a while, the coincident version still stands at a level that signals above average growth and the leading version has - specifically because of particular developments in Asia and in industry at the start of 2022-picked up again (see Figure 1.25). The partly very high order backlogs should lead to a significant acceleration of industrial production and investment dynamics. Moreover, the robust growth of the global economy in the forecast period is supported by still accommodative monetary and fiscal policies. Hence, the outlook remains positive given the expectation of significantly lower contagion levels again in the spring than in the wintry situation. Stronger momentum can therefore be expected again from spring 2022 onward. Support measures, however, cause a further push in public debt, which is therefore reduced much more slowly than was hoped for before the start of the winter. Overall, world GDP is likely to have seen an expansion rate of 5.8 percent in 2021 and facing one of 3.7 percent in 2022.

Whereas the decline in world economic growth in 2020 was strongly driven by developments in Western Europe, last year and again this year, we will see that the strongest contribution to world economic growth will stem from South and East Asia (see Figure 1.26). Nevertheless, while before the pandemic more than half of world's growth was coming from the Asian continent, in the current environment it is still North America and Western Europe that together contribute more strongly to world dynamics.

In the United States, momentum should continue to normalize in the coming guarters (see Figure 1.27). Despite rising infection figures, no new lockdown measures have been undertaken. However, consumer restraint is likely to have led to a slowdown in the service sector during the winter months. Another positive impulse comes from investments plans of USD 1 trillion to renew infrastructure and expand broadband internet access. This includes USD 550 million in new investments, in addition to those already budgeted. These are to be spread over the next few years and will support growth momentum in the medium term. Hence, fiscal policy remains expansive. Nevertheless, these plans provide less stimulus as compared to the programs of the past two years. Due to the far advanced recovery, the US Federal Reserve will end its purchase of securities this spring and start raising interest rates afterwards. This will first allow for a further improvement in the labor market situation. Although the crisis-induced rise in unemployment has virtually been reduced again to a pre-crisis level, the labor force participation rate in the United States is still significantly below that level.

The outlook for the Chinese economy remains fraught with great uncertainty. While the government's zero-tolerance Covid-19 strategy could lead to renewed local lockdowns at any time, tensions in the real estate market are likely to continue to weigh on economic development in the near term. The fact that further electricity rationing measures were suspended at the end of last year and exports have continued to recover is a relief for their development. While the energy crisis seems to be easing with the mobilization of additional fuel and improved incentives for electricity production, measures to contain local Covid-19 outbreaks are likely to continue to have a noticeable dampening effect on the economy for some time to come. Consolidation in the real estate sector is even likely to dampen overall economic production beyond this year. In order to support the economy, monetary and fiscal policy will become more expansionary. In

Figure 1.26

Regional Contributions to World GDP Growth^a



 2008
 2009
 2010
 2011
 2012
 2013
 2014
 2015
 2016
 2017
 2018
 2019
 2020
 2021
 2022

 * Based on market weights.
 Source: National statistical offices; EEAG calculations and forecast.
 © CESifo

Figure 1.27

Economic Growth by Country and Region Real GDP as an index



Source: US Bureau of Economic Analysis; Eurostat; ESRI; National Bureau of Statistics of China; last accessed on 4 February 2022; EEAG forecast. © CESifo

December and January, the central bank decided to lower the minimum reserve rate by in total 15 basis points. In addition, small and medium-sized enterprises are to be supported, for example by easing lending conditions and reducing taxes and fees. All in all, we expect the Chinese economy to pick up speed slowly. At 4.9 percent, the GDP growth rate will still be significantly lower this year than the from a historical perspective already low long-term figures recorded before the Corona crisis.

