


KIEL INSTITUTE **ECONOMIC OUTLOOK**

World Economy
Autumn 2023

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

Forecasting Center

GLOBAL ECONOMY REMAINS ON TRACK DESPITE SIGNIFICANT HEADWINDS

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

The global economy has expanded at a very moderate pace so far in 2023, but stayed clear of the recession predicted by many for the advanced economies as a result of the massive tightening of monetary policy. In the United States in particular, the economy is proving surprisingly robust. By contrast, economic momentum in China has recently fallen short of expectations and is likely to remain subdued amid structural problems. Overall, we expect global production – measured on a purchasing power parity basis – to increase by 3.0 percent this year, with growth next year likely to be somewhat lower at 2.8 percent. Compared to our June forecast, we have revised growth upward by 0.2 percentage points for 2023 and downward by 0.2 percentage points for 2024. For 2025, we expect the global economy to pick up and to reach a growth rate of 3.2 percent. Unemployment in the advanced economies will increase slightly going forward, although it will remain low by historical standards. Inflation has recently fallen significantly, mainly as a result of lower commodity prices. While underlying inflation has remained high for the most part, we expect an easing of the situation to become increasingly apparent in the coming months. Nonetheless, inflation rates are not expected to fall sustainably to levels close to the targets before 2025.

Economic environment

Global production picked up in the first half of 2023, although momentum remained low. After solid growth in the first quarter, the global economy slowed down again in the second quarter both in the advanced economies and in the emerging economies. Business sentiment, which had brightened noticeably around the turn of the year against the backdrop of lower inflationary pressure, easing supply chain problems and the departure from the zero-Covid policy in China, deteriorated again in the spring and remained subdued to date. The global economic climate indicator calculated by IfW Kiel on the basis of sentiment indicators from 42 countries suggests slow growth continuing for the time being (Figure 1).

Industrial production remained stagnant despite the economic opening in China, and world trade is trending downward. The slight increase in global industrial production recorded in the first months of this year, mainly due to a return to significantly higher production in China, did not continue in spring. In June, output was slightly lower compared to both February and March as well as the same month in the previous year.

While production in the advanced economies was almost 2 percent lower, the emerging economies still produced slightly more than a year earlier. World trade is also weak: Overall, it was slightly down in the first half of the year, in the advanced economies quite substantially so (Figure 2).

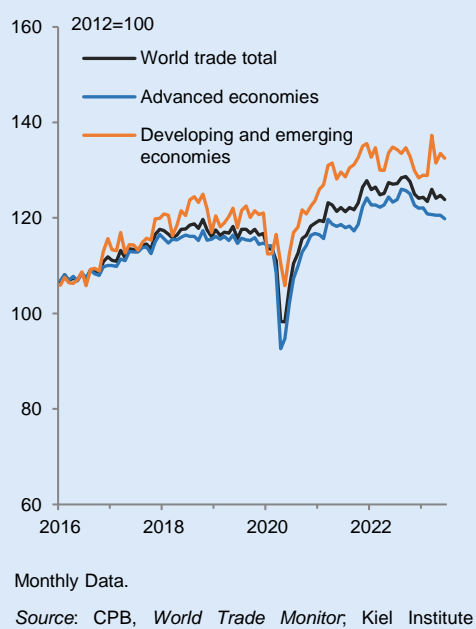
Figure 1:
World Economic Activity



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.

**Figure 2:
World Trade**



In the advanced economies growth remained sluggish.

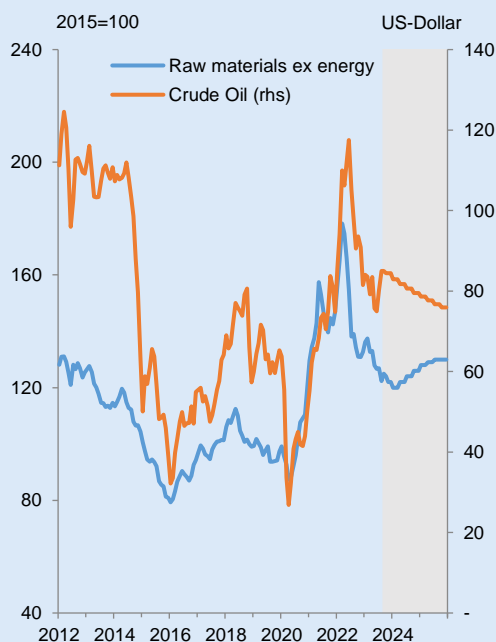
In the second quarter, GDP in the group of advanced economies increased at a moderate pace, in line with previous quarters. The pace of expansion in the United States remained stable at a rate of 0.5 percent, roughly in line with growth in potential output. In Europe, too, there was little change in economic momentum, but at a significant lower level: Both in the euro zone and the United Kingdom little more than stagnation has been recorded in the year to date. However, private consumption has recently picked up again after real incomes increased noticeably as inflation slowed and wage growth accelerated significantly. By contrast, GDP in Japan grew very strongly at a rate of 1.5 percent, although the increase was almost exclusively due to a strong expansion in exports and therefore probably overstates the underlying momentum. Overall, economic activity in the advanced economies is proving surprisingly robust in view of the considerable headwinds, last year from higher raw material prices and severe tensions in supply chains and now from the pronounced tightening of monetary policy.

Advanced economies have recovered to varying degrees from the crises of recent years. A comparison of the development of GDP and key expenditure components shows that among the major advanced economies, the United States in particular has now more or less fully recovered the losses suffered in the Corona crisis, mainly due to a strong expansion in private consumption. By contrast, the European countries - as well as Japan - have only just reached the production level of the pre-crisis year 2019 and thus remain well below the previous growth trend, with the United Kingdom and Germany lagging behind. It is important to note that last year's energy crisis, the associated dramatic rise in natural gas and electricity prices and the resulting uncertainty among consumers and companies affected Europe to a much greater extent than the United States, which as an exporter of energy commodities was even benefitting from terms-of-trade gains.

In the emerging economies, output growth slowed mainly as a result of weakening momentum in China. Expectations of a sustained strong upturn in China following the removal of extensive infection control measures at the end of last year were not fulfilled. Although output grew strongly by more than 2 percent in the first quarter, there were already increasing signs of a slowing economy in the spring: weak foreign trade figures, hardly any growth in industrial production, deteriorating business sentiment and uncertainty among private households signaled weakening economic momentum with little indication of improvement to date. Only a 0.8 percent increase in GDP was reported for the second quarter. In the other emerging markets, by contrast, the economy has recently continued to expand quite strongly. Growth was particularly strong in India, but economic activity in Brazil and Mexico also surprised on the upside. In Russia, the statistical office reported a further increase in output. According to official estimates, GDP has recovered the pre-war level in the second quarter with growth of 4.9 percent compared to the same quarter in 2022, when there had been a slump in economic activity in the wake of the start of hostilities against Ukraine.

Raw material prices are no longer unusually high despite their recent increases, and are expected to ease somewhat in the forecast period. The overall situation in the commodity markets has eased during the current year. Prices for non-energy raw materials tended to fall further and were most recently back at the level seen at the end of 2020, when the post-Covid commodity boom began. Prices for steel and copper, as well as for other non-ferrous metals, have failed to sustain increases, notwithstanding the opening of the Chinese economy, given the low momentum in industrial production.

Figure 3:
Raw material prices



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

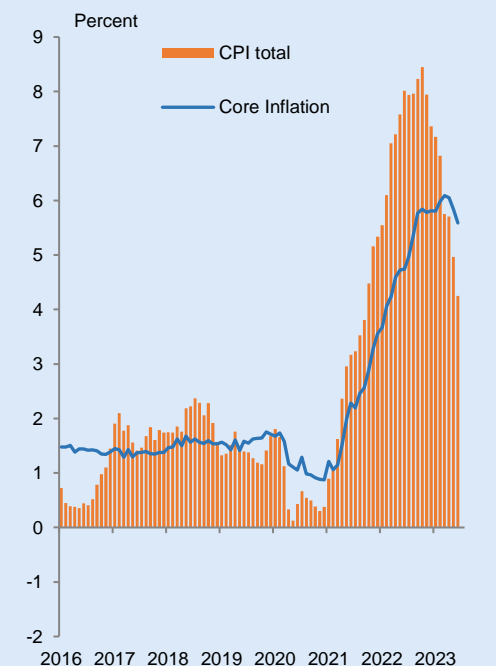
Source: International Petroleum Exchange; HWWI,

Food prices have also fallen noticeably in the course of the year. Even the termination of the agreement on the export of Ukrainian foodstuffs on conventional routes through Russia at the beginning of July has only temporarily pulled up the price of wheat. However, the oil price rose sharply in July when Saudi Arabia enacted a voluntary production cut of 1 million barrels a day (1 percent of world production) on top of OPEC's decision to maintain its reduced quotas into next year. As a result, the price of a barrel of Brent crude increased by around \$10 to around 85 US-Dollar. Starting from this level, we expect prices to fall gradually over the forecast period in line with financial markets (Figure 3). The price level on the European gas market has also recently risen again and reached just under 50 euros per megawatt hour (TTF), a level around twice as high as in the years before the crisis.

Inflation has been falling, so far mainly as a result of lower energy prices. The upward pressure on prices has recently eased worldwide. In the G7 countries, the inflation rate fell from 8.4 percent in October 2022 to 4.1 percent (July 2023) (Figure 4). A key factor in the decline was a smaller contribution from the energy component. Most recently, there even was some relief from this side. By contrast, the core rate of inflation (consumer prices excluding energy and food) has so far decreased only slightly. Only in the United States has the month-on-month increase in the core index recently decreased significantly.

Central bank interest rates are likely to be raised only slightly, but will remain elevated for some time. The major central banks in the advanced economies reacted to the sharp rise in inflation quite late, but then with interest rate increases that are very steep by historical standards. In the United States, the target for the federal funds rate is now 5.25 to 5.5 percent. The Federal Reserve is now unlikely to raise interest rates further because inflation has fallen sharply, including most recently the core component, which rose month-on-month at an annualized rate of around 2 percent in June and July. The Federal Reserve is likely to keep policy rates at current levels through April 2024 to ensure that the slowdown in inflation is sustainable (Figure 5). The European Central Bank (ECB), which began raising interest rates about six months later than the Federal Reserve, is likely to take another interest rate step of 0.25 percentage points in September in view of still stubbornly high inflation. The main refinancing rate will then reach a level of 4.25 percent, as it was at the peak of the interest rate cycle in

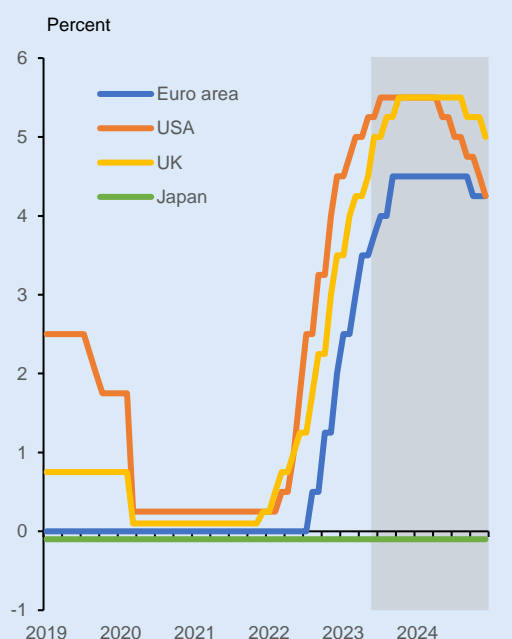
Figure 4:
CPI Inflation in Industrial Countries



Monthly Data; yoy change.

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

Figure 5:
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.

2008. The Bank of England is also expected to raise its key rate once again, to 5.5 percent. The ECB and the

Bank of England are also likely to follow the U.S. Federal Reserve with a delay in the interest rate cuts expected for the forecast period. All three central banks are additionally increasing the degree of restriction of monetary policy through quantitative tightening.

In the emerging economies, some central banks are already cutting rates while others are still tightening. Many emerging economies – similar to most countries in Eastern Europe – have started raising interest rates early. Some central banks, such as those in India, South Korea or Indonesia, have been on hold since the beginning of the year, while others, such as those in Colombia or South Africa, raised their rates again in the second quarter. Sharp rate hikes were made in Russia and Turkey in the summer in order to stabilize the exchange rate and curb inflation that was accelerating again. In Argentina, where the aim is to get galloping inflation under control, the key interest rate was even raised by more than 20 percentage points in August. By contrast, in neighboring Chile and Brazil, the rate-cutting cycle has begun. In China, too, monetary policy has been eased several times amid economic weakness and softening

prices. For the emerging economies, we now expect more and more countries to cut interest rates, but these will be cautious for the time being. Only when the Federal Reserve begins to reduce its interest rates in spring 2024, as expected, are such steps likely to be more pronounced in the emerging economies as well.

The supportive effects of fiscal policy are fading. Although pronounced consolidation efforts are currently lacking, government budgets are being relieved by the fact that energy prices have fallen again. In Europe in particular, but also in Japan, economic policy has sought to limit the impact of the energy crisis on households and companies. Many of these measures are now coming to an end and are likely to be replaced only in part by follow-up programs. On the other hand, defense spending is likely to increase significantly in view of the changed geopolitical situation. Longer-term programs to promote infrastructure and in particular an expansion of renewable energies are continued to be implemented, but are unlikely to provide additional fiscal stimulus over the forecast period. Overall, we expect fiscal policy to have a moderate dampening effect in 2024 and 2025.

Outlook: Global economic expansion continues to be slow for the time being

Important underlying conditions have improved. The disruptive factors, which last year ended the recovery from the Covid crisis – prematurely in many countries – have largely disappeared: Commodity prices and in particular those for energy have fallen significantly again and, as a result, inflation has decreased. With the abandonment of the zero-Covid policy in China, demand not only picked up there, but supply bottlenecks have diminished, which had been to a large extent triggered by the stop-and-go of Chinese production. Thanks to easing inflation and rising average earnings, real wages are no longer falling or are even increasing significantly.

At the same time, the tightening of monetary policy is increasingly weighing on growth. The sharp rise in key interest rates has led to significantly higher financing costs and is curbing the propensity to spend. In the United States, the yield curve is inverted so sharply and persistently that past experience would suggest this is a strong signal of an impending recession. The fact that we are nevertheless not predicting a significant economic contraction is mainly due to the unusually large financial cushion built up by private households thanks to massive government income transfers during the Covid crisis. In the United States in particular, the extra savings accumulated during the pandemic have already been used in the past year to maintain consumption levels in the face of shrinking real incomes, but only partially so that they are likely to continue to have a stabilizing effect for some time to come. Moreover, unlike in earlier phases of monetary tightening, such as before the great financial crisis of 2008 or before the bursting of the dotcom bubble at the beginning of the millennium, no major imbalances appear to have built up in the corporate sector in the advanced economies, so there are no signs of a consolidation recession for the time being.

The Chinese economy is weakening and increasingly is a risk to the global economy. Whereas during past global economic downturns, such as the Great Recession of 2009 or the Covid crisis of 2020, China was a stabilizer for global activity by unleashing demand and providing stimulus via external trade, economic momentum in the Chinese economy is currently low. Unlike in advanced economies, corporate and household debt has risen massively in recent years, and substantial overcapacities have emerged in the construction sector. Falling real estate prices and collapsed financing models are slowing activity and unsettling private households, whose propensity to consume is falling as a result. Although we expect the government to succeed in containing the crisis and gradually restoring the confidence of private households and companies, we do not expect the problems with the real estate market to go away soon. Thus it is possible that problems will become worse, resulting in an even sharper economic slowdown, which would have a significant negative impact on the global economy given China's great importance as a buyer of raw materials and processed products.

The global economy is expanding at a moderate pace for the time being and only gradually gaining momentum going forward. After growing by 3.3 percent in 2022, which is roughly in line with the medium-term trend rate, global output is expected to increase by only 3.0 and 2.8 percent this year and next (Table 1). We expect growth to accelerate to 3.2 percent in 2025. We have thus revised our forecast for 2023 upward by 0.2 percentage points compared with our June forecast, while that for 2024 has been revised downward by 0.2 percentage points. Based on market exchange rates, rates of change in global output are 2.6 percent this year and 2.4 percent next year, and 2.7 percent in 2025. Global merchandise trade is expected to contract by 1.7 percent in 2023 and increase only weakly by 1.5 percent next year. For 2025, we project a recovery with growth of 2.9 percent.

In the advanced economies, expansion will remain subdued. The most important factor holding back the economies is the deterioration in monetary conditions. In residential construction, the effects of higher interest rates have already been felt for some time, particularly strongly in the United States, but also in some European countries, not least Germany. In the United States, however, housing construction already seems to be stabilizing again and house prices have recovered. In Germany, too, the decline in house prices has apparently come to a halt recently, and in other European countries they have fallen little or not at all so far. A stabilizing effect is likely to come from private consumption, which should increase noticeably in view of the renewed rise in real incomes and a robust labor market. All in all, GDP growth in the advanced economies is likely to expand quite steadily, albeit moderately, by 1.4 percent this year and next, and 1.6 percent in 2025 (Table 2). Inflation at the consumer level continues to decline, considering the outlined assumptions with respect to the future development of commodity prices, and is expected to be close to the central banks' target of 2 percent again by the end of 2025. Against this backdrop, unemployment is likely to rise somewhat initially, but it is likely to move back towards the end of the forecast period towards the generally very low levels recorded recently.

Tabelle 1:
Gross domestic product and consumer prices in the world

	Gewicht	Bruttoinlandsprodukt				Verbraucherpreise			
		2022	2023	2024	2025	2022	2023	2024	2025
World economy total including	100	3.3	3.0	2.8	3.2	9.4	7.8	6.4	5.1
Advanced economies	59.4	2.6	1.5	1.4	1.6	7.4	4.8	2.6	2.1
China	18.5	3.2	4.9	4.5	4.9	2.0	1.1	2.5	2.8
Latin America	4.7	3.6	1.9	1.3	2.0	16.9	21.4	19.9	14.2
India	7.3	6.7	7.3	6.7	6.9	6.7	5.8	5.2	4.9
East Asian emerging economies	5.0	4.6	3.5	3.9	4.1	4.8	4.6	3.1	2.5
Russia	2.9	-2.1	2.0	0.5	0.4	13.8	7.0	8.0	5.0
Africa	2.4	3.4	4.2	3.6	3.8	14.6	14.5	14.6	13.6
<i>Memorandum item:</i>									
World trade volume (goods)		3.2	-1.7	1.5	2.9				
World economy (GDP weights using current US-dollar exchange rates)		3.0	2.5	2.3	2.7	7.7	5.9	4.5	3.6

Prozent. Gewicht: gemäß Bruttoinlandsprodukt im Jahr 2022 nach Kaufkraftparität. — Bruttoinlandsprodukt, Verbraucherpreise: Veränderungen gegenüber dem Vorjahr; Ostasiatische Schwellenländer: Thailand, Malaysia, Indonesien und Philippinen; Fortgeschrittene Länder: Die Werte stimmen nicht notwendigerweise mit denen in Tabelle 3 überein, da der Länderkreis hier breiter gefasst ist und ein anderes Konzept bei der Gewichtung verwandt wird.

Quelle: IMF, *International Financial Statistics*; OECD, *Main Economic Indicators*; Berechnungen des IfW Kiel; grau hinterlegt: Prognose des IfW Kiel

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

	Weights	Real GDP				Consumer prices				Unemployment rate			
		2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
European Union	40.7	3.4	0.5	1.4	1.8	9.2	6.5	2.9	2.4	6.2	6.0	5.8	5.5
Euro area	34.8	3.4	0.6	1.4	1.7	8.4	5.6	2.6	2.2	6.8	6.5	6.3	5.9
Sweden	0.9	2.9	-1.3	0.7	1.7	8.1	6.4	2.5	2.2	7.5	7.3	7.1	6.7
Poland	2.3	5.4	-0.5	1.9	3.7	13.2	11.1	4.4	2.9	2.9	2.8	2.6	2.5
United Kingdom	5.1	4.1	0.5	1.0	1.7	9.1	7.4	3.5	2.4	3.7	3.7	4.4	4.5
Switzerland	1.0	2.1	0.7	1.3	1.5	2.8	2.4	1.0	0.8	4.3	4.4	4.6	4.6
Norway	0.6	3.2	1.4	1.5	2.2	5.8	5.5	3.5	2.8	4.4	3.3	3.4	3.5
United States	35.0	2.1	2.0	1.3	1.3	8.0	4.1	2.5	1.9	3.6	3.6	3.9	4.2
Canada	3.1	3.4	1.5	1.1	1.1	5.0	3.7	2.7	2.0	5.3	5.4	5.8	6.0
Japan	8.4	1.0	2.3	1.1	1.3	2.5	3.0	2.2	1.8	2.7	2.7	2.8	2.7
South Korea	3.8	2.6	1.3	2.6	2.9	5.1	5.1	3.1	2.0	2.8	3.0	2.9	2.8
Australia	2.2	5.2	3.7	1.8	2.6	6.6	5.7	3.5	2.8	3.7	3.8	4.3	4.2
Total	100.0	2.8	1.3	1.4	1.6	7.8	5.2	2.7	2.1	4.6	4.5	4.6	4.6

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.

Expansion in the emerging economies remains robust overall. While the low momentum in China is also having a dampening effect in other emerging countries via trade, most of the economies are being supported by domestic forces. For example, lower prices for food, which have a much higher weight in the basket of goods in developing and emerging countries than in the advanced economies, are benefiting consumers. In more and more countries, interest rates will also be reduced as inflation falls. The Indian economy is expanding particularly dynamically, where the growth losses suffered in the Corona crisis are gradually recovered. By contrast, production growth in Latin America is expected to slow again in the next two years (Table 3). The outlook for Russia is particularly uncertain. The burdens of the war are becoming increasingly visible in the national budget and in the current account balance, and the workforce is becoming increasingly stretched. Sustained economic expansion is difficult to achieve under these conditions.

Risks to the forecast lie primarily in the financial environment. While energy supply and energy prices continue to pose a risk to the forecast, markets have proved their ability to digest even major changes in underlying conditions. Currently, upside and downside risks to commodity prices appear to be balanced. Downside risks exist mainly in connection with the effects of monetary policy as well as the uncertainty around the developments in China. It is possible that companies are more concerned about consolidating their debt positions and are scaling back their investments more than expected.

Table 3:
Real gross domestic product and consumer prices in selected emerging market economies

	Weights	Real GDP				Consumer prices			
		2022	2023	2024	2025	2022	2023	2024	2025
Indonesia	5.5	5.3	4.9	4.8	5.0	4.2	4.4	3.0	2.7
Thailand	2.0	2.6	3.8	3.4	3.5	6.1	2.9	2.1	2.0
Malaysia	1.6	8.7	4.3	4.0	4.2	3.4	2.9	3.1	2.6
Philippines	1.6	7.6	5.9	5.8	5.9	5.8	6.3	3.2	3.0
Total	10.7	5.6	4.8	4.6	4.7	4.7	4.2	2.9	2.6
China	41.4	3.2	4.9	4.5	4.9	2.0	1.1	2.5	2.8
India	16.3	6.7	7.3	6.7	6.9	6.7	5.8	5.2	4.9
Asia total	68.4	4.4	5.4	5.0	5.4	3.5	2.7	3.2	3.3
Brazil	5.3	3.0	3.2	1.4	1.6	9.3	4.7	3.6	3.7
Mexico	4.1	3.0	2.3	1.4	2.0	7.9	5.2	3.4	3.7
Argentina	1.7	5.0	-2.6	-1.8	1.6	72.4	124.6	150.0	100.0
Colombia	1.3	7.3	1.2	1.6	2.4	10.2	11.5	4.5	4.1
Chile	0.8	2.5	-0.2	1.7	2.0	11.6	7.5	3.5	3.7
Peru	0.7	2.7	0.9	2.2	2.8	7.9	6.6	3.7	2.6
Latin America total	13.8	3.6	1.7	1.1	1.9	16.7	20.3	21.4	15.3
Egypt	2.3	6.6	6.6	4.2	4.5	8.5	10.1	20.0	25.0
Nigeria	1.8	3.3	3.0	3.2	3.5	18.8	22.5	25.0	20.0
South Africa	1.3	2.0	2.3	1.4	1.5	6.9	7.0	4.2	4.5
Algeria	0.8	2.9	2.5	2.5	2.5	9.3	9.7	8.5	8.5
Ethiopia	0.5	6.4	6.0	5.8	5.5	34.0	30.0	24.0	20.0
Africa total	6.6	4.4	4.3	3.3	3.5	12.9	14.2	17.1	17.3
Russia	6.5	-2.1	2.0	0.5	0.4	13.8	7.0	8.0	5.0
Tyrkiye	4.6	5.6	3.9	3.5	4.5	72.0	50.0	45.0	30.0
Total	100.0	3.9	4.5	4.0	4.4	9.8	8.3	8.9	7.2

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.

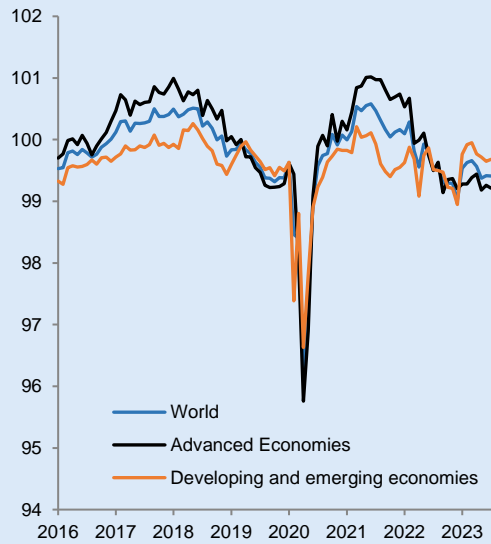
Data annex

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1. World Economy

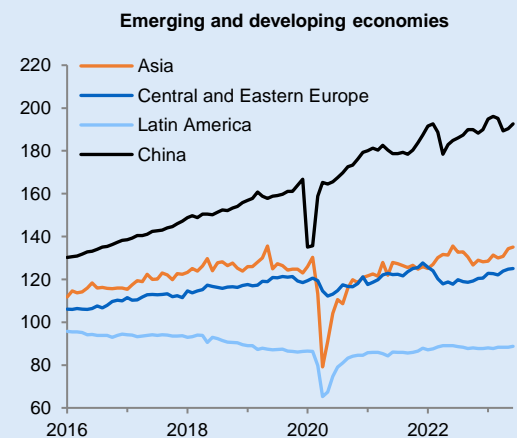
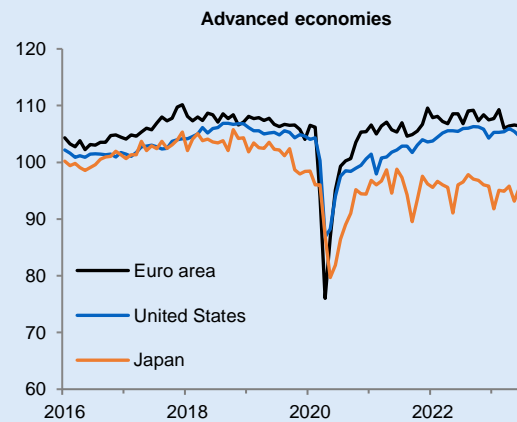
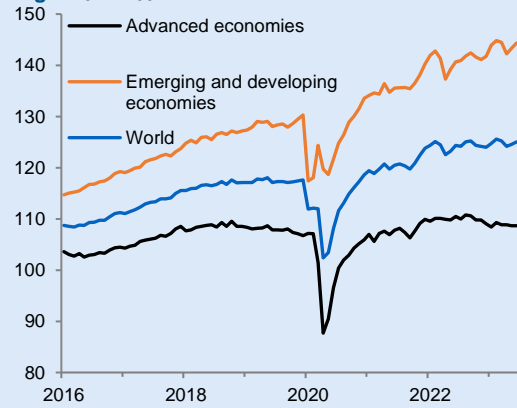
Figure 1.1:
Business expectations by groups of countries



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

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

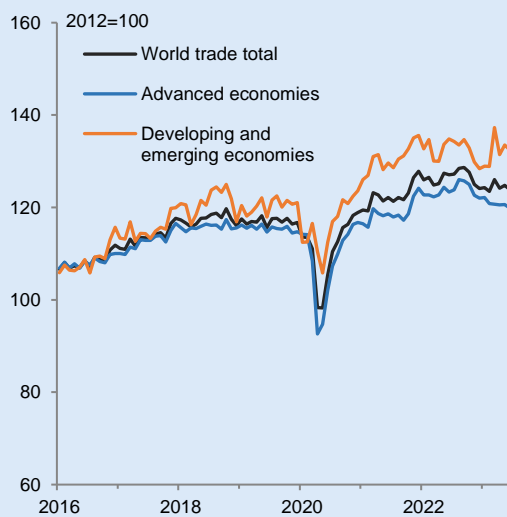
Figure 1.2:
Industrial production by groups of countries and regions
2012=100



Monthly data. Last value: June 2022.

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

Figure 1.3:
World Trade

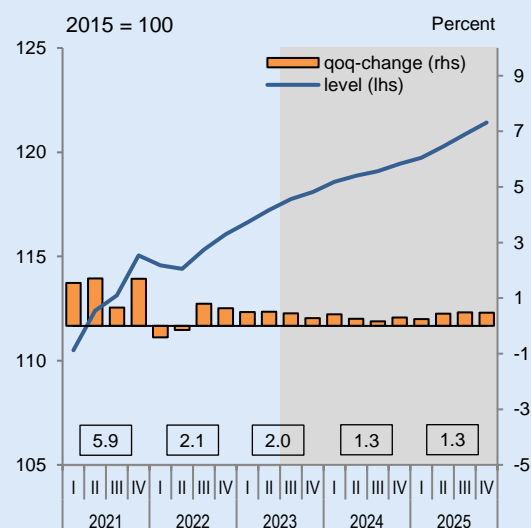


Monthly Data.

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

2. United States

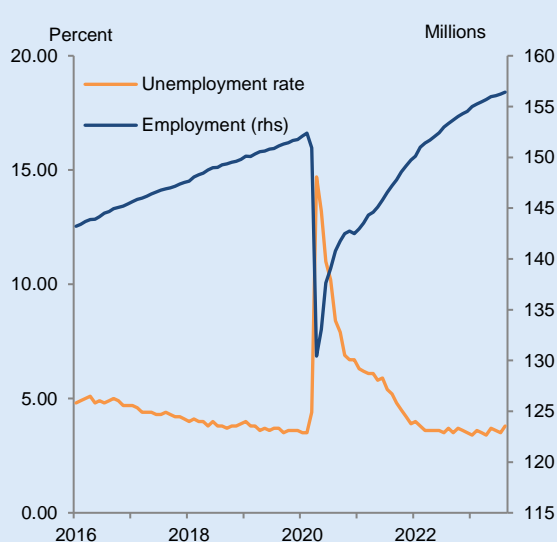
Figure 2.1:
GDP



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

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

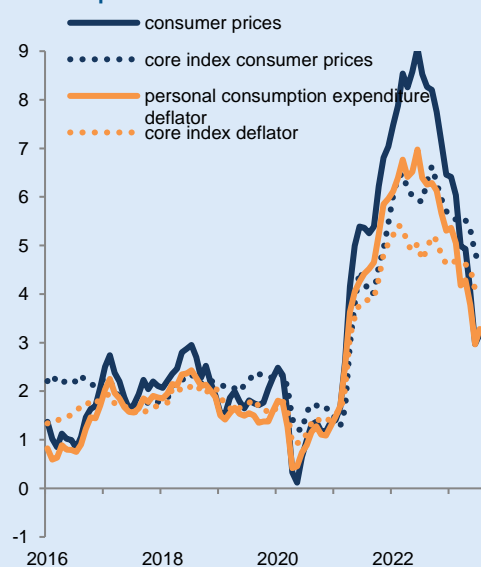
Figure 2.2:
Labor Market



Monthly data; seasonally adjusted. .

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

Figure 2.3:
Consumer prices



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

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

Table 2.1:
Key indicators for the United States

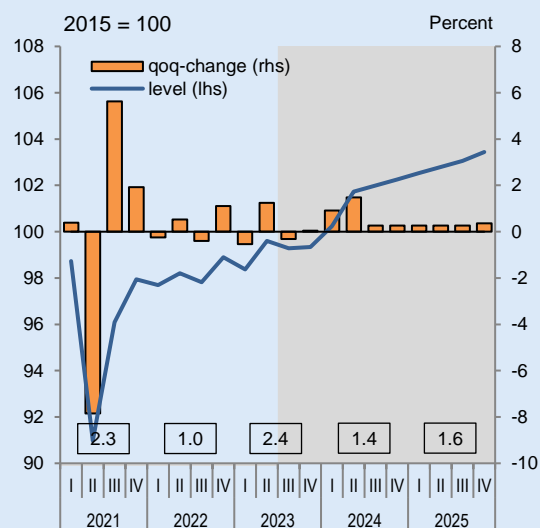
	2022	2023	2024	2025
Gross Domestic Product	2.1	2.0	1.3	1.3
Domestic expenditure	2.4	1.6	1.6	1.3
Private consumption	2.7	2.3	1.4	1.2
Government expenditure	-0.6	3.2	1.2	1.0
Gross fixed capital formation	-0.2	-0.5	1.3	1.4
Machinery and equipment	4.3	-0.2	0.4	0.2
Intellectual property rights	8.8	4.4	2.9	2.9
Structures	-6.6	8.0	1.5	1.0
Residential Investment	-10.6	-12.1	0.1	1.1
Change in inventories	0.7	-0.4	0.3	0.3
Net exports	-0.3	0.5	-0.3	0.0
Exports	7.1	1.9	0.2	1.1
Imports	8.1	-1.2	2.3	2.2
Consumer prices	8.0	4.1	2.5	1.9
Unemployment rate	3.6	3.7	4.1	4.6
Current account balance	-3.7	-3.3	-3.2	-3.2
Government budget balance	-5.3	-4.4	-4.6	-4.5

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.— 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

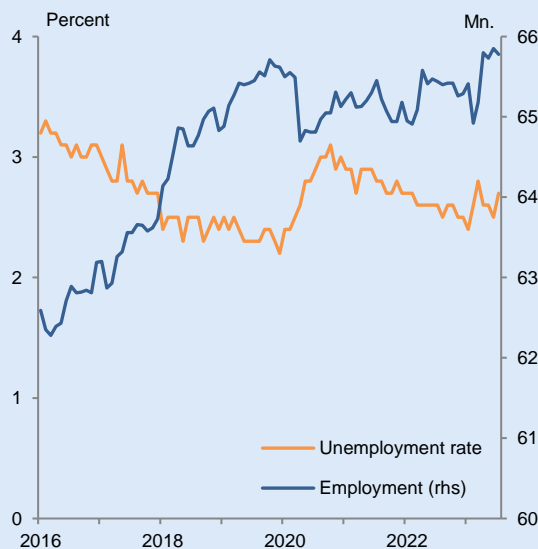
Figure 3.1:
GDP



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

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

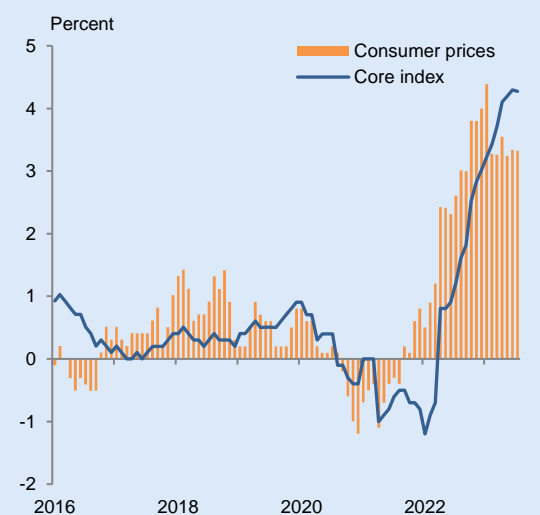
Figure 3.2:
Labor market



Monthly data; seasonally adjusted.

Source: Department of Labor.

Figure 3.3:
Consumer prices



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

Source: Statistics Bureau of Japan.

Table 3.1
Key Indicators Japan

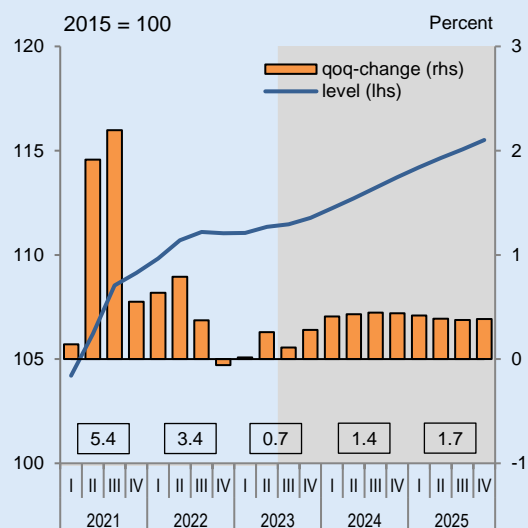
	2022	2023	2024	2025
Gross Domestic Product	1.0	2.3	1.1	1.3
Domestic demand	1.5	1.7	1.0	1.1
Private consumption	2.1	1.2	0.8	0.8
Government consumption	1.2	0.6	1.2	1.2
Gross fixed investment	-0.8	2.8	1.0	1.8
Enterprises	1.9	2.6	0.7	2.1
Residential Investment	-3.5	-3.5	-3.5	-3.5
Public investment	-7.2	4.2	1.9	0.5
Inventories	0.4	-0.1	0.0	0.0
Net exports	-0.3	0.4	0.6	0.0
Exports	5.1	1.1	2.3	2.8
Imports	8.0	-1.8	1.5	2.0
Consumer prices	2.5	3.0	2.2	1.8
Unemployment rate	2.7	2.7	2.8	2.7
Current account balance	1.9	1.9	1.9	1.9
Fiscal balance	-5.9	-5.8	-5.3	-4.5

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, fiscal balance: percent of nominal GDP.

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

4. Euro Area

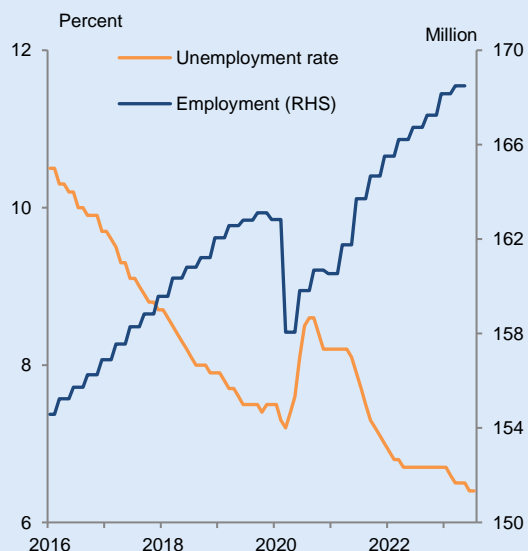
Figure 4.1:
GDP



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.

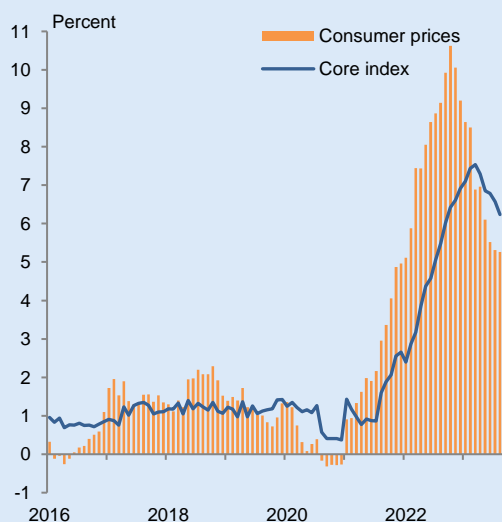
Figure 4.2:
Labor market



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

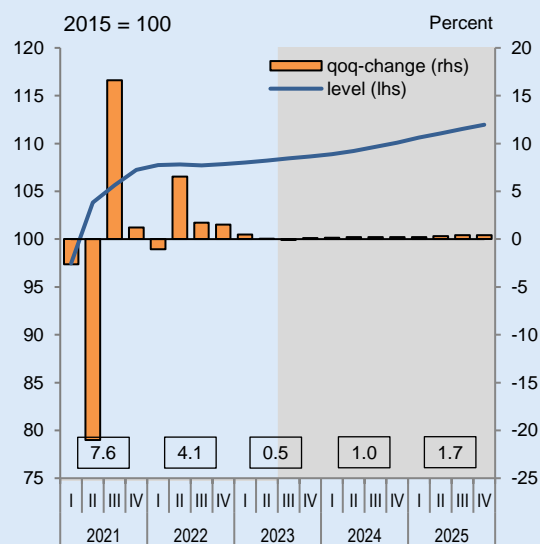
	2022	2023	2024	2025
Gross Domestic Product	3.4	0.6	1.4	1.7
Domestic expenditure	3.7	0.2	1.6	1.8
Private consumption	4.5	0.1	2.1	1.8
Government consumption	1.4	-0.8	1.1	1.3
Gross fixed capital formation	3.0	0.9	0.7	2.6
Inventories	0.2	0.1	0.1	0.0
Net exports	-0.2	0.4	-0.2	-0.1
Exports	7.2	0.4	2.1	3.7
Imports	8.1	-0.4	2.6	4.2
Consumer prices	8.4	5.6	2.6	2.2
Unemployment rate	6.8	6.5	6.3	5.9
Current account balance	-1.0	1.5	1.8	1.7
Government budget balance	-4.1	-3.4	-2.9	-2.8

GDP: volumes, change over previous year, percent. Net ex-ports, 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; grey shaded area: Kiel Institute forecast.

5. United Kingdom

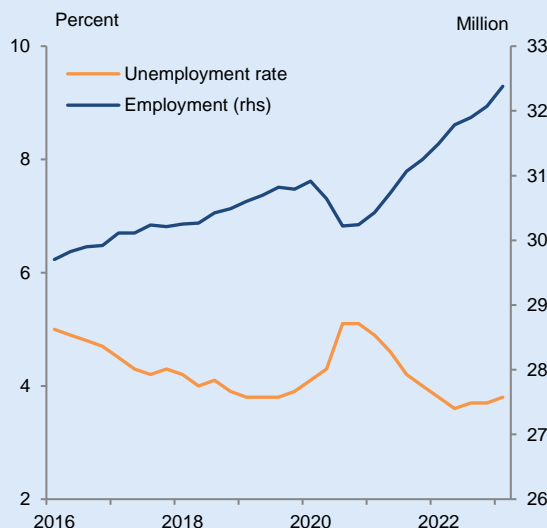
Figure 5.1:
GDP



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

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

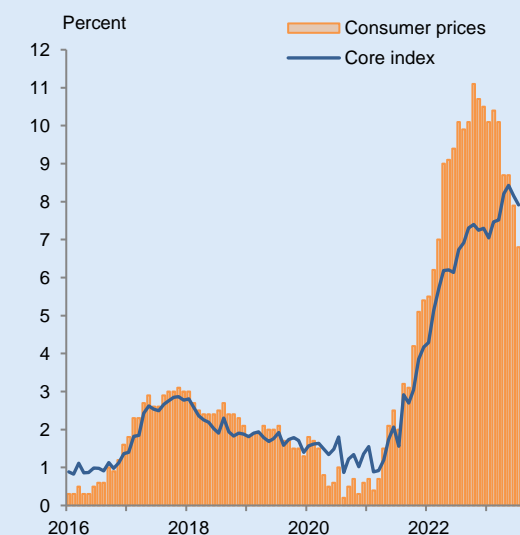
Figure 5.2:
Labor market



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

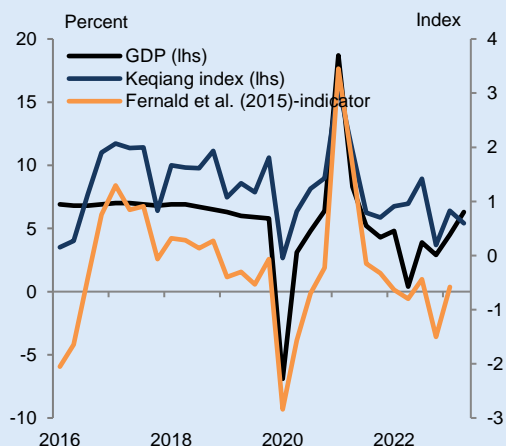
	2020	2021	2022	2023
Gross Domestic Product	4.1	0.5	1.0	1.7
Domestic expenditure	5.8	-0.2	-0.2	1.7
Private consumption	5.6	0.5	0.5	1.4
Government consumption	1.8	-1.0	-0.6	1.2
Gross fixed investment	8.8	1.2	-1.0	1.5
Inventories	-0.9	0.1	0.2	0.0
Net exports	-1.5	0.0	0.7	0.3
Exports	9.9	-2.0	2.5	3.0
Imports	13.3	-2.0	0.0	1.9
Consumer prices	9.1	7.4	3.5	2.4
Unemployment rate	3.7	3.7	4.4	4.5
Current account balance	-3.8	-4.2	-3.9	-3.6
Fiscal balance	-5.2	-5.0	-4.3	-3.8

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, fiscal balance: percent of nominal GDP.

Source: Office for National Statistics, *Economy*. Shaded area: IfW forecast.

6. China

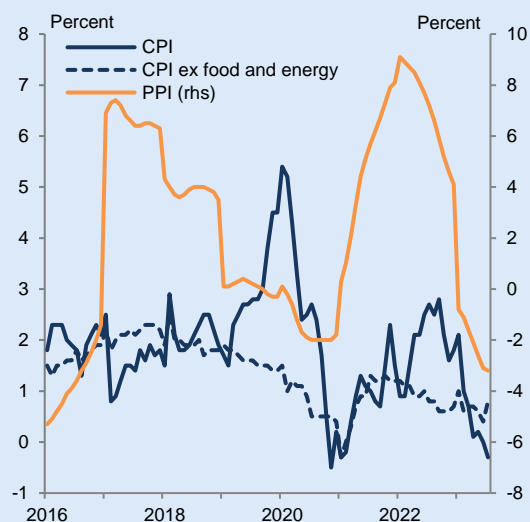
Figure 6.1:
GDP and alternative activity indicators



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.

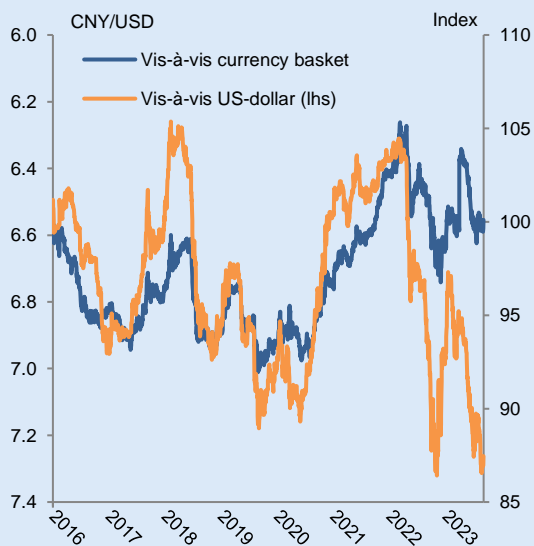
Figure 6.2:
Inflation



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

Source: National Bureau of Statistics.

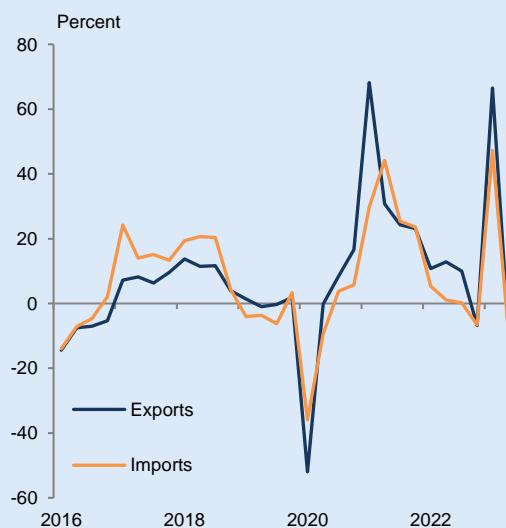
Figure 6.3:
Exchange rates



Daily data.

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

Figure 6.4:
Exports and imports

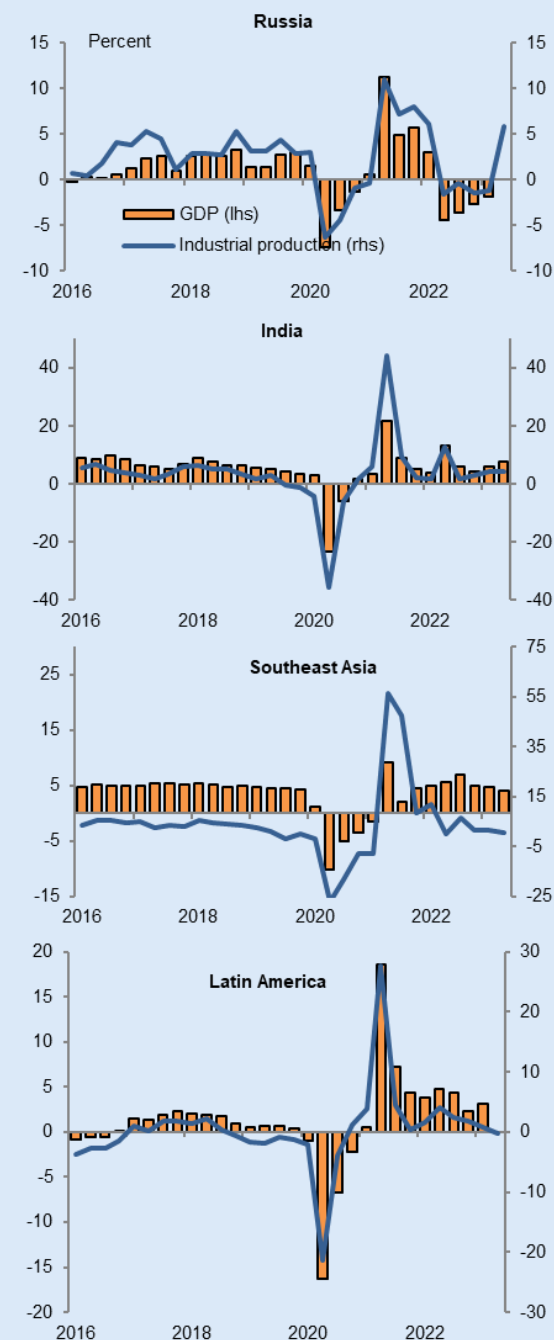


Change on a year earlier based on quarterly averages.

Source: General Administration of Customs China

7. Emerging Economies

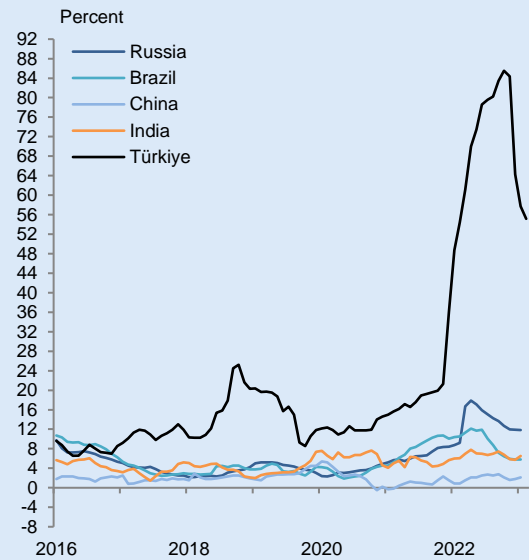
Figure 7.1:
GDP and industrial production in emerging economies



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 Argentina, Brasil, Chile, Colombia, Mexico and Peru.

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

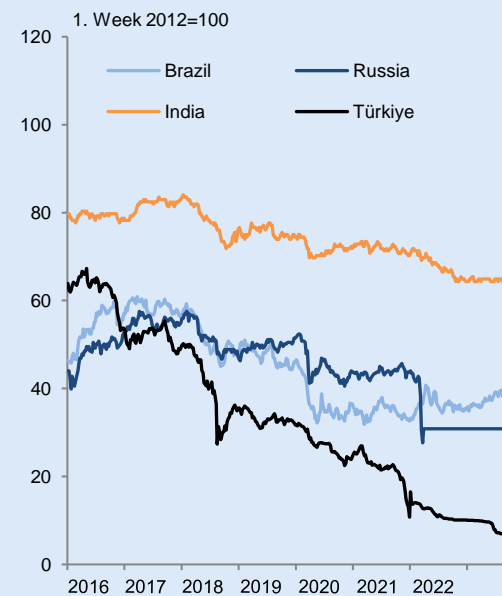
Figure 7.2:
Consumer prices



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			
		2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
European Union	40.7	3.4	0.5	1.4	1.8	9.2	6.5	2.9	2.4	6.2	6.0	5.8	5.5
Euro area	34.8	3.4	0.6	1.4	1.7	8.4	5.6	2.6	2.2	6.8	6.5	6.3	5.9
Sweden	0.9	2.9	-1.3	0.7	1.7	8.1	6.4	2.5	2.2	7.5	7.3	7.1	6.7
Poland	2.3	5.4	-0.5	1.9	3.7	13.2	11.1	4.4	2.9	2.9	2.8	2.6	2.5
United Kingdom	5.1	4.1	0.5	1.0	1.7	9.1	7.4	3.5	2.4	3.7	3.7	4.4	4.5
Switzerland	1.0	2.1	0.7	1.3	1.5	2.8	2.4	1.0	0.8	4.3	4.4	4.6	4.6
Norway	0.6	3.2	1.4	1.5	2.2	5.8	5.5	3.5	2.8	4.4	3.3	3.4	3.5
United States	35.0	2.1	2.0	1.3	1.3	8.0	4.1	2.5	1.9	3.6	3.6	3.9	4.2
Canada	3.1	3.4	1.5	1.1	1.1	5.0	3.7	2.7	2.0	5.3	5.4	5.8	6.0
Japan	8.4	1.0	2.3	1.1	1.3	2.5	3.0	2.2	1.8	2.7	2.7	2.8	2.7
South Korea	3.8	2.6	1.3	2.6	2.9	5.1	5.1	3.1	2.0	2.8	3.0	2.9	2.8
Australia	2.2	5.2	3.7	1.8	2.6	6.6	5.7	3.5	2.8	3.7	3.8	4.3	4.2
Total	100.0	2.8	1.3	1.4	1.6	7.8	5.2	2.7	2.1	4.6	4.5	4.6	4.6

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			
		2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
Germany	24.5	1.9	-0.3	1.4	1.6	8.6	6.2	2.1	2.1	3.1	2.9	2.9	2.8
France	16.7	2.5	1.0	1.4	1.6	5.9	5.5	2.4	2.1	7.3	7.3	7.1	7.0
Italy	12.0	3.8	0.7	0.5	0.9	8.7	6.6	3.1	2.0	8.1	7.7	7.7	7.6
Spain	8.4	5.5	2.3	1.7	1.8	8.3	3.0	2.5	2.3	12.9	12.0	11.6	10.0
Netherlands	6.0	4.4	0.5	1.2	1.6	11.6	5.4	3.3	2.4	3.5	3.5	3.3	3.0
Belgium	3.5	3.3	1.1	1.3	1.4	10.3	3.3	2.7	2.3	5.6	5.6	5.5	5.3
Austria	2.8	4.9	0.1	0.7	1.3	8.6	7.5	3.2	2.4	4.8	5.1	5.0	4.8
Ireland	3.2	9.5	-0.9	3.1	4.1	8.1	5.1	2.9	2.0	4.5	4.1	3.9	3.7
Finland	1.7	1.6	0.5	1.4	1.4	7.2	4.8	2.6	2.1	6.8	7.0	6.7	6.5
Portugal	1.5	6.7	2.4	1.8	2.0	8.1	5.5	3.0	2.5	6.0	6.5	6.3	6.0
Greece	1.3	6.0	1.6	2.4	2.8	9.3	4.2	3.0	2.3	12.5	11.0	10.1	9.0
Slovak Republic	0.7	1.7	1.3	2.0	2.7	12.1	10.8	3.6	3.2	6.2	5.9	5.6	5.0
Luxembourg	0.5	1.6	0.3	1.8	2.4	8.2	2.8	2.6	2.1	4.6	5.0	4.8	4.5
Kroatien	0.4	6.3	2.6	3.0	3.7	10.7	8.4	3.3	2.8	6.8	6.7	6.3	5.9
Slovenia	0.4	5.7	2.3	2.9	3.2	9.3	7.3	4.1	3.0	4.0	3.6	3.4	3.2
Lithuania	0.4	1.9	0.3	3.2	2.8	18.9	10.1	4.6	3.1	5.9	6.5	6.3	5.5
Latvia	0.2	2.8	0.8	2.1	2.8	17.2	10.5	3.4	3.0	6.9	6.2	5.5	5.2
Estonia	0.2	-1.0	-2.3	1.5	3.4	19.5	9.5	3.0	2.9	5.6	6.4	6.6	5.6
Cyprus	0.2	5.6	1.8	1.7	2.8	8.1	3.8	2.5	2.4	6.8	6.3	5.8	5.1
Malta	0.1	7.1	1.8	2.6	2.9	6.1	5.9	3.6	2.8	2.9	2.7	2.5	2.3
Sweden	3.6	2.9	-1.3	0.7	1.7	8.1	6.4	2.5	2.2	7.5	7.3	7.1	6.7
Poland	4.1	5.4	-0.5	1.9	3.7	13.2	11.1	4.4	2.9	2.9	2.8	2.6	2.5
Denmark	2.4	2.7	1.4	1.3	1.8	8.5	4.1	2.1	2.2	4.5	4.8	4.7	4.5
Czech Republic	1.7	2.4	-0.1	2.0	3.2	14.8	11.4	3.8	3.5	2.4	2.6	2.6	2.3
Romania	1.8	4.2	2.8	3.2	4.0	12.0	9.3	4.7	3.7	5.6	5.5	5.3	5.0
Hungary	1.1	4.6	-0.9	1.6	3.1	15.3	18.1	4.6	3.9	3.6	4.0	4.3	4.1
Bulgaria	0.5	3.8	1.9	2.9	3.9	13.0	8.7	4.0	3.9	4.3	4.4	4.3	4.0
European Union	100.0	3.5	0.5	1.4	1.9	9.2	6.5	2.9	2.4	6.2	6.0	5.8	5.5
Addendum:													
European Union 11	88.0	3.4	0.5	1.3	1.6	8.2	5.5	2.5	2.2	6.8	6.5	6.4	6.0
Accession countries	12.0	4.2	0.5	2.3	3.5	13.2	10.9	4.3	3.3	4.1	4.1	3.9	3.7
Euro Area	84.7	3.4	0.6	1.4	1.7	8.4	5.6	2.6	2.2	6.8	6.5	6.3	5.9
Euro Area without Germany	60.3	4.1	1.0	1.4	1.7	8.3	5.4	2.8	2.2	8.0	7.7	7.5	7.0

Based on GDP at prices and exchange rates of 2020 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 2019. Accession countries since 2004.

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

Table 8.3:
GDP volume and consumer prices in selected countries and regions

	Gross domestic product			Consumer prices		
	2023	2024	2025	2023	2024	2025
United States	2.0	1.3	1.3	4.1	2.5	1.9
Japan	2.3	1.1	1.3	3.0	2.2	1.8
Euro Area	0.6	1.4	1.7	5.6	2.6	2.2
United Kingdom	0.5	1.0	1.7	7.4	3.5	2.4
Advanced economies total	1.3	1.4	1.6	5.2	2.7	2.1
China	4.9	4.5	4.9	1.1	2.5	2.8
Latin America	1.7	1.1	1.9	20.3	21.4	15.3
India	7.3	6.7	6.9	5.8	5.2	4.9
East Asia	4.8	4.6	4.7	4.2	2.9	2.6
Russia	2.0	0.5	0.4	7.0	8.0	5.0
Africa	4.3	3.3	3.5	14.2	17.1	17.3
World economy total	3.0	2.8	3.2	7.8	6.4	5.1
Addendum: World trade volume	-1.7	1.5	2.9	.	.	.
Oil price (Brent in US\$)	82.0	81.2	77.2	.	.	.
World economy total (weighted according to GDP at market exchange rates)	2.5	2.3	2.7	5.9	4.5	3.6

Weighted according to GDP at PPP rates. — East Asia: Emerging Asia excluding China and India. — Shaded: IfW forecast.

Source: Forecast of the Kiel Institute for the World Economy.