KIEL INSTITUTE FOR THE WORLD ECONOMY

KIEL INSTITUTE ECONOMIC OUTLOOK

World Economy
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Klaus-Jürgen Gern, Stefan Kooths, Jan Reents,
Nils Sonnenberg und Ulrich Stolzenburg

Research Center
Business Cycles and Growth

GROWTH REMAINS SUBDUED

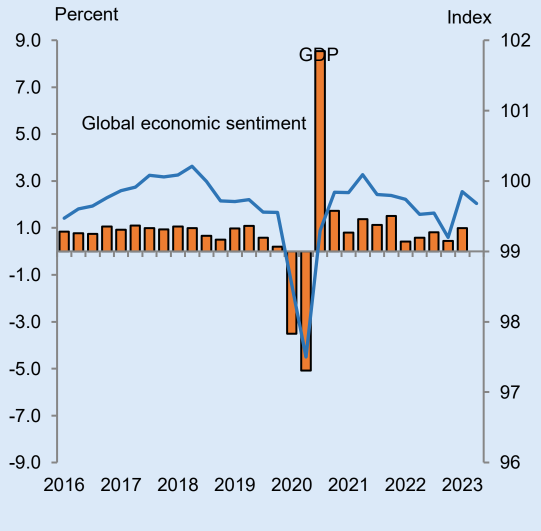
Klaus-Jürgen Gern, Stefan Kooths, Jan Reents, Nils Sonnenberg und Ulrich Stolzenburg

A number of factors that contributed to the weakening of the global economy in the past year have recently improved significantly. Energy prices have reversed, the prospects for a steady expansion in China have improved with the abandonment of the zero-covid policy, and supply bottlenecks have ceased to impede economic activity to an unusual extent. All this has helped the global economy to stabilize. However, the sharp tightening of monetary policy has led to significantly higher financing costs and is weighing on growth. Fiscal policy is generally also restrictive. Against this backdrop, global growth is expected to be moderate this year and next. After growing by 3.3 percent in 2022, which is roughly in line with the medium-term trend rate, global output is expected to grow by only 2.8 percent and 3.0 percent in 2023 and 2024, respectively. Compared to our spring forecast, we have increased the rate for 2023 by 0.3 percentage points but decreased it by 0.2 percentage points for 2024. Although inflation will fall significantly in the coming months on the back of lower commodity prices, underlying inflation is likely to remain elevated for the time being and will not return target levels before the end of the forecast horizon.

Although global growth picked up noticeably at the beginning of 2023, there are still no signs of a sustained upturn. In the first quarter, global output increased by 0.8 percent, the highest rate since the end of 2021. Economic activity accelerated particularly in the emerging economies. Business sentiment even brightened quite significantly in view of lower inflationary pressure and easing problems in supply chains. However, the indicator for the global economic climate calculated by IfW Kiel on the basis of sentiment indicators from 42 countries has recently declined again and signals a weaker expansion for the second quarter (Figure 1).

Industrial production was almost flat despite the economic opening in China, and world trade showed little momentum. Although global industrial production increased slightly in the first quarter, mainly due to a recovery in China, the available indicators for April and May do not suggest that industrial activity has already turned the corner. World trade is also going through a weak phase: Despite a strong increase in March 2023, quarter-on-quarter growth of world trade in goods was negative in the first quarter as a whole, and real-time indicators suggest that momentum in world trade has recently been low again (Kiel Trade Indicator).

Figure 1:
World economic activity, 2012–2020



Quarterly data, seasonally adjusted. Global economic sentiment is based on business expectations in 42 economies. GDP: price adjusted, change over previous quarter, 46 countries, weighted by purchasing power parities.

Source: OECD, Main Economic Indicators; national sources; Kiel Institute calculations.

Although the number of containers shipped has picked up again since the end of last year, it is still significantly lower than a year ago (Figure 2).

In the advanced economies growth remained sluggish. In the first quarter, GDP in the group of advanced economies increased at a rate of around 0.3 percent, as in the final quarter of last year (Fig. 3). The pace of expansion in the United States slowed noticeably, but the US economy still looked robust given the pronounced tightening of monetary policy. Although the Federal Reserve raised interest rates at an unusually sharp pace, economic output and employment continued to grow significantly on the back of a marked rise in private consumption (Box 1), whereas the deterioration in financing conditions is now clearly reflected in investment - residential construction in particularly weak. Meanwhile, the euro area economy contracted slightly for a second consecutive quarter. The main factor was again weakness in consumption, with private household consumption contracting at a slower pace, but at the same time a sharp reduction in government consumption. In the United Kingdom, too, economic activity remained weak, with output almost stagnating. By contrast, GDP in Japan grew at a healthy rate of 0.7 percent, considerably stronger than in previous quarters, and private consumption picked up significantly. In addition to somewhat lower energy prices and a strong rise in wages, the lifting of the last pandemic-related containment measures is likely to have played a role here. In South Korea, this factor also contributed to the rebound of production in the first quarter.

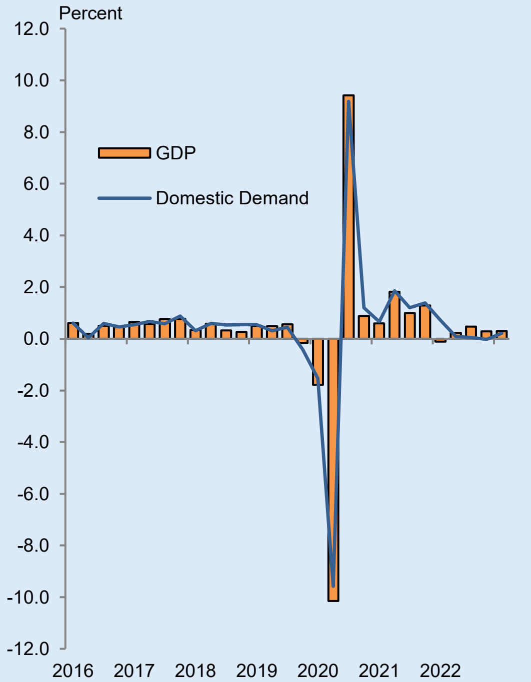
In the emerging economies, production accelerated markedly, mainly due to the departure from the zero-Covid policy in China. The sudden widespread abolition of infection control measures resulted in a strong 2.2 percent increase in GDP in China in the first quarter. However, while the service sectors, which had previously been particularly restricted, expanded strongly, industrial production and foreign trade benefited less and even showed signs of slowdown recently. In the other emerging economies, the economic growth accelerated in most cases. Where production had declined towards the end of the year - as in Thailand, Malaysia and Brazil - the economy even recovered significantly. One exception is Argentina, where the essentially drought-related production slump is likely to have continued after the turn of the year. In Russia, according to official estimates, GDP in the first quarter was only 1.9 percent lower than a year earlier, suggesting that production increased over the previous quarter and continued to recover from the steep drop

Figure 2:
Global container trade

Monthly data. Volume of globally traded containers in TEU (20-feet standard containers) based on ship movement data.

Source: Kiel Trade Indicator.

Figure 3:
GDP and Domestic Demand in the G-7



Price adjusted; seasonally adjusted; yoy change. G7 consists of USA, Japan, Canada, Germany, France, Italy and UK.

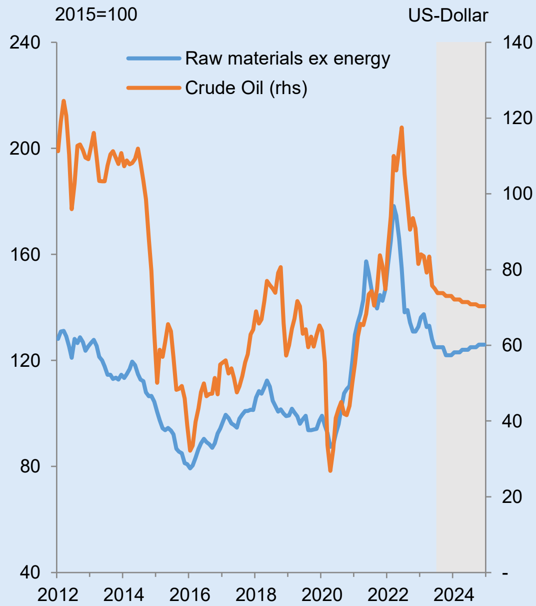
Source: OECD *Main Economic Indicators*, Kiel Institute calculations.

experienced in the first months of the war of aggression against Ukraine.

Raw material prices have moderated and are expected to decline somewhat further in the forecast period. The situation on the raw material markets eased further in the first months of the current year. Prices for non-energy raw materials have continued to fall and were recently back at the level seen at the end of 2020, when the post-Corona commodity boom began. Prices for steel and copper, as well as other nonferrous metals, have not increased sustainably again following the opening of the Chinese economy, reflecting the overall moderate momentum in industrial production. Food prices have also eased noticeably, although they remain elevated, particularly in the case of corn. The oil price has been trending downward since June 2022, even though OPEC repeatedly reigned in production and, most recently, decided to maintain the reduced quotas into next year. OPEC apparently tolerates that Russia significantly increases its exports in order to counteract the loss of revenue caused by the generally low oil prices and the continued massive discounts on the price of Russian Urals. To prevent market oversupply and resulting downward pressure on prices, Saudi Arabia has announced that it will temporarily reduce its production by 1 million barrels per day (about one percent of world production) in July. However, also this news only briefly pushed up the price of oil. In mid-June, the price of Brent crude was back at just above $70, which is lower than the 2021 average. The market thus appears to remain well supplied. In line with forward market quotations, we expect crude oil to continue to become gradually cheaper over the forecast period (Figure 4). The price level on the European gas market has also continued to fall significantly in recent months. At the time of writing, at below 30 euros per megawatt hour (TTF), it was almost back at the upper end of the price band recorded in the years before the crisis. LNG prices in Asia have also fallen back to the level seen at the beginning of 2021. However, supply is likely to become less ample going forward, which leads us to expect somewhat higher quotations again in the coming year, in line with the financial markets.

Inflation has so far been falling mainly as a result of lower energy prices. The upward pressure on prices has recently eased worldwide. Since October 2022, the inflation rate in the G7 countries has fallen from 8.4 percent to 5.7 percent (April) (Figure 5). The main reason for the decline was the easing on the energy markets, which led to a noticeable reduction in the contribution to inflation from energy. Most recently, there was even relief from this side. By

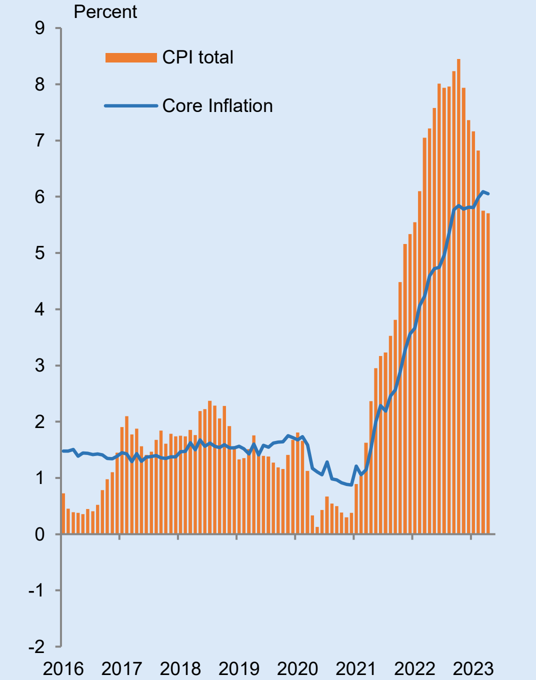
Figure 4:
Raw material prices



Monathly data, data edge: shaded: forecast.
Raw meterials ex energy: HWWI-Index, USD-based; Crude Oil: Spot market, Brent.

Source: International Petroleum Exchange; HWWI, Rohstoffpreisindex, Kiel Institute forecast.

Figure 5:
CPI Inflation in Industrial Countries

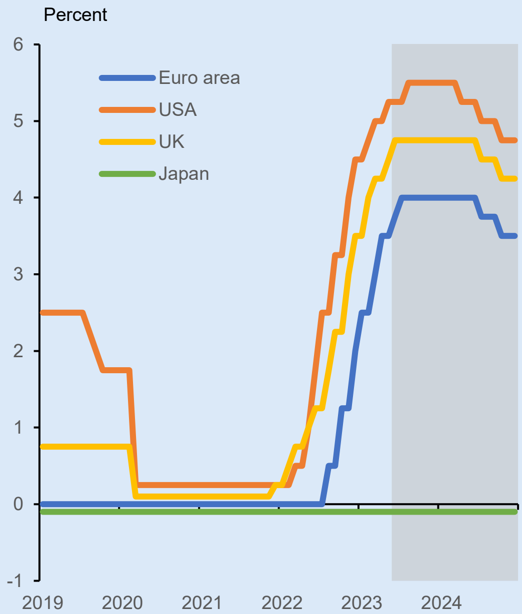


Monthly Data; yoy change.

Source: OECD, *Main Economic Indicators*; Kiel Institute calculations.

contrast, the core rate of inflation remained virtually unchanged at the high levels reached in the fall. This trend continued in May: Although US consumer prices rose by only 0.1 percent in May compared with the previous month and were only 4 percent higher than a year earlier (after 4.9 percent in April), prices excluding energy and food rose by 0.4 percent from April, the same monthly increase as in the previous five months.

Figure 6:
Policy rates in major advanced economies



Monthly data, end-of-period. Euro area: Main refinancing operations rate, USA: Federal Funds Rate, UK: BoE base rate, Japan: BoJ overnight rate:

Source: Refinitiv. shaded area: forecast of IfW Kiel.

Central bank interest rates are likely to be raised only slightly. The central banks in the major advanced economies were rather late to react to the sharp rise in inflation, but then with a historically very steep increase in key interest rates. In the US, the target for the Federal Funds Rate is now 5 to 5.25 percent, almost as high as at the end of the last pronounced phase of monetary tightening in 2007. After gradually reducing the size of its interest rate steps, the Fed decide to pause at its June 14 meeting. However, the latest economic indicators still do not point to a noticeable economic slowdown that could lead to a sustained dampening of inflation. We thus expect another interest rate hike of 0.25 percentage points in the summer before key rates will be left at the 5.25 to 5.5 percent level for some time (Figure 6). The ECB, which only started to raise its rates last summer, has now increased its key rate to 3.75 percent and is also likely to follow suit. We expect interest rates to peak at 4 percent in the summer. The Bank of England is also likely to raise its key rate once again, to 4.75 percent. Gradual interest rate cuts are likely in the course of the coming year as inflation eases and the economy expands only moderately. In addition to interest rate policy, monetary policy will be tightened quantitatively, in particular by not reinvesting proceeds from maturing government bonds.

Monetary policy in the emerging economies generally remains stability-oriented. Some emerging economies - including some Eastern European economies - started their rate hike cycle relatively early and have left their key interest rates unchanged since the middle of last year. Often, however, key rates in the emerging economies have been raised further until recently. Against the backdrop of continued tightening in the advanced economies, there have hardly been any interest rate cuts so far. One exception to the general approach of stability-oriented monetary policy is Türkiye, where interest rates have been cut several times since last summer despite very high inflation, most recently after the devastating earthquake at the end of February. However, after the elections in May, the top positions at both the Ministry of Finance and the Central Bank were filled by persons who are expected to tighten monetary and fiscal policy in the future.

The supportive effects of fiscal policy are running out. After high spending to mitigate the economic consequences of the pandemic increased government debt in the advanced economies, but also in many emerging markets, budgets in many countries were strained last year by programs to support households and businesses in the face of temporarily extremely high energy prices. However, this spending is now declining as energy prices have fallen again. At the same time, the demands on government budgets remain high due to the fact that defense spending is increasing amid the changed geopolitical situation and longer-term programs are being implemented to promote infrastructure and, in particular, the green energy transition. On balance, there is unlikely to be additional fiscal stimulus this year. For 2024 we expect fiscal policy to be overall restrictive. In the US, the agreement reached in the dispute over the debt ceiling includes spending cuts amounting to 0.2 percent of GDP per year.

OUTLOOK: A SUBDUED ECONOMIC OUTLOOK

The risk of sliding into a recession has declined but economic momentum is being weakened back by restrictive monetary policy. Key factors, which have been responsible for the weakening of the global economy last year, have recently improved. Energy prices, for example, have fallen again and as a result inflationary pressures have eased. In China, the end of its zero-Covid policy has improved the chances for a steady expansion and global supply bottlenecks are no longer significantly impeding economic activity. All this has contributed to an improvement of business and household sentiment on a global basis and supported economic activity. However, the level of survey-based leading indicators, such as the purchasing managers' indices in the manufacturing sector, remain quite low and have recently declined again in some instances. The substantial order backlogs in the industry are declining and the shrinking number of new orders will have a stronger impact on production going forward. The weak industrial sector is likely to have an even greater impact on the economy as a whole, as the stimulus provided by the normalization of demand in the service sector, following the end of the pandemic, is likely to have less and less of an impact. The sharp tightening of monetary policy, which has led to significantly higher financing costs and is weighing on consumers' willingness to spend, is having a particularly dampening effect. In some countries, the financial cycle also appears to be turning. After a long period of strong growth, real estate prices are now falling. When the financial cycle turns, financial imbalances often materialize, further slowing economic activity.

The global economy will expand only moderately this year and next. After expanding by 3.3 percent in 2022, roughly in line with the medium-term trend growth rate, global output is expected to increase by only 2.8 percent in 2023 (Table 1). For 2024, we expect a slight acceleration to 3.0 percent. We have thus increased our forecast for 2023 by 0.3 percentage points compared to our March forecast (Gern et al, 2023); for 2024, we have reduced our forecast by 0.2 percentage points. Based on market exchange rates, growth rates are 2.4 percent and 2.5 percent in the following two years, down from 3.0 percent in 2022. World trade is expected to contract by 0.6 percent in 2023 and to grow by 2.8 percent next year, following a gain of 3.2 percent last year.

Table 1:
Real GDP and consumer prices in the global economy

	Weight	Gross domestic product				Consumer prices			
		2021	2022	2023	2024	2021	2022	2023	2024
World economy total	100	6.2	3.3	2.8	3.0	7.0	9.4	7.8	5.8
including									
Advanced economies	59.4	5.4	2.6	1.1	1.4	3.3	7.5	4.7	2.6
China	18.5	8.6	3.1	5.6	4.7	0.9	2.0	1.8	2.4
Latin America	4.7	6.9	3.7	1.8	1.3	27.5	17.0	20.1	16.2
India	7.3	8.9	6.7	6.6	6.9	5.1	6.7	4.5	4.9
East Asian emerging economies	5.0	3.8	4.7	3.4	4.0	2.2	4.8	3.8	2.8
Russia	2.9	4.6	-2.1	1.0	0.5	5.9	13.8	10.0	10.0
Africa	2.4	4.9	3.4	3.6	3.6	15.1	15.0	15.6	14.0
Memorandum item:									
World trade volume (goods)		10.4	-0.6	-0.6	2.8				
World economy (GDP weights using current US-dollar exchange rates)		6.1	3.0	2.4	2.5	4.7	7.8	5.9	4.2

Percent. Weights according to GDP in 2022 based on purchasing power parities. GDP, consumer prices: change over previous year. East Asian emergin economies: Thailand, Malysia Indonesia and Philippines. Africa: Egypt, Nigeria, South Africa, Algeria, Ethiopia.

Source: IMF, International Financial Statistics; OECD, Main Economic Indicators; Kiel Institute calculations; shaded area: Kiel Institute forecast.

In the advanced economies, expansion will remain subdued for the time being. The drag on purchasing power caused by high inflation continues to act as a brake. However, while burdens are gradually easing in this regard, the tightening of monetary conditions will increasingly have an impact. In residential construction, the effects of higher interest rates, have already been felt for some time, particularly in the US, but also in some European countries, not least Germany. Fiscal policy is also having a dampening effect, with measures to support consumers' purchasing power being scaled back. All in all, with a rate of 1.1 percent this year and 1.4 percent next year, the increase in GDP in the advanced economies is likely to be significantly below the growth rate of potential output (Table 2). Inflation continues to decline over the forecast period but is still expected to be close to 3 percent in 2024. A bright spot are the labor markets, where unemployment, which is very low almost everywhere, is likely to increase only slightly despite economy activity being generally sluggish.

Tabelle 2:
Real gross domestic product, consumer prices and unemployment rate in advanced economies

	Weights	Real GDP				Consumer prices				Unemployment rate			
		2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
European Union	40.7	5.4	3.6	0.7	1.8	2.9	9.2	6.4	2.7	7.1	6.2	6.0	5.8
Euro area	34.8	5.3	3.5	0.6	1.7	2.6	8.4	5.5	2.4	7.8	6.8	6.6	6.4
Sweden	0.9	5.9	2.9	0.9	1.6	2.7	8.1	6.3	2.5	8.8	7.5	7.3	7.0
Poland	2.3	6.8	5.4	2.7	3.6	5.3	13.2	10.5	4.4	3.4	2.9	2.7	2.5
United Kingdom	5.1	7.6	4.1	0.4	1.2	2.6	9.1	7.2	3.4	4.5	3.7	4.4	4.5
Switzerland	1.0	4.2	2.1	0.7	1.3	0.6	2.8	2.3	1.4	5.1	4.4	4.6	4.6
Norway	0.6	4.0	3.2	1.6	2.2	3.5	5.8	5.2	3.3	4.4	3.3	3.4	3.5
United States	35.0	5.9	2.1	1.3	0.8	4.7	8.0	4.1	2.6	5.4	3.6	3.7	4.2
Canada	3.1	5.0	3.4	1.2	1.3	3.4	6.8	3.9	2.5	7.4	5.3	5.4	5.5
Japan	8.4	2.3	1.0	1.3	1.5	-0.2	2.5	2.7	2.0	2.8	2.7	2.6	2.5
South Korea	3.8	4.1	2.6	1.2	2.7	2.5	5.1	3.2	2.6	3.6	2.8	2.8	2.6
Australia	2.2	5.2	3.7	1.8	2.6	2.8	6.6	5.7	4.0	5.1	3.7	3.8	4.0
Total	100.0	5.3	2.8	1.0	1.5	3.2	7.8	5.0	2.7	5.8	4.6	4.6	4.7

Based on GDP at prices and exchange rates of 2022 in percent. Change over previous year in percent. European Union and Norway: Harmonized Index of Consumer Prices (HICP). Standardized unemployment rate in percent (ILO); country groups weighted according to the size of the labor force in 2022.

Source: Eurostat, VGR; OECD, Main Economic Indicators; IMF World Economic Outlook Database; Statistics Canada, Canadian Economic Account; shaded: Kiel Institute forecast.

The economy in the USA is losing momentum. Supported by a substantial rise in disposable income and a steady usage of the additional savings accumulated during the pandemic, private consumption grew significantly until recently. During the course of this year, however, this economic engine will lose steam. The dampening effect of inflation and the sharp rise in interest rates will become increasingly apparent as the stock of extra savings is becoming increasingly depleted. We expect the savings rate to rise over the course of the year, while real disposable incomes will grow less dynamically over the forecast period compared to the past two years. Fiscal policy will also have a dampening effect. Given higher financing costs and subdued sales and earnings expectations, investment demand will decline over the forecast period as well. Residential investment will fall sharply and equipment investment will also be cut back. We expect GDP to contract slightly in the second half of 2023. Nevertheless, the annual average growth rate for 2023 is expected reach 1.3 percent. In the coming year, the increase will slow to 0.8 percent, despite an economic upturn in the course of the year. Against this backdrop, the rise in employment will slow noticeably over the forecast period, and unemployment will rise to 4.2 percent in 2024. Inflation will fall to 4.1 percent this year and 2.6 percent next year and thus continue to remain above the Fed’s target rate.

The recovery of the Chinese economy after the end of the zero-Covid policy is moderate. At 2.2 percent, output in the first quarter after the end of the zero-Covid policy rose strongly from the previous quarter. Recently, however, the economic recovery has lost momentum. The main beneficiaries were the contact-intensive service sectors, where consumption opportunities were limited during the pandemic and pent-up demand is now being realized. By contrast, growth in industry was more moderate and lost further momentum in spring, probably also because consumers - not only in China - are returning to their pre-pandemic demand patterns and cutting back on demand for goods. At the same time, the real estate crisis is still ongoing and likely to remain a restraining factor for some time to come. Falling real estate prices and the financial problems of numerous real estate developers have not only dampened construction activity, but are also likely to have a negative impact on consumer spending. Despite these dampening factors, GDP is expected to grow by 5.6 percent and 4.7 percent, respectively this year and next, significantly more than in 2022 (3.1 percent).

The economy in the euro zone is gradually picking up after the recent weak phase. High inflation, rising financing costs and uncertainty around the economic outlook have put an end to the post-Corona upswing in Europe and caused economic activity to contract slightly. Private consumption in particular was weak in the winter semester. According to surveys, business and consumer confidence has recovered noticeably since last fall, but most recently - in May 2023 - there was another decline. Notably, pessimism of many companies in the manufacturing sector is increasing, accompanied by weak production figures in March and April, while service providers remain rather optimistic. For the second quarter, we expect only moderate growth of GDP, but for the rest of 2023 and 2024 we anticipate a gradual strengthening of the economy. Overall, GDP is expected to increase by 0.6 percent in the current year and 1.7 percent in 2024. There are no signs of a significant deterioration in the situation of the labor market, and the unemployment rate is likely to remain close to its recent record low. Consumer prices are expected to rise by an average of 5.5 percent in the current year, with the rate of inflation falling markedly during the course of the year. Over time, lower raw material prices and transport costs will also lead to a slowdown in price beyond energy related products. Nevertheless, core inflation is likely to fall only gradually. As a result, consumer prices will continue to rise by an average of 2.4 percent in 2024, which remains higher than the target of the central bank.

In Japan, the economy is picking up noticeably. Following the strong increase at the beginning of the year, output is expected to expand at a moderate pace for the time being. The economy is being held back by subdued demand from abroad and weakening stimulus from fiscal policy. By contrast, monetary policy is expansive, keeping long-term interest rates very low despite the significant rise in inflation. Private consumption is benefiting from a strong rise in wages; with inflation gradually declining, real income growth is likely to be significant. All in all, GDP is expected to grow somewhat faster than potential output, at rates of 1.3 percent this year and 1.5 percent next year. Consumer prices will continue to rise significantly stronger than in the years before the crisis.

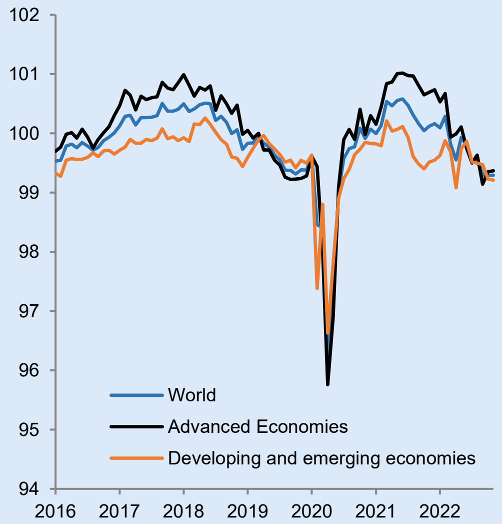
Important risks to the forecast can be found in the financial environment. Energy supply and energy prices continue to pose a risk to the forecast. However, developments in recent months have shown that the markets are capable of coping with major changes in the economic environment. In the meantime, upside and downside risks for raw material prices appear to be balanced. A notable upside risk to the forecast results from our comparatively pessimistic scenario for the economy in the United States. If the financial reserves of US consumers prove to be more productive and US growth withstands monetary tightening noticeably better than we expect, this would also have an impact on the rest of the world. However, in that case inflation could prove more persistent and in response US interest rates would likely be raised further and remain higher for longer than assumed here. This could intensify the downward dynamics of the financial cycle over the remainder of the forecast period and associated risks to financial stability could become more prevalent.

Data annex

CONTENTS

1. World Economy

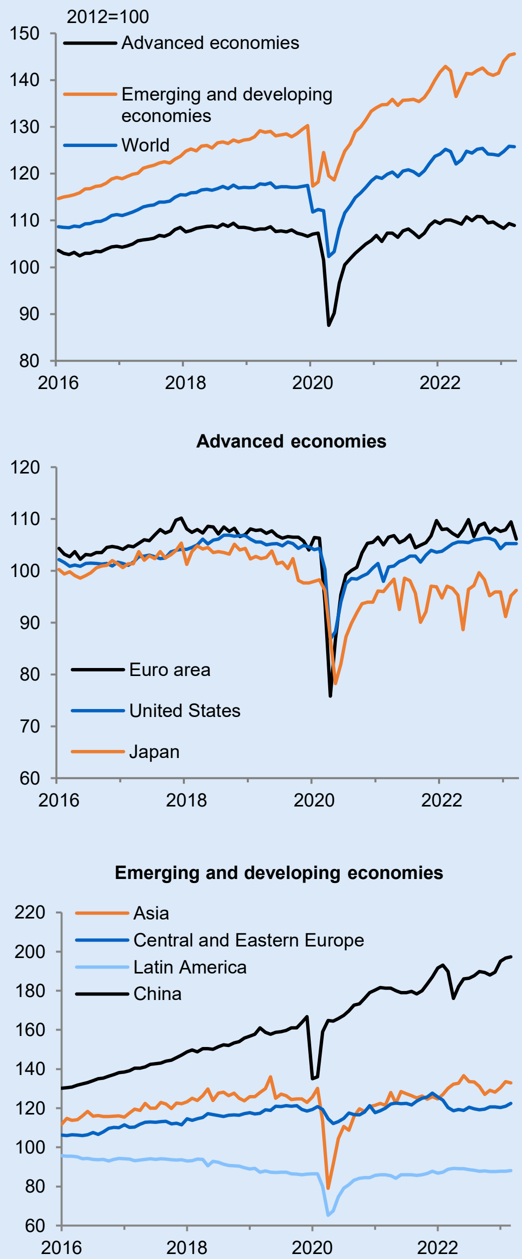
Figure 1.1:
Business expectations by groups of countries



Monthly data, seasonally adjusted. Indicators are based on buisness expectations in 42 countries (34 advanced economies and 8 emerging economies).

Source: OECD, *Main Economic Indicators*; national sources; Kiel Institute calculations.

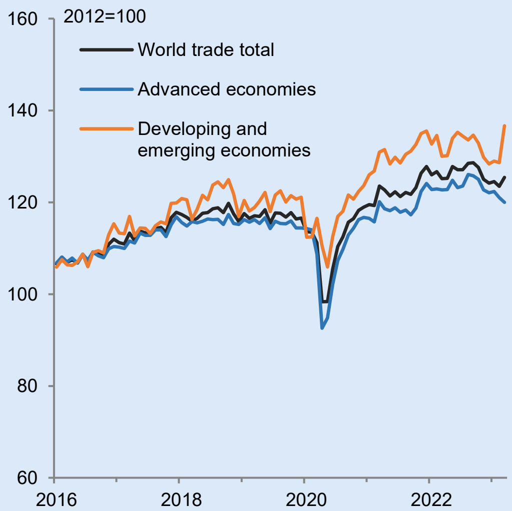
Figure 1.2:
Industrial production by groups of countries and regions



Monthly data. Last value: June 2022.

Source: CPB, *World Trade Monitor;* Kiel Institute calculations.

Figure 1.3:
World Trade

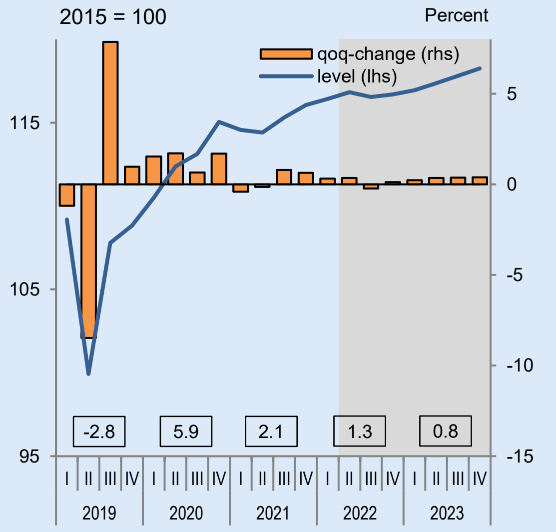


Monthly Data.

Source: CPB, *World Trade Monitor*, Kiel Institute calculations.

2. United States

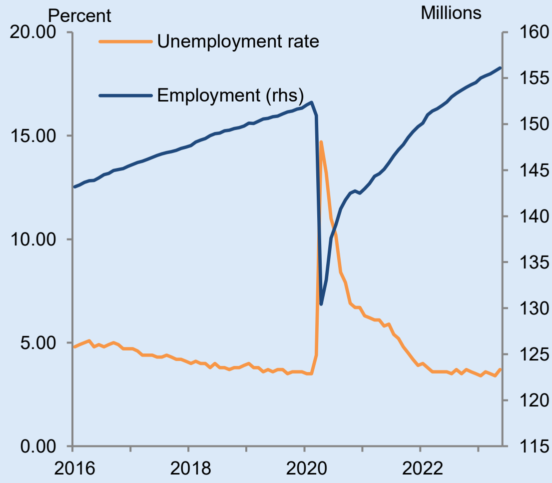
Figure 2.1:
GDP in the United States



Quarterly data, price, seasonally and calendar adjusted, qoq-change; annual rate of change (boxes).

Source: Bureau of Economic Analysis; shaded: Kiel Institute forecast.

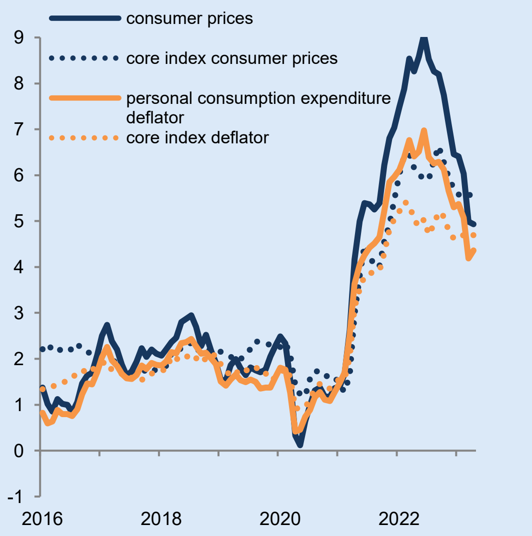
Figure 2.2:
Labor market



Monthly data; seasonally adjusted. .

Source: US Department of Labor, *Employment Situation.*

Figure 2.3:
Consumer prices



Monthly data; change over previous year. Core index: excluding energy and food.

Source: US Department of Labor, *Consumer Price Index, Bureau of Economic Analysis*.

Table 2.1:
Key indicators United States

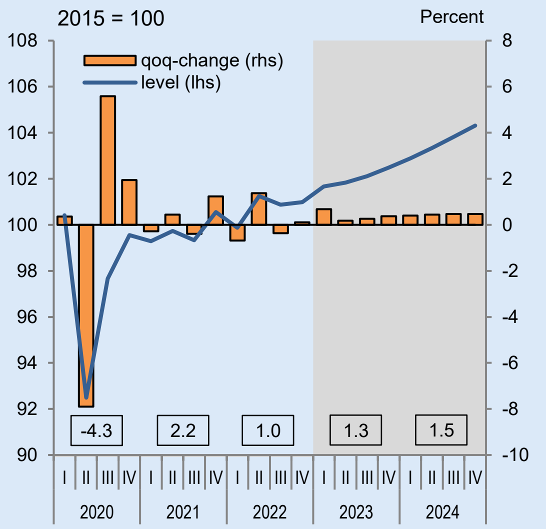
	2022	2023	2024
Gross Domestic Product	2.1	1.3	0.8
Domestic expenditure	2.4	0.9	0.8
Private consumption	2.8	2.1	1.1
Government consumption	-0.6	2.7	1.0
Gross fixed capital formation	-0.2	-1.2	0.2
Machinery and equipment	4.3	-2.5	0.2
Intellectual property rights	8.9	5.6	2.2
Structures	-6.9	6.0	-4.2
Residential investment	-10.7	-12.3	0.8
Inventories	0.7	-0.7	-0.1
Net exports	-0.3	0.4	0.0
Exports	7.2	2.1	0.6
Imports	8.2	-0.8	0.6
Consumer prices	8.0	4.1	2.6
Unemployment rate	3.6	3.7	4.2
Current account balance	-3.7	-3.3	-3.3
Government budget balance	-5.3	-4.4	-4.6

GDP: volumes, change over previous year, percent. Net exports, inventories: contribution to growth, percentage points. Unemployment rate: unemployed in relation to labor force, percent. Current account balance, government budget balance: percent of nominal GDP. Budget balance: fiscal year.

Source: US Department of Commerce, *National Economic Accounts;* US Department of Labor, *Employment Situation and Consumer Price Index;* US Department of the Treasury, *Monthly Treasury Statement;* Kiel Institute calculations; shaded: Kiel Institute forecast.

3. Japan

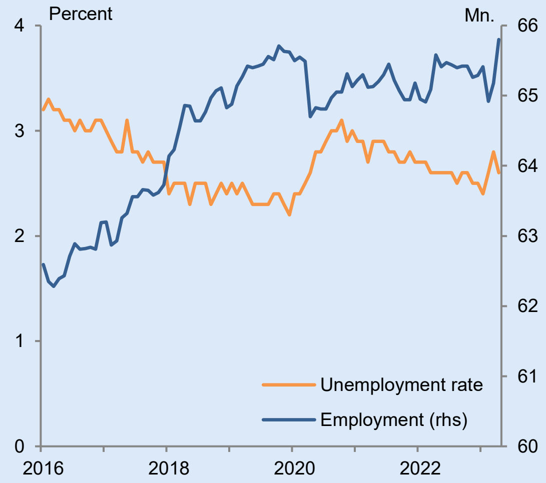
Figure 3.1:
GDP



Quarterly data, price, seasonally and calendar adjusted, qoq-change; annual rate of change (boxes).

Source: Cabinet office, *National Accounts*; shaded: Kiel Institute forecast.

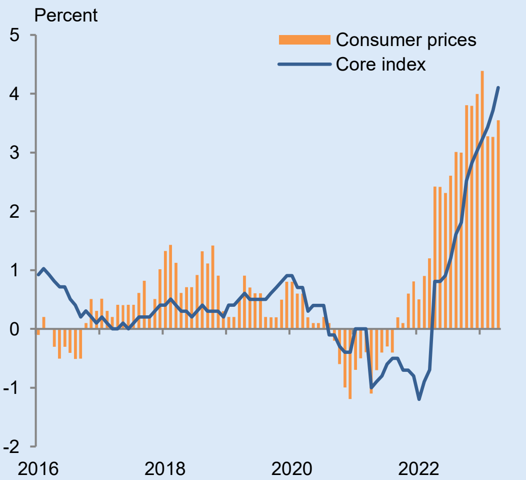
Figure 3.2:
Labor market



Monthly data; seasonally adjusted.

Source: Department of Labor.

Figure 3.3:
Consumer prices



Monthly data; change over previous year. Core index: consumer prices excluding enery and fresh food.

Source: Statistics Bureau of Japan.

Table 3.1:
Key indicators Japan

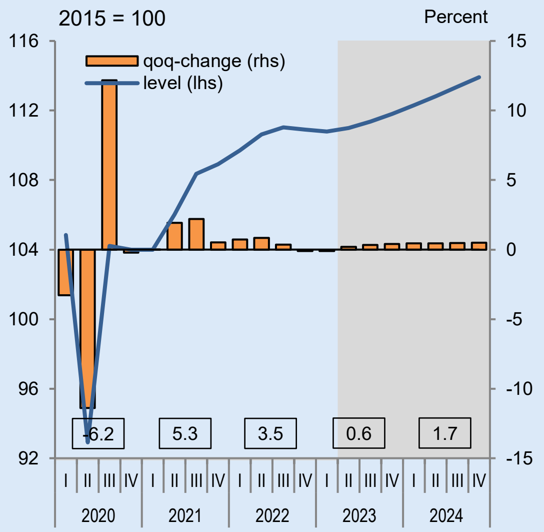
	2021	2022	2023	2024
Gross Domestic Product	2.3	1.0	1.3	1.5
Domestic expenditure	1.1	1.6	1.6	1.4
Private consumption	1.5	2.0	1.3	1.1
Government consumption	3.2	1.5	0.9	1.2
Gross fixed capital formation	-3.3	-0.9	2.2	2.5
Enterprises	1.0	1.9	3.0	2.9
Residential Investment	-1.2	-4.7	-1.2	1.3
Public investment	-1.4	-7.0	1.8	1.6
Change in inventories	0.2	0.4	0.0	0.0
Net exports	0.8	-0.3	-0.2	0.0
Exports	12.2	5.1	0.2	2.5
Imports	5.8	8.0	1.6	2.0
Consumer prices	-0.2	2.5	2.7	2.0
Unemployment rate	2.8	2.7	2.6	2.5
Current account balance	2.9	2.9	2.9	2.9
Government budget balance	-6.2	-5.9	-5.2	-4.0

Percent. GDP: volumes, change over previous year, percent. Net exports, inventories: contribution to growth, percentage points. Unemployment rate: unemployed in relation to labor force. Current account balance, government budget balance: percent of nominal GDP.

Source: Cabinet Office, *National Accounts*; OECD, *Main Economic Indicators*; Kiel Institute calculations; shaded: Kiel Institute forecast.

4. Euro Area

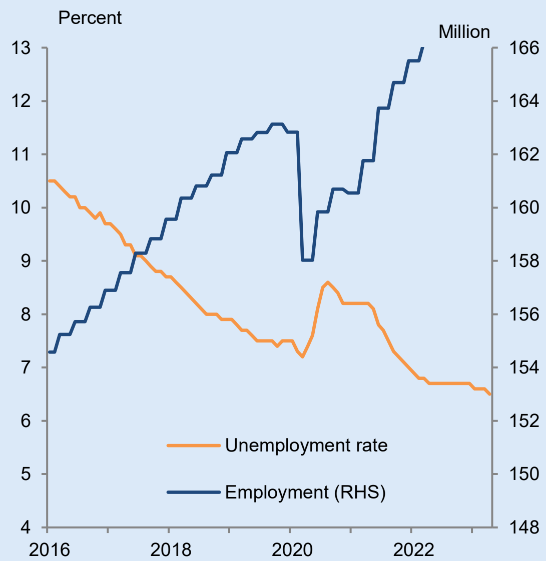
Figure 4.1:
GDP



Quarterly data, price, seasonally and calendar adjusted, qoq-change. Annual data: price adjusted, annual rate of change (boxes).

Source: Federal Statistical Office, Fachserie 18, Series 1.3; shaded: IfW forecast.

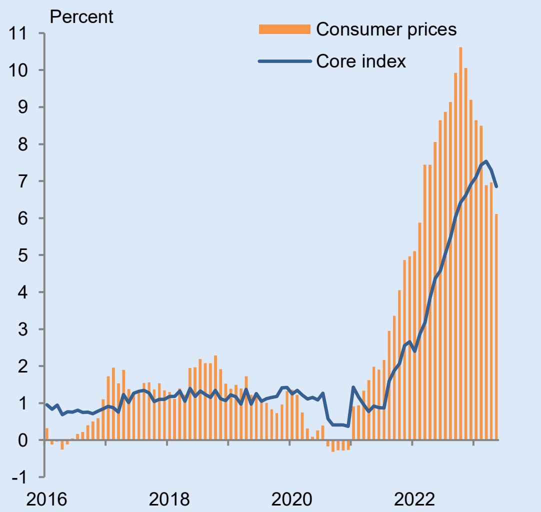
Figure 4.2:
Labor market



Monthly data; seasonally adjusted.

Source: Eurostat, *Labor Statistics*; ECB, *Monthly Bulletin*.

Figure 4.3:
Consumer prices



Monthly data; y-o-y change. Core index: HICP without energy and unprocessed food.

Source: Eurostat, *Price Statistics*.

Table 4.1:
Key indicators Euro Area

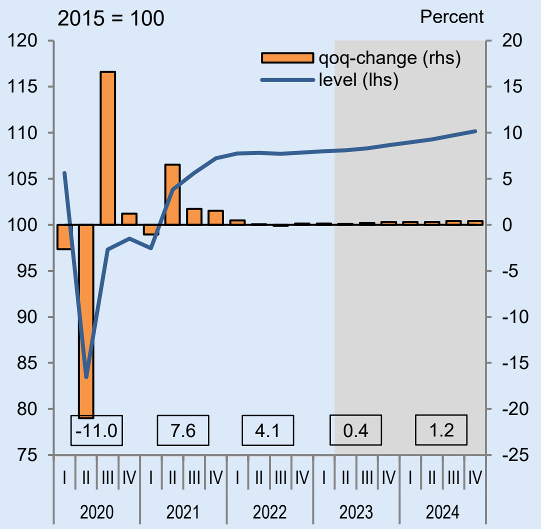
	2021	2022	2023	2024
Gross Domestic Product	5.3	3.5	0.6	1.7
Domestic expenditure	4.1	3.9	-0.1	1.8
Private consumption	3.7	4.5	0.6	2.6
Government consumption	4.3	1.4	-0.3	1.1
Gross fixed capital formation	4.0	3.8	-0.2	1.0
Inventories	0.2	0.3	-0.3	0.0
Net exports	1.2	-0.2	0.7	-0.1
Exports	10.5	7.3	1.7	3.5
Imports	8.3	8.4	0.3	3.9
Consumer prices	2.6	8.4	5.5	2.4
Unemployment rate	7.8	6.8	6.6	6.4
Current account balance	2.3	-1.3	2.5	2.0
Government budget balance	-5.4	-3.5	-3.8	-3.3

GDP: volumes, change over previous year, percent. Net exports, inventories: contribution to growth, percentage points. Unemployment rate: unemployed in relation to labor force, percent. Current account balance, government budget balance: percent of nominal GDP.

Source: Eurostat, *National Accounts*; Kiel Institute calculations; shaded: Kiel Institute forecast.

5. United Kingdom

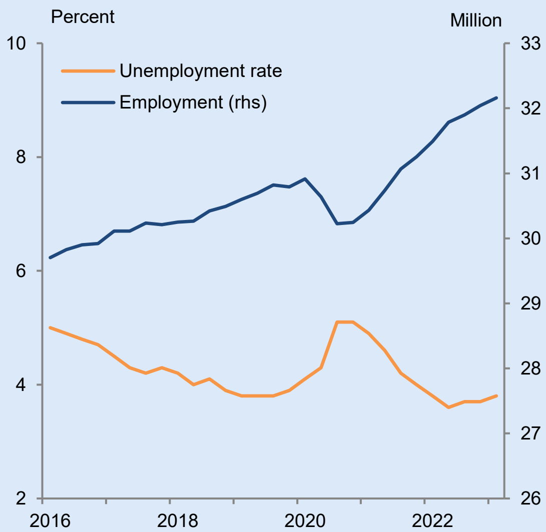
Figure 5.1:
GDP



Quarterly data, price, seasonally and calendar adjusted, qoq-change; annual rate of change (boxes).

Source: Cabinet office, *National Accounts*; shaded: IfW forecast.

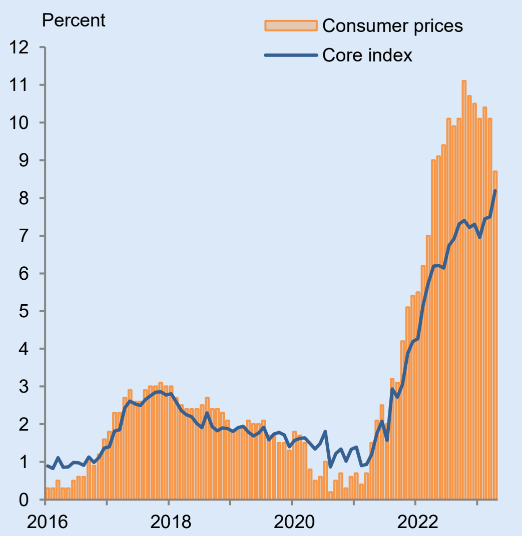
Figure 5.2:
Labor market



Quarterly data, seasonally adjusted.

Source: Office for National Statistics, *Economy*.

Figure 5.3:
Consumer prices



Monthly data, change over previous year. Core rate: consumer prices excluding energy and fresh food.

Source: Office for National Statistics, *Economy.*

Table 5.1:
Key indicators United Kingdom

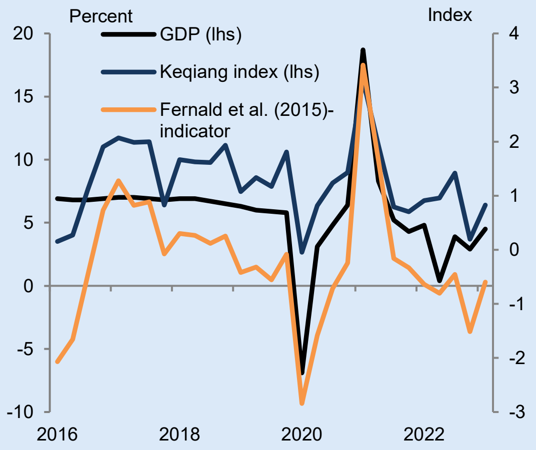
	2021	2022	2023	2024
Gross Domestic Product	7.6	4.1	0.4	1.2
Domestic expenditure	8.6	5.8	-0.4	1.0
Private consumption	6.3	5.6	-0.2	1.3
Government consumption	12.5	1.8	-2.5	-0.5
Gross fixed investment	6.1	8.8	0.5	1.5
Inventories	1.3	-0.9	-0.5	0.0
Net exports	-1.2	-1.5	0.7	0.0
Exports	2.2	9.9	-1.5	2.0
Imports	6.2	13.3	-3.5	1.9
Consumer prices	2.3	9.1	7.2	0.1
Unemployment rate	4.5	3.7	4.4	4.5
Current account balance	-2.0	-7.3	-8.0	-5.5
Government budget balance	-8.2	-4.8	-4.8	-3.6

Percent. GDP: volumes, change over previous year, percent. Net exports, inventories: contribution to growth, percentage points. Unemployment rate: unemployed in relation to labor force. Current account balance, government budget balance: percent of nominal GDP.

Source: Office for National Statistics, *Economy;* shaded: Kiel Institute forecast.

6. China

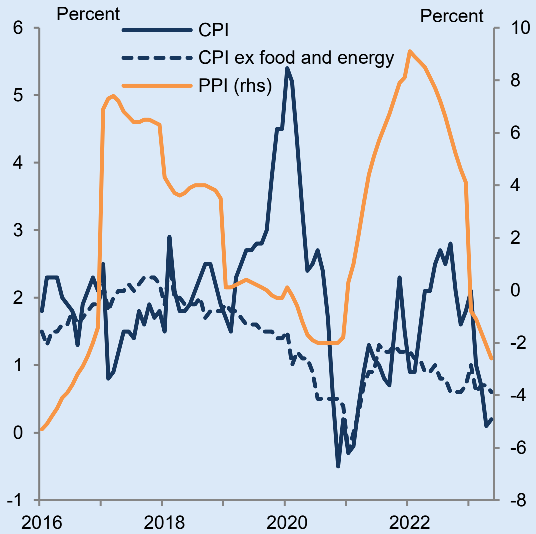
Figure 6.1:
GDP and alternative activity indicators



Quarterly data. GDP: year-on-year percentage change; Keqiang-index: arithmetic mean of the year-on-year growth rates of bank lending, electricity consumption and freight cargo; Fernald et al. (2015)-indicator: first principal component of the year-on-year growth rates of electricity production, railway cargo, retail sales and raw material prices (see Fernald et al. (2015). *Is China Fud-ging its Figures? Evidence from Trading Partner Data.* Federal Reserve Bank of San Francisco, Working Paper 2015-12).

Source: National Bureau of Statistics; People's Bank of China; Kiel Institute calculations.

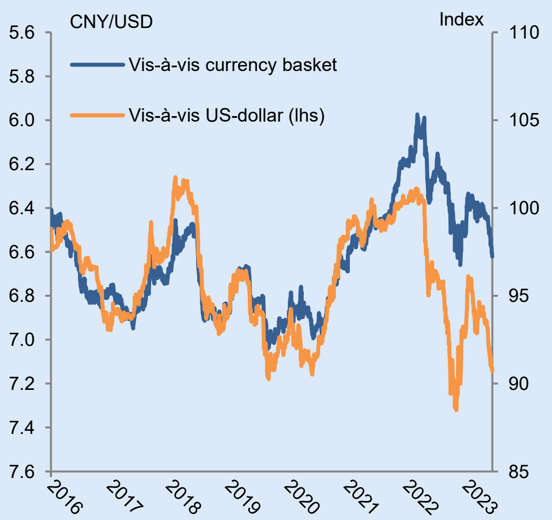
Figure 6.2:
Inflation



Monthly data; y-o-y growth rate. Core index: CPI excluding food and energy.

Source: National Bureau of Statistics.

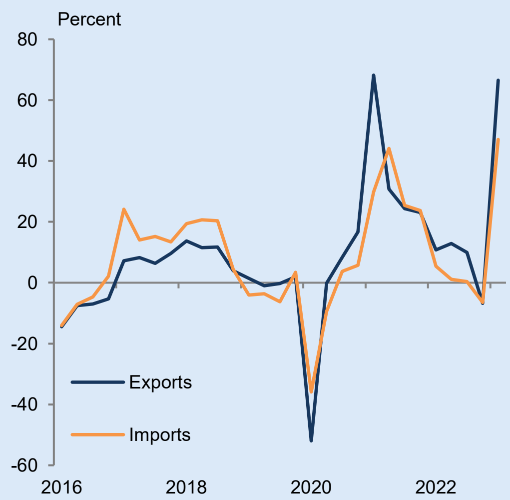
Figure 6.3:
Exchange rates



Daily data.

Source: Thomson Reuters; China Foreign Exchange Trade System; Kiel Institute calculations.

Figure 6.4:
Foreign trade

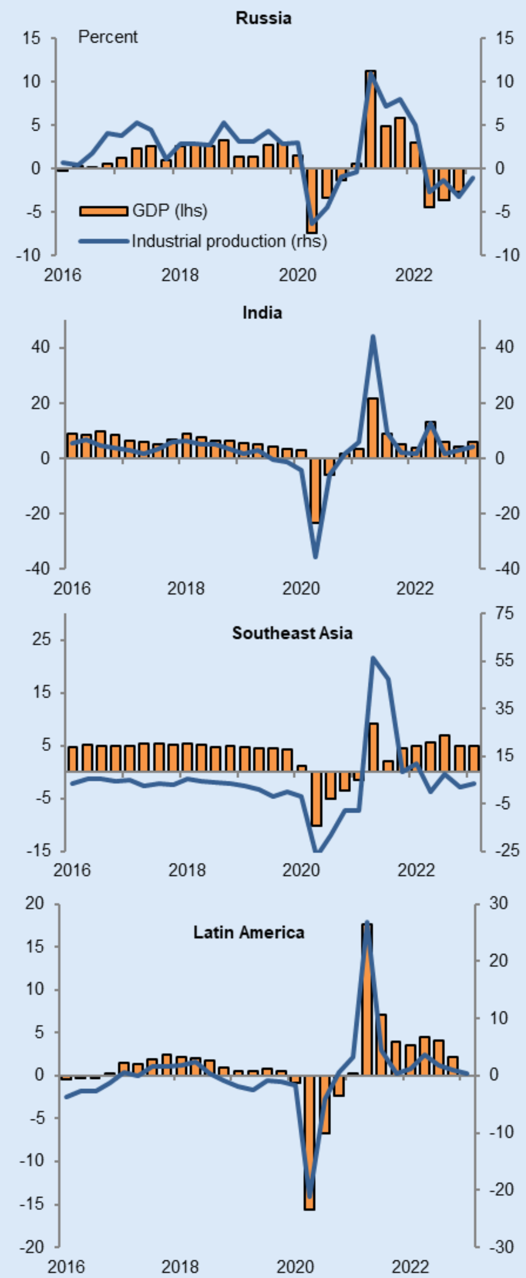


Change on a year ealier based on quarterly averages.

Source: General Administration of Customs China

7. Emerging Economies

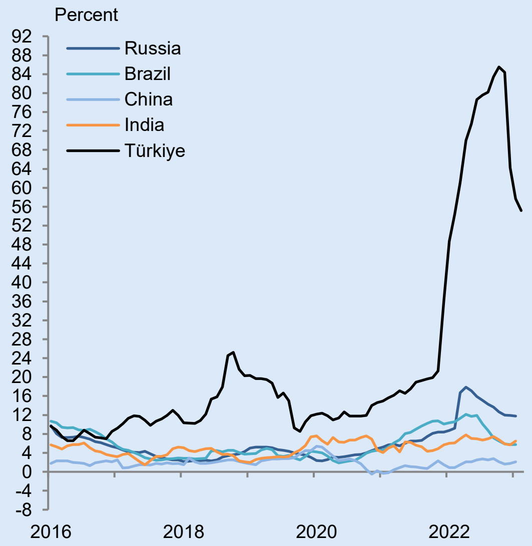
Figure 7.1:
GDP and industrial production in emerging economies



Quarterly data; volumes; seasonally adjusted; change over previous year; Southeast Asia: GDP-weighted average of Indonesia, Thailand, Malaysia and the Philippines; Latin America: GDP-weighted average of Argentinia, Brasil, Chile, Colombia, Mexico and Peru.

Source: IMF, *International Financial Statistics*; national statistical offices; Kiel Institute calculations.

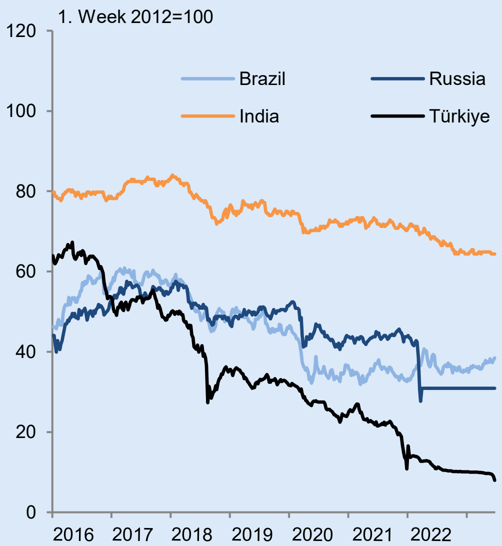
Figure 7.2:
Consumer prices



Monthly data; change over previous year.

Source: Federal State Statistics Service, *Russia*; IBGE, *Brazil*; National Bureau of Statistics, *China*; Labour Bureau, *India*.

Figure 7.3:
US-dollar exchange rates



Weekly data.

.

Source: Thomson Reuters Datastream

8. Forecast summary

Tabelle 8.1:
Real gross domestic product, consumer prices and unemployment rate in advanced economies

	Weights	Real GDP				Consumer prices				Unemployment rate			
		2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
European Union	40.7	5.4	3.6	0.7	1.8	2.9	9.2	6.4	2.7	7.1	6.2	6.0	5.8
Euro area	34.8	5.3	3.5	0.6	1.7	2.6	8.4	5.5	2.4	7.8	6.8	6.6	6.4
Sweden	0.9	5.9	2.9	0.9	1.6	2.7	8.1	6.3	2.5	8.8	7.5	7.3	7.0
Poland	2.3	6.8	5.4	2.7	3.6	5.3	13.2	10.5	4.4	3.4	2.9	2.7	2.5
United Kingdom	5.1	7.6	4.1	0.4	1.2	2.6	9.1	7.2	3.4	4.5	3.7	4.4	4.5
Switzerland	1.0	4.2	2.1	0.7	1.3	0.6	2.8	2.3	1.4	5.1	4.4	4.6	4.6
Norway	0.6	4.0	3.2	1.6	2.2	3.5	5.8	5.2	3.3	4.4	3.3	3.4	3.5
United States	35.0	5.9	2.1	1.3	0.8	4.7	8.0	4.1	2.6	5.4	3.6	3.7	4.2
Canada	3.1	5.0	3.4	1.2	1.3	3.4	6.8	3.9	2.5	7.4	5.3	5.4	5.5
Japan	8.4	2.3	1.0	1.3	1.5	-0.2	2.5	2.7	2.0	2.8	2.7	2.6	2.5
South Korea	3.8	4.1	2.6	1.2	2.7	2.5	5.1	3.2	2.6	3.6	2.8	2.8	2.6
Australia	2.2	5.2	3.7	1.8	2.6	2.8	6.6	5.7	4.0	5.1	3.7	3.8	4.0
Total	100.0	5.3	2.8	1.0	1.5	3.2	7.8	5.0	2.7	5.8	4.6	4.6	4.7

Based on GDP at prices and exchange rates of 2022 in percent. Change over previous year in percent. European Union and Norway: Harmonized Index of Consumer Prices (HICP). Standardized unemployment rate in percent (ILO); country groups weighted according to the size of the labor force in 2022.

Source: Eurostat, VGR; OECD, Main Economic Indicators; IMF World Economic Outlook Database; Statistics Canada, Canadian Economic Account; shaded: Kiel Institute forecast.

Tabelle 8.2:
Real gross domestic product, consumer prices and unemployment rates in the European Union

	Weights	Real GDP				Consumer prices				Unemployment rate			
		2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Germany	24.5	2.6	1.9	-0.2	1.9	3.2	8.6	5.8	2.1	3.6	3.1	2.9	2.8
France	16.7	6.4	2.5	0.7	1.5	2.1	5.9	5.1	2.4	7.9	7.3	7.1	7.1
Italy	12.1	7.0	3.8	1.1	0.9	2.0	8.7	5.7	2.2	9.6	8.1	7.9	7.7
Spain	8.4	5.5	5.5	2.1	2.1	3.0	8.3	4.5	2.8	14.8	12.9	12.7	12.0
Netherlands	6.0	4.9	4.5	0.3	1.6	2.8	11.6	5.0	2.7	4.2	3.5	3.4	3.2
Belgium	3.5	6.3	3.3	1.1	1.3	3.2	10.3	4.5	2.5	6.3	5.6	5.6	5.5
Austria	2.8	4.7	5.0	0.7	1.2	2.8	8.6	6.7	2.8	6.2	4.8	5.0	4.9
Ireland	3.2	13.4	12.1	-0.8	4.3	2.4	8.1	4.9	2.1	6.3	4.5	3.9	3.7
Finland	1.7	3.1	2.1	0.0	1.3	2.1	7.2	4.8	2.5	7.7	6.8	6.9	6.7
Portugal	1.5	5.5	6.7	2.6	1.9	0.9	8.1	7.0	3.3	6.6	6.0	6.8	6.6
Greece	1.3	8.1	6.0	1.8	2.7	0.6	9.3	5.3	2.8	14.8	12.5	11.1	10.6
Slovak Republic	0.7	4.9	1.7	1.2	2.2	2.8	12.1	10.9	3.8	6.8	6.2	6.1	5.8
Luxembourg	0.5	5.1	1.6	0.5	2.0	3.5	8.2	3.2	2.2	5.4	4.6	4.9	4.7
Kroatien	0.4	12.7	6.3	2.7	3.4	2.7	10.7	9.5	4.2	7.6	6.8	6.5	6.1
Slovenia	0.4	8.3	5.7	1.5	2.9	2.1	9.3	7.2	3.7	4.8	4.0	3.6	3.4
Lithuania	0.4	5.9	1.9	-1.6	2.7	4.6	18.9	9.7	3.7	7.1	5.9	6.7	6.5
Latvia	0.2	4.0	2.8	1.5	2.6	3.2	17.2	11.2	4.0	7.6	6.9	5.8	5.3
Estonia	0.2	8.1	-1.0	-1.9	2.6	4.5	19.5	10.7	3.4	6.2	5.6	5.9	6.1
Cyprus	0.2	6.6	5.6	3.5	2.8	2.3	8.1	3.8	2.2	7.5	6.8	5.8	5.3
Malta	0.1	11.6	7.1	2.1	2.8	0.7	6.1	5.8	3.2	3.4	2.9	2.8	2.7
Sweden	3.5	5.9	2.9	0.9	1.6	2.7	8.1	6.3	2.5	8.8	7.5	7.3	7.0
Poland	4.2	6.8	5.4	2.7	3.6	5.3	13.2	10.5	4.4	3.4	2.9	2.7	2.5
Denmark	2.4	4.9	3.8	1.5	1.6	1.9	8.5	4.5	2.1	5.1	4.5	4.7	4.7
Czech Republic	1.7	3.5	2.5	0.2	2.6	3.3	14.8	10.9	3.8	2.8	2.4	2.5	2.5
Romania	1.8	5.9	4.2	2.6	3.8	4.1	12.0	9.1	4.7	5.6	5.6	5.6	5.4
Hungary	1.1	7.2	4.6	-0.4	2.9	5.2	15.3	16.0	4.6	4.0	3.6	4.0	4.3
Bulgaria	0.5	7.1	3.8	2.3	3.7	2.8	13.0	9.0	4.0	5.3	4.3	3.9	3.8
European Union	100.0	5.4	3.6	0.8	1.9	2.9	9.2	6.4	2.7	7.1	6.2	6.0	5.8
Addendum:													
European Union 11	88.0	5.3	3.6	0.6	1.7	2.5	8.2	5.4	2.4	7.8	6.8	6.6	6.4
Accession countries	12.0	6.3	4.2	1.6	3.2	4.4	13.2	10.4	4.3	4.6	4.1	4.0	3.9
Euro Area	84.7	5.3	3.6	0.6	1.7	2.6	8.4	5.5	2.4	7.8	6.8	6.6	6.4
Euro Area without Germany	60.3	6.5	4.2	0.9	1.7	2.3	8.3	5.4	2.6	9.2	8.0	7.9	7.6

Based on GDP at prices and exchange rates of 2022 in percent. Change over previous year in percent. Harmonized Index of Consumer Prices (HICP). Standardized unemployment rate in percent (ILO); country groups weighted according to the size of the labor force in 2022. Accession countries since 2004.

Source: Eurostat, National Accounts; shaded: IfW forecast.

Tabelle 8.3:
Real gross domestic product and consumer prices in selected emerging market economies

	Weights	Real GDP				Consumer prices			
		2021	2022	2023	2024	2021	2022	2023	2024
Indonesia	5.5	3.7	5.3	5.0	5.1	1.6	4.2	4.2	2.9
Thailand	2.0	2.6	3.4	3.7	3.2	1.2	6.1	2.9	2.1
Malaysia	1.6	3.1	8.7	4.4	4.4	2.5	3.4	3.0	2.9
Philippines	1.6	5.7	7.6	5.9	5.6	3.9	5.8	6.2	3.1
Total	10.7	3.7	5.8	4.8	4.7	2.0	4.7	4.1	2.8
China	41.4	8.6	3.1	5.6	4.7	0.9	2.0	1.8	2.4
India	16.3	8.9	6.7	6.6	6.9	5.1	6.7	4.5	4.9
Asia total	68.4	7.9	4.4	5.7	5.2	2.1	3.5	2.8	3.1
Brazil	5.3	5.3	3.0	2.6	1.1	8.3	9.3	5.1	4.0
Mexico	4.1	4.9	3.1	2.3	1.4	5.7	7.9	5.2	3.2
Argentina	1.7	10.4	5.6	-3.2	-0.8	48.4	72.4	108.4	120.0
Colombia	1.3	10.7	7.5	2.3	1.9	3.5	10.2	11.5	4.5
Chile	0.8	11.9	2.5	0.5	1.8	4.5	11.6	7.7	3.7
Peru	0.7	13.6	2.7	1.6	2.2	4.0	7.9	6.9	3.8
Latin America total	13.8	7.1	3.7	1.6	1.1	11.5	16.7	18.5	17.8
Egypt	2.3	3.2	6.6	4.2	4.5	4.5	10.1	20.0	25.0
Nigeria	1.8	3.6	3.3	3.0	3.2	17.0	18.8	20.0	17.5
South Africa	1.3	4.9	2.3	1.4	1.2	4.6	7.0	5.6	4.7
Algeria	0.8	3.5	2.9	2.5	2.5	7.2	9.7	9.0	8.5
Ethiopia	0.5	6.3	6.4	6.0	5.5	26.8	34.0	30.0	24.0
Africa total	6.6	3.9	4.4	3.3	3.3	9.8	13.5	16.6	17.0
Russia	6.5	4.6	-2.1	1.0	0.5	5.9	13.8	10.0	10.0
Tyrkiye	4.6	11.4	5.6	3.5	4.0	19.6	72.0	45.0	30.0
Total	100.0	7.5	3.9	4.6	4.2	4.9	9.8	8.3	7.7

In percent. Weights: According to 2022 GDP at purchasing power parities. — GDP: price adjusted; changes compared to the previous year. — Consumer prices: changes compared to the previous year. — Asia total, Latin America total: based on listed countries.

Source: IMF, International Financial Statistics; OECD, Main Economic Indicators; national statistics; Kiel Institute calculations; shaded: Kiel Institute forecast.