The current inflation dynamic in the world will subside as the demand overhang is reduced. Nevertheless, inflation rates in many countries around the world will remain clearly above the implicit or communicated inflation targets for quite some time (see Figure 1.28). Whereas inflation is expected to have peaked this winter and to decline significantly during the year, mainly because inflationary impulses from energy prices will cease, underlying inflation is expected to remain significantly higher than pre-crisis levels throughout the year. The rising overall eco-

Inflation Rates in Major Countries and Regions Percentage change over previous year's month





nomic capacity utilization will contribute to price increases remaining higher than these inflation targets. For the United States we expect the average inflation rate to on average marginally change from 4.7 percent last year to 4.9 percent this year. However, at the end of the year, inflation will thereby have dropped to around 2 percent again. Consumer prices in China will rise only moderately in the forecast period, also because energy prices on the consumer side are - to a greater extent than elsewhere - regulated by the state.

1.4.3 European Economy

The Omicron variant has led to stricter entry restrictions and increased testing requirements in many places in Europe. In some cases, entry bans have also been imposed again. Individual countries have already adopted a general vaccination requirement or introduced a partial vaccination requirement for individual occupational groups and institutions. In addition to

Figure 1.29



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 ^a Selected (seasonally adjusted) balances on business and consumer tendency survey questions. Balances are the 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 © CESifo

Source: European Commission; last accessed on 4 February 2022; EEAG calculations.

Confidence Indicators^a for Different Sectors in the Euro Area

the measures taken to reduce contacts, this renewed uncertainty shock is likely to pose an increased risk to companies' ability to plan ahead and cause many of them to postpone their investment plans. In addition, endogenous behavioral adjustments in consumer behavior are likely to weigh again on economic development. On the supply side, the biggest bottlenecks are likely to be in the area of personnel. Healthcare personnel in particular are reaching the limits of their capacities after almost two years of crisis.

Both voluntary behavioral changes and tighter restrictions will reduce demand in the contact-intensive service sectors and can to some extent cause intertemporal substitution through increased savings. In transport, too, the home office recommendation and stricter travel regulations will lead to losses again. However, these demand-driven losses will be significantly lower than during the winter of 2020/21, as the measures will be less drastic as the immunization of the population progresses. This will make supply-side reductions related to shortfalls in labor more noticeable. Demand in the tourism sector will be supported by domestic tourism, although not quite as strongly as in the previous summer and autumn months. The recovery in the hospitality sector is still likely to be partly held back, as the guests from long-distance markets are likely to remain absent for longer. The return of intercontinental guests is significantly delayed compared to inner-European guests, also because their tourist trips have significantly longer lead times and are currently subject to restrictions. In the long run, the reduced business tourism will leave its mark especially in urban areas.

Despite the next wave in the pandemic, most economic sentiment indicators for the euro area remained at high levels or did not decline to clearly below-average values (see Figure 1.29). The overall outlook therefore remains quite positive and after a setback in the winter half-year, the recovery in the euro area will pick up speed again in spring. Gradually dissipating supply bottlenecks will allow for strong value-added growth in the manufacturing sector over the course of the year. After growing by 5.2 percent in 2021, GDP in the euro area is likely to increase by 3.4 percent this year.

The construction sector continues to be supported by the low interest rate environment and public financing for transport infrastructure investments. The retail sector, which has benefited from consumer substitution from pandemic unavailable services to goods since the beginning of the pandemic, will return to normal this year due to the continued increase in availability of services and saturation in goods consumption. Therefore, some decline in retail trade is to be expected this year. The accelerated structural change towards online trade is likely to be permanent to rather a high degree. Since the beginning of the pandemic, an unusually high number of business start-ups have been recorded in this sector.

Table 1.2 Labor Costs^a

	Compensation per employee ^b		c	R compe	eal nsatio	al Isation ^c			Labor productivity		Unit labor costs		Relative unit labor costs ^d			Export performance ^e			e					
	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022	2014- 2019	2020	2021	2022
Germany	2.8	0.4	3.1	3.9	1.0	1.2	- 2.7	- 0.2	0.7	- 4.1	2.8	2.5	2.4	4.9	0.4	1.1	1.1	1.4	- 0.2	-0.9	- 0.2	- 1.7	- 1.2	- 1.5
France	1.2	- 2.9	5.4	4.4	0.3	- 1.4	- 3.6	4.4	0.7	- 7.1	5.0	3.2	0.4	4.5	0.1	1.1	- 1.1	0.6	-0.2	- 0.6	- 0.3	- 7.5	-0.2	2.0
Italy	0.9	- 5.2	5.5	2.3	- 0.1	- 0.3	-6.6	3.6	0.1	- 7.1	5.6	3.0	1.3	2.4	0.7	-0.6	0.1	- 0.7	0.4	- 3.0	- 0.4	-6.1	4.1	1.2
Spain	0.9	- 1.4	3.1	3.2	0.2	- 0.2	- 2.9	0.4	0.3	- 7.0	1.9	3.1	0.9	5.9	0.9	-0.4	- 0.3	2.9	0.6	-2.3	0.1	- 11.1	3.5	4.3
Netherlands	1.5	4.7	1.5	2.0	0.1	-0.8	2.3	- 0.9	0.6	- 3.4	2.9	1.9	0.9	7.6	- 1.2	0.0	-0.1	5.9	-1.6	- 3.2	0.2	5.2	- 0.8	- 0.7
Belgium	1.2	- 1.5	3.8	4.6	- 0.3	0.0	- 4.8	1.6	0.5	- 5.6	4.7	3.0	0.6	4.0	- 0.9	1.5	- 0.7	1.0	- 0.6	- 0.4	- 0.1	4.4	2.3	-0.9
Austria	2.3	1.9	2.8	2.8	0.5	0.0	0.3	0.0	0.4	- 5.3	1.3	2.8	2.1	7.2	2.3	0.5	0.1	2.9	1.8	- 1.0	- 0.1	- 3.0	1.3	2.5
Finland	0.8	0.8	3.1	3.3	- 0.5	- 0.5	- 1.9	0.9	0.6	- 0.8	1.7	1.4	0.3	1.6	1.0	1.9	- 0.1	-1.4	-0.2	- 1.4	- 0.2	1.7	- 5.2	0.4
Greece	- 0.8	0.0	0.0	1.9	- 0.4	0.1	- 2.6	- 3.1	- 0.3	- 7.8	5.4	0.5	0.8	8.9	- 5.9	1.8	- 0.3	6.6	- 6.3	- 0.9	1.9	- 13.8	6.4	7.4
Ireland	2.3	2.1	1.5	3.3	0.1	3.6	2.7	- 0.6	6.3	7.4	12.0	2.2	- 3.2	- 5.2	- 9.2	0.5	- 4.7	- 10.3	- 10.0	- 1.8	9.0	21.4	7.8	- 0.5
Portugal	1.8	2.0	3.2	2.5	0.2	- 0.2	1.1	1.8	0.5	- 6.7	2.6	4.4	1.8	9.8	-0.1	- 1.8	0.6	6.0	- 0.7	- 3.1	1.2	- 8.2	1.0	3.8
Slovakia	4.3	3.6	4.9	4.9	3.5	1.9	1.4	1.4	1.3	- 2.5	3.8	3.7	3.3	6.3	0.3	1.0	1.4	2.8	- 1.3	- 1.0	- 0.3	0.9	1.0	- 3.2
Slovenia	2.9	3.4	6.8	4.0	1.6	1.7	0.9	3.8	1.4	- 3.7	4.5	3.4	1.7	7.1	1.7	0.0	0.0	4.5	1.1	- 1.8	2.2	0.3	0.9	0.6
Estonia	7.1	4.7	6.4	8.3	4.2	7.6	3.0	1.8	2.5	- 0.4	8.7	2.4	4.3	5.3	-1.6	7.1	3.4	2.8	- 3.0	3.4	0.1	2.7	6.7	1.9
Sweden	1.6	2.6	4.0	3.0	0.9	0.1	- 0.5	1.5	1.1	- 1.6	3.2	1.5	0.6	4.2	1.5	1.7	- 0.6	1.7	4.4	1.2	0.0	4.4	0.1	- 1.4
Denmark	5.0	2.3	4.0	3.1	3.7	2.7	0.9	2.5	3.3	-2.1	2.7	1.1	2.1	4.5	1.5	2.0	0.4	1.3	0.4	- 0.3	3.0	1.2	- 3.9	- 2.5
Poland	5.4	3.7	5.5	5.6	3.3	1.3	- 0.2	1.5	2.5	- 2.4	4.1	5.2	3.2	5.5	2.9	1.5	1.6	- 1.3	- 0.6	- 1.8	0.9	10.2	2.8	- 1.7
Czech Republic	4.2	3.2	4.4	2.6	0.7	- 0.2	-1.6	- 1.1	1.4	- 4.2	2.3	2.2	2.7	7.6	3.2	0.7	- 0.8	0.5	6.0	0.5	1.5	2.0	- 1.1	-2.2
Hungary	2.4	1.9	7.1	8.9	0.8	- 3.6	- 5.3	- 0.8	0.7	- 3.9	5.1	4.0	1.5	5.7	2.4	5.1	- 0.3	- 5.9	-0.4	2.2	- 1.6	3.0	0.2	0.8
United Kingdom	2.7	2.2	5.0	4.6	0.7	- 3.1	1.4	2.7	1.0	- 8.9	7.4	3.7	1.9	13.6	- 1.1	1.1	- 2.8	9.9	1.4	- 0.6	0.7	- 7.0	- 7.2	- 0.2
Switzerland	0.3	- 0.7	3.3	1.6	0.7	0.9	- 1.9	2.0	0.7	-2.1	2.7	1.4	-0.1	1.6	0.4	-0.2	0.2	2.2	- 0.7	0.0	- 2.2	3.3	- 2.2	0.1
Norway	2.7	1.6	5.0	2.5	1.7	6.3	- 13.4	- 0.8	0.5	0.6	2.9	2.3	2.3	0.8	1.9	0.3	-2.6	- 10.7	6.4	0.4	- 2.2	9.3	- 0.3	2.1
Iceland	6.7	- 2.3	6.0	7.5	3.3	3.5	- 6.6	2.9	1.7	- 3.6	1.6	1.1	4.6	5.2	1.7	3.3	6.4	- 9.6	2.9	1.2	0.3	- 22.5	5.4	9.8
United States	2.6	7.2	5.8	4.7	1.0	1.4	3.2	2.1	0.7	2.3	2.7	0.9	2.0	4.7	2.8	3.7	3.5	2.1	-1.9	3.6	- 1.1	- 4.1	- 4.8	- 1.2
China																	1.0	-0.3	5.9	3.1	0.3	12.2	5.0	- 2.6
Japan	0.8	-0.8	1.3	0.0	0.0	0.0	- 0.2	0.7	- 0.2	- 3.9	1.8	3.0	1.3	3.4	-0.5	- 1.2	- 0.1	3.1	- 8.0	- 6.1	0.2	- 4.9	0.7	0.4

^a Growth rates for the total economy. ^b Compensation per employee in the private sector. ^c Compensation per employee in the private sector deflated by the GDP deflator. ^d Competitiveness: weighted relative unit labor costs. ^e 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.

Source: OECD Economic Outlook No. 110, November 2021.

The high number of vacancies in many sectors and the related recruitment problems of staff should also have supported wage settlements for next year. However, the willingness of employers to accept wage demands is likely to be quite low in many sectors due to the poor earnings situation in recent years. Therefore, a strong wage growth this year is not to be expected in Europe at large (see Table 1.2).

After consumer price inflation peaking this winter with rates slightly above 5 percent, price pressure from in particular energy prices will ease. It will take somewhat longer before the upward pressure on prices for industrial goods will also start to reduce. In the euro area, consumer price inflation is expected to be 3.8 percent this year: once again well above the inflation target. The euro area's unemployment rate of 7.0 percent by the end of last year already reached pre-crisis levels again and is expected to fall further during the year. For the winter half-year, the EU countries outside of the euro area also face a temporary slowdown in overall economic expansion. In addition to the effects of the pandemic, the withdrawal of purchasing power due to the particularly high inflation in the Central and Eastern European countries will have a dampening effect. With strong wage growth, however, the consumption-driven upswing will reassert itself in the course of the year as the energy price-related inflationary push subsides. In addition, substantial additional EU funds will help finance an increase in investment. Thus, output is expected to rise strongly this year (see Figure 1.30).

The overall labor shortage is increasingly becoming a restraining factor for the UK economy: the number of job vacancies rose to a record level last year. The pandemic is again likely to have had a strong dampening effect on the UK economy this winter, as containment measures were again taken in view of the

Economic Growth in EU Member Countries and the United Kingdom



rapidly rising number of infections with the Omicron variant and the staff shortage problem was at least temporarily exacerbated. At the same time, some fiscal support measures are expiring. The fact that the economy has to realign its foreign trade after leaving the European single market is likely to continue to act as a brake this year. Nevertheless, GDP in the United Kingdom is expected to rise quite strongly this year at a rate of 5.1 percent.

REFERENCES

Abberger, K., Y. Abrahamsen, M. Anderes, J. Bamert, M. Daniele,
F. Eckert, A. K. Funk, M. Graff, P. Kronenberg, H. Mikosch, N. Mühlebach,
A. Rathke, T. Reinicke, S. Sarferaz, P. Seiler, M. Siegenthaler, S. Siegrist,
S. Streicher, A. Stücker, and J.-E. Sturm (2021), "Konjunkturanalyse:
Prognose 2022/2023. Pandemie bremst konjunkturelle Erholung", KOF
Analysen, 2021:4, 1–28, Zurich: KOF Swiss Economic Institute, ETH Zurich.

Abberger, K., M. Graff, O. Müller, and J.-E. Sturm (2022), "Composite Global Indicators from Survey Data: the Global Economic Barometers", *Review of World Economics*, https://doi.org/10.1007/s10290-021-00449-8).

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

Organisation for Economic Co-operation and Development (2020), "OECD Economic Outlook" 110, 2021/2, December.

Wollmershäuser, T., P. Brandt, S. Ederer, F. Fourné, M. Lay, R. Lehmann, S. Link, S. Möhrle, R. Šauer, S. Schiman, K. Wohlrabe, and L. Zarges (2021), "ifo Konjunkturprognose Winter 2021: Lieferengpässe und Coronawelle bremsen deutsche Wirtschaft aus", *ifo Schnelldienst*, 73, Sonderausgabe, December.

APPENDIX 1.A

Table 1.A1

GDP Growth, Inflation and Unemployment in Various Regions and Selected Countries

	Share of	GDP growth CPI inflation ^a						Unemployment rate ^b			
	total GDP in %			in	%				in %		
		2020	2021	2022	2020	2021	2022	2020	2021	2022	
North America	27.5	- 3.5	5.3	3.0							
United States		- 3.4	5.7	3.0	1.2	4.7	5.2	8.1	5.4	3.9	
Canada		- 5.2	4.8	3.2	0.7	3.3	3.4	9.6	7.4	5.9	
Western Europe	23.7	- 6.3	5.2	3.6							
European Union		- 5.9	5.2	3.4	0.7	2.9	3.8	7.2	7.0	6.2	
Euro area		- 6.4	5.2	3.4	0.3	2.6	3.8	8.0	7.7	6.8	
United Kingdom		- 9.4	6.8	5.1	0.9	2.6	4.7	4.5	4.6	4.4	
Switzerland		- 2.5	3.6	3.0	- 0.8	0.5	1.0	4.8	5.2	4.5	
Norway		- 3.0	3.8	2.4	1.2	3.9	3.3	4.6	4.4	3.8	
South and East Asia	35.4	- 1.0	6.3	4.1							
China		2.3	8.1	4.9	2.5	0.8	1.9	4.0	4.1	3.7	
Japan		- 4.5	1.8	1.9	0.0	- 0.3	0.8	2.8	2.8	2.5	
India		- 7.3	7.3	8.5	6.6	5.1	5.5	10.3	7.8	6.3	
Eastern Europe and Central Asia	2.0	- 2.5	6.3	9.3							
Russia		- 2.3	6.6	10.3	3.4	6.7	6.8	5.8	4.9	4.5	
Latin America	5.7	- 6.7	6.9	2.8							
Oceania	2.0	- 2.0	4.5	3.6							
Africa and the Middle East	3.7	- 2.2	6.1	4.3							
OECD countries		- 4.7	5.2	3.2							
Advanced economies		- 4.5	4.9	3.1	0.7	3.3	4.1				
Emerging markets		- 1.3	7.4	4.8	3.5	3.5	4.5				
World	100.0	- 3.4	5.8	3.7	1.6	3.4	4.2				

Notes: Aggregates are weighted with the 2020 level of GDP in US dollars; ^a Where possible harmonized inflation rates are shown. ^b Where possible standardized unemployment rate are shown.

Source: EU; OECD; IMF; ILO; National Statistical Offices; 2021 and 2022: EEAG forecast.

	Share of		GDP growth ^a			Inflation ^b		Unemployment rate ^c			
	total GDP in %					in %					
		2020	2021	2022	2020	2021	2022	2020	2021	2022	
Germany	25.1	- 4.6	2.8	3.6	0.4	3.2	4.3	3.9	3.5	3.1	
France	17.2	- 7.9	6.7	2.9	0.5	2.1	2.8	8.0	7.9	7.3	
Italy	12.3	- 8.9	6.1	3.7	- 0.1	1.9	4.5	9.3	9.5	8.7	
Spain	8.4	- 10.8	5.0	2.7	- 0.3	3.0	4.5	15.6	14.8	12.9	
Nether- lands	6.0	- 3.8	4.5	3.4	1.1	2.8	3.7	4.9	4.2	3.7	
Belgium	3.4	- 5.7	6.2	3.4	0.4	3.2	3.2	5.6	6.3	5.4	
Austria	2.8	- 6.7	5.0	2.9	1.4	2.8	3.3	6.1	6.1	4.7	
Ireland	2.8	5.9	15.8	9.1	- 0.5	2.4	3.7	5.8	6.3	5.3	
Finland	1.8	- 2.8	3.4	1.1	0.4	2.1	2.8	7.8	7.6	6.8	
Portugal	1.5	- 8.4	4.2	3.3	- 0.1	0.9	2.7	7.1	6.6	5.7	
Greece	1.2	- 9.0	9.3	2.9	- 1.3	0.6	5.2	16.4	14.8	12.6	
Slovakia	0.7	- 4.4	3.3	3.3	- 0.7	0.8	1.4	6.7	6.8	6.3	
Luxem- bourg	0.5	- 1.8	7.0	1.1	0.0	3.5	3.2	6.6	5.6	5.0	
Lithuania	0.4	- 0.1	4.8	2.3	1.1	4.6	4.8	8.5	6.9	5.6	
Slovenia	0.3	- 4.2	6.9	3.1	- 0.3	2.0	3.4	5.0	4.8	4.6	
Latvia	0.2	- 3.6	4.7	3.5	0.1	3.2	4.2	8.1	7.5	7.0	
Estonia	0.2	- 3.0	8.2	1.6	- 0.6	4.5	4.8	6.9	6.2	4.9	
Cyprus	0.2	- 5.2	5.5	4.1	- 1.1	2.3	2.5	7.7	7.5	6.3	
Malta	0.1	- 8.2	7.2	3.3	0.8	0.7	2.0	4.4	3.6	3.4	
Euro area	85.1	- 6.4	5.2	3.4	0.3	2.6	3.8	8.0	7.7	6.8	
Poland	3.9	- 2.5	5.3	4.5	3.7	5.2	5.8	3.2	3.4	2.9	
Sweden	3.6	- 2.9	4.6	2.2	0.7	2.7	2.8	8.3	8.8	7.4	
Denmark	2.3	- 2.1	3.8	1.9	0.3	1.9	2.8	5.7	5.2	4.7	
Romania	1.6	- 3.7	6.5	5.0	- 0.2	0.5	0.9	6.0	5.5	5.2	
Czech Republic	1.6	- 5.8	2.8	1.9	3.0	3.2	4.3	2.6	2.8	2.1	
Hungary	1.0	- 4.7	6.5	4.7	3.3	5.1	5.9	4.1	4.1	3.5	
Bulgaria	0.5	- 4.4	2.8	4.9	1.2	2.8	4.0	5.2	5.3	4.8	
Croatia	0.4	- 8.1	10.8	3.2	0.0	2.7	3.1	7.9	7.9	6.8	
Non-euro area EU	14.9	- 3.4	4.9	3.3	1.7	3.2	3.8	4.7	4.7	4.1	
EU 27	100.0	- 5.9	5.2	3.4	0.7	2.9	3.8	7.2	7.0	6.2	
* 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. * Harmonized consumer price index (HICP). < Standardized unemployment rate.											

Table 1.A2
GDP Growth, Inflation and Unemployment in the EU Countries

Source: Eurostat; 2021 and 2022: EEAG forecast.

Table 1.A3

Key Forecast Figures for the European Union (EU27)

.,									
	2020	2021	2022						
	Percentage change over previous year								
Real GDP	- 5.9	5.2	3.4						
Private consumption	- 7.3	3.8	4.5						
Government consumption	1.3	3.5	1.9						
Gross fixed capital formation	- 6.3	3.4	1.1						
Exports of goods and services	- 8.5	9.2	5.2						
Imports of goods and services	- 8.3	7.4	4.5						
Net exports ^a	0.2	1.0	0.5						
Consumer prices ^b	0.7	2.9	3.8						
	Pero	centage of nominal (GDP						
Government fiscal balance ^c	- 6.9	- 6.6	- 3.6						
	Pe	rcentage of labor fo	rce						
Unemployment rate ^d 7.2 7.0 6.2									
^a Contributions to changes in real GDP (percentage of real GDP in previous year). ^b Harmonized consumer price									

index (HCPI). c 2021 and 2022: forecast of the European Commission. d Standardized unemployment rate.

Source: Eurostat; 2021 and 2022: EEAG forecast.

Table 1.A4

Key Forecast Figures for the Euro Area

	2020	2021	2022						
Percentage change over previous year									
Real GDP	- 6.4	5.2	3.4						
Private consumption	- 7.9	3.4	4.6						
Government consumption	1.3	3.8	1.7						
Gross fixed capital formation	- 7.0	3.2	0.8						
Exports of goods and services	- 9.1	9.6	5.5						
Imports of goods and services	- 9.1	6.8	4.2						
Net exports ^a	- 0.3	1.5	0.8						
Consumer prices ^b	0.3	2.6	3.8						
	Per	centage of nominal	GDP						
Government fiscal balance ^c	- 7.2	- 7.1	- 3.9						
	Pe	rcentage of labor fo	rce						
Unemployment rate ^d	8.0	7.7	6.8						
^a Contributions to changes in real GDP (percentage of real GDP in previous year). ^b Harmonized consumer price index (HCPI). ^c 2021 and 2022: forecast of the European Commission. ^d Standardized unemployment rate.									

Source: Eurostat; 2021 and 2022: EEAG forecast.