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European Economic Forecast

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EUROPEAN ECONOMY

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European Commission
Directorate-General for Economic and Financial Affairs

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Institutional Paper 187

ABBREVIATIONS

Countries and regions

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

BR	Brazil
CN	China
IN	India
JP	Japan
MD	Moldova
MX	Mexico
UA	Ukraine
UK	United Kingdom
US	United States of America

AE	Advanced economy
CEE	Central and Eastern European
EFTA	European Free Trade Association
EME	Emerging markets economy
EMU	Economic and Monetary Union
MENA	Middle East and North Africa
ROW	Rest of the World

Economic variables and institutions

CPI	Consumer price index
ECB	European Central Bank

EUI	Economic Uncertainty Indicator
ESI	Economic Sentiment Indicator
GDP	Gross Domestic Product
GNI	Gross National Income
HICP	Harmonised Index of Consumer Prices
IIF	Institute of International Finance
IMF	International Monetary Fund
NEER	Nominal Effective Exchange Rate
OECD	Organisation for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
PMI	Purchasing Managers' Index
ULC	Unit labour cost

Other abbreviations

DBP	Draft Budgetary Plan
BCS	Joint Harmonised EU Programme of Business and Consumer Surveys
COVID-19	Coronavirus disease 2019
GM	European Commission's Global Multi-country model
NACE	Statistical classification of economic activities in the European Community
NGEU	NextGenerationEU
LNG	Liquefied Natural Gas
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plan
SME	Small and medium-sized enterprise
TTF	Title Transfer Facility
TLTRO III	Targeted longer-term refinancing operations
VAT	Value-added tax

Graphs/Tables/Units

bbl	Barrel
bn	Billion
bp. /bps.	Basis point / points
euro/MWh	Euro per megawatt hour
lhs	Left hand scale
mn	Million
pp. / pps.	Percentage point / points
pt. / pts.	Point / points
Q	Quarter
q-o-q%	Quarter-on-quarter percentage change
rhs	Right hand scale
tr	Trillion
y-o-y%	Year-on-year percentage change

Currencies

EUR	Euro
ALL	Albanian lek
BGN	Bulgarian lev
CZK	Czech koruna
DKK	Danish krone
GBP	Pound sterling
HUF	Hungarian forint
HRK	Croatian kuna
ISK	Icelandic krona
MKD	Macedonian denar

NOK	Norwegian krone
PLN	Polish zloty
RON	New Romanian leu
RSD	Serbian dinar
RUB	Russian Ruble
SEK	Swedish krona
CHF	Swiss franc
JPY	Japanese yen
CNY	Chinese Yuan Renminbi
TRY	Turkish lira
USD	US dollar

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FOREWORD

As the economy adjusts to the shocks caused by the COVID-19 pandemic and Russia's war of aggression against Ukraine, the European Union finds itself at a turning point. While the momentum created by the reopening of the economy is fading, the contractionary forces unleashed by the war are taking the upper hand. After a buoyant first half of the year, the pace of economic expansion slowed down in summer. The energy price increases are reverberating throughout the economy, hitting firms with exorbitant cost increases. At the same time, double-digit inflation is eroding households' income and savings at a rate not seen since the 70s. As consumers cut down on spending and firms delay investment plans, a recession this winter is likely. The economic weakness is set to persist throughout the next year.

The current economic situation puts policy makers in a very difficult position. Understandably, households are asking governments for financial support. The policy space for countering this downturn, however, is limited. As the EU is a net importer of energy, the energy price shock subtracts income from the EU and transfers it to the rest of the world. In 2021 and 2022, higher energy costs have resulted in a cumulative loss of income of some 3.3% of GDP - roughly 1,000 euro per person. A fiscal expansion cannot compensate for this loss of income, in particular if energy prices stay high for longer. The real solution to this crisis is to reduce our dependence on imported fossil fuels from Russia: by increasing energy efficiency, by diversifying energy supply and by accelerating the development of renewable energy sources.

In the meantime, governments must ensure that the cost of the shock is equitably distributed. Lower income households are, as usual, first in line to take a hit: higher inflation, especially in energy and food, weighs heavily on their disposable income, while they also tend to be the first to feel the brunt of a slowdown in labour demand. A careful targeting of policy interventions would protect vulnerable households and energy-intensive firms, while avoiding unintended side effects. Strong coordination at EU level is important to avoid a race to the top, whereby sizeable and untargeted measures taken in one Member State trigger demands for similar measures also in other Member States.

In many Member States, measures are set to expire in the first half of next year. This offers a short window to agree on a more coordinated and better calibrated approach. We should make good use of this window. The coming year will be difficult. But with the right policies we should see a quick adjustment of the economy and a swift return to growth.

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THE EU ECONOMY AT A TURNING POINT

EXECUTIVE SUMMARY

The EU economy is at a turning point

As Russia's war of aggression against Ukraine enters its ninth month, there is no sign of a let-up in the fighting, let alone a peaceful resolution of the hostilities. The war continues to cause untold suffering and destruction in Ukraine, but also has economic reverberations that extend far beyond. The sharp rise in inflation under the pressure of energy, food and other commodity prices is hitting a global economy that is still struggling with the economic consequences of the pandemic crisis. The EU is among the most exposed economies, due to its geographical proximity to the war and heavy – albeit much diminishing – reliance on imports of fossil fuels. Although creeping inflation had already dented some of the post-pandemic euphoria ahead of the war, real GDP growth in the first half of the year beat expectations. With the easing of containment measures, consumers resumed international travel and flocked back to restaurants, hotels and other contact-intensive services, unleashing a strong spending spree. The expansion continued in the third quarter, though at a weaker pace. As the terms-of-trade shock makes its way through the economy, the sharp erosion of the purchasing power of households has shifted consumers' sentiment dramatically. Confidence plunged also in the business sector, amid high production costs, remaining supply bottlenecks, tighter financing conditions and heightened uncertainty.

Table 1:

Overview - the autumn 2022 forecast

	Real GDP			Inflation			Unemployment rate			Current account			Budget balance		
	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Belgium	2.8	0.2	1.5	10.4	6.2	3.3	5.8	6.4	6.3	-2.7	-2.9	-2.6	-5.2	-5.8	-5.1
Germany	1.6	-0.6	1.4	8.8	7.5	2.9	3.1	3.5	3.5	3.7	4.7	5.0	-2.3	-3.1	-2.6
Estonia	-0.1	0.7	2.1	19.3	6.6	2.6	6.1	6.6	6.2	0.4	0.7	1.1	-2.3	-3.7	-3.3
Ireland	7.9	3.2	3.1	8.3	6.0	2.8	4.4	4.8	5.0	18.1	18.2	17.8	0.2	0.8	1.2
Greece	6.0	1.0	2.0	10.0	6.0	2.4	12.6	12.6	12.1	-8.6	-8.6	-8.1	-4.1	-1.8	-0.8
Spain	4.5	1.0	2.0	8.5	4.8	2.3	12.7	12.7	12.6	0.9	0.8	1.2	-4.6	-4.3	-3.6
France	2.6	0.4	1.5	5.8	4.4	2.2	7.7	8.1	7.7	-2.5	-1.3	-0.8	-5.0	-5.3	-5.1
Croatia	2.6	0.4	1.5	5.8	4.4	2.2	7.7	8.1	7.7	-2.5	-1.3	-0.8	-5.0	-5.3	-5.1
Italy	3.8	0.3	1.1	8.7	6.6	2.3	8.3	8.7	8.5	0.8	-0.2	0.5	-5.1	-3.6	-4.2
Cyprus	5.6	1.0	1.9	8.0	4.2	2.5	7.2	7.2	6.9	-9.6	-7.3	-6.2	1.1	1.1	1.6
Latvia	1.9	-0.3	2.6	16.9	8.3	1.3	7.1	8.1	7.9	-6.4	-6.8	-4.0	-7.1	-3.4	-1.3
Lithuania	2.5	0.5	2.4	18.9	9.1	2.1	6.0	7.1	7.0	-3.9	-2.8	-2.6	-1.9	-4.4	-1.8
Luxembourg	1.5	1.0	2.4	8.4	3.8	3.1	4.7	5.1	4.9	3.5	3.0	3.9	-0.1	-1.7	-0.5
Malta	5.7	2.8	3.7	6.1	4.0	2.4	3.2	3.1	3.0	5.1	5.5	6.0	-6.0	-5.7	-4.4
Netherlands	4.6	0.6	1.3	11.6	4.2	3.9	3.7	4.3	4.3	5.7	5.3	6.9	-1.1	-4.0	-3.1
Austria	4.6	0.3	1.1	8.7	6.7	3.3	5.0	5.2	5.3	0.2	0.0	-0.1	-3.4	-2.8	-1.9
Portugal	6.6	0.7	1.7	8.0	5.8	2.3	5.9	5.9	5.7	-1.5	-0.9	-0.8	-1.9	-1.1	-0.8
Slovenia	6.2	0.8	1.7	9.2	6.5	3.5	4.1	4.3	4.1	-0.6	-0.5	-0.3	-3.6	-5.2	-2.7
Slovakia	1.9	0.5	1.9	11.8	13.9	3.6	6.3	6.4	6.4	-6.5	-5.6	-5.3	-4.2	-5.8	-4.7
Finland	2.3	0.2	1.4	7.2	4.3	1.9	7.0	7.2	6.9	-0.2	-0.3	0.1	-1.4	-2.3	-2.3
Euro area (20)	**3.2**	**0.3**	**1.5**	**8.5**	**6.1**	**2.6**	**6.8**	**7.2**	**7.0**	**1.5**	**1.9**	**2.4**	**-3.5**	**-3.7**	**-3.3**
Bulgaria	3.1	1.1	2.4	12.8	7.4	3.2	5.2	5.2	5.3	-1.2	-3.0	-3.2	-3.4	-2.8	-2.5
Czechia	2.5	0.1	1.8	15.6	9.5	3.5	2.7	3.3	3.6	-5.8	-6.9	-5.9	-4.3	-4.1	-3.0
Denmark	3.0	0.0	1.3	7.9	3.7	2.0	4.5	5.5	5.6	6.7	7.4	7.8	1.8	0.5	0.4
Hungary	5.5	0.1	2.6	14.8	15.7	3.9	3.6	4.2	4.2	-7.6	-6.3	-4.3	-6.2	-4.4	-5.2
Poland	4.0	0.7	2.6	13.3	13.8	4.9	2.7	3.0	3.1	-2.9	-2.5	-1.6	-4.8	-5.5	-5.2
Romania	5.8	1.8	2.2	11.8	10.2	6.8	5.4	5.8	5.4	-9.1	-8.8	-8.4	-6.5	-5.0	-4.8
Sweden	2.9	-0.6	0.8	8.1	6.6	1.8	7.2	7.6	7.8	3.3	3.3	4.2	0.2	0.2	0.0
EU	**3.3**	**0.3**	**1.6**	**9.3**	**7.0**	**3.0**	**6.2**	**6.5**	**6.4**	**1.1**	**1.4**	**1.9**	**-3.4**	**-3.6**	**-3.2**
United Kingdom	4.2	-0.9	0.9	7.9	7.5	2.9	3.8	4.4	4.8	-5.6	-6.0	-5.8	-6.4	-4.4	-3.7
China	3.4	4.5	4.7	:	:	:	:	:	:	2.1	1.6	1.1	:	:	:
Japan	1.7	1.6	1.2	2.5	3.1	1.8	2.7	2.5	2.5	0.7	1.2	1.7	-6.9	-4.7	-3.4
United States	1.8	0.7	1.7	7.9	3.4	2.3	3.7	4.1	4.4	-3.8	-3.2	-2.8	-5.9	-6.7	-7.1
World	3.1	2.5	3.1	:	:	:	:	:	:	:	:	:	:	:	:

Despite inflation surprises, the growth forecast for 2022 has been lifted considerably

Notwithstanding a projected contraction of GDP in the fourth quarter, the momentum from 2021 and strong growth in the first half of the year are set to lift real GDP growth in 2022 as a whole to 3.3% in the EU - well above the 2.7% projection of the Summer interim Forecast (SiF). Inflation also continued to surprise on the upside. Accelerating and broadening price pressures in the first ten months of the year have moved the expected inflation peak to the fourth quarter of this year and lifted the yearly inflation rate projection to 9.3% in the EU and 8.5% in the euro area, about one percentage point higher than what was expected in the SiF.

Yet, the outlook for 2023 is for broad stagnation and high inflation, with a moderate growth rebound and substantial taming of inflation in 2024

The contraction of economic activity is set to continue in the first quarter of next year. The EU and euro area, and most Member States, are therefore expected to experience a technical recession this winter. Growth would return in spring, as inflation progressively relaxes its grip on the economy. However, with powerful headwinds still holding back demand, the EU economy is set to manage only lacklustre growth. For 2023 as a whole, this forecast projects real GDP growth in both the EU and euro area at 0.3% - well below the 1.5% and 1.4% expected in the SiF. Though rapidly declining throughout the year, average inflation is projected to remain high, at 7.0% in the EU and 6.1% in the euro area – again a very large revision with respect to the 4.6% and 4.0% expected respectively for the EU and the euro area only a few months ago. By 2024, the EU is set to have largely adjusted to the shock. As inflation moderates to 3.0% in the EU and 2.6% in the euro area, growth is forecast to progressively regain traction, averaging 1.6% and 1.5% respectively.

This forecast hinges crucially on the assumption that the EU will avoid crippling gas shortages…

The EU is approaching the winter season with gas storages at historically high levels, even above the targets stipulated by the EU.[1] Amid further cuts of Russian supplies, refilling efforts came at the cost of a sharp increase in gas prices over summer. Rising prices nevertheless allowed the EU to attract a growing share of LNG supplies and build a comfortable buffer for the coming winter. High storages, policy- and price-induced reduction in demand, supported by milder temperatures registered in Europe so far, have reduced pressures on wholesale energy prices in recent weeks and should ensure that Europe manages the upcoming winter without disruptions to gas supply. The near absence of Russian gas supply and infrastructure constraints to further expand LNG imports in the short run will weigh on the EU's capacity to refill storages next year, heightening risks of disruptions and shortages in the winter of 2023/2024. The forecast rests on the assumption that elevated energy retail prices and other policy incentives will result in a continued reduction of demand, while the diversification of supply achieved this year will carry on over the forecast horizon. Under such hypotheses, which are consistent with the gradual decline in future prices in 2023 and 2024, the EU is assumed to avoid crippling gas shortages also next winter.

(1) See Regulation (EU) 2022/1032 of the European Parliament and the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage targets.

...though in the meantime, high energy prices are spilling over to core inflation

As the summer surge in wholesale energy prices makes its way through the retail markets, energy inflation is still expected to increase until year end, before starting to decline next year and turn negative in 2024. The impact of the fiscal measures aimed at shielding households from surging energy prices, nevertheless, adds a degree of uncertainty to the forecast for energy inflation. Pressures stemming from food prices are also set to abate, in line with indications from agricultural commodity markets. Yet, with energy being a key input to much of economic activity, past price increases are now passing through to other inflation components. An uptick in wage growth - though still expected to be moderate – together with the weaker euro would add to external pressures. As a result, core inflation is set to peak only in the first quarter of 2023 and abate very slowly thereafter, thus settling above headline inflation for most of 2024 in both the EU and the euro area.

With inflation at double digit rates, central banks are set to normalise monetary conditions more forcefully

Faced with persistent inflationary pressures, monetary policy is expected to continue on its tightening path. In line with market expectations, the ECB is assumed to keep hiking its policy rate throughout 2023. With a few exceptions, most EU central banks are also expected to keep tightening throughout 2023. Short-term rates should therefore keep increasing over the forecast horizon. The 10-year Bund yield, averaged over the 10 days preceding the cut-off date of the forecast, stood at 2.3%, some 70 basis points above the yield at the cut-off date of the SiF, though still in negative territory in real terms, based on market expectations of inflation over the same horizon. Long-term real rates of virtually all other Member States are by now well into positive territory. Since July, the spreads of sovereign bonds with respect to the German Bund benchmark have widened somewhat within and especially outside the euro area. The customary technical assumption of fixed spreads over the forecast horizon is complemented in this forecast with the working assumption that the upcoming sharp increase in interest rates will not induce disorderly adjustments in sovereign and financial markets.

As the energy crisis dents real disposable income, consumption takes a hit in 2023...

Notwithstanding the support from fiscal measures, the large loss in households' real disposable income is set to continue in the coming quarters. Nor is the hit confined to real income. Recent adjustments in equity and bond valuations have taken a toll on financial wealth of households. More importantly, the pick-up in inflation is quickly eroding the real value of the additional savings accumulated during the pandemic crisis as well as of the housing wealth following the recent above-trend increases in prices. In most Member States, households are expected to be able to withstand the increase in interest rates, thanks to the prevalence of mortgage loans on fixed term rates. Yet, with saving rates already falling to pre-pandemic levels, households will have no choice but to consume less. Growth in real private consumption is thus projected to decelerate sharply from 3.7% in 2022 to 0.1% in 2023, before picking up to 1.5% in 2024 as real wages, and hence disposable incomes, recoup some of the lost purchasing power.

...while headwinds to investment should abate in 2024

Higher input and labour costs, coupled with rising borrowing costs, are set to weigh on firms' financing capacity, while the contraction in demand is likely to soften the pressure on capital utilisation, down from the relatively high rates registered in recent quarters. On the supply front, the ongoing adjustment to supply side disruptions will have to continue, but bottlenecks to production due to shortages in raw material and equipment are still expected to dissipate gradually. These adverse developments are partially mitigated by the continued implementation of the Recovery and Resilience Facility. Overall, total investment in the EU is projected to decelerate markedly from annual growth of 3.0% in 2022 to 0.5% in 2023. Being short-lived and not excessively deep, the economic recession is not expected to result in large capital destruction. An additional assumption for this forecast is that the increase in bankruptcies will remain overall contained and sector-specific, allowing the banking sector to absorb potential increases in non-performing loans without excessively restricting access to credit. This assumption sets the stage for a bounce-back of investment in 2024, by 2.3%.

EU firms have weathered the competitiveness shock well so far, but global demand is also weakening

Despite an unprecedented energy cost shock, EU firms have been able to pass a significant increase in import costs onto export prices, with so far contained losses in market shares. While the income loss of the terms-of-trade shock remains large in historical perspective, it is a fraction of what it would have been, had export prices not largely tracked import prices. This positive outcome was facilitated by the high degree of openness of the EU economy and the important role of the euro as invoicing currency. Going forward, nevertheless, less buoyant trade growth and abating global inflationary pressures may weaken the capacity of EU firms to pass on to foreign customers further increase in costs. Global economic activity already contracted in the second quarter. Although China and the US have in the meantime returned to positive growth and global inflationary pressures appear close to peak, tightening financing conditions are set to also weigh on external demand in most advanced and emerging economies (with the notable exception of China). Overall, weakness in the EU external environment is expected to persist, and net exports are projected to contribute marginally to growth in 2023 and 2024. Price effects are set to dominate over volume effects: the current account surplus is projected to shrink from 3.1% of GDP in 2021 to 1.1% in 2022 and improve only modestly thereafter.

Labour markets remain resilient despite slowing demand

As the recession looms, the EU economy is bolstered by the strongest labour market in decades. Unemployment rates are at record low and participation and employment rates at record high. What is more, vacancy rates and reported labour shortages remain extremely elevated, though they have started declining. Although with a lag, labour demand is set to react to the slowing of economic activity, but vacancy rates and labour shortages are expected to fall significantly before employment contracts. The unemployment rate is thus projected to increase only marginally from a historic low annual average of 6.2% in 2022, to 6.5% in 2023, before falling again to 6.4% in 2024. Wage growth increased to above-average rates in 2022 and is expected to remain strong, but below inflation in 2023.

Low growth and rising interest rates weigh on government deficits, but debt to GDP ratios keep falling

Strong nominal growth in the first three quarters of the year and the phasing out of pandemic-related support are driving a further reduction of government deficits in 2022, despite new measures adopted to mitigate the impact of surging energy prices on households and firms. After falling to 4.6% of GDP in 2021, the general government deficit in the EU is projected to decline by more than one percentage point in 2022. As economic activity weakens, interest spending increases and governments extend or introduce new discretionary measures to mitigate the impact of high energy prices, the 2023 aggregate general government deficit for the EU is set to increase again, but only by some 0.2 pps. to 3.6% of GDP. This mild projected increase rests on the customary no-policy-change assumption of the European Commission forecast. In line with governments' plans, most energy measures are assumed to expire early in 2023, despite the expectation that energy prices will remain at current elevated levels for most of next year. In 2024, the aggregate deficit in the EU is forecast to fall back to 3.2%, thanks to the projected resumption of economic activity. Over the forecast horizon, a dynamic GDP deflator would support further reduction in the debt-to-GDP ratio, which on the back of the denominator effect is set to drop from 89.4% of GDP in 2021 to 84.1% of GDP in 2024. Yet, over the longer term high inflation (especially if imported) is set to negatively affect public finances as well.

The projections for economic growth and inflation remain surrounded by exceptionally large risks

The realisation of the working assumptions underpinning the forecast is subject to high risks. The potential for further disruptions unleashed by Russia's invasion of Ukraine is alas far from exhausted. A large degree of uncertainty also hangs over the EU's and global economy's adjustment to the rapid succession of two extreme shocks. Under these circumstances, this forecast relies again to an exceptional degree on working assumptions. The largest threat comes from adverse developments on the gas market and the risk of crippling shortages, especially in the winter of 2023/2024. Beyond gas, the EU remains directly and indirectly exposed to renewed shocks to commodity markets reverberating from geopolitical tensions. The formation of a wage-price spiral that would entrench high inflation, and potentially disorderly adjustments on financial markets to the new high interest rate environment also remain important risk factors. Both are amplified by potential conflict between fiscal and monetary policy objectives. Pandemic related health risks remain, though they would mostly continue to affect the EU indirectly through demand and supply channels, while the adverse impact of climate change appears to increase threats to the EU and the global economy.

PART I

Economic outlook for EA and EU

1. SETTING THE SCENE

The EU economy is at a turning point. After having recovered the pre-pandemic output level in the third quarter of 2021, the EU economy continued to expand vigorously in the first half of 2022. Meanwhile, the inflation also continued to surprise: not only has the rate of price increase been higher than previously projected, but inflationary pressures now appear broader and more entrenched. While the propelling forces driving the post-pandemic expansion largely fade, the shocks unleashed by the war in Ukraine and a broad-based slowdown in external demand are taking the upper hand. As a result, the outlook for growth in the EU looks significantly weaker, and inflation higher, compared to the projections in the Summer interim Forecast (SiF).

A terms of trade shock of a significant magnitude is making its way through the EU economy. Given limited substitutability of gas, relatively stable volumes of energy imports at significantly higher prices are resulting in an important transfer of income from the EU to the rest of the world. This transfer of income – estimated at some 3.3% of GDP cumulatively over 2021 and 2022 – is operating through different channels. High energy costs eat into the profitability of most firms, while inflationary pressures that largely surpass wage increases erode households' purchasing power. The depreciation of the euro and other EU currencies against major trading partners, and especially the US dollar, amplify and propagate the initial shock (see Box I.2.3). Government support to soften the impact of high energy prices on consumers and firms (see Box I.2.4) weighs on the public finances. Real income losses compound with sinking economic sentiment and greater uncertainty forcing households and firms to revise downwards consumption and investment plans.

In the meantime, some of the tailwinds supporting the economic expansion are vanishing or losing strength. In the first three quarters of the year, the economy was still propelled by re-opening dynamics. With the relaxation of COVID-19 containment measures, consumption-hungry households flocked to bars, restaurants, hotels and many other contact-intensive services. After the summer, however, this spending spree has run out of steam. As the reopening enthusiasm wanes, consumers are faced with the harsh reality of a cost-of-living squeeze. Similar dynamics are affecting the majority of advanced and emerging economies. In the second quarter, the global economy contracted for the first time since 2020-Q2 and weakness is set to persist, meaning that external demand is unlikely to offer much respite in face of falling domestic demand. Finally, the additional wealth accumulated during the pandemic crisis, on the back of forced savings and above-trend capital gains in house prices (see Box I.2.2), has also largely been eroded by inflation.

As contractionary forces hold sway, the policy tools to soften the blow appear constrained. Fiscal policy is protecting energy-intensive firms and households from the adverse impact of high energy and consumer prices. Vulnerable households, in particular, face an increased risk of worsening material and social deprivation and energy poverty (see Special Issue 4.3). However, fiscal policy cannot continue to absorb what currently appears to be a lasting increase in energy prices. Moreover, leaving aside considerations about debt sustainability, subsidisation of fossil fuel consumption slows down the green transition. Monetary authorities are also treading a narrow path between taming inflation and averting an excessive decline in demand.

Still, the EU economy displays important elements of resilience. In the first half of this year, import prices in the EU increased by almost 20%. Over the same period, however, the terms of trade deteriorated only by some 4.5%. The EU economy has therefore been able to shift a large amount of the initial shock on energy prices to the rest of the world. Whereas strong global inflationary pressures and demand might have facilitated this transfer, the fact that export prices largely tracked import prices hint at a number of potential drivers, namely a strong pricing power of EU companies and the important role of the euro as invoicing currency in the context of a large degree of trade openness. Furthermore a healthy and even record-tight labour market is likely to limit the impact of the economic slowdown on workers (see Special Issue 4.2). Finally, RRF spending is set to achieve its highest level next year, supporting public and private investment just as consumer spending slows down. Importantly, the transformative dimension of investment – coupled with the reform pillar - will not only support EU economic activity throughout its projected weakness, but also frontload its adjustment capacity.

Overall, whereas in the short term contractionary forces are set to prevail, a deep recession in the EU appears unlikely. The forceful momentum of the first half of the year is an important buffer to the looming downturn. Looking beyond the short term, the structural strengths and adaptive capacity displayed so far should ensure that the EU economy can transform in response to the new formidable challenges it is faced with.

This forecast has to rely again on strong working assumptions. Uncertainties about the unfolding of the war and its ramifications for the EU economy, in particular regarding its energy markets, make the Autumn Forecast 2022 yet another challenging exercise. Against this background, the forecast relies – once again – on a number of ad hoc assumptions (see Box I.1.1 for a summary). Specifically:

- Geopolitical tensions are assumed to persist throughout the forecast horizon. Russia's war continues to cause untold suffering and destruction in Ukraine, and directly and indirectly it weighs on the security and economic well-being of the EU and its Member States. As the war enters its ninth month, there is no sign of a let-up in the fighting, let alone any peaceful resolution of the conflict. On July 21 and October 6, the EU implemented two additional packages of sanctions. This forecast assumes that geopolitical tensions will remain exceptionally high throughout the forecast horizon. As a direct consequence, all sanctions against Russia stipulated until the cut-off date are assumed to remain in place throughout the forecast horizon.

- The EU economy is set to manage the full forecast period without major energy disruptions. Overall, stocking efforts appear to have delivered. The EU is approaching the winter season with gas storage at historically high levels. The refilling came at the cost of a sharp increase in gas prices over summer, especially to attract a growing share of LNG supplies. Demand reduction also seems to be working. In the first three quarters of this year, demand for natural gas (net of storage filling) is estimated to have declined by some 7%, compared to the average from the period 2019 to 2021, with a particular strong reduction in the months of August and September. Based on past consumption patterns and assuming normal weather conditions, current storage levels are considered sufficient to get the EU economy through this winter. Yet, the near-absence of Russian gas and the difficulty in further expanding LNG imports in the short term make the refilling of storages in spring and summer of 2023 considerably more challenging. This forecast assumes that adjustment in demand (in response to high prices but also policy-induced) will help avoid supply shortages throughout the forecast horizon. The gradual decline in future prices in 2023 and 2024 suggest that – based on information available today - market agents share this assessment (see Box I.2.1). The assumption of lack of gas supply shortages throughout the forecast horizon and reliance on futures contracts for the trajectory of gas (and electricity) prices provide an anchor to the forecast at a time of major structural changes in EU energy markets. Still, the large degree of uncertainty around the unfolding of the EU's energy crisis and its outsize impact on the EU's economic outlook, warrants an analysis of a counterfactual adverse scenario (see Special Issue 4.1).

Box I.1.1: Key assumptions underlying the forecast

Given the current context of high uncertainty, forecasts continue to rely heavily on ad-hoc assumptions. The assumptions underpinning the Autumn Forecast include updates to the Spring 2022 Forecast and the Summer 2022 interim Forecast.

Russian invasion of Ukraine and geopolitical tensions

The economic impact of the war remains highly uncertain and depends crucially on its duration. The central scenario assumes persisting geopolitical tensions. As a result, all sanctions against Russia stipulated until the cut-off date of the forecast, including those already implemented after Russia's annexation of Crimea in 2014, are assumed to remain in place throughout the forecast horizon. As regards to Ukraine, a gradual economic recovery is assumed in substantial parts of the Ukrainian territory over the course of the forecast years.

People fleeing the war in Ukraine to the EU

Assumptions on people fleeing Ukraine have been updated compared to the previous forecast. The update affects the number of people that have left Ukraine, their geographical distribution in the EU, their integration into labour markets, and the fiscal implications.

- The *number of people fleeing the war in Ukraine to the EU* is assumed to grow by the end of 2022 to 4.5 million, and stay constant in 2023 in 2024. This assumption is based on the number of applications for temporary protection (based on the EU implementing decision to activate the Temporary Protection Directive on 4 March 2022), which stood on 12 September at 4.1 million people and until recently increased by about 50,000 per week. It is assumed that this inflow will taper off to zero in December.

- The estimation of the *geographical distribution of people seeking protection in the EU* relies mainly on actual applications for temporary protection, but takes into account factors possibly affecting reallocation of people between Member States (e.g. information about how many Ukrainians lived in a country before the war and the size of the country). Almost two thirds of the persons are assumed to stay in Poland, Germany and Czechia.

- Assumptions about the *labour market integration of people fleeing the war* are based on information published by some Member States on the demographic composition and employment of beneficiaries of temporary protection. About 60% of the persons coming to the EU are assumed to be of working age. Recent data suggest that, by late September, about 20% of the persons of working age were employed and it is assumed that the employment rate will steadily increase to about 50% at the end of 2024 (equivalent to 30% of all persons fleeing the war).

- Assumptions on *fiscal costs per person* are based on calculations using EUROMOD, the EU's tax-benefit microsimulation tool. The fiscal costs include both cash and in-kind benefits (health care, education and housing), mirroring the entitlements suggested in the Temporary Protection Directive.[(1)] Estimates suggest for the EU average annual gross fiscal costs of hosting people fleeing Ukraine of about 0.2% of GDP in 2022-24, with the highest costs in 2023 and large differences across Member States.

The COVID-19 pandemic

The Autumn 2022 Forecast assumes that the pandemic will not cause any major disruptions in the EU economy over the forecast horizon. For China, it is assumed that the current "dynamic Zero-COVID" policy is continued throughout the forecast horizon.

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(1) Calculations are based on the methodology described by Christl, M., A. Bélanger, A. Conte, J. Mazza, and E. Narazani (2021). "The fiscal impact of immigration in the EU." European Commission JRC Joint Research Centre *Working Papers on Taxation and Structural Reforms*, No 01, Seville.

- Fiscal measures to shield households and firms from high energy prices are assumed to expire at their announced date. This forecast incorporates, where available, adopted and credibly announced fiscal measures, including those spelt out in the Draft Budgetary plans (DBPs) by euro area Member States for 2023. A large share of these measures is planned to expire already in early 2023, even if, in view of the projected elevated energy prices throughout the forecast horizon, they can reasonably be expected to be prolonged. In line with the customary no-policy-change assumption, fiscal measures are included only to their announced expiry date. The analysis in Box I.2.4. discusses the fiscal implication of a counterfactual scenario in which the measures were prolonged over the forecast horizon.

- The tightening of monetary conditions is assumed to continue in line with **markets' expectations, without** producing any disorderly adjustment in financial markets. In particular, customary technical assumptions about short-term and long-term rates and stability of spreads over the forecast horizon are supplemented by the ad-hoc assumption that bankruptcies will remain contained and sector-specific and the banking sector will be able to absorb the increase in non-performing loans without materially constraining the flow of credit.

- The number of people fleeing the war in Ukraine to the EU is assumed to grow by the end of 2022 to around 4.5 million and stabilise thereafter. This is about 1.5 million fewer than assumed in the SiF. The downward revision is motivated by the fact that, following the initial spike in refugee numbers in spring, inflows have reduced considerably. There is also evidence of important outflows, back to Ukraine and to other destinations outside the EU. The current estimate is in line with available data on applications for Temporary Protection application data, which was not yet available back in summer.

- The pandemic is assumed not to cause any major disruptions to the EU economy over the forecast horizon. As the third anniversary of the start of the pandemic approaches, the EU – like many other regions of the world boasting high vaccination rates – appears to be settling on a steady-state where further economic disruptions from the pandemic can be avoided. Since early spring, infections continue to be common, but hospitalisations and mortality rates have come down. Like in the previous two rounds, this forecast assumes that the pandemic will no longer cause any material direct disruption to the economy, though outbreaks and lockdowns in other parts of the world remain a source of indirect risk.

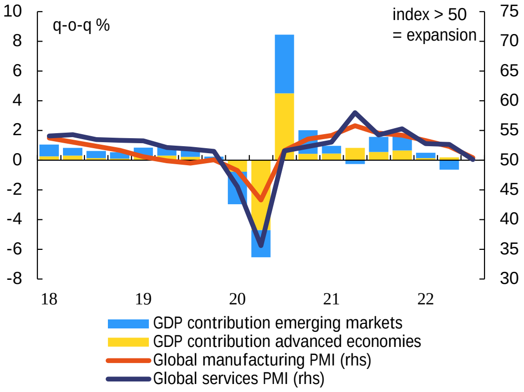
2. ECONOMIC OUTLOOK

2.1. INTERNATIONAL ENVIRONMENT

After a robust bounce-back in 2021, global economic activity broadly stagnated in the first half of 2022. Following a sharp increase, by 1.8% in the fourth quarter of last year, global growth slowed down to 0.5% in the first quarter and contracted to -0.4% in the second quarter of 2022 (see Graph I.2.1). In the United States, real GDP contracted in the first two quarters of 2022 - technically a recession - but domestic demand remained robust and employment kept increasing strongly with the number of job openings exceeding separations. Activity also contracted in China in the second quarter of 2022, reflecting the recurring lockdowns due to the strict COVID-19 policy and the continuing slowdown in its real estate sector. Among commodity exporters in Latin America, growth held up relatively well, supported by high commodity prices and normalisation of activity in contact-intensive sectors, while growth in some economies in emerging Asia softened in sync with slower growth in China.

Global economic activity remained soft over the summer despite positive outturns in the US and China. The US economy rebounded by 0.6% q-o-q in the third quarter thanks to a positive contribution of net exports, while residential investment declined strongly. China reported 3.9% quarterly growth, as some service activities picked up with further re-opening and construction received a boost from infrastructure spending. Based on GDP data available before the cut-off date, global GDP growth is set to be stronger in the third quarter on the back of the rebounds in the US and China. Recent monthly indicators (e.g. industrial production, retail sales, PMIs) nevertheless point to weakness in global economic activity going forward. Most advanced and emerging economies are suffering from a major terms of trade shock due to the energy crisis, while global monetary conditions are tightening and the US dollar has appreciated sharply.

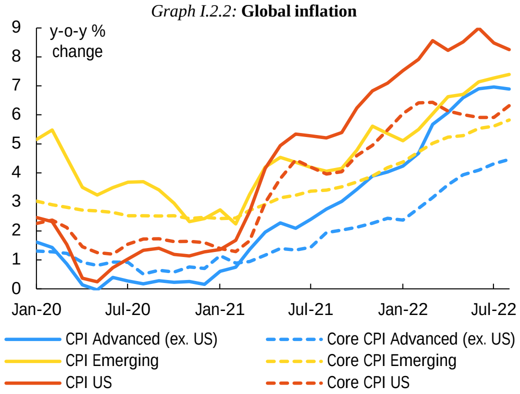
Graph I.2.1: **Growth in global GDP and global PMIs**



Sources: OECD, IMF and national sources for GDP, S&P Global for PMI.

Inflation rates have surged to highs not seen in decades (see Graph I.2.2). In the US, price pressures have eased in the goods sector, but intensified and broadened in the services sector, with the largest contribution to core inflation coming from growth in housing rents. The headline CPI inflation edged down to 8.2% in September (from 8.3% in August), but core inflation continued its upward trend and remained around multi-decade highs. Inflationary pressures remained elevated in other major advanced economies (e.g. United Kingdom, Canada, South Korea), driven by energy prices, but also by tight labour markets and high core inflation, though demand is slowing and monetary policy tightening. In Japan, elevated producer prices and a strongly depreciating currency led to a moderate pass-through to inflation. In most EMEs, where food and energy have a relatively large weight in the consumption basket, rising commodity prices have been compounded in many cases by the effect of strong local currency depreciation against the US dollar. In emerging Asia, inflation remains more contained, despite rising energy costs (e.g. Indonesia) and food prices (e.g. India). The recent moderation in global commodity prices and the global slowdown will help alleviate inflationary pressures in many parts of the world.

Graph I.2.2: **Global inflation**



Source: Dallas Fed.
Note: Last data point refers to August 2022.

The growth of global trade continues to slow, despite recovery of international tourism. Global trade expanded by around 10% in 2021 but growth has slowed in 2022 – the volume of global trade increased by 4.4% in the first 8 months of 2022 compared to the same period of 2021. More recent data point to further subdued trade activity, with the Kiel Trade Indicator posting flat month-on-month growth for September and the JPMorgan Global PMI export orders index for September declining at the fastest pace this year. Monthly data for services trade shows that travel and tourism picked up significantly during the first half of 2022, with the exception of China, as COVID-related mobility restrictions eased. In line with this trend, the latest UNWTO World Tourism Barometer shows that international tourist arrivals were back to 60% of pre-pandemic levels in the January to June period.

Supply chain disruptions eased during the summer, but with significant regional divergences. The New York Federal Reserve Bank's Global Supply Chain Pressure Index has been decreasing since April, with the September reading approaching historical average. Data on port congestion, however, shows a marked divergence across areas, falling quickly in China and the US West Coast, while increasing rapidly in the US East Coast and European ports in the North Sea due to the increasing presence of LNG tankers and sanctions controls (see Graph I.2.3). Freight rates remain higher than pre-COVID-19 levels but have fallen as demand weakens, with September rates for container shipping (Freightos) and bulk cargo (Baltic Exchange) falling by 56% and 69% y-o-y, respectively. Increases in inventory levels in early 2022 have contributed to lower supply chain pressures in more recent months. According to the Logistics Managers' Index, inventory levels increased in September to above their historical average. The inventory build-up during 2022 results from a combination of goods arriving late due to supply chain bottlenecks, consumers shifting to services, inflationary pressures, and more recently business efforts to raise inventory levels before the December holiday season. The S&P Global PMI's orders-to-inventory ratios have been declining since July and in September they were well below 1 in the EU and around 1 in the US and China (see Graph

Table I.2.1:

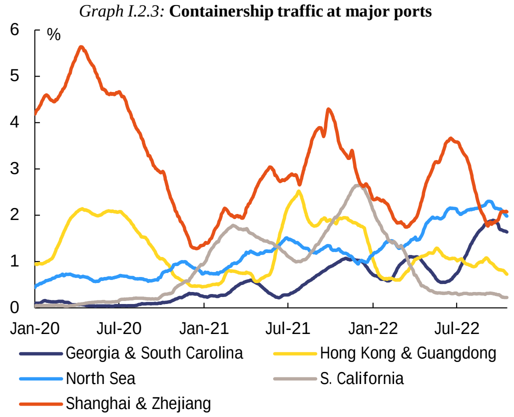
International environment

(Annual percentage change)					Autumn 2022 forecast			*Spring 2022 forecast*		
	(a)	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
					Real GDP growth					
Japan	3.8	-0.4	-4.6	1.7	**1.7**	**1.6**	**1.2**	*1.7*	*1.9*	*1.8*
United Kingdom	2.3	1.6	-11.0	7.5	**4.2**	**-0.9**	**0.9**	*7.4*	*3.4*	*1.6*
United States	15.7	2.3	-2.8	5.9	**1.8**	**0.7**	**1.7**	*5.7*	*2.9*	*2.3*
Emerging and developing Asia	33.4	5.2	-1.2	6.9	**4.4**	**4.8**	**5.0**	*6.9*	*5.2*	*5.3*
- China	18.6	6.0	2.2	8.1	**3.4**	**4.5**	**4.7**	*8.1*	*4.6*	*5.0*
- India	7.0	4.5	-6.6	8.3	**6.9**	**6.0**	**6.3**	*8.3*	*7.4*	*6.5*
Latin America	7.4	-0.1	-7.3	6.8	**3.0**	**1.7**	**2.2**	*6.1*	*2.3*	*2.4*
- Brazil	2.3	1.2	-3.9	4.6	**2.5**	**0.8**	**1.0**	*4.6*	*0.7*	*1.5*
MENA	5.7	1.2	-3.3	4.0	**5.4**	**3.5**	**3.3**	*3.4*	*5.4*	*3.8*
CIS	4.5	2.6	-2.6	4.8	**-6.8**	**-1.1**	**3.2**	*4.7*	*-11.7*	*1.9*
- Russia	3.1	2.2	-2.7	4.7	**-5.1**	**-3.2**	**0.9**	*4.7*	*-10.4*	*1.5*
Sub-Saharan Africa	3.3	2.7	-2.0	4.3	**3.3**	**3.4**	**3.7**	*4.3*	*3.6*	*3.7*
Candidate Countries	2.2	1.0	1.5	10.5	**4.8**	**3.4**	**3.0**	*10.2*	*2.1*	*3.1*
World excluding EU	85.0	2.9	-2.7	6.0	**3.1**	**2.9**	**3.4**	*5.9*	*3.3*	*3.7*
					Trade of goods and services, volumes					
World excluding EU, import		-0.6	-8.5	11.0	**4.8**	**2.5**	**3.7**	*10.9*	*4.9*	*4.3*
EU export market growth		2.5	-8.5	9.9	**6.2**	**1.9**	**3.5**	*8.9*	*6.8*	*4.7*

(a) Relative weights in %, based on GDP (at constant prices and PPS) in 2021.(b) Imports of goods and services to the various markets (incl. EU-markets) weighted according to their share in country's exports of goods and services.

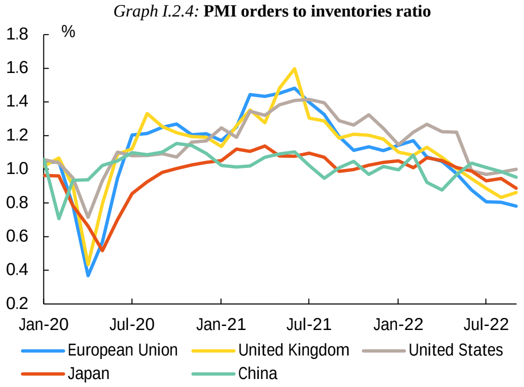
I.2.4).

Graph I.2.3: **Containership traffic at major ports**



Source: Kiel Institute for the World Economy

Graph I.2.4: **PMI orders to inventories ratio**

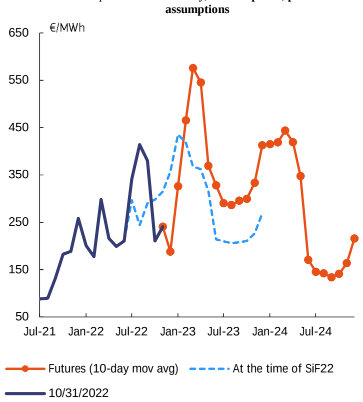


Source: S&P Global.
Note: Last data point refers to September.

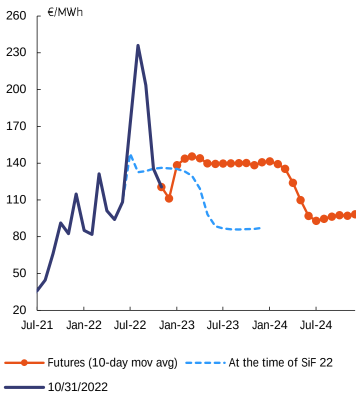
Food and metal prices have declined since summer and food commodity futures point to further decreases, while for industrial metals the outlook is mixed. Industrial metal prices are down 17% since the beginning of 2022 on the back of rapidly declining global demand, especially due to China's property sector contraction. Metals futures remain mixed – with for example copper and steel broadly flat while aluminium expected to move higher - amidst concerns over the global economy and a US ban on aluminium imports from Russia. According to the FAO Food Price Index, food prices dropped for the sixth consecutive month in September, by 1.5% compared to August. The Black Sea grain deal - brokered by the UN and Türkiye to erect a shipping corridor for Ukrainian grain and other agricultural products – helped to significantly lower the prices of cereals and vegetable oils over this period. Nevertheless, the FAO index was 7.2% higher in September than a year ago and uncertainties remain about future food supplies. Future prices for the main food components have declined compared to summer, especially from the highs reached in second quarter of 2022, and show only a gradual decline over the forecast horizon. In 2024, however, many food futures including wheat, rice, corn and soybean are still expected to remain above 2021 average levels.

Oil prices have declined from summer highs, but the outlook remains highly uncertain in view of deep changes in demand and supply fundamentals. Following Russia's invasion of Ukraine, the Brent price soared to 133 USD/bbl in early March 2022 and averaged 113 USD/bbl in the second quarter of 2022. Oil prices have been on a declining path since the summer, averaging around USD 89/bbl in September and USD 94/bbl in October. A large dollar appreciation coupled with softening global demand weigh strongly on oil prices. On the supply side, oil markets could tighten again after OPEC+ announced sizable production cuts starting from November 2022. Oil future prices at the cut-off date were trading below the spot market price, reflecting mainly concerns about the pace of the global economic slowdown. Oil prices are assumed to average USD 102/bbl in

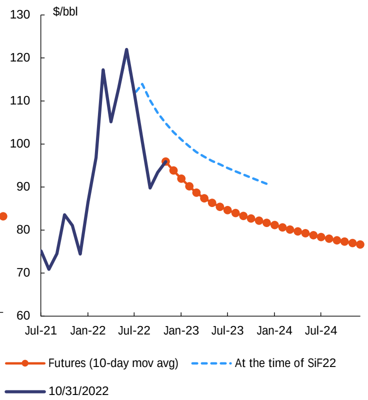
Graph I.2.5a: **Electricity, EU composite, price assumptions**



Graph I.2.5b: **Natural gas (TTF), price assumptions**



Graph I.2.5c: **Crude oil, price assumptions**



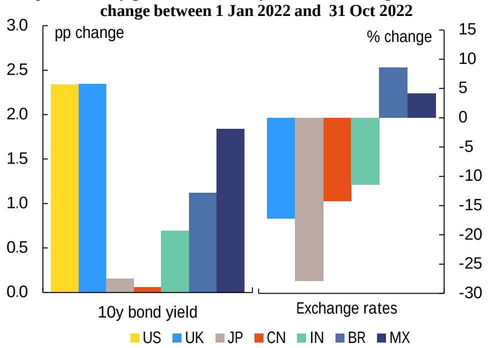
2022, 85/bbl in 2023 and 78/bbl in 2024 (see Graph I.2.5).

The EU gas market has successfully replaced a large fraction of waning Russian gas through LNG imports. The EU has taken various policy actions, including on gas demand reductions and storage requirements in preparation for the winter.(2) Russian pipeline imports have fallen significantly and are now a fraction of what they were last year (around 7% of all imports in October 2022 compared to roughly 40% in prior years). While volumes from other pipeline routes have remained rather stable as compared to this time last year, high EU gas prices have made it an attractive market, compared to others, for LNG exporters, with the US acting as the main supplier. These developments underpin the baseline assumption of no gas disruptions over the forecast horizon.

Wholesale gas prices have fallen back sharply from their summer peak, but the outlook is for further increase. European TTF gas front-month contract prices fell from over 300 EUR/Mwh in late August to around 100 EUR/Mwh in late October, the lowest since June, reflecting above-normal temperatures and reductions in industrial and household demand. However, as storage levels will be drawn down over the winter and need to be replenished, markets are expected to be tight, implying continued uncertainty about the future supply situation. Gas prices continue to affect the electricity market and the declines in recent wholesale gas prices were reflected in wholesale electricity prices. Electricity prices fell in October back to levels seen a year ago, also benefitting from increased wind power generation. All in all, future contracts suggest that despite the recent decline, TTF gas prices will increase to 147 EUR/MWh on average in 2023, compared to 135 EUR/MWh in 2022, and moderate to 110 EUR/MWh in 2024, which still represents five times the price available in 2020. This puts the outlook for gas prices in euro some 16% and 53% higher in 2022 and 2023, respectively, compared to the SiF (see Graph I.2.5 and Box I.2.1).

Global financing conditions have tightened with rising policy rates, higher bond yields and a stronger US dollar. Central banks in emerging market economies started to raise policy rates in response to rising inflation from mid-2021, while monetary policy tightening in advanced economies started later in early 2022. The US Federal Reserve has been tightening at a fast pace in 2022, with the upper bound of the targeted policy rate range increasing from 0.25% in March 2022 to 4.00% in November, and further rate hikes are expected. The rapid increase in US rates has contributed to a sharp appreciation of the US dollar in 2022 and this has raised the pressure for further monetary tightening elsewhere (see Graph I.2.6). The dollar's strength likely also reflects a "risk-off" sentiment in global markets, as the shock of the Ukraine war and its impact on global growth has been reflected in risk premiums. The US 10-year bond yield has risen from below 1.5% at the start of 2022 to above 4% by the cut-off date. Government bond yields have also increased significantly in advanced economies and in several major emerging market economies (e.g. Mexico, Brazil) (see Graph I.2.6).

Graph I.2.6: **10-y government bond yields and exchange rates vs USD, change between 1 Jan 2022 and 31 Oct 2022**



Source: Central banks, US Treasury Department, Ministry of Finance of Japan.
Note: A negative change signals depreciation of the currency.

(2) See Regulation (EU) 2022/1032 of the European Parliament and the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage targets.

Box I.2.1: **Future prices in forecast assumptions**

Large swings in commodity prices can have important effects on macroeconomic developments. The two oil price shocks in the 70s were the main cause of the stagflationary patterns observed in Europe and in the US. Similarly, the post-pandemic surge in oil prices – especially in Europe and Asia – and natural gas prices, coupled with sharp increases in the prices of agricultural commodities, are largely responsible for the pick-up in inflation and slowdown in economic momentum. Unlike the price shocks in the 70s, where oil was a broad indicator of energy developments, the changes in the energy mix in the past decades have given a more prominent role to natural gas (especially as it often spills over to electricity market). Predicting developments in energy commodity prices is therefore key to economic forecasts.

This box discusses the merits of relying on futures prices for forecasting commodity prices, with focus on the role of the European gas market.

Since many commodities are traded on both spot and futures markets, forecasters generally rely on their prices in futures contracts to anchor projections over the forecast horizon. The idea is that irrespective of whether futures contracts are used for hedging against a pre-existing risk or for speculating on price movements, the futures price reflects expectations of the interplay of future demand and supply (plus a risk premium commensurate to agents' hedging requirements vis-a-vis the uncertainty of spot prices in the future). This holds in particular for non-storable commodities, but also for storable commodities for which inventories are relatively small compared to the volume of consumption, as in the case of oil. (1)

Whereas forecasters have long relied on oil futures for forecasting, the poor record of oil futures markets in anticipating the surge of prices in 2003–08 and concerns of heightened volatility on futures markets triggered a new critical assessment of the practice. In a 2008 speech, Fed Chairman Bernanke cautioned against ignoring "the substantial amounts of information about supply and demand conditions that are aggregated by futures markets." Chairman Bernanke however conceded that forecasts of commodity prices obtained from futures markets should be considered as highly uncertain. (2) This – especially at times of heightened volatility and large structural shifts in energy markets – justifies the recourse to scenario analysis largely built around the evolution of futures prices.

Much of the recent research has confirmed the key role of futures, highlighting that (1) futures markets convey substantial information about expected supply and demand conditions; (2) potential deviations of spot prices from the path of futures are due to a changing assessment of demand and supply circumstances, rather than a systemic failure of the futures price discovery role; and (3) predictions based on futures markets are generally superior to alternatives. (3) Recent research however has cautioned that financial speculation can hamper the price discovery function of futures. (4)

Consistent with these findings, the European Commission, in its European Economic Forecast, sets oil price assumptions according to oil price futures. The IMF, the ECB and many central banks, including the Federal Reserve System and the Bank of Japan, follow the same approach. (5)

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(1) In the case of storable commodities with sufficiently large inventories futures prices generally correspond to spot price plus carrying costs. Emmons, W. R., and T. J. Yeager (2002). "An imperfect crystal ball," Federal Reserve Bank of St. Louis *The Regional Economist*, Issue Jan., pp. 10-11.

(2) Bernanke, B. (2008). "Outstanding Issues in the Analysis of Inflation." Speech at the Federal Reserve Bank of Boston's 53rd Annual Economic Conference. Chatham, Massachusetts, June 9.

(3) See, amongst others, Roache, S. K., and D. A. Reichsfeld, (2011). "Do Commodity Futures Help Forecast Spot Prices?" IMF Working Paper No. 11/254; Reeve, T. A., and R. J. Vigfusson (2011). "Evaluating the forecasting performance of commodity futures prices." Board of Governors of the Federal Reserve System International Finance Discussion Papers No. 1025, August; Polanco-Martínez, J. M., and L. M. Abadie (2016). "Analyzing Crude Oil Spot Price Dynamics versus Long Term Future Prices: A Wavelet Analysis Approach", Energies, 9 (12), pp. 1-19, December 20.

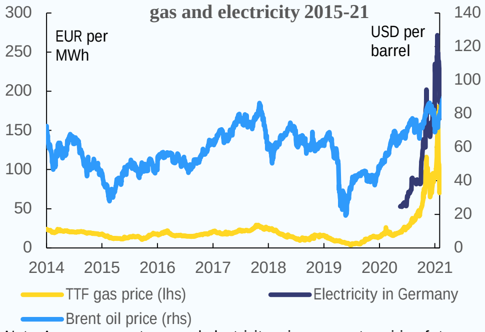
(4) See, for example, Beckmann, J., A. Belke, and R. Czudaj (2014). "Does global liquidity drive commodity prices?" *Journal of Banking & Finance*, Vol. 48, Issue C, pp. 224-234.

(5) Chahad, M.,, A.C. Hofmann-Drahonsky, B. Meunier, A. Page, and M. Tirpák (2022). "What explains recent errors in the inflation projections of Eurosystem and ECB staff?" ECB *Economic Bulletin*, Issue 3/2022.

(Continued on the next page)

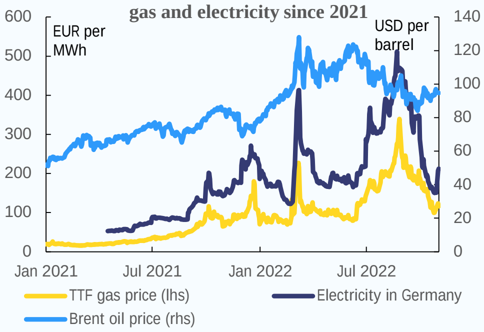
Box (continued)

Graph 1a: **Spot prices of crude oil and natural gas and electricity 2015-21**



Note: As a proxy spot gas and electricity price, nearest expiring future price is used
Source: ICE

Graph 1b: **Spot prices of crude oil and natural gas and electricity since 2021**



Note: As a proxy spot gas and electricity price, nearest expiring future price is used
Source: ICE

Until recently, in Europe, most gas tended to be supplied on the basis of long-term contracts indexed to oil prices. [6] Close co-movement of oil and gas meant that a single assumption for oil was sufficient to project the evolution of most energy commodities.

Important changes in the production and distribution of gas, coupled with reforms in market structures, have led to a decoupling of gas prices from oil (see Graph 1a). [7] In parallel, and partly owing to the superior underlying infrastructure and extensive interconnectedness with large part of North West Europe, the Dutch Title Transfer Facility (TTF) emerged over the past decade as Europe's main gas trading hub, progressively replacing the British National Balancing Point (BNP) as reference benchmark for Europe. TTF prices are currently used as indexes in price formulas for a wide range of gas contracts, from import long-term contracts to retail contracts.

A second important structural change relates to the electricity market. Following decades of relative stability, the electricity market has been profoundly affected by the phasing out of nuclear- and coal-fired electricity generator plants and the increasing share of cleaner intermittent renewable sources. Because of these developments, gas-fired electricity producers (which can easily adjust production to fill the gap between demand and supply) have become price-setters in the wholesale electricity markets. Consequently, movements in gas prices now spill over to electricity prices.

The decoupling of the price of gas from the price of oil has accelerated on the back of tight global supply and rising demand (especially from Asia), and has been recently exacerbated by Russia's unprovoked aggression against Ukraine (see and Graph 1b). Structural trends and recent developments increase the importance of anchoring the economic forecast to an expected evolution of gas prices. As of the Autumn 2021 Forecast, Commission services have broadened the assumptions about the evolution of energy commodity prices to gas using – just as in the case of oil – futures markets (and specifically TTF futures for gas) to anchor the projected trajectory of future prices over the forecast horizon. The approach was justified by recent evidence on the predictive power of futures in gas markets. [8]

Since mid-2021, nevertheless, gas futures have failed to correctly anticipate the large increases in the price of gas and electricity, resulting in large inflation forecast errors across private and institutional forecasters (see Graph 2). Doubts about the discovery role of futures have been heightened by the

(6) Asche, F., A. Oglend, and P. Osmundsen (2017). "Modeling UK Natural Gas Prices when Gas Prices Periodically Decouple from the Oil Price." *The Energy Journal*, Vol. 38 (2), pp. 131-148; and Zhang, D., and Q. Ji (2018). "Further evidence on the debate of oil-gas price decoupling: A long memory approach". *Energy Policy*, Vol. 113(C), pp. 68-75.

(7) European Central Bank (ECB) (2014). "Developments in consumer gas prices in the euro area." *Monthly Bulletin*, Box 2, October.

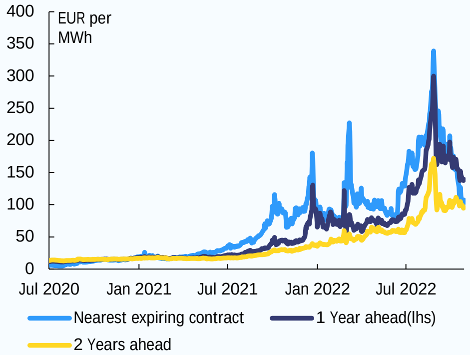
(8) Chinn, M. D., and O. Coibion (2014). "The Predictive Content of Commodity Futures," John Wiley & Sons, Ltd. *Journal of Futures Markets*, Vol. 34(7), pp. 607-636.

(Continued on the next page)

Box (continued)

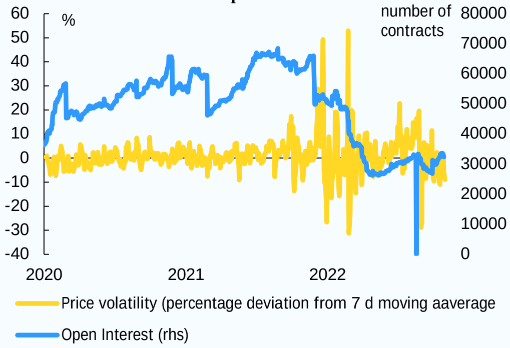
extreme volatility and concerns about the role of financial speculation in the gas futures market [9] and falling market liquidity (see graph 2a). [10]

Graph 2a: **Future and spot prices of TTF gas prices**



Source: ICE

Graph 2b: **TTF future 1 year ahead, price volatility and open interst**



Source: ICE

These concerns do not appear fully justified. First, data from the US Futures Trading Commission (CFTC) reveals that on aggregate non-commercial traders have not increased their long net positions on the gas market as the spot price of TTF gas surged, showing that financial speculation has not increased. [11] Second, the low liquidity in the TTF futures gas market appears to be more the consequence than the cause of the volatility. With rising prices, the initial margin requirements set by ICE Clear Europe, the central counterparty (CCP) for trade in TTF, have surged to cover the increased risks of loss. The rising cost of meeting margin requirements has led many commercial traders to reduce their trading of futures. Notwithstanding these liquidity constraints, evidence of a strong bi-directional causality between spot and futures prices suggests that spot and futures prices on the TTF market react simultaneously to new information. In other words, the fact that futures prices have recently failed to anticipate the trajectory of spot prices reflects unpredictable developments in demand and especially supply conditions in a context of a major structural break of normal demand and supply relations, rather than systematic failures in the price discovery function.

If anything, doubts about the use of the TTF futures as reference for future developments in European gas market relate to emerging bottlenecks in the underlying delivery infrastructure. With the Dutch infrastructure (originally designed in view of large inflows from the East) now operating at or close to maximum capacity, spot TTF prices have surged above those of other hubs, e.g. the UK NBP. Until these bottlenecks have been resolved, the Commission has proposed the development of a complementary benchmark for LNG (liquified natural gas).

This forecast continues to assume that the EU economy will avoid gas shortages and that spot prices will evolve in line with TTF futures. Ongoing changes in the European gas market could nevertheless lead to different approaches in upcoming forecast rounds.

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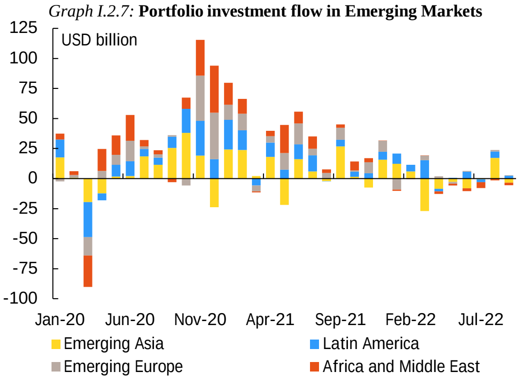
(9) Although the TTF futures contracts result in physical delivery, the opportunity to trade the contract multiple times before maturity and to close trading position without taking physical delivery opens the trade to non-commercial traders. Differently from commercial traders, who mainly seek to hedge an underlying exposure to commodity risk, non-commercial agents seek exposure to commodity price fluctuations in an attempt to achieve returns.

(10) Sufficient market liquidity is key to process information into price signal. See Nick, S. (2016). "The Informational Efficiency of European Natural Gas Hubs: Price Formation and Intertemporal Arbitrage." International Association for Energy Economics *The Energy Journal*, Vol. 0(2), pp. 1-30.

(11) See Mezzomo L. and Corsini D., (2022). “La crisi energetica in Europa: cause e possibili soluzioni”, Focus Commodity, Intesa San Paolo, Direzione Studi e Ricerche, 6 September.

Global equity markets have registered major losses and risk-off sentiment has accelerated capital outflows from emerging market economies. Global equity markets have fallen from the highs in early 2022, with most markets falling significantly since April. Net capital inflows into EMEs have also moderated, and turned negative in some regions, since the beginning of 2022 (see Graph I.2.7). This reflects a combination of rapid outflows from China, but also the shift away from risk assets in general, with an outflow of portfolio investment mainly to US assets. The combination of a strong dollar and sharply rising costs of dollar finance not only raises policy dilemmas for economies particularly vulnerable to capital outflows or with concerns for the rolling over of external debts, but may also have a dampening effect on global trade, given the high volume of global trade invoiced in dollars.

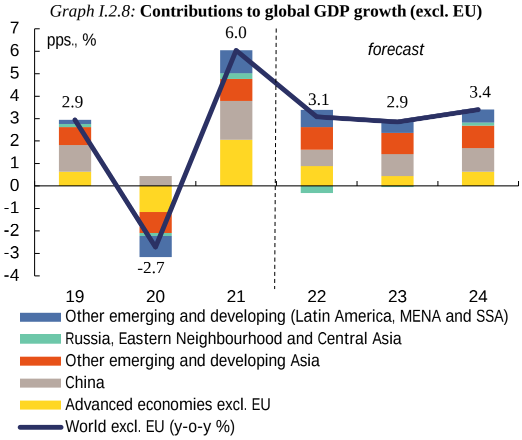
Graph I.2.7: **Portfolio investment flow in Emerging Markets**



Source: IIF.
Note: Last data point refers to September 2022.

Global growth faces several headwinds and is expected to remain weak in the second half of 2022 and into 2023 (see Graph I.2.8). First, high inflation is reducing household disposable incomes and sapping private demand. Second, central banks continue to raise policy rates at a swift pace, thus tightening global financing conditions, while many advanced economies face fiscal constraints after the large stimulus during the pandemic and recently with energy support measures. Third, China's outlook is still clouded by the lingering strict COVID-19 policy-related lockdowns and the sharp slowdown in its real estate sector, thus wiping out a major source of demand with negative spillovers for the region. Global growth is thus expected to slow to 3.1% in 2022 and 2.5% in 2023 (see Table I.2.1). Activity is set to pick up moderately to 3.1% in 2024 as inflationary pressures abate, supply chains mend and trade channels restore.

Graph I.2.8: **Contributions to global GDP growth (excl. EU)**



Economic activity in the US is set to soften as the Federal Reserve continues to hike rates. High frequency indicators point to a moderate slowdown in the fourth quarter. Overall, real GDP growth is expected to slow to 1.8% in 2022 and to drop further to 0.7% in 2023 as financial conditions continue to tighten, impacting on investment -especially residential-, strong US dollar appreciation weighs on net exports, and household disposable incomes are reduced by still elevated inflation. The US economy is set to rebound in 2024 as consumer price inflation eases and real disposable incomes improve. However, at 1.7%, 2024 GDP growth will remain below its long-term potential rate.

Prospects for other advanced economies have turned gloomy as well. The UK economy is expected to grow by over 4% in 2022, but is set to deteriorate sharply in the second half of the year, setting a lower carry-over for 2023, as household incomes have been hit by rising energy and food prices, while business investment remains stagnant. The UK economy is projected to contract in 2023 and recover only gradually in 2024. In Japan, the economy is set to grow moderately over the forecast horizon, as headline inflation is still less of a hurdle compared to peers, though rising energy costs and soft external demand limit the expansion. Growth prospects in the other advanced economies have also deteriorated as demand softened amid elevated inflation and tighter monetary policy.

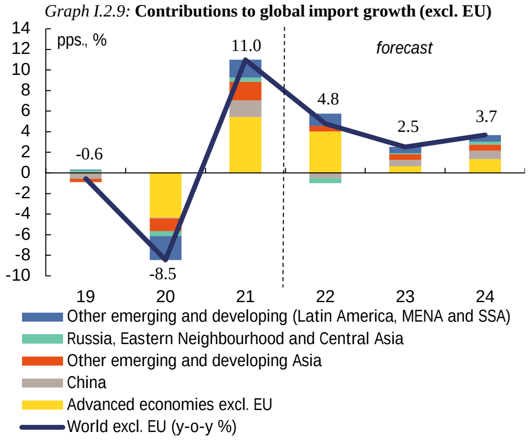
China' economy is facing significant headwinds from the "dynamic zero-COVID" policy and the ailing property sector. Given the output growth in the first three quarters, government's annual growth target of "around 5.5%" looks out of reach. COVID-19 outbreaks are still prompting strict lockdowns across China (e.g. Chengdu, Shenzhen) undermining consumer sentiment and consumption, as well as exports. Meanwhile, the crisis in the real estate sector has wiped out buyers' confidence, forcing cash-strapped developers to pause ongoing construction projects and cancel new ones. In response, policy-driven infrastructure spending is being ramped up, while in August the People's Bank of China lowered its policy rates. However, these measures are not expected to fully offset the combination of weak domestic demand and the real estate slump. Growth in China is therefore expected to attain a relatively modest 3.4% in 2022, before recovering in 2023 (4.5%) and 2024 (4.7%). The real estate sector is set to act as a drag on growth over the forecast horizon as recent major defaults and prevailing high debt ratios suggest a protracted deleveraging to come.

Growth prospects in emerging market economies have weakened due to higher inflation and tighter financing conditions. Rising inflation, especially of food prices which constitute a substantial proportion of the consumption basket for most EMEs, has eroded disposable incomes, which, together with tightening financing conditions and lower external demand from advanced economies, it is expected to result in slower growth across EMEs in 2023. Commodity exporting EMEs (e.g. in Latin America, MENA) that benefited from higher prices in the first half of 2022, are likely to suffer from the lower global demand for commodities. At the same time, the negative impact of Russia's aggression in Ukraine on the Eastern neighbourhood and on Central Asia has so far been somewhat more limited than initially expected. Similarly, the output contraction in Russia in 2022 is set to be shallower than previously projected, as the authorities have managed to avoid the complete meltdown of the financial sector and have benefited from higher energy prices. However, the recession in Russia is set to last longer than previously forecast as sanctions, the drastic loss of stable energy exports to Europe and the massive retreat of western companies will drag profoundly on the potential growth of the country and its ability to generate new sources of growth.

Global inflationary pressures are set to abate over the forecast horizon but more slowly and gradually than previously expected. In the US, headline CPI inflation is projected to reach around 8% in 2022, before gradually falling to 3.4% in 2023 on the back of lower energy and goods prices and much tighter financial conditions. However, services inflation is expected to remain persistently high, in part due to this year's rent increases feeding into the headline inflation rate over the course of 2023. In 2024, consumer inflation is forecast to edge down further to 2.3% as services inflation moderates. Inflation in other advanced economies and in emerging market economies is also likely to peak soon, though inflationary pressures have broadened to other goods and services in Latin America and emerging Europe due to depreciating currencies and wage indexation practices. Looking forward, global inflationary pressures are likely to abate on much tighter monetary policy, lower commodity prices and subdued global demand, though the reversal is likely to take longer than previously expected due to elevated core inflation and higher wages setting in.

Global trade growth is expected to moderate somewhat in late 2022 and especially in 2023 after the brisk recovery seen in 2021. Global trade in the first half of 2022 benefitted from the re-opening of the economies and pent-up demand. However, latest global indices of new export orders signal considerable contraction. Several factors are set to weigh on global trade over the forecast horizon, including slower global growth, negative economic spillovers from Russia's military aggression against Ukraine, lingering challenges in global logistics, monetary policy tightening across many economies, and the sharp US dollar appreciation, given its dominant role in trade invoicing. As a result, global import volumes are expected to slow down to 5.4% in 2022. The deceleration is projected to intensify in 2023, with import volumes growing by just 2.3%, before picking up to 3.6% in 2024 (see also Graph I.2.9).

Graph I.2.9: **Contributions to global import growth (excl. EU)**



2.2. FINANCIAL CONDITIONS IN THE EU

Since the Summer interim Forecast, financial conditions in the EU tightened further amidst persistent volatility. In the government bond segment, long-term yields increased further as central banks accelerated monetary policy tightening in response to mounting inflation. Riskier segments such as stocks and corporate bonds remained very volatile, mostly driven by rising funding costs, slowing economic activity, geopolitical tensions and energy supply concerns.

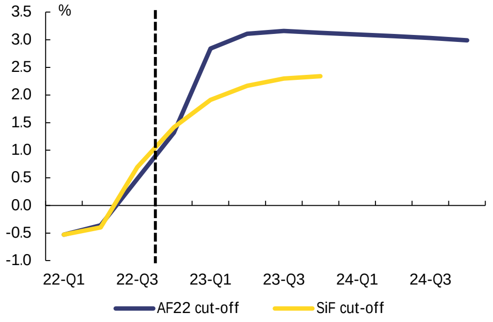
The euro continued to slide against most currencies, especially against the US dollar. Since early-July, the euro has depreciated by 0.4% in nominal effective terms and by 6.0% against the US dollar, reaching parity. It has also depreciated against the Swiss franc and most emerging market currencies, while it appreciated against the currencies of some major economies such as the Japanese yen, the Chinese renminbi and the British pound. Overall, a lower euro contributes to further deteriorating terms of trade and adds to the inflationary pressures, notably via higher import prices (see Box I.2.3).

The persistence of high inflation has pushed the ECB towards a more forceful tightening than previously expected. After a 50 bps. increase in July, policy rates were hiked by 75 bps. in September and by another 75 bps. in October. As such, the interest rates on the main refinancing operations, on the marginal lending facility and on the deposit facility currently stand at 2.0%, 2.25% and 1.5%, respectively. Elsewhere in the EU, where monetary policy normalisation was already well underway in response to strong and persistent inflationary pressures, central banks have raised further their policy rates, bringing them to 7% in Czechia, 13% in Hungary, 6.75% in Poland and 6.25% in Romania. In Sweden, the policy rate reached 1.75% after the Riksbank increased it by 100 bps. in September.

The ECB Governing Council stressed that further normalisation of interest rates would be appropriate. At the same time, the ECB Governing Council emphasised its intention to remain data dependent and take future decisions on a meeting-by-meeting basis. As regards to the pass-through of higher interest rate to the banking system, the ECB amended in October the conditions on the third series of targeted long-term refinancing operations (TLTRO III) so as to speed up the transmission of higher policy rates to banks' funding costs as well as to bank lending rates.

At the cut-off of the forecast, markets were expecting the ECB to continue on its path of normalisation of monetary conditions throughout 2023. Euribor-3 months futures suggest that short-term nominal rates are expected to increase from their current levels to 2.8% in the beginning of 2023. They would then peak at 3.2% during the summer 2023 before easing to 3.0% by the end of 2024. These levels suggest a more rapid and more pronounced tightening compared with the market pricing in early July, at the cut-off date of the Summer interim Forecast (see Graph I.2.10). In view of the projected gradual easing of inflation, real short-term interest rates are expected to increase in a sustained manner and would turn positive in the second quarter of 2024. Elsewhere in the EU, short-term interest rates next year are also set to continue increasing in most countries before a slight decline in 2024 (see Box I.5.1 for technical assumptions).

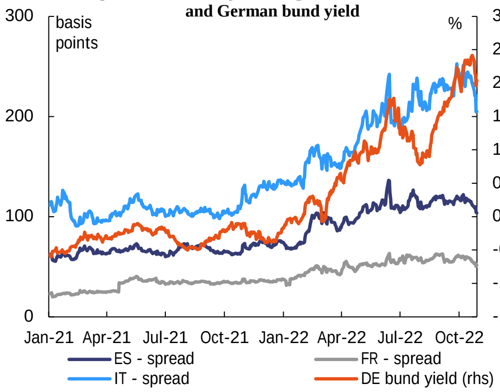
Graph I.2.10: **Short-term euro interest rate expectations, euro area**



Source: Bloomberg.

In euro area sovereign bond markets, yield curves moved up significantly, but spreads remained in check. Since early July (at the cut-off date of the SiF), the 10-year German Bund yield rose by some 70 bps. to about 2.3%.[3] Most euro area sovereign bond spreads remained broadly stable to the Bund (see Graph I.2.11). Outside the EA, 10-year Polish sovereign bond yields have moved up further as inflation pressures continue.

Graph I.2.11: **Sovereign bond spreads to German bund and German bund yield**

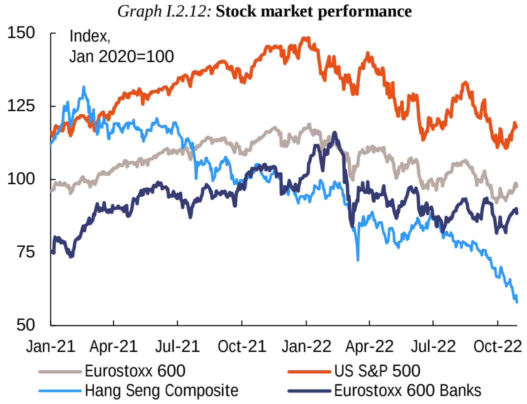


Source: Bloomberg.

Real long-term interest rates in the euro area have already turned positive. The long-term nominal interest rates as measured by the euro area 10-year interest rate swap stood at 3.1% at the end October while market's inflation expectations over a 10-year period were at around 2.5%. Looking forward over the forecast horizon, long-term real rates are expected to remain in positive territory.

Equity markets and corporate bonds have continued to be under pressure. After a short-lived recovery over the summer, sell-off pressures on equity markets resumed amid the strong rise in sovereign bond yields and the deterioration in macroeconomic fundamentals (see Graph I.2.12). The banking sector stocks outperformed as capital and liquidity buffers remain at robust levels and higher interest rates support net interest margins. While this forecast assumes that the increase in the number of firm insolvencies will not have a significant macroeconomic impact, the corporate sector is facing new headwinds. Corporations most affected by higher energy prices and with weak pricing power, higher debt and low liquidity are set to face solvency challenges as the buoyant post-pandemic growth comes to an abrupt end.

Graph I.2.12: **Stock market performance**



Source: Bloomberg.

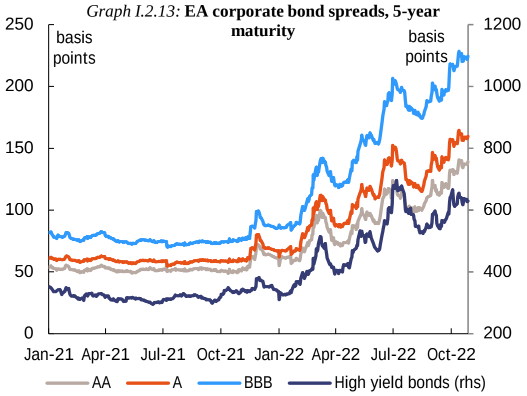
Reflecting increased risks for the corporate sector, corporate bond spreads have widened in the investment grade segment and, after a pause over the summer, also in the high yield segment (see Graph I.2.13). The increase in the cost of market-based debt financing has already led to a slowdown in the net issuance of debt securities.

Bank lending in the euro area remained strong in the third quarter of this year. ECB data shows that the annual growth rate of loans to the private sector, adjusted for loan sales, securitisation and notional cash pooling, in the euro area increased further to a robust 6.9% in September, following 6.8% in August. Adjusted loans to households stood at an annual growth rate of 4.4% in September, compared with 4.5% in August, while the annual growth rate of adjusted loans to non-financial corporations accelerated to 8.9% in September, from 8.8% in August and 7.6% in July. A significant part of the new loans was in

(3) Both figures refer to the average over 10 working days preceding the cut-off date.

the shorter-term segment, driven by the increase in firms' working capital needs due to higher input costs and increased uncertainties. The strong loan growth also partly reflects a move away from the issuance of debt securities, as market-based funding conditions have tightened sharply (see Graph I.2.13).

Graph I.2.13: **EA corporate bond spreads, 5-year maturity**



Source: Bloomberg.

Looking forward, growth in bank lending may slow down under rapidly tightening funding conditions by euro area banks. The October 2022 euro area bank lending survey (BLS) showed that banks' credit standards for loans or credit lines tightened further in the third quarter, both for loans to NFCs and for households' house purchase, mostly driven by banks' perceptions of increased economic risk and lower risk tolerance. Banks' cost of funds and balance sheet situation have also started to have a more prominent tightening impact on credit standards. Euro area banks expect further tightening of credit standards in the fourth quarter of this year for both NFCs and households. Meanwhile, NFCs' demand for loans continued to increase in the third quarter, driven by firms' financing needs for working capital and inventories, while demand for fixed investments continued to have a dampening impact on net demand. Households demand for mortgage loans decreased substantially on the back of increased interest rates, lower consumer confidence and worsened housing market prospects. For the fourth quarter, banks expected continued net decrease in housing loan demand and a moderate net decline in demand for loans to firms.

The increased interest rate levels should **bolster banks' net interest margins, at** least in the short run. First, a steepening yield curve for the short to medium maturity allows banks to benefit from the increase in the interest spread between lending on the long end and borrowing on the short end. Second, banks benefit from the so far asymmetric pass-through of policy rate increases to the liability and asset side of banks' balance sheets, whereby household and NFC deposits have seen no or only muted interest rate increases, compared to a stronger pass-through to banks' assets. Third, large excess reserve holdings in the euro area banking system mean that the maturity transformation in banks' balance sheets is likely to be less pronounced than in pre-crisis times. Beyond the short term, however, the economic downturn and the increased risk of credit defaults is set to weigh on bank profitability via higher provisioning needs and unexpected increases in non-performing exposures.

2.3. ECONOMIC ACTIVITY

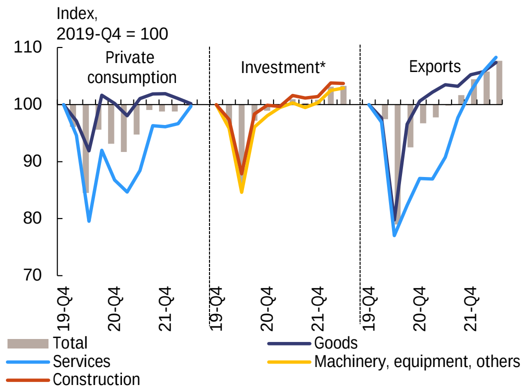
EU growth in the first half of the year surprised on the upside. Real GDP expanded at a rate of 4.9% over the same period of last year. In quarterly terms, economic activity in the EU expanded by 0.7% in both the first and second quarter of the year (0.6% and 0.8%, respectively, in the euro area[4], exceeding expectations in the SiF.

Growth in the first half of the year benefited from the lifting of pandemic-related restrictions. After having been supported by a strong net trade contribution in the first quarter (affected by activities of multinational enterprises in Ireland), growth in the second quarter was boosted by the spending spree unleashed by the relaxation of pandemic-related restrictions. Private consumption in the EU increased by 1.1% (q-o-q) in the second quarter, with the purchase of services (3.2% q-o-q) more than offsetting a decline in the purchase of goods (-0.9% q-o-q), especially durable goods (see Graph I.2.14). Consumption growth outpaced gross disposable income growth, leading to a further decline of households' saving rate. At 12.6% in the EU,

(4) Reflecting the upcoming entry of Croatia in the euro area in January 2023, euro area aggregates include for the first time 20 countries (both for historical data and autumn forecast figures).

the saving rate is now a notch below its long-term average. Investment spending and government consumption picked up by 0.6% and 0.5%, respectively, after stagnating in the previous quarter. On the external side, the contribution of net trade was modest (0.1 pps.), with the pick-up in exports only barely compensating for an increase in imports.

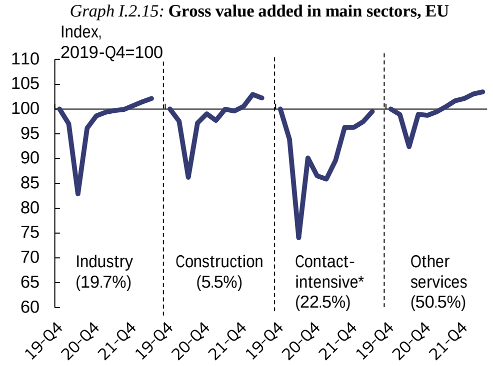
Graph I.2.14: **GDP demand-side components, EU**



Note: *excluding Ireland.

The surge in demand largely benefited the service industry. Growth in value added in contact-intensive services[5] accelerated in the second quarter, outpacing all other sectors. Industry continued to grow, but at a moderate pace, while construction contracted in the second quarter, after a strong increase in the first quarter (see Graph I.2.15).

Graph I.2.15: **Gross value added in main sectors, EU**



Note: *Wholesale and retail, transport, accommodation, food services; arts, entertainment, recreation. % of GVA in 2019 in brackets.

According to Eurostat's preliminary flash estimate, growth in the third quarter remained positive but slowed down substantially.[6] While positive at 0.2% q-o-q in both the EU and the euro area, the preliminary estimate of GDP growth in the third quarter points to a substantial slowdown in a context of high inflationary pressures, plummeting confidence, and high uncertainty. The estimated outturn was slightly above consensus, though broadly in line with the Commission's Summer interim Forecast. The 2022-Q3 growth lifted the volume of GDP 2.6% above pre-pandemic levels in the EU (2.1% for the euro area) and brought acquired growth in the third quarter for 2022 as a whole to 3.5% in the EU and 3.3% in the euro area.

Continued economic growth was reported for 7 of the 10 reporting Member States. Economic activity increased in all the largest euro area countries. Output rose by 0.5% q-o-q in Italy, 0.3% in Germany and 0.2% in both France and Spain. By contrast, contractions were recorded in Belgium, Latvia and Austria. While no expenditure breakdown was published, information from Member States suggests that growth was supported by domestic demand, with a significant contribution from the recovery of tourism and other contact-intensive service activities in some countries.

Hard indicators had already pointed to a slowdown of economic activity over the summer. Industrial production in the EU increased markedly in August (by 1.1% m-o-m), but without offsetting the losses from the July drop (-1.5% m-o-m).[7] Especially the energy-intensive subsectors in the EU continued to struggle over the summer. Production in construction also continued to decrease in the first two months of the third quarter, pointing to a second consecutive contraction, quarter-on-quarter, in the sector's output. Along the

(5) Contact-intensive sectors include: arts, entertainment and recreation, as well as wholesale and retail trade, transport, accommodation and food service activities. These are sectors with non-teleworkable occupations, reliant on teamwork or face-to-face customer interaction, which have been particularly affected by containment measures.

(6) The preliminary flash estimate of GDP growth in 2022-Q3 is based on the data of 17 Member States, covering 91% of EU GDP and 93% of euro area GDP. While usually included in the preliminary flash estimate, Czech GDP data has been released on 1 November 2022. Eurostat will release flash estimates of GDP growth and employment on 15 November (t+45) and more detailed estimates on 7 December (t+65), including estimates of GDP components.

(7) The outturn is affected partly by the very volatile production data for Ireland.

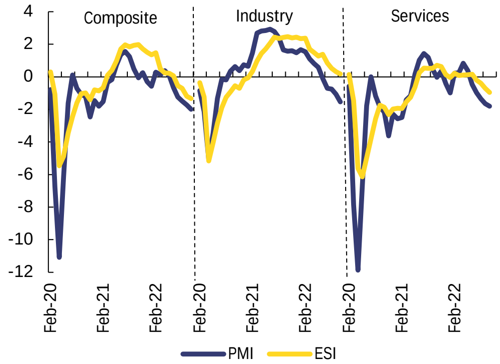
same lines, retail trade declined in August for the third consecutive month, as high inflation eroded households' purchasing power and opportunities to spend on services. Rising prices are reflected in growing divergence between the nominal and real value of retail sales.

Still, the first restriction-free summer holiday season supported a strong recovery in demand for travel and recreation. In the summer, COVID-related restrictions to mobility remained at the low level attained after the easing of measures throughout spring, despite some new spikes in infections. After years of pandemic restrictions, data on mobility in retail trade and recreation over the summer months[8] show that pent-up demand for travel and recreation defied the ongoing squeeze on real incomes from inflation. Available data on tourism in the EU show a strong increase in overall nights spent and arrivals at tourist accommodation establishments in July compared to the same month last year, even though both remained below the levels of July 2019. This evolution was supported by the recovery of flight travel[9] during the summer months, which was up compared to the same period of last year, but still below the levels of summer 2019. Whereas by the end of the second quarter value added in the contact-intensive services remained slightly below its pre-pandemic level, evidence of a strong performance of tourism-related industries in the third quarter suggests that this gap should by now also be closed, meaning that potential tailwinds from reopening dynamics are largely exhausted.

Leading indicators signal a contraction in economic activity at the turn of the year. As post-pandemic recovery forces faded, rocketing energy prices, tightened financing conditions and a weaker external environment are affecting the outlook in a more tangible way.

– The Commission Economic Sentiment Indicator (ESI) has been declining in the EU since summer 2021. The month-on-month decrease in October resulted from marked deteriorations in services and manufacturing confidence (see Graph I.2.16). Consumer confidence edged up slightly, but remained at a record low.

Graph I.2.16: **ESI and PMI, euro area**



Source: S&P Global, European Commission.
Note: Standardised data based on 2000-'07 sample.

– In October, the estimated capacity utilisation rate in the EU manufacturing sector decreased by 0.5 pps. compared to July 2022. Nevertheless, the rate is still at a relatively high level (81.2%). In services, the rate of capacity utilisation also decreased, but at 90.8% it remains slightly above its long-term average (89.0%).

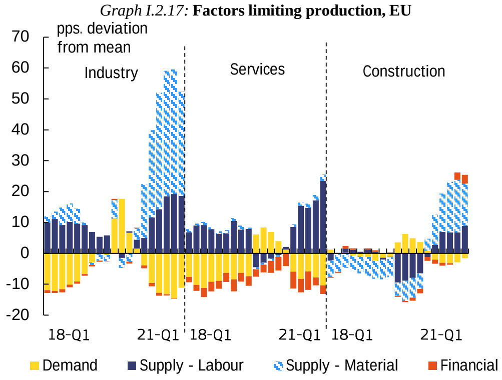
– The Commission's October surveys pointed to a decrease in the share of industry managers identifying shortages of material and/or equipment as a factor limiting their business activity (to 40%). Also, the percentage of managers identifying shortage of labour force declined slightly (to 25.9% of all industry managers) but remained close to the historical high reached in April 2022. Meanwhile, the share of managers indicating insufficient demand and financial constraints as limiting their production increased considerably (to 25.1% and 8.1%, respectively) (see Graph I.2.17).

– The Economic Uncertainty Indicator (EUI) rose further in October, driven by growing uncertainty about the economic outlook among consumers and in all business sectors except industry. Consumer uncertainty rose sharply.

(8) Composite index based on Google Community Mobility Reports that track movement trends over time compared to the base period. For the EU aggregate, a GDP-weighted average of EU countries has been computed.

(9) Based on data from https://www.eurocontrol.int.

Graph I.2.17: **Factors limiting production, EU**



Note: For services Material refers to space/equipment.

– PMIs in October signalled a contraction of economic activity. According to the flash release, the euro area Composite Output PMI dropped to 47.1, recording the fourth successive reading below the zero-growth threshold of 50 points (see Graph I.2.16). Economic conditions deteriorated markedly in the manufacturing sector. Energy intensive sectors reported the steepest output loss. The activity index in the service sector fell by 0.6 points amid the ongoing surge in consumer prices and broad-based economic uncertainty. New orders placed for both goods and services dropped as demand weakened. Business confidence in the year ahead hovered around the lowest level seen over the past two years. Price pressures remained elevated, as rising energy costs, wage pressure and the weaker euro offset the alleviating effect of improving supply conditions on commodity prices.

GDP growth in the EU is expected to contract at the end of 2022 and early 2023. Multiple shocks from high energy price pressures, the erosion of households' purchasing power, and a weaker external environment, amid elevated uncertainty, are set to tip the EU economy into contraction in the last quarter of the year (-0.5% q-o-q). A second consecutive contraction in second quarter (-0.1%) implies that the EU is set to enter into a technical recession. Whereas relatively shallow, the recession is expected to be broad based, across countries and demand components. Still, EU GDP growth for 2022 as a whole is projected to attain 3.3% (3.2% in the euro area), well above the Summer interim Forecast. The upward revision (+0.6 pps.) is the result of a powerful carry-over effect for 2022 and stronger-than-expected growth in the second quarter.

Economic activity is expected to stabilise in spring next year, with growth gaining some traction only towards the end of the year. The gap between wages and price growth is set to close somewhat, leading to a marked slowdown in the pace of deterioration in disposable income. Still, a further reduction in the saving rate is expected to support a stabilisation in consumption. Further adjustment to supply shocks and easing constraints to production are foreseen to support investment despite tighter financing conditions. Annual GDP growth is therefore projected to attain a meagre, but still positive, 0.3% in the EU and the euro area. This is markedly lower than expected in the summer (1.5% in the EU, 1.4% in the euro area).

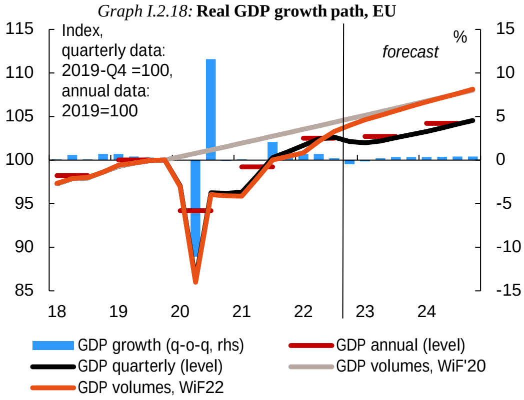
A modest rebound in growth is projected in 2024. A swift reduction in inflation and strong wage growth is set to boost real disposable income of households, leading to a rebound in private consumption. The delayed impact of monetary policy tightening is expected to be felt more forcefully in 2024.[10] Increased domestic and external demand in a context of further adjustment to supply shock

[10] According to Commission's models (the Global Model, QUEST), aggregate demand progressively eases over five quarters following a hike in interest rates. Over this period, a rate increase of 100 bps. is estimated to have a cumulative impact of between 0.3% to 0.6% on GDP. As a result of weaker activity, year-on-year inflation slows gradually, reaching its through by the end of the first year following the action (falling by 0.2 to 0.3 pps.). See Burgert M., W. Roeger, J. Varga, J. in 't Veld, L. Vogel (2020) "A Global Economy Version of QUEST: Simulation Properties." European Commission (DG ECFIN) Discussion Paper 126 and Albonico, A., L. Calès, R. Cardani, O. Croitorov, F. Di Dio, F. Ferroni, M. Giovannini, S. Hohberger, B. Pataracchia, F. Pericoli, P. Pfeiffer, R. Raciborski, M. Ratto, W. Roeger and L. Vogel (2019). "The Global Multi-Country Model (GM): an Estimated DSGE Model for the Euro Area Countries." European Commission (DG ECFIN) Discussion Paper 102. These estimates are conditional on several assumptions, including the specification of the model interest rate rule and the treatment of expectations, i.e. here it is assumed that monetary policy credibly follows the interest-rate rule.

is set to support a more robust uptake in investment. All in all, GDP is projected to grow at 1.6% in the EU (1.5% in the euro area).

Overall, the succession of two large shocks implies that the EU economy is now settled on a lower growth path. The economic activity is expected to remain below the output level that the economy would likely have attained in the absence of the pandemic and war shocks, based on an extrapolation of the growth outlook from the Winter 2020 interim Forecast and from the Winter 2022 interim Forecast. Whereas the latter forecast still projected that the EU would re-converge to the pre-pandemic path of expansion, Russia's war of aggression against Ukraine is set to have resulted in a level shift. The current forecast does not project a narrowing of the gap with the pre-pandemic trend output within the forecast horizon (see Graph I.2.18). Still, the volume of economic output in the last quarter of the forecast horizon (2024-Q4) is expected to exceed its pre-pandemic level by 4.6%.

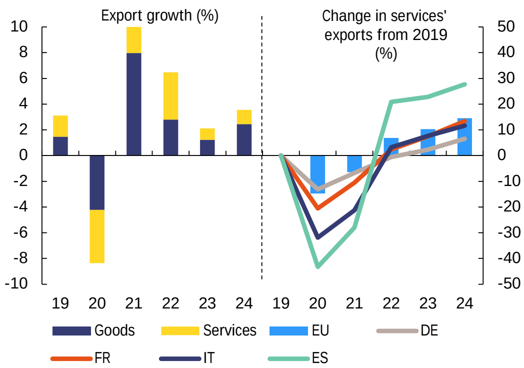
Graph I.2.18: **Real GDP growth path, EU**



Note: WiF20 GDP volumes extended with average growth rate from 2010-2019. Similar extension has been applied for 2024 in WiF22 GDP volumes.

In terms of components, most of the feeble 2023 growth is set to come from external demand, while its contribution wanes in 2024. Volumes of exports and imports of goods and services in the EU are forecast to grow significantly less than previously expected. This reflects weaker global demand, as many advanced and emerging economies also struggle with the aftershocks of the war and strong inflationary pressures. The projections for export market growth are revised down for the EU in 2023, in line with the deterioration of the global trade outlook. All in all, export and import growth are expected to slow down next year, to 2.1% and 1.9% respectively. Still, at 0.2 pps, net trade is set to be the main contribution to the feeble growth of 2023. Despite a hefty rebound in services in 2024, strong import growth is expected to lower the contribution of external demand to 0.1 pps. (see Graph I.2.19).

Graph I.2.19: **Exports and external demand breakdown, EU**

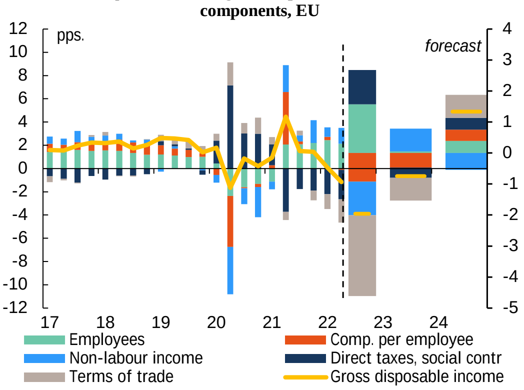


On the domestic front, the surge in cost-of-living weighs heavily on the consumption outlook. Despite negative real wage growth, a strong labour market has supported labour income in 2022. Government measures (pandemic and energy related) also supported households' budgets. As a result, nominal gross disposable income in the EU is projected to expand by 5.9% in 2022. Gross disposable income is set to keep expanding vigorously in 2023 (5.7%) and 2024 (4.2%). Still, given the terms of trade shock is curtailing household real purchasing power with inflation outpacing wage growth, real disposable income is expected to fall sharply in 2022. A further reduction in real wages coupled with the withdrawal of most support measures in the course of 2023 is set to curtail real disposable income also in 2023 (see Graph I.2.20). In 2024, finally, real disposable incomes will be supported by increasing real wages and an uptick in employment.

Table I.2.2:
Composition of growth - EU
(Real annual percentage change)

	2021		2017	2018	2019	2020	2021	Autumn 2022 forecast 2022	2023	2024
bn Euro	**Curr. prices**	**% GDP**	**Real percentage change**							
Private consumption	7,472.5	51.0	2.2	1.9	1.5	-7.1	4.1	**3.7**	**0.1**	**1.5**
Public consumption	3,225.5	22.0	1.1	1.2	1.9	1.0	4.1	**1.3**	**0.3**	**0.8**
Gross fixed capital formation	3,226.3	22.0	4.1	3.6	6.5	-5.4	3.6	**3.0**	**0.5**	**2.3**
Change in stocks as % of GDP	178.3	1.2	0.8	1.0	0.8	0.4	1.2	**1.8**	**1.6**	**1.7**
Exports of goods and services	7,380.1	50.4	5.7	3.7	3.1	-8.4	10.5	**6.3**	**2.1**	**3.6**
Final demand	21,481.7	146.7	3.7	2.7	2.7	-6.4	6.5	**4.4**	**0.8**	**2.3**
Imports of goods and services	6,839.0	46.7	5.5	4.2	4.6	-7.9	9.0	**6.7**	**1.9**	**3.5**
GDP	14,645.0	100.0	2.8	2.1	1.8	-5.7	5.4	**3.3**	**0.3**	**1.6**
GNI	14,603.1	99.7	2.9	2.4	1.7	-5.8	5.8	**3.4**	**0.2**	**1.5**
p.m. GDP euro area	12,370.8	84.5	2.6	1.8	1.6	-6.1	5.3	**3.2**	**0.3**	**1.5**
			Contribution to change in GDP							
Private consumption			1.2	1.0	0.8	-3.8	2.1	**1.9**	**0.1**	**0.8**
Public consumption			0.2	0.2	0.4	0.2	0.9	**0.3**	**0.1**	**0.2**
Investment			0.8	0.7	1.4	-1.2	0.8	**0.7**	**0.1**	**0.5**
Inventories			0.3	0.1	-0.2	-0.4	0.5	**0.4**	**-0.2**	**0.0**
Exports			2.7	1.8	1.5	-4.1	4.8	**3.2**	**1.2**	**2.0**
Final demand			5.2	3.9	3.9	-9.3	9.2	**6.4**	**1.3**	**3.5**
Imports (minus)			-2.3	-1.9	-2.1	3.6	-3.8	**-3.1**	**-1.0**	**-1.9**
Net exports			0.3	-0.1	-0.6	-0.5	1.0	**0.0**	**0.2**	**0.1**

Graph I.2.20: **Real gross disposable income and components, EU**



Note: Forecast figures are annual data.

Private consumption growth is set to more than halve in 2023-2024 years. With inflation eroding disposable income and net worth, consumers will have no choice but to reduce spending. Despite important government measures, vulnerable households face an increased risk of worsening material and social deprivation and energy poverty (see Special Issue 4.3). All in all, private consumption is projected to fall significantly in the last quarter of this year and in the first of next year. Still, a good performance in the first half of the year sets private consumption growth in the EU for the whole of 2022 at 3.7%. The sharp contraction in fourth quarter of 2022 is expected to carry over to 2023, with private consumption broadly stagnating in yearly terms. In line with the pick-up of economic activity, households' increasing disposable income and progressively easing inflation, private consumption is foreseen to grow by 1.5% in 2024. The household saving rate is projected to fall in the EU from 16.7% last year to 13.4% in 2022 and to continue to decline to 12.7% in 2023. In 2024 it is set to fall further to 12.6%, which is very close to the saving rate recorded before the pandemic (12.5% in 2019-Q4) and below the long-term average (12.8% in the EU). The increase in mortgage interest rates is expected to constrain households' funding capacity for new acquisitions and put a lid on the recent exuberant increase in real estate prices. This will compound with the negative wealth effect impressed by inflation (see Box I.2.2) and drag on housing construction. Regarding existing mortgages, only variable rates contracts should be impacted. These mortgages amount to only 15% of total mortgages in 2020, while fixed-rate contracts remain dominant in the euro area mortgage market. The situation remains nevertheless very heterogeneous across Member States, with the share ranging from 1.5% and 2% in Slovakia and France, respectively, to 94% to 98% in Finland, Lithuania and Latvia.

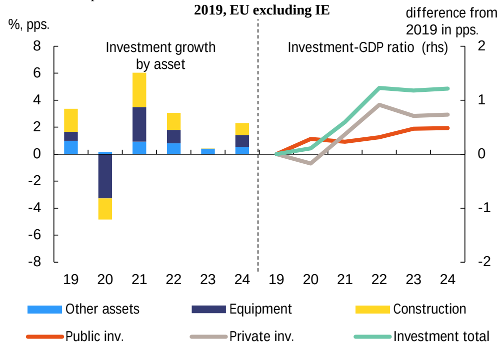
Table I.2.3:
Composition of growth - euro area

(Real annual percentage change)

	2021 bn Euro Curr. prices	2021 % GDP	2017	2018	2019	2020	2021	2022 (Autumn 2022 forecast)	2023 (Autumn 2022 forecast)	2024 (Autumn 2022 forecast)
			Real percentage change							
Private consumption	6,322.1	51.1	1.8	1.5	1.4	-7.7	3.8	**3.7**	**0.1**	**1.5**
Public consumption	2,730.6	22.1	1.1	1.0	1.7	1.0	4.3	**1.4**	**0.3**	**0.8**
Gross fixed capital formation	2,713.9	21.9	3.9	3.1	6.9	-6.2	3.6	**2.8**	**0.5**	**2.3**
Change in stocks as % of GDP	124.5	1.0	0.7	0.9	0.7	0.4	1.0	**1.5**	**1.3**	**1.5**
Exports of goods and services	6,096.3	49.3	5.6	3.5	2.8	-9.0	10.6	**6.6**	**2.0**	**3.4**
Final demand	17,987.3	145.4	3.4	2.4	2.6	-6.9	6.2	**4.3**	**0.9**	**2.2**
Imports of goods and services	5,618.6	45.4	5.2	3.8	4.8	-8.5	8.4	**6.8**	**1.9**	**3.5**
GDP	12,370.8	100.0	2.6	1.8	1.6	-6.1	5.3	**3.2**	**0.3**	**1.5**
GNI	12,466.5	100.8	2.6	2.1	1.4	-6.4	5.9	**3.3**	**0.1**	**1.5**
p.m. GDP EU	14,645.0	118.4	2.8	2.1	1.8	-5.7	5.4	**3.3**	**0.3**	**1.6**
			Contribution to change in GDP							
Private consumption			1.0	0.8	0.7	-4.1	2.0	**1.9**	**0.0**	**0.8**
Public consumption			0.2	0.2	0.4	0.2	1.0	**0.3**	**0.1**	**0.2**
Investment			0.8	0.6	1.4	-1.4	0.8	**0.6**	**0.1**	**0.5**
Inventories			0.3	0.1	-0.2	-0.3	0.3	**0.2**	**0.0**	**0.0**
Exports			2.6	1.7	1.4	-4.3	4.8	**3.2**	**1.1**	**1.9**
Final demand			4.8	3.4	3.7	-9.9	8.8	**6.3**	**1.3**	**3.4**
Imports (minus)			-2.2	-1.6	-2.1	3.8	-3.5	**-3.1**	**-1.0**	**-1.9**
Net exports			0.4	0.0	-0.7	-0.5	1.3	**0.2**	**0.1**	**0.1**

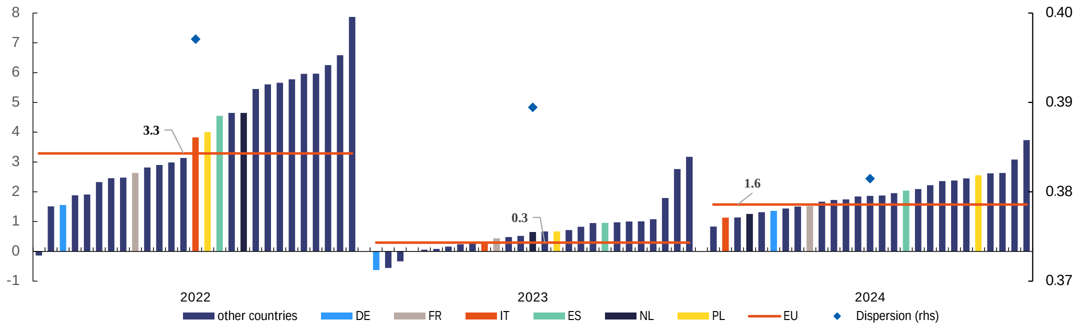
Demand and supply side factors are putting investment growth under pressure. Increased borrowing costs, a less supportive external environment, reduced demand expectations in the context of high uncertainty, as well as reduced profit margins on the back of high energy related costs are reducing demand. On the supply side, labour and input material shortages limit potential output. These adverse factors can only partially be mitigated by increased energy saving investments by households and the continued implementation of the RRF. Overall, the outlook for total investment in the EU has been revised downward somewhat, with growth rates (in volumes) projected to slow down from 3.6% in 2021 to 3.0% in 2022, and to decelerate markedly in 2023 to 0.5%. The gradual normalisation of economic activity is expected to reinvigorate companies' investment decisions. Investment growth is forecast at 2.3% in 2024. Investment in equipment is projected to slow down significantly from 8.9% in 2021 to 3.7% in 2022. In 2023, growth in equipment investment is expected to weaken considerably, slowing down to a mere 0.1%, as tighter financing conditions are set to keep weighing on firms. With the progressive fading of adverse factors, buoyant growth in equipment investment is foreseen to return in 2024 (2.9%) (see Graph I.2.21).

Graph I.2.21: **Investment breakdown and investment rates since 2019, EU excluding IE**



Construction investment growth is expected to slow down markedly next year. Residential investment benefited from the availability of low-cost mortgages and the accumulation of savings during the pandemic. However, the rise in interest rates, higher building costs and the fall in real incomes are expected to undermine housing affordability and dampen private residential demand. On the favourable side, the continued implementation of the RRF will provide some impetus. Furthermore, normalisation of the high energy price environment is set to increase capacity utilisation in construction after a period of subdued activity, bringing with it higher investment needs on the corporate side. Further adjustment to supply chains disruptions should allow both the construction and investment goods sectors to gradually reduce the current backlog of work. Overall, construction investment growth is expected to slow from

Graph I.2.22: **GDP growth dispersion in years 2022-2024**



Note: The bars for all 27 current Member States are ranked by size. Dispersion is expressed as the coefficient of variation calculated as standard deviation on the average of EU GDP per capita at PPP.

5.1% in 2021 to 2.8% in 2022, followed by a strong deceleration to 0.2% in 2023. After this slowdown, a rebound is projected in 2024, with growth set to reach 1.9%.

Public investment is expected to remain robust over the forecast horizon. Public investment is set to further expand, benefiting from the continued deployment of the RRF. Public investment in the EU is projected to increase stronger than GDP in both 2023 and 2024, from an expected growth of 3.3% this year, to 3.4% in 2023 and 3.5% in 2024.

Heterogeneity across Member States has increased. The 2022 spring and summer forecasts already reported a strong degree of heterogeneity in growth performances across Member States. Over the summer, heterogeneity was amplified by different degrees of exposure to shocks unleashed by the war. This forecast still projects considerable differences in growth rates across Member States (see Graph I.2.22), even if the spread in performances is set to narrow over the forecast horizon. The difference between the highest and lowest growth rate is 8 points in 2022. Then, the gap narrows in 2023 (3.8 points) and in 2024 (2.9 points). Still, economic convergence – measured in terms of GDP per capita – is set to continue.

A negative output gap is expected to open again in 2023, but shrink somewhat in 2024. In the Spring 2022 Forecast economic activity was projected to converge to its potential level and the output gap to be broadly closed in 2023. The strong growth in the first half of the year now implies that the output gap will close in 2022, but only shortly. With the negative repercussions of the war in Ukraine the output gap is set to turn negative again in 2023 (-0.6% in the EU and -0.5% in the euro area). In 2024, as the economy regains strength, the output gap is expected to decrease, but only narrowly (-0.4% in the EU and -0.2% in the euro area). The full closure of the output gap is therefore projected to take place outside the current forecast horizon.[11]

[11] The potential output estimates include this round the effect of people fleeing the war in Ukraine on total labour supply, though the overall impact is relatively small at the EU level. Because of the difficulties in getting reliable effects on potential output, the effect of refugee inflows was not included in the Spring 2022 Forecast. This has changed in the Autumn Forecast since forecasts were available not only for the effects of the refugees on the population of working age numbers in their respective countries, but also their breakdown into employed and unemployed refugees. With this more detailed breakdown, refugee specific participation rates could be estimated and overall, economy wide, trend participation rates were adjusted to take into account the effects of refugee inflows for the individual Member States. Consequently, the impact of this refugee shock is now fully incorporated in the potential output numbers for the Autumn Forecast.

Box I.2.2: Household wealth and savings in the euro area – the effect of inflation

Household wealth in the euro area has increased significantly since the onset of the pandemic, on the back of the exceptional accumulation of savings and surge in house prices. Increased wealth was set to support private consumption even over and above the boost provided by the post-pandemic re-opening, but the uptick in inflation since the second quarter of 2021 is eroding its real value. This box explores the magnitude and drivers of household wealth accumulation, and examines changes in the real wealth, with focus on the role of recent price increases.

Households' net worth tends to increase steadily over time due to accumulation of savings and valuation effects.

Household wealth can be proxied by the sector accounts concept "households' net worth", which is the value of the total assets of households minus the value of their total outstanding liabilities.

Housing wealth includes dwellings and land, and makes up the bulk of non-financial wealth. Net financial wealth is the difference between financial assets (such as deposits, pension entitlements, bonds and equity) and financial liabilities (mainly mortgage loans). Households' gross savings increase net wealth through the acquisition of (net) financial and non-financial assets. Households' net worth is also affected by changes in real estate prices (which increase the value of the stock of housing) and in the value of financial assets. Such valuation effects can produce important short-time variation in the stock of net worth. (1)

After the onset of the pandemic, sustained increases in savings and house prices have boosted household net worth.

The household savings rate in the euro area increased from a quarterly average of around 13% of GDI in 2019 to an average of around 21% between 2020-Q2 and 2021-Q2. The increase in the saving rate above its long-term average was partly the result of a surge in precautionary savings, amidst heightened uncertainty, but resulted to a large extent from the combination of severe limitations to consumption opportunities – especially of contact intensive services – and policy measures aimed at supporting incomes and jobs. Starting in the second half of 2021, the saving rate dropped gradually back to around pre-pandemic levels, settling at 13.2% in 2022-Q2. All in all, between 2020-Q2 and 2022-Q2, households in the euro area accumulated 3167 billion euros of savings. This is almost 1 trillion more (i.e. 12% of 2021 GDI) than if savings had followed their pre-crisis trend. (2) The large increase in holding of liquid assets also supported the view that much of this additional net worth would support consumption.

The increase in house prices also contributed to the increase in household net worth. Between 2014 and 2019, house prices increased on average by 3.2% y-o-y per quarter. Yet, between 2020-Q2 and 2022-Q2, the average increase in housing prices surged to 7.4% y-o-y per quarter. Overall, valuation effects in real estate have added some 6000 billion euros to household wealth since 2020-Q2, of which more than 4500 billion euros (or 60% of 2021 GDI) can be ascribed to above-trend increases in real estate prices (see Graph 1).

Valuation effects on financial assets, in contrast, detracted from the accumulation of net wealth between 2020-Q2 and 2022-Q2. Following a sharp adjustment in financial asset prices in the wake of the pandemic, bonds and especially stocks recovered. Since the start of Russia's war of aggression against Ukraine, however, high uncertainty resulted in sharp adjustment in stock markets. The surge in interest rates, in a context of high inflation, resulted in a drop in value in bonds.

All in all, households accumulated more than 7 trillion euros of new wealth between the onset of the pandemic (2020-Q1) and the start of the war (2021-Q4). Around 2.7 trillion euros can be considered to

(1) See European Central Bank (ECB) (2020). ECB *Economic Bulletin*, Issue 1, "Household wealth and consumption in the euro area".
(2) All excess accumulations are estimated by extrapolation of the 2014 to 2019 trend using ordinary least squares.

(Continued on the next page)

Box (continued)

be “in excess” of the normal accumulation trend. The negative developments in financial markets in the first half of 2022 resulted only in a modest reduction in net worth (around 400 billion euros).

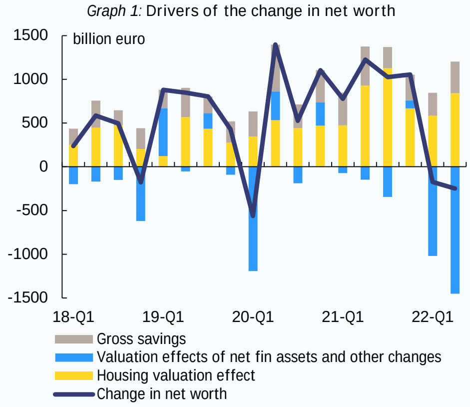
The real value of household net worth decreased sharply in the first half of this year.

For consumption decision, however, what matters is the level of real net worth. The strong increase in nominal net worth must therefore be seen in relation to price developments. Graph 2 decomposes the cumulative change in real net worth (i.e. deflated to 2019 prices with the consumption deflator) in cumulative flows and valuation effects discussed above, as well as the cumulative effect of rising cost of living over the 2020-Q1 to 2022-Q2 horizon.

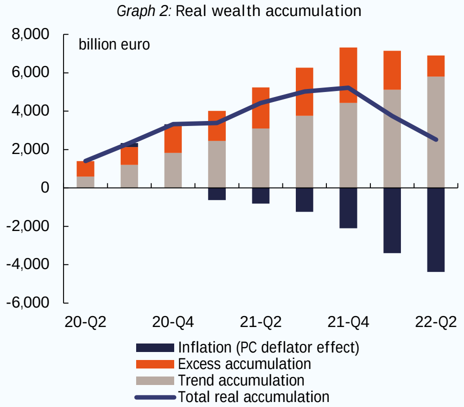
Up to the end of 2020, movements in prices have been negligible. This means that the increase in nominal wealth broadly corresponded to the increase in real wealth. In the second half of 2021, prices started to pick up, but wealth accumulation dynamics remained strong, mainly on account of valuation effects on the stock of housing, which continued to outpace inflation. At the end of 2021, households’ real stock of net worth corresponded to roughly 9.4 times the volume of real consumption in 2021, that was slightly below the peak of 9.5 of 2020-Q1. This led many forecasters, including the European Commission, to expect a continued robust expansion of household consumption. As an important share of the increase in net worth came from capital gains on stock of owned houses, households were supposed to increase consumption only slowly.[3] Saving rates were expected to decrease and eventually undershoot their long-term average, supporting a steady and prolonged consumption growth even after reopening dynamics were to fade away.

In the first half of 2022, the sharp increase in prices, however, strongly reduced the real value of net worth. Consequently, by mid-2022 the real value of additional wealth had decreased by almost 50%. Taking into account also the recovery in consumption, household net worth corresponded to 8.7 times the volume of consumption, much closer to the long-term ratio of around 8. This suggests that potential tailwinds to consumption assumed in previous forecast rounds have by now largely vanished.

Graph 1: Drivers of the change in net worth



Graph 2: Real wealth accumulation



(3) The marginal propensity to consume out of financial wealth is significantly larger than of housing wealth. See [Wealth effects in the euro area (europa.eu)]

2.4. LABOUR MARKET

Despite a challenging environment, the EU labour market continued performing well. In 2022, total employment increased and the unemployment rate reached new record lows. While wages and disposable incomes declined in real terms, more persons took up work and/or worked for more hours. As a result, labour market slack continued its downward trend, reflecting inter alia the large number of transitions of formerly inactive people to the labour force. At the same time, labour shortages were relatively large in several Member States, pointing to tightness of labour markets.

Strong employment gains were observed as the economy rebounded. The relaxation

Table I.2.4:

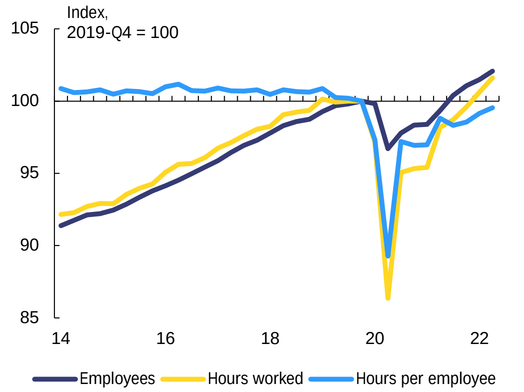
Labour market outlook - euro area and EU

(Annual percentage change)	Euro area							EU						
	Autumn 2022 forecast				*Spring 2022 forecast*			Autumn 2022 forecast				*Spring 2022 forecast*		
	2021	2022	2023	2024	2021	2022	2023	2021	2022	2023	2024	2021	2022	2023
Population of working age (15-64)	0.0	**0.3**	**0.2**	**0.1**	*0.0*	*0.1*	*0.1*	-0.1	**0.4**	**0.2**	**0.0**	*0.0*	*0.0*	*0.0*
Labour force	1.2	**0.9**	**0.4**	**0.3**	*0.9*	*0.7*	*0.5*	1.1	**0.9**	**0.4**	**0.3**	*0.5*	*0.8*	*0.5*
Employment	1.4	**1.8**	**0.1**	**0.5**	*1.1*	*1.3*	*0.8*	1.4	**1.8**	**0.0**	**0.4**	*0.7*	*1.2*	*0.7*
Employment (change in million)	2.2	**3.0**	**0.2**	**0.9**	*1.8*	*2.1*	*1.3*	2.8	**3.7**	**0.0**	**1.0**	*1.5*	*2.6*	*1.5*
Unemployment (levels in millions)	12.8	**11.3**	**12.0**	**11.7**	*12.8*	*12.0*	*11.7*	15.0	**13.3**	**14.1**	**13.9**	*15.0*	*14.3*	*13.9*
Unemployment rate (% of labour force)	7.7	**6.8**	**7.2**	**7.0**	*7.3*	*6.8*	*6.6*	7.0	**6.2**	**6.5**	**6.4**	*7.0*	*6.7*	*6.5*
Labour productivity, whole economy	3.8	**1.2**	**0.1**	**0.9**	*2.8*	*1.1*	*1.4*	3.9	**1.4**	**0.2**	**1.0**	*4.6*	*1.2*	*1.5*
Employment rate (a)	62.7	**63.6**	**63.6**	**63.8**	*62.4*	*63.2*	*63.6*	62.3	**63.2**	**63.0**	**63.3**	*61.9*	*62.7*	*63.1*

(a) Employment as a precentage of population of working age. Definition according to structural indicators. See also note 6 in the Statistical Annex. For the EU and EA, this table now also displays employment in persons, limiting the comparability to figures published in previous forecasts.

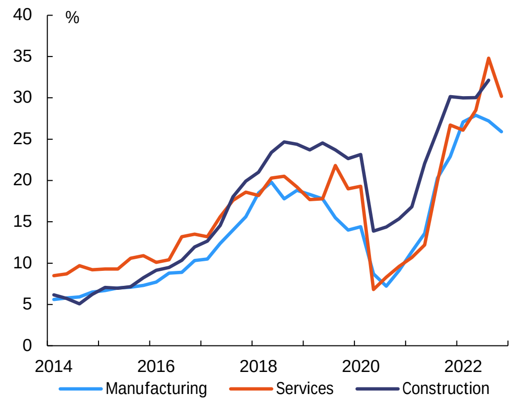
of pandemic-related containment measures and the rebound in economic activity exerted a strong positive impact on employment in the EU. According to Labour Force Survey data, the strong pace of job creation in the second quarter of the year pulled (in net terms) an additional 0.8 million people into employment, raising the number of employed persons to 213.4 million (including 183.3 million employees) and the activity rate increased further. All-time highs were reached for employment (data available since 1998) and for the activity rate (data available since 2003). Already in the first quarter, the number of hours worked by employees had for the first time exceeded its pre-pandemic level, in the fourth quarter of 2019. Since headcount employment increased faster than the number of hours worked, the number of hours worked per employee kept lagging and stood, in the second quarter, 0.4% below the level recorded before the pandemic (Graph I.2.23). A key contribution to the expansion of employment came from the public sector.[12]

Graph I.2.23: **Employment, EU**



In 2022, the unemployment rate fell to a string of all-time lows in the EU. In August, the unemployment rate in the EU stood at 6.0%, which was 0.8 pps. lower than one year before. The strength of labour demand was also evidenced by the increase in the number of job vacancies and in the share of managers reporting labour shortages to multi-year highs (Graph I.2.24), which pointed to persistent difficulties in matching labour supply and demand.

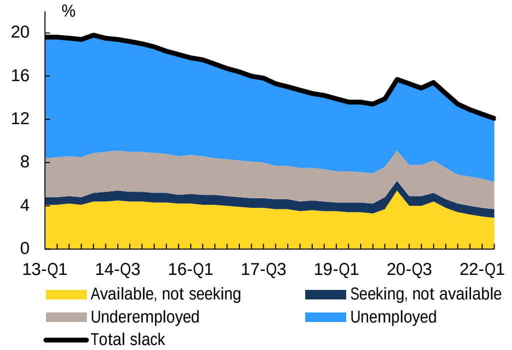
Graph I.2.24: **Labour seen as limiting factor of activity, EU**



[12] Headcount employment in the public sector was in second quarter of 2022 4.0% higher than in the fourth quarter of 2019, whereas in the rest of the economy employment was only 0.9% higher. For an analysis see e.g. Consolo, A. and A. Dias da Silva (2022). "The role of public employment during the COVID-19 crisis". *ECB Economic Bulletin* 6, Box 1, pp. 46-50.

Labour market slack declined further by mid-2022. Labour market slack in the EU, as measured by Eurostat, amounted in the second quarter to 27.2 million persons, which represented 12.1% of the extended labour force aged 15-74, down from 12.5% in the first quarter of 2022. Underemployed part-time workers were 2.5%, those available for work but not searching for work were 2.9%, and those actively searching for work but not immediately available to take up work were 0.8%, all in percentage of the extended labour force (Graph I.2.25).

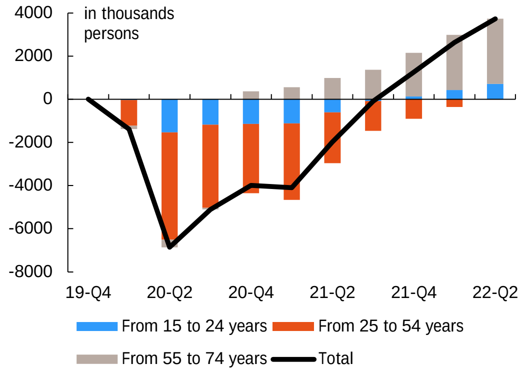
Graph I.2.25: **Labour market slack, EU**



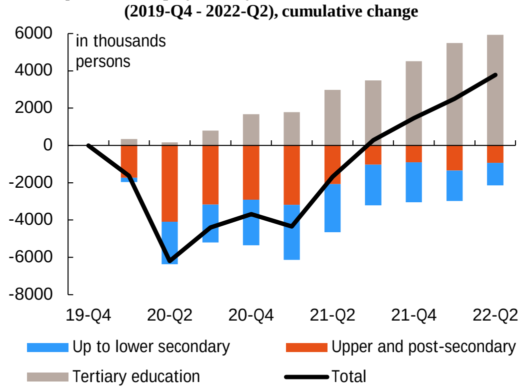
Note: Seasonally adjusted data, reflects age group 15-74, and are expressed as % of the extended labour force.

Mainly older and higher educated workers have benefitted from the improving employment situation. Since the last pre-pandemic quarter (2019-Q4), it is mainly the number of older workers that has increased, whereas the number of jobs held by young people and persons below the age of 55 has only slightly rebounded in recent quarters (Graph I.2.26). In the second quarter of 2022, the number of employed persons in the age between 25 and 54 was still slightly lower than before the pandemic. Employment among younger persons, after having fallen markedly in 2022, had reached the pre-pandemic level already in the fourth quarter of 2021. Another important factor for benefiting from the employment recovery has been the educational attainment (Graph I.2.27). While employment of persons with less than tertiary education was still below the pre-pandemic level in the second quarter, employment for those with tertiary education increased by more than 4 million.

Graph I.2.26: **Employment by age group, EU (2019-Q4 - 2022-Q2). cumulative change**



Graph I.2.27: **Employment by educational attainment levels, EU (2019-Q4 - 2022-Q2), cumulative change**



Despite labour market tightness and elevated consumer price inflation, wage growth has so far remained moderate. In the second quarter, the ECB's Index of negotiated wages in the euro area (including one-off payments) was 2.4% higher than in the second quarter of last year, which was slightly below its rate of change in the first quarter (3.0%), but markedly above the post-2009 average. The lower rate of change in the second quarter is not fully indicative of underlying wage dynamics, because the reading for the first quarter was pushed up by one-off payments (e.g. lump sum payments to restore purchasing power). Compensation per employee increased in the euro area at an annual rate of 4.4% (up from 4.3%) in the second quarter. Growth of compensation per hour worked was more subdued, at 3.4% y-o-y (up from 1.3% in the first quarter), which can be associated with the fading impact of pandemic-related support schemes such as job retention schemes. In the euro area the share of the labour force covered by job retention schemes fell from 1.3% in the first quarter to 0.7% in the second quarter.

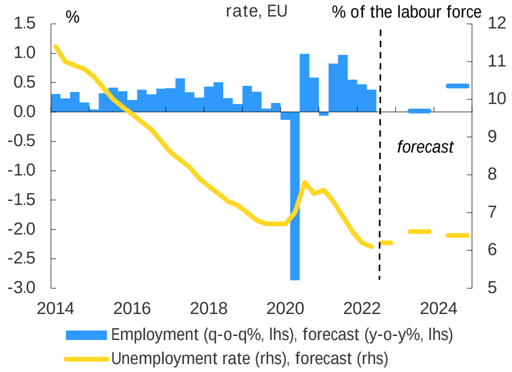
Labour markets performed strongly in most Member States. Headcount employment increased and unemployment rates decreased in the majority of Member States. In the first half of the year, the highest increases in headcount employment were recorded in Lithuania, Latvia, Ireland and Slovakia. Between December 2021 and August 2022 (latest available Eurostat data), unemployment rates continued falling in two thirds of the Member States. The highest decreases of the unemployment rate were observed in Lithuania (from 6.6% to 5.2%), Sweden (from 8.0% to 6.9%), Italy (from 8.8% to 7.8%) and Spain (from 13.3% to 12.4%). Overall, labour market slack decreased in all EU Member States in the second quarter compared with the first quarter of 2022, except in five countries that recorded increases (Slovenia, Belgium, Croatia, Austria and Portugal) and in three countries where it was unchanged (Cyprus, Malta and Luxembourg).

Labour markets are expected to react with a lag to slowing economic activity in the EU, but to remain relatively robust. In response to severe shocks such as the ones currently hitting the EU economy, the labour market outlook depends on the market's capability to absorb (i.e. the ability to contain the shock and to minimise the damage on jobs and employees), adapt (i.e. the strength in recovering quickly and rapidly creating new jobs to replace the destroyed ones), and transform (i.e. aligning with long-term trends and turning long-term challenges into opportunities). With the EU scoring well on these features, the impact of a deteriorating environment on labour market outcomes is expected to be mild.[13] Employment growth is projected to soften in the wake of the expected slowdown in economic activity, a worsening situation of firms and negative confidence effects. However, a major increase in unemployment is not expected.

The short-term outlook for the labour market has recently worsened. The Composite PMI Employment Index for the euro area signalled in September slowing employment growth. In addition, the Commission's business surveys underscore the slowing momentum as the Employment Expectations Indicator for the EU has been retreating since March, though remaining well above its long-term average in October. The decline in October was driven by worsened employment plans in industry, services and retail trade, while managers in construction expected employment in their firms to increase over the next three months.

Employment growth is forecast at 1.8% in the EU this year, before coming to a standstill in 2023 and moderately edging up to 0.4% in 2024. The annual growth rate of headcount employment in 2022 is largely driven by the strong growth momentum gathered up to the first half of the year. Employment growth is expected to decrease gradually in the second half of this year and to come to a standstill in the fourth quarter and in 2023. Following the lagged response to the slowdown in growth, employment growth is set to recover slightly (Graph I.2.28), in line with the projected gradual improvement in economic activity, towards the end of the forecast horizon. People fleeing the war in Ukraine to the EU are expected to enter labour markets only gradually, with tangible effects only from next year.[14]

Graph I.2.28: Employment growth and unemployment rate, EU



Note: Forecast figures are annual data.

In 2022, headcount employment is forecast to increase in all Member States at markedly varying rates (between 0.4% in Bulgaria and Czechia to 4.3% in Denmark) and to slow in 2023 in all Member States except

(13) For the detailed analysis in a global context, see Whiteshield Partners (2022). *Global Labour Resilience Index 2022*, October. Labour market resilience in the EU is analysed in section I.4.2 in this document.

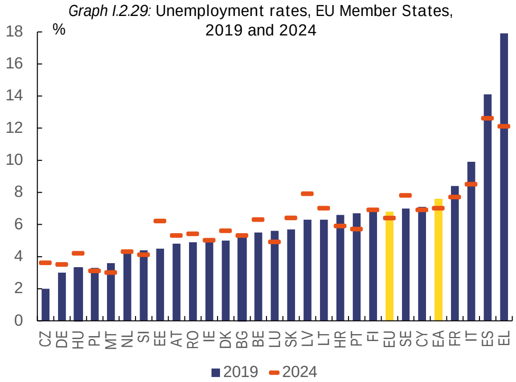
(14) See forecast assumptions on people fleeing the war in Ukraine in in Box I.1.1.

Czechia. Last year, headcount employment had already surpassed the pre-pandemic level of 2019 in about half of the Member States. In 2022, employment growth is expected to lift employment above the 2019 level in all but four Member States, with Latvia, Slovakia and Bulgaria exceeding pre-pandemic employment in 2023 and Czechia following in 2024.

Unemployment rates are expected to respond only mildly to the changing pace of economic growth. Following many years of decline up to 2022, interrupted only during the pandemic-induced recession in 2020, the unemployment rate is expected to increase mildly in 2023, before marginally edging down again in 2024. This profile is reflected in the projected annual unemployment rates of 6.2% in 2022, 6.5% in 2023, and 6.4% in 2024. The relative stability of unemployment rates is partly a consequence of the cushioning of the weakening of economic activity through policy measures (e.g. extended and/or expanded job retention schemes in some countries), but it is also related to demographic trends (e.g. ageing populations). As compared to the forecast in spring, the number of unemployed in the EU is now expected to be 1.022 million lower in 2022, but about 234.000 higher in 2023. After falling in 2022 in all Member States, in 2023 slowing growth of economic activity is projected to result in an increase in annual unemployment rates in most Member States, with the largest increases in Lithuania, Latvia and Denmark. Due to the employment effects of the slight rebound in economic activity that is expected in 2024, unemployment rates are set to decline in more than half of the Member States. By then, the countries with the highest unemployment rates in 2019 should see falling rates, but for a majority of Member States rates are expected to exceed those in 2019 (Graph I.2.29).

Nominal wage growth is expected to remain strong. The tightness of labour markets in several sectors and countries, increases in minimum wages in several countries, and, more generally, efforts to restore purchasing power after severe losses from elevated consumer price inflation are set to put upward pressure on wages. Recently agreed wage agreements in several Member States already highlight rising wage pressures. With inflation normally feeding into wage increases with some lag, due to regular wage bargaining schedules, an immediate full restoration of purchasing power cannot be expected. However, such pressures are set to affect also the outer year of the forecast, when inflation rates should already have fallen somewhat. After growing by 4.6% in 2022 (4.2% in the euro area), the annual growth rate of compensation per employee is expected to increase to 5.2% in 2023 (4.9% in the euro area) before falling to 3.9% in 2024 (3.6% in the euro area). These forecasts imply significant upward revisions from the Spring Forecast (for the EU 0.8 pps. in 2022 and 1.5 pps. in 2023).

Graph I.2.29: Unemployment rates, EU Member States, 2019 and 2024



Wage growth is expected to only partially mitigate losses in real incomes, without triggering a persistent feedback loop between wages and inflation. In times of elevated uncertainty, pursuing the objective of job security is expected to receive priority in wage bargaining. The assumed weakening of economic activity is set to strengthen preferences for job security over wage increases. In addition, the only limited share of inflation-indexed wages in the EU and the continued anchoring of longer-term inflation expectations are set to prevent very high wage settlements.[15]

The outlook for labour productivity is subdued. Amid significantly easing economic activity, growth of labour productivity per employed person is expected to decrease from 3.9% in 2021 to 1.4% in 2022 and 0.2% in

(15) A similar result has recently been presented by the IMF; see Albrizo, S. et al. (2022). "Wage dynamics post-COVID-19 and wage-price spiral risks". IMF *World Economic Outlook*, Ch. 2, October.

Table I.2.5:

Inflation outlook - euro area and EU

(Annual percentage change)	Euro area (20)							EU						
	Autumn 2022 forecast				*Spring 2022 forecast*			Autumn 2022 forecast				*Spring 2022 forecast*		
	2021	2022	2023	2024	2021	2022	2023	2021	2022	2023	2024	2021	2022	2023
Private consumption deflator	2.3	**7.2**	**5.8**	**2.5**	*2.3*	*5.8*	*2.7*	2.5	**8.0**	**6.4**	**2.8**	*2.5*	*6.3*	*3.1*
GDP deflator	2.1	**4.6**	**5.3**	**3.4**	*2.0*	*3.9*	*3.1*	2.4	**5.2**	**5.7**	**3.5**	*2.3*	*4.4*	*3.4*
HICP	2.6	**8.5**	**6.1**	**2.6**	*2.6*	*6.1*	*2.7*	2.9	**9.3**	**7.0**	**3.0**	*2.9*	*6.8*	*3.2*
Compensation per employee	3.9	**4.2**	**4.9**	**3.6**	*2.8*	*3.4*	*3.4*	4.0	**4.6**	**5.2**	**3.9**	*4.1*	*3.8*	*3.7*
Unit labour costs	0.1	**3.0**	**4.8**	**2.7**	*0.1*	*2.3*	*2.0*	0.1	**3.2**	**5.0**	**2.8**	*0.0*	*2.5*	*2.2*
Import prices of goods	9.7	**21.6**	**4.7**	**0.4**	*9.6*	*13.2*	*1.0*	9.6	**21.7**	**5.5**	**0.7**	*9.5*	*13.1*	*1.3*

2023, before rebounding to 1.0% in 2024, which is above the long-term average. In 2022 and 2023, the decline in productivity growth per person mirrors the continued increase in the number of hours worked per person, but also some labour hoarding during a temporary slowing of economic activity.

2.5. INFLATION

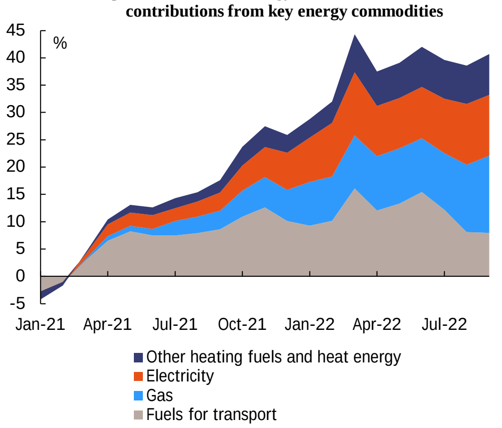
Price pressures continued to intensify as inflation hit new records. Inflation in the euro area accelerated further during the third quarter, reaching 9.9% in September and 10.7% in October (flash estimate),[16] a new all-time high, up from 8.6% y-o-y in June. In the EU, inflation rose from 9.6% in June to 10.9% in September. Energy continues to be the main contributor to headline inflation, with food prices accelerating strongly. However, pressures are increasingly rotating to core elements. The depreciation of the euro also contributed to a further broadening of price pressures (see Box I.2.3).

Energy inflation has stabilised since June, albeit at a high level, as accelerating gas and electricity prices offset slowing fuel inflation. Annual energy inflation in the euro area remained broadly unchanged, at very high levels (39-42% y-o-y) between June and October. It remained the main contributor to inflation, adding 4.5 pps. to the headline rate in October. This relative stability, however, concealed important compositional changes within the energy inflation, as the gradual decline in inflation of fuels for transport, induced by falling Brent oil prices, was offset by a sharp increase in the contribution of inflation of gas and, to a lesser extent, electricity and other heating fuels (see Graph I.2.30). Large increases in wholesale prices over the summer are gradually making their way into retail gas and electricity prices. Still, the pace of transmission is subject to several sources of uncertainty. On the one hand, following the surge in prices and volatility, the TTF gas market ceased to be a universal benchmark for the Member State wholesale markets, making the monitoring of the pass-through more complex (see Box I.2.1). This fragmenting comes on top of a range of factors weakening or drawing out the pass-through compared to the pre-energy-crisis period.[17] On the other hand, policy interventions in many Member States have weakened and likely shifted in time the transmission of the shocks from wholesale energy market to retail. All in all, inflation of gas prices accelerated to an all-time high of 72% y-o-y in September (up from 52% in June) while that of electricity increased to 40% in September (up from June, but slightly down from 41% in March).

(16) Eurostat's October HICP flash estimate refers to *euro area 19*, as opposed to all other references in this section that refer to *euro area 20* (i.e. including Croatia).

(17) These include widening differences in wholesale pipeline gas import prices faced by Member States; the differentiated presence of long-term wholesale and retail contracts, their staggered renewal, as well as prevalence of hedging practices at Member State level. For more details see European Commission (2022), *Quarterly Report on European Gas Markets*, Volume 15, 2022-Q2; and *Quarterly Report on European Electricity Markets*, Volume 15, 2022-Q2.

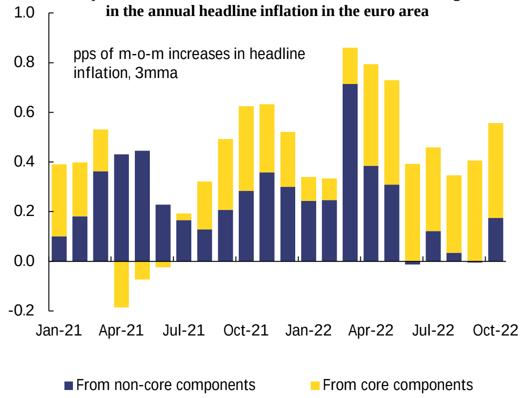
Graph I.2.30: **Annual energy inflation in the euro area: contributions from key energy commodities**



Food prices continued to increase sharply. Processed and unprocessed food prices (incl. alcohol and tobacco) accelerated markedly since June, with annual growth hitting 13.1% y-o-y in October, a historical high, up from 8.9% in June. The acceleration was broad-based, but particularly strong in dairy products, bread and cereals, reflecting past increases in farmgate prices, but also the depreciation of the euro, and pressures from rising input costs related to energy, transport and wages.

Prices of non-energy industrial goods and services continued to accelerate driven by robust demand and rising input costs. Inflation of non-energy industrial goods continued its upward trend in the third quarter (5.5% y-o-y in the euro area in September) and further up in October (6.0%), driven by across-the-board acceleration in prices of durables, semi-durables and non-durables. While the impact of most supply side bottlenecks on durables appears to be gradually waning, prices of consumer industrial goods continue to be subject to considerable pressures. These include persistently high input costs, including energy, the past depreciation of the euro, and robust demand, driven in certain cases by powerful structural trends (working from home, green transition). Finally, prices of services accelerated from 3.4% y-o-y in June to 4.4% in October. Similarly to industrial goods, price pressures in services have broadened considerably over the course of the year. However, they continue to be particularly strong in contact-intensive services, where persistently high demand following re-opening faces a challenging context of high energy costs, labour shortages and rising wages. Reflecting this, prices in e.g. air transport and hotel services accelerated rapidly in 2022, reaching an all-time high of 37% and 19.4% y-o-y, respectively in the third quarter.[18]

Graph I.2.31: **Contributions to the month-on-month change in the annual headline inflation in the euro area**



Core goods and services replaced energy as the primary driver of headline inflation. All subcomponents of the HICP, except energy, have seen their annual inflation increase between June and October. Even if so-called non-core elements of the consumer basket, i.e. energy and unprocessed food, continue to register exceptionally high double-digit price growth, the balance of inflation drivers is shifting towards core components. This is clearly visible in Graph I.2.31, which presents contributions to the month-on-month increase in the annual headline inflation in the euro area. While non-core components (blue areas) were largely behind increases in headline inflation in 2021 and early 2022, core components gained in importance in the course of 2022, to fully take over as driver of headline inflation, on average, in the third quarter. Consequently, the structure of euro area inflation has evolved significantly over the past two years: from being fuelled primarily (two-thirds) by energy and (unprocessed) food in mid-2021 to being driven primarily by core components (since August 2022) (see Graph I.2.32).

(18) Compared to 0.9% and 0.8% y-o-y, respectively, on average during 2018-2021.

Box I.2.3: **Exchange rate pass-through to euro-area consumer price inflation**

Between June 2021 and October 2022, the nominal effective exchange rate (NEER) of the euro has seen a significant weakening, by more than 5.4%. This was largely driven by the US dollar, against which the euro depreciated by 16.6%, partly offset by the appreciation of the euro against a few other currencies, notably the Japanese yen and the Turkish lira. [(1)] The main reasons for this depreciation are differences in market expectations about the pace and size of monetary policy normalisation across currency areas and geopolitical and economic risks specifically related to the EU, due to its proximity to Russia and the war in Ukraine.

Currency movements pass through to consumer prices via both direct and indirect channels. First, they pass on directly via prices of imported consumer goods and services. For example, a euro depreciation against the currency of oil exporters increases the price of imported refined oil, with immediate impact on the HICP energy component. Second, indirect effects work via supply chain and production costs, which may take longer to pass through to consumer prices. The relevance of these two channels will depend on the pricing behaviour of domestic firms, namely, the extent to which they are able to pass the higher production costs on to consumers or have to accept lower profits. A currency depreciation may also lead to an increase in demand for domestic products, both as a result of higher exports and substitution of imports with cheaper domestic products. In turn, increased demand may translate into higher demand for labour and higher wages, which can put further upward pressure on inflation.

The degree to which domestic inflation adjusts to exchange rate fluctuations is important for understanding inflation dynamics. Existing empirical estimates of the exchange rate pass-through to headline HICP inflation in the euro area are limited and vary significantly, essentially due to the still relatively short history of the European Monetary Union and the ensuing limited length of time series. The impact on headline inflation of a 1% depreciation in the euro effective exchange rate is estimated between little more than 0% and 0.1% after one year, with some studies concluding that the effect is not statistically significant [(2)]. The estimated effect of the exchange rate pass-through is usually stronger for import prices (0.3%-0.7% after one year) and weaker or insignificant for core inflation. [(3)]

Chart 1 illustrates the exchange rate pass-through to inflation by plotting month-on-month changes in the euro NEER (lagged by one month) against 'abnormal changes' in the euro area inflation rate. The latter are defined as the difference between the monthly inflation rate for any month and the median

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(1) The nominal effective exchange rate is the weighted average rate at which the euro exchanges for a basket of 42 foreign currencies.

(2) Methodologies also vary: where Hahn (2003), Gaggl (2009) and Comunale and Kunovac (2017) use vector autoregressions, Landolfo (2007) makes use of dynamic simultaneous equations, and Colavecchio and Rubene (2020) use a local linear projection approach. A more recent study by Osbat, Sun and Wagner (2021) also uses a vector autoregressive approach and estimates the exchange rate pass-through to euro area import prices by sector, finding the magnitude of the pass-through to be heterogeneous across sectors. Finally, time-varying estimates for the euro area suggest that the exchange rate pass-through to consumer prices is lower than estimates obtained for other currency areas in earlier decades (see Ortega and Osbat, 2020). References: Colavecchio, R. and I. Rubene (2020). "Non-linear exchange rate pass-through to euro area inflation: a local projection approach." ECB Working Paper Series, No 2362, Frankfurt am Main, January; Comunale, M. and D. Kunovac (2017). "Exchange rate pass-through in the euro area." ECB Working Paper Series, No 2003, Frankfurt am Main, January; Gaggl, P. (2009). "The role of exchange rate movements for prices in the euro area." Oesterreichische Nationalbank *Monetary Policy and the Economy*, Issue 2, June; Hahn, E. (2003). "Pass-through of external shocks to euro area inflation." ECB Working Paper Series, No 243, Frankfurt am Main, July; Landolfo, L. (2007). "Modelling the impact of external factors on the euro area's HICP and real economy-A focus on pass-through and the trade balance." ECB Working Paper Series, No 789, Frankfurt am Main, July; Ortega, E., and C. Osbat (2020). "Exchange rate pass-through in the euro area and EU countries." ECB Occasional Paper Series, No 241, Frankfurt am Main, April; Osbat, C., Y. Sun, and M. Wagner, (2021). "Sectoral exchange rate pass-through in the euro area," ECB Working Paper Series, No 2634, Frankfurt am Main, December.

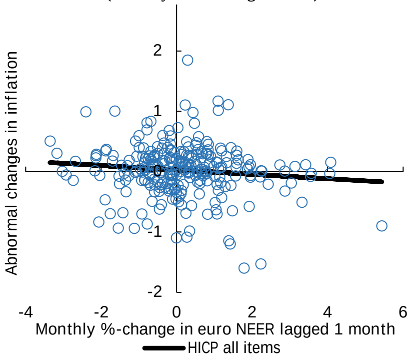
(3) The Quarterly Report of the Euro Area features a chapter on exchange rate pass-through to import prices, see Meyermans, E., (2022). "The exchange rate elasticity of import prices across the euro area." In European Commission (DG ECFIN) Quarterly Report on the Euro Area, Vol. 21, No. 3, pp. 27-44.

(Continued on the next page)

Box (continued)

inflation rate of the previous month. [4] The black line represents the fitted values from a regression where the abnormal changes in inflation are regressed on a constant and the monthly changes in the euro NEER. The slope coefficient in the chart is slightly negative, meaning that a depreciation increases abnormal inflation, but has a p-value of 8.2%, falling just short of conventional significance levels. Performing the same analysis using HICP excluding energy prices also gives an insignificant result.

Graph 1: **Monthly abnormal changes in inflation vs. monthly changes in euro NEER (January 2001 to August 2022)**



Source: Eurostat and IHS Markit

Colavecchio and Rubene (2020) find that euro area consumer prices do not respond linearly, as the impact is stronger when the exchange rate movements are relatively large. This may be due to the fact that larger fluctuations may limit the capacity of importers and of other firms dependent on foreign input to absorb foreign exchange rate shocks, and that cost increases are easier to pass through in a context of generalised price increases.

Based on this evidence, the analysis that follows assesses the impact of movements in exchange rate pass-through to consumer inflation, with focus on large fluctuations in the euro NEER. The question is whether the conclusion of a relatively weak exchange rate pass-through in the euro area also holds for the large depreciation in the euro NEER observed since mid-2021, especially in some months (e.g. in April and July 2022).

The analysis is based on an 'event study', which tests the extent to which large monthly changes in the euro NEER affect the month-on-month inflation rate. Large changes in the euro NEER are defined as the 30 percent largest month-on-month changes in the euro NEER in the period January 2001 to August 2022. This corresponds to euro NEER changes larger than 1.3%. [5] The procedure involves testing for 'abnormal' changes in the month-on-month inflation rate (as defined above) across a set of event periods, defined as the month when the large exchange rate movement takes place (the event month) and the following six months.

The impact of large exchange rate changes on inflation is appraised in the event-month (t_0) and in the following six months (t_1 to t_6). Due to the timing of price data collection, any immediate effect of a large change in the exchange rate is likely to show up in the month following the first event month, i.e. in t_1. [6] The additional five months (i.e. t_2 to t_5) are used for assessing if any effect persists or reverses

(4) The median inflation rate is in this case the middle inflation rate of all the ranked categories of individual consumption expenditures making up the HICP in one particular month. The suggested measure of abnormal change in the inflation rate can be interpreted as a forecast error of inflation, when using a naïve forecast option based on the median inflation rate of the previous month. For a detailed discussion see: Meyer, B.H., and M. Pasaogullari (2010). "Simple ways to forecast inflation: what works best?." Federal Reserve Bank of Cleveland *Economic Commentary*, No 2010-7, Cleveland, December.

(5) The largest and the smallest absolute changes in the month-on-month NEER changes considered are 7.2% and 1.3%, respectively, with an average of 2.2%.

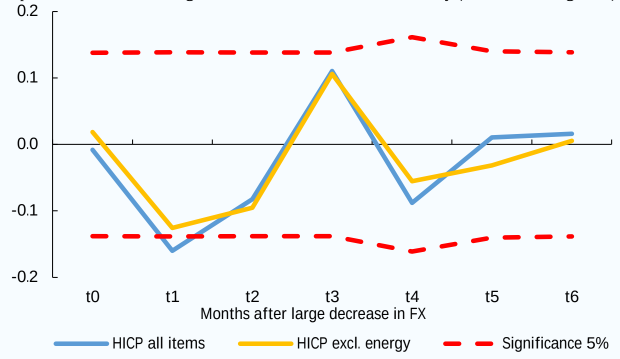
(6) Since the national statistical institutes collect price information during at least one working week at, or near, the middle of the calendar month to which the index pertains, the 'news', constituting the large exchange rate changes cannot be incorporated into the measured inflation rate in the first event-month (t_0).

(Continued on the next page)

Box (continued)

in the following months. In principle, the methodology amounts to calculating the average abnormal change in the inflation rate across the selected months (see Chart 2).

Graph 2: **Coefficients and significance thresholds from event study (Jan 2001 to Aug 2022)**



Source: Eurostat and IHS Markit

Restricting the sample to events of large changes in the euro NEER alters the picture, as it emerges from Chart 2. The blue and green solid lines represent the estimated coefficients at different horizons (on the horizontal axis) from regressing the abnormal changes in HICP rate of inflation (including and excluding energy, respectively) on a set of dummy variables that take the value one on months with the large changes in the euro NEER. [(7)] The coefficients represent the average abnormal change in the inflation rates at different dates after the shock. The dashed red lines show the 5%-significance level for these coefficients. The results imply that when a large deprecation in the euro takes place, the m-o-m inflation rate increases by 0.16 pps. on average.

As from mid-2021, there have been two episodes of large depreciation: in April and July 2022, when the euro NEER depreciated by 2.7% and 1.7% on the previous month, respectively. Applying the above estimates, these large depreciations increased HICP inflation by 0.7 pps. However, when considering the cumulative NEER depreciation of 5.4% over the whole period between June 2021 and October 2022 as a large depreciation episode in itself, the impact on HICP inflation is estimated at approximately 0.9 pps., as compared to a cumulative rise in inflation over the same period by 12.4%. As illustrated in the chart, the adjustment of inflation implies an immediate change in the price level, with no significant additional impact in the following five months.

It should be noted that the focus on the NEER in the above estimates could somewhat underestimate the impact of the recent large depreciation against the US dollar on inflation. Based on available data for 2020, the US dollar was the most used currency for invoicing imports into the EU, with a share of 48%, while the euro was used for invoicing imports with a share of 38%. Evidence suggests that the pass-through into import prices is relatively small for goods priced in the own currency and more significant for goods priced in other currencies. [(8)] The structure of EU import invoicing implies that fluctuations in the euro-dollar exchange rate are set to account for proportionally more than just the weight of US imports in total EU imports. Overall, the above estimates should probably be considered as a lower bound to the potential inflationary impact of the recent weakness of the euro.

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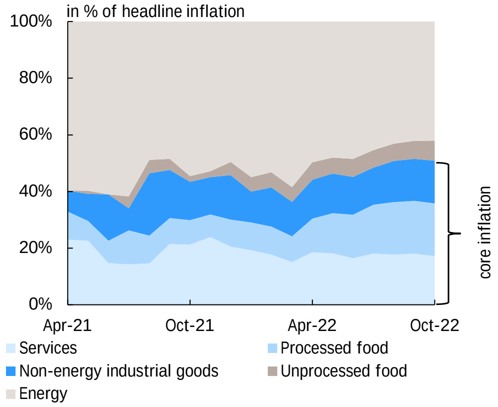
(7) The test procedure has three steps. The first step is to calculate abnormal changes (or forecast errors) in the m-o-m inflation rates for all months. The second step is to regress the abnormal changes in the monthly inflation rate on a set of seven dummy variables representing the event months. The first dummy variable takes the value 1 in the months of large changes in NEER, the event months, and 0 otherwise. The following six dummy variables take the value 1 in the months following the event month and 0 otherwise. The final step is to test if the coefficients are significantly different from zero, i.e. whether aggregated abnormal change for each month is statistically significant.

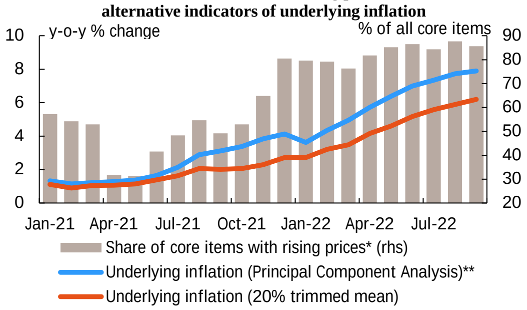
(8) See for example Gopinath, G., O. Itskhoki, and R. Rigobon (2010), “Currency Choice and Exchange Rate Pass-Through.” *The American Economic Review*, Vol. 100 (1), pp. 304-336; and Ortega and Osbat (2020).

Graph I.2.32: **Structure of contributions to the annual headline inflation in the euro area**



Price pressures continued to broaden to core goods and services. As core inflation became the primary driver of headline inflation, price pressures have continued spilling over to an increasing number of core goods and services. Broadening price pressures are best illustrated by the rising share of core goods and services that have seen their seasonally adjusted prices go up on a month-on-month basis (Graph I.2.33). This share hit an all-time high of more than 85% on average in the third quarter, clearly pointing to the broadening of core price pressures. Completing the picture are two alternative measures of underlying inflation – the trimmed mean (20%) and a measure based on principal component analysis, both of which point to a consistent rise in underlying inflation pressures.

Graph I.2.33: **Broadening price pressures in the euro area: share of core items with rising prices and two alternative indicators of underlying inflation**



Note: * share of core HICP components (5-digit COICOP level) that registered average positive monthly growth in the last three months (seasonally adjusted)
** analysis performed at 3-digit COICOP level

The rapid increase in the price level over the year so far mechanically adds to annual inflation in 2023. Exceptionally fast price growth in the first 10 months of the year not only implies that annual inflation in 2022 will be historically high, but also sets the price level very high at the turn of the year, adding momentum to annual inflation rates in 2023 as well. Even without further increases in the price level in the remainder of 2022, inflation in the euro area would turn out at a high 8.4% and 3.7%, respectively in 2022 and 2023 as a whole. Continued pressures in the current year and those projected throughout 2023 are set to add to this carry-over effect, pushing annual average inflation higher, particularly in 2023.

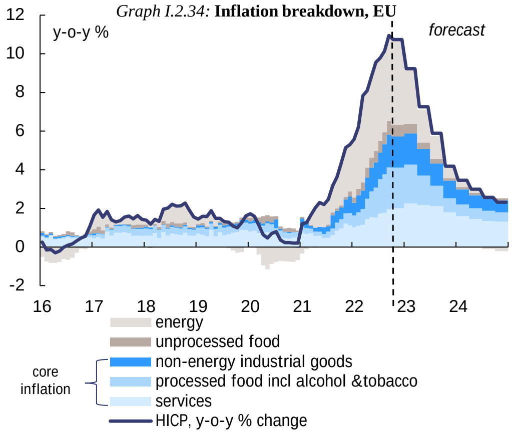
Consumer gas and electricity prices are set to remain high for longer, but negative base effects and steadily falling fuel prices will dampen energy inflation. Gas and electricity prices skyrocketed over summer. Despite their recent moderation, futures point to renewed upward pressures on gas prices over winter, while electricity prices are set to move even above their summer peak by early 2023. Given the drawn-out pass-through to retail prices, this should keep annual inflation of both energy commodities elevated in 2023, even taking into account strong negative base effects related to sharp upward adjustments in the course of 2022. Moreover, measures aimed at lowering retail prices, currently set to expire in the course of 2023 and 2024 in most Member States, are expected to generate a significant upward impulse to energy inflation upon their expiry, as from the third quarter in 2023, and then additionally in 2024. However, recent declines in Brent spot prices, sustained in future contracts over the entire forecast horizon, are set to continue pushing liquid fuel inflation down in 2023 and 2024, more than offsetting the elevated dynamics of retail gas and electricity prices. Consequently, energy inflation is set to peak in the last quarter of 2022 before coming down sharply in 2023 to turn negative as of mid-2024.

Inflation of food and non-energy industrial goods is set to fall from the current highs but remain well above historical averages. Annual inflation of food (both processed and unprocessed) and non-energy industrial goods is expected to continue accelerating in the fourth quarter of 2022. It is then projected to decline in 2023 and 2024, reflecting strong negative base effects and supported by the moderation in agricultural commodity prices implicit in future contracts, as well as progressive easing in supply chain bottlenecks, particularly in markets previously subject to supply-demand mismatches. Inflation of both subcomponents is, nevertheless, expected to remain well above historical averages, particularly in 2023, due to e.g. lagged effects of the depreciation of the euro and elevated input costs related to energy, transport and wages. Moreover, food prices should remain subject to persistent pressures along the entire value chain, related to e.g. war-induced disruptions exacerbated by the surge in input costs, keeping the moderation in food price dynamics only very gradual over the forecast horizon.

Supported by stronger wage growth, services inflation is set to peak only in 2023. Among the key HICP subcomponents, services is the only one expected to continue accelerating into 2023. Pressures on services prices will be sustained by still high demand and robust wage growth.[19] This is the case in particular for contact-intensive sectors, such as catering, accommodation and transport, where high demand is set to keep inflation elevated for longer. After peaking in 2023, services inflation is set to come down slowly, persisting above 3% in 2024, with the tightening of financing conditions playing an increasingly important role in cooling demand.

Headline inflation in the euro area is now expected to peak in the fourth quarter of 2022, before falling gradually over the course of 2023 and 2024. Headline inflation in the euro area is set to increase further in the near term, from 9.3% in the third quarter to peak at 10.2% in the fourth quarter (see Graph I.2.34). It is then projected to follow a downward trend until the end of the forecast horizon. Sharply falling energy inflation is expected to remain the key disinflationary factor in the first half of 2023. The decline in inflation is set to become more broad-based as from the second half of 2023, as all major subcomponents, including services, are expected to see annual price growth fall progressively amid strong base effects. The trend is projected to continue in 2024, with annual inflation falling from 3.3% in the first quarter to 2.1% in the fourth, pushed down by energy inflation turning negative (in the second half of the year) and a broad-based moderation across core inflation components.

Graph I.2.34: **Inflation breakdown, EU**



The rotation of price pressures towards core components is set to continue over the forecast horizon. Core inflation in the euro area is expected to peak at above 6% at the turn of the year, before coming down gradually to around 3.7% towards the end of 2023, and to 2.7% towards the end of 2024. As from the second quarter of 2024, core inflation should start exceeding headline inflation. Underlying price pressures look set to be supported by continued robust wage growth, providing a certain degree of inertia over the forecast horizon. Consequently, core inflation should account for the complete headline inflation as from mid-2024 (see Graph I.2.34).

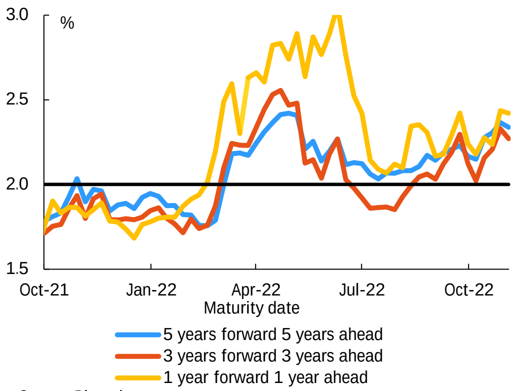
On an annual basis, inflation in the euro area is projected to peak at 8.5% in 2022, a historical high, before easing to 6.1% in 2023 and moderating to 2.6% in 2024. In the EU, inflation is set to reach 9.3% and 7.0% in 2022 and 2023, respectively, to moderate to 3.0% in 2024. Compared to the Summer interim Forecast, this represents an upward revision of 0.9 pps. in 2022 for both euro area and the EU, and of 2.0 pps. and 2.4 pps for the euro area and the EU, respectively, in 2023.

Inflation outlook revised up again on account of higher energy prices and weaker euro. Sizable revisions to the inflation outlook since the Summer interim Forecast reflect, first and foremost, significantly higher wholesale gas and electricity prices (over the entire forecast horizon, see Graph I.2.5), and their estimated pass-through to consumer energy inflation, taking account of government

[19] A tight labour market and past erosion of purchasing power are set to support wage growth accelerating to around 5% 2023 in the EU/euro area (see Table I.2.5).

measures. They are also due to the impact of the depreciation of the euro, the pass-through of energy prices to core components, expectation of a firmer wage growth, and ensuing services price pressures going forward. While faster tightening of financial conditions in the EU (and globally) is expected to weaken core price pressures over the forecast horizon, its dampening effect will take time, and, on the whole, it is not expected to offset the multiple forces pushing inflation higher in the forecast horizon.

Graph I.2.35: **Inflation expectations derived from implied forward inflation-linked swap rates**

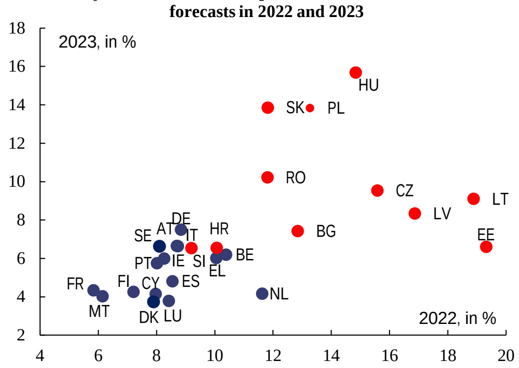


Source: Bloomberg

Inflation expectations of financial markets converged slightly above the 2% price stability target. The 1-year forward/1-year ahead inflation expectations have come down from their June highs to settle just below 2.5% in late October. They are now roughly aligned with the 5-year forward/5-year ahead and 3-year forward/3-year ahead expectations, which have been fluctuating between 2-2.3% since mid-August (see Graph I.2.35). Both S&P Global PMI composite input and output prices, as well as selling price expectations in the Commission surveys rose again for the EU in October in all surveyed sectors (except industry), after declining for several months over the summer. Even if the uptick was broad-based, October levels in the surveys are still short of spring peaks.

Inflation in Central and Eastern Europe is projected to be markedly higher compared to the rest of the EU. Within-EU inflation dispersion remains high, particularly in 2022 and 2023, when it appears to largely reflect the outlook for energy prices.[20] There is a clear geographical pattern to intra-EU inflation dispersion. Central and Eastern European (CEE) countries are ranking considerably higher than their Western, Northern and Southern European peers over the forecast horizon (see Graphs I.2.36 and I.2.37). The high inflation division line clearly cuts across the membership in the currency union. Many euro area Member States are projected to have record high inflation rates this year and next (e.g. Baltic countries, Slovakia), whereas some non-euro area countries (Sweden, Denmark) are among the EU Member States with the lowest inflation over the forecast horizon. High headline inflation across CEE is explained by outsize energy and food price growth (in 2022 and 2023), amplified by the higher weight of both components in the consumption baskets across the region. In 2024, however, the difference is increasingly driven by core components, predominantly services. This suggests that as commodity-driven volatile inflation abates, the Harrod-Balassa-Samuelson effect[21] resumes its key role in shaping inflationary processes across the CEE region.

Graph I.2.36: **Intra-EU dispersion of headline inflation forecasts in 2022 and 2023**

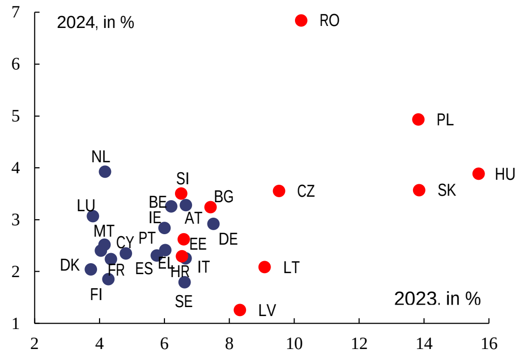


Note: Red circles indicate countries in the CEE. region

(20) Extreme inflation outcomes in e.g. 2022, both high (Baltic States) and low (FR, MT), are largely due to the extreme price dynamics of the energy component.

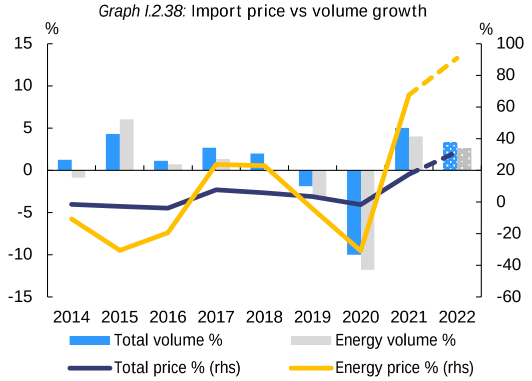
(21) Higher inflation in non-tradable components of the consumer basket in catching-up economies.

Graph I.2.37: **Intra-EU dispersion of headline inflation forecasts in 2023 and 2024**



Note: Red circles indicate countries in the CEE region.

Graph I.2.38: Import price vs volume growth



Note: Data for 2022 includes January to June.

2.6. CURRENT ACCOUNT

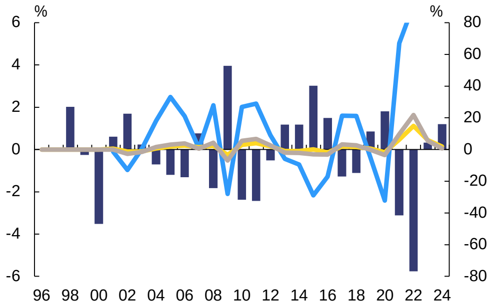
The cost of imports into the EU has surged on the back of the sharp increase in energy prices. Import prices increased throughout 2021, as oil and gas prices started creeping up. The trend accelerated abruptly in 2022, when Russia's invasion in Ukraine pushed gas prices to record highs. While energy was the main driver for this increase, import prices also rose for non-energy goods, mainly due to surging agricultural commodities, industrial metals and industrial goods. All in all, in 2021, the import prices for energy goods increased by 67.6% - more than three times more than price growth of total imported goods. In the first two quarters of 2022, energy prices increased on average by another 137.1% (compared to the same period of the previous year), while the price of total imports of goods were up by 40.2% (first half of 2022 compared to first half of 2021).[22] As a result, the value of energy imports in the first half of 2022 was already almost equal the total yearly value for 2021, while – due to the low elasticity of energy imports – the volume of energy imports had barely moved (i.e. 2022 mid-year volume of imports corresponds roughly to 50% of the imports in 2021).

The massive surge in import prices was largely attenuated by dynamic growth in export prices, but it is still resulting in an important terms of trade shock. Export deflators closely tracked import deflators, in the aggregate. From the beginning of 2021 to mid-2022, the price of EU exports increased by some 17.3%. This was the result of a 19.4% increase in the price of exported goods and 12% increase in the price of exported services. Rising export deflators mean that firms have been able to diffuse much of the hit coming from surging import price to the rest of the world.[23] Overall, the deterioration of the terms of trade is set to be relatively small given the magnitude of the shock: terms of trade is projected to decline from -3.1% in 2021 to -5.8% 2022 and to increase by 0.3% in 2023 and by 1.2% in 2024. This is still one of the largest shocks. The deterioration of terms of trade is set to contribute negatively to gross disposable income in 2022 (see Graph I.2.39). In 2022, the impact of terms of trade on real income is estimated to reach -2.4% of GDP (of the previous year). It follows another negative impact of about 0.9% of GDP (of the previous year) in 2021. This means a combined effect of more than 3% of GDP over the two years.

(22) Based on international trade in goods statistics (ITGS) published by Eurostat measuring the value and quantity of goods traded between the EU Member States (intra-EU trade) and goods traded by the EU Member States with non-EU countries (extra-EU trade).

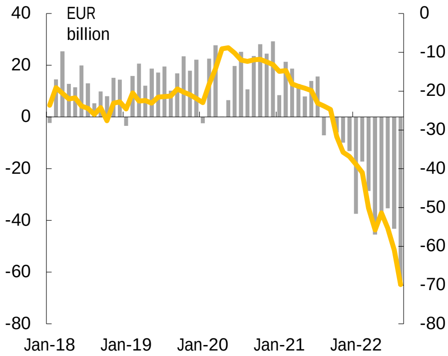
(23) Schnabel, I. (2022). "The globalisation of inflation." Speech at a conference organised by the Österreichische Vereinigung für Finanzanalyse und Asset Management. Vienna, May 11.

Graph I.2.39: **Terms of trade goods, EU**



Note: Energy import prices growth for 2022 is an average up to Aug 2022.

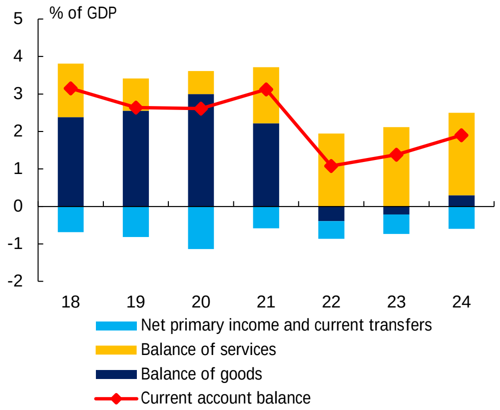
Graph I.2.40: Extra-EU trade balance, EU



Despite strong export performance, the EU current account surplus is set to shrink significantly. Besides price dynamics, also trade volumes changed to the upside during the first half of 2022 supported by the strong global rebound that started in 2021. In the first half of 2022, exports of services registered a substantial increase (5.8%) while exports of goods increased by 2.1%. Imports of goods and services, in turn, increased by 1.9%. Trade balances, particularly for energy net importing countries in Europe still showing a surplus in 2021, deteriorated since February 2022. The trade deficit has increase by 23% on a 3-months average in August 2022. The negative trade balance is mainly due to the large deficit for energy goods (see Graph I.2.40) but also the trade surplus of manufactured goods decreased in August for the second consecutive month. All in all, the EU current account is set to deteriorate further over the next months, with the yearly balance projected to shrink from 3.1% of GDP in 2021 to 1.1% of GDP in 2022.

EU current account surplus is set to narrow in 2023, on account of adverse price developments, and to recover somewhat in 2024. The increase in import and export deflators is forecast to reach its peak in 2022. In 2023, import prices are set to grow much more moderately (5.3%), slightly less than export deflators (5.7%), delivering an improvement in the terms of trade. In 2024, some of the loss of the surplus should be recovered. Consequently, the negative balance of merchandise trade is expected to improve in 2023 and to turn positive again in 2024. In contrast to goods, the balance of services is projected to continue its increasing surplus trend over the forecast horizon. This is mainly driven by the rebound of the tourism industry as from the first half of 2022. A weaker euro should continue to play in favour of Europe as a tourism destination for domestic and foreign visitors alike. The deficit of primary incomes and current transfer is set to remain rather stable from 2022 until 2024. All in all, the current account surplus is forecast to increase marginally to 1.4% of GDP in 2023 and 1.9% in 2024.

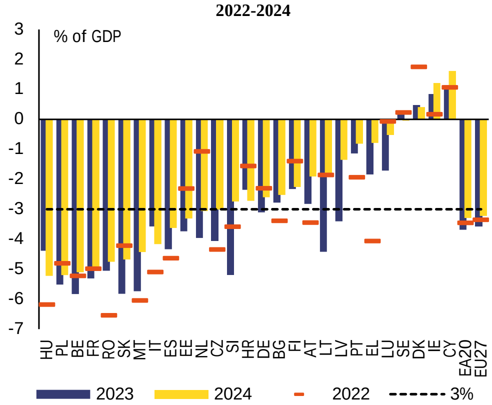
Graph I.2.41: **Current-account balance, EU**



2.7. PUBLIC FINANCES AND POLICY STANCE

The economic expansion has been driving a further reduction in government deficits in 2022. The EU general government deficit is projected to decline to 3.4% of GDP in 2022 (see Graph I.2.42), from 4.6% in 2021 and 6.7% in 2020. The still strong real GDP growth is supporting the reduction in the expenditure ratio, while high inflation is set to affect both revenues and expenditure, but to a different extent in the near term.[24] As for discretionary policies, new deficit-increasing measures, including those adopted to mitigate the impact of skyrocketing energy prices on households and firms, will more than offset the phasing out of the pandemic-related measures in 2022.[25] Specifically, reductions in indirect taxes, subsidies on energy products or production, and price caps in energy markets have an estimated net impact on the deficit of 1.2% of GDP in the EU.[26] The budgetary cost of sheltering and integrating people fleeing Ukraine, following Russia's war of aggression, is estimated at 0.1% of GDP in the EU as a whole, with large differences across Member States. Interest expenditure is set to increase by around 0.2 pps. of GDP, reflecting the rising interest rates.

Graph I.2.42: **Budget balance in EU Member States, 2022-2024**



As economic activity weakens, a slight increase in the EU deficit is forecast for 2023. The EU deficit is expected to rise to 3.6% of GDP in 2023. The deceleration in real GDP below potential growth and higher interest expenditure are projected to spur the expenditure ratio. These factors, together with the expected revenue shortfalls,[27] are set to more than offset the complete phasing out of COVID-19 emergency temporary measures and the projected decline in energy-related measures (by almost 0.4 pps. of GDP) (see Graph I.2.43). However, there is a risk that the deficit further increases in 2023 if persistently high energy prices lead Member States to prolong existing discretionary measures or implement new ones (see Box I.2.4).

In 2024, the EU aggregate deficit is projected to fall to 3.2% of GDP. This is driven by the assumed acceleration in

(24) Revenue developments are mainly affected by developments in the GDP deflator, which in turn is driven by changes in compensation of employees above productivity (i.e. ULCs) and profit margins (i.e. mark-ups). Expenditure developments are more influenced by HICP inflation, in particular for the purchase of goods and services and the indexation (normally with one year delay) of social transfers. In 2022 and 2023, the EU GDP deflator is projected to increase significantly (by 5.2% and 5.7% respectively), though by much less than HICP inflation (9.3% and 7.0% respectively), as the latter also reflects the surge in import prices (e.g. for fossil fuel and other commodities). In 2024, the GDP deflator and the HICP are both projected to decelerate (to 3.5% and 3.0%, respectively).

(25) The impact of the COVID-19 emergency temporary measures (mostly on the expenditure side) is projected to decline in the EU from 3.2% of GDP in 2021 to 0.8% of GDP in 2022, then it is assumed to become nil in 2023.

(26) Energy measures are estimated according to the following criteria: (1) measures credibly announced and specified in sufficient detail; (2) strict and consistent definition of an energy measure; (3) measures with direct budgetary impact for the general government accounts. These measures are expected to be temporary. See Box I.2.4 for more details.

(27) Revenue windfalls (shortfalls) are estimated through the increase (decrease) in the revenue-to-GDP ratio that is not explained by discretionary measures or transfers from the EU budget.

Table I.2.6:

General Government budgetary position - euro area and EU

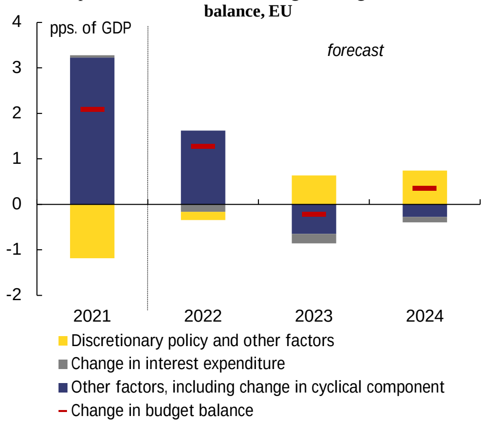
(% of GDP)	Euro area (20)							EU						
	Autumn 2022 forecast				*Spring 2022 forecast*			Autumn 2022 forecast				*Spring 2022 forecast*		
	2021	2022	2023	2024	2021	2022	2023	2021	2022	2023	2024	2021	2022	2023
Total receipts (1)	47.2	**47.1**	**46.7**	**45.7**	*47.3*	*45.2*	*45.0*	46.8	**46.4**	**46.1**	**45.2**	*46.9*	*46.0*	*45.7*
Total expenditure (2)	52.3	**50.5**	**50.3**	**49.0**	*52.4*	*48.8*	*47.4*	51.5	**49.8**	**49.7**	**48.4**	*51.6*	*49.6*	*48.2*
Actual balance (3) = (1)-(2)	-5.1	**-3.5**	**-3.7**	**-3.3**	*-5.1*	*-3.6*	*-2.4*	-4.6	**-3.4**	**-3.6**	**-3.2**	*-4.7*	*-3.6*	*-2.5*
Interest expenditure (4)	1.5	**1.6**	**1.8**	**1.9**	*1.5*	*1.4*	*1.3*	1.4	**1.5**	**1.7**	**1.9**	*1.4*	*1.3*	*1.3*
Primary balance (5) = (3)+(4)	-3.6	**-1.9**	**-1.9**	**-1.4**	*-3.6*	*-2.2*	*-1.1*	-3.3	**-1.8**	**-1.8**	**-1.4**	*-3.3*	*-2.2*	*-1.2*
Cyclically-adjusted budget balance (a)	-4.2	**-3.7**	**-3.4**	**-3.2**	*-4.0*	*-3.3*	*-2.5*	-3.9	**-3.6**	**-3.2**	**-3.0**	*-3.6*	*-3.2*	*-2.5*
Cyclically-adjusted primary balance (a)	-2.8	**-2.1**	**-1.6**	**-1.3**	*-2.5*	*-1.9*	*-1.2*	-2.5	**-2.0**	**-1.5**	**-1.1**	*-2.2*	*-1.9*	*-1.2*
Structural budget balance (a)	-4.2	**-3.6**	**-3.4**	**-3.2**	*-4.0*	*-3.3*	*-2.5*	-3.9	**-3.6**	**-3.2**	**-3.0**	*-3.6*	*-3.3*	*-2.5*
Change in structural budget balance (a)	-0.5	**0.6**	**0.2**	**0.3**	*-0.3*	*0.7*	*0.8*	-0.2	**0.3**	**0.3**	**0.3**	*-0.1*	*0.4*	*0.7*
Gross debt	97.1	**93.6**	**92.3**	**91.4**	*97.3*	*94.0*	*92.1*	89.4	**86.0**	**84.9**	**84.1**	*89.7*	*87.1*	*85.2*

(a) as a % of potential output. The structural budget balance is the cyclically-adjusted budget balance net of one-off and other temporary measures estimated by the European Commission.

economic activity and the phasing out of energy-related measures currently projected for that year.

By 2024, eleven Member States are projected to have still a deficit greater than 3% of GDP. Except for Denmark and Sweden, all Member States reported deficits above 3% of GDP in 2020. In 2022, the number of Member States with a deficit greater than 3% of GDP is set to remain 15, as in 2021. This number is expected to increase to 16 in 2023, before falling again to 11 in 2024 (see Graph I.2.42), based on unchanged policies.

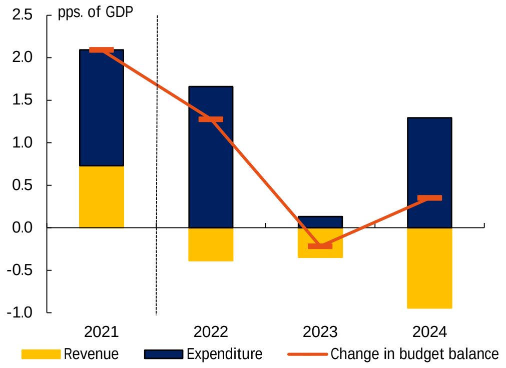
Graph I.2.43: **Drivers of the change in the government balance, EU**



Large swings in expenditure and revenue ratios are projected over the forecast horizon. After declining by 3.8% in 2020, EU total revenues rebounded strongly in 2021, with an annual rise of 9.6%, i.e. more than the increase in nominal GDP (8.3%). As result, the revenue ratio reached a peak of 46.8% of GDP in the EU in 2021, mainly due to sizeable revenue windfalls, estimated at ¾% of GDP. (28) It is set to start declining in 2022 (by 0.4 pps. of GDP), mainly due to the discretionary reduction of VAT and excise duties on energy products. Despite the projected phasing out of the above-mentioned energy measures, further declines in the EU revenue ratio are expected in 2023 and 2024 (0.3 and 0.9 pps. of GDP, respectively), as the composition of growth is projected to be less tax rich. Revenue shortfalls are estimated at ¾% of GDP in both years. The EU expenditure ratio is expected to decline by 3 pps. of GDP from 2020 to 2022 driven by the strong economic expansion, increasing the denominator, and the waning pandemic-related spending. High inflation is set to be reflected in the annual increase of EU public spending also in 2023 (5.4%), driven by an acceleration in social transfers. As a result, the expenditure-to-GDP ratio is set to remain broadly stable in 2023 despite COVID-19 temporary emergency measures expiring. The EU expenditure ratio is projected to resume declining in 2024, based on a no-policy-change assumption.

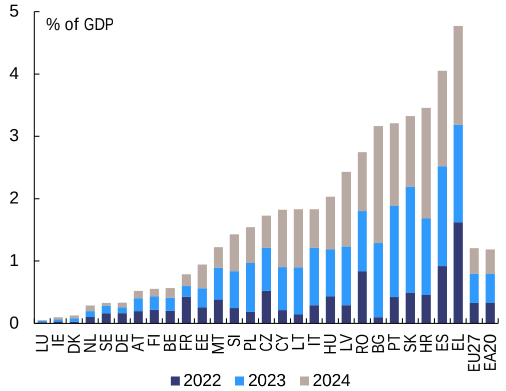
(28) The large revenue windfalls estimated for 2021 are possibly related to the strong nominal recovery after the pandemic in consumption of goods, investment and merchandise imports, components that are generally more tax-compliant than services.

Graph I.2.44: **General government balance: expenditure and revenue contribution to the change, EU**



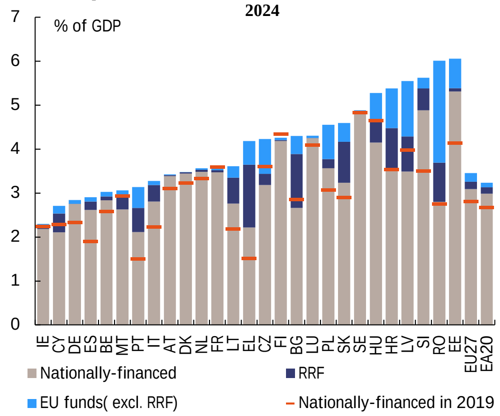
The absorption of Recovery and Resilience Facility (RRF) grants is set to increase over the forecast horizon. For the EU as a whole, the absorption of RRF grants is projected to increase to 0.3% of GDP in 2022 (from 0.2% in 2021). It is set to further increase to 0.5% of GDP in 2023. Over the 2022-2024 forecast horizon, expenditure financed by RRF grants is expected to be more than 4% of GDP in Spain and Greece, more than 3% in Croatia, Slovakia, Portugal and Bulgaria, more than 2% in Hungary, Latvia and Romania, and more than 1% of GDP in Malta, Slovenia, Poland, Lithuania, Cyprus, Czechia and Italy (see Graph I.2.45).

Graph I.2.45: **RRF grants absorption, 2022-2024**



Rising public investment is improving the composition of expenditure. The EU aggregate public investment ratio is expected to rise from around 3% of GDP in 2019 to 3.5% in 2024, with most Member States set to spend a higher amount of their national budgets on public investment than they did prior to the pandemic (see Graph I.2.46). Half of the increase in public investment is related to investment financed by the EU, particularly by the RRF.[29]

Graph I.2.46: **Public investment in the EU, in 2019 and 2024**



High inflation supports the reduction in debt-to-GDP ratios in the short term. The public debt-to-GDP ratio is set to fall to 86% in the EU at the end of 2022 (to around 94% in the euro area), from the historically high level of 91.5% recorded in 2020 (99% in the euro area).[30] This reduction is driven by strong economic growth, lower primary deficits, and inflation. In particular, the projected increase in the GDP deflator is expected to have a significant debt-decreasing impact over the forecast horizon, while higher interest rates will affect only gradually the implicit cost of public debt. Overall, the interest-growth differential ('snowball effect') is set to continue decreasing debt ratios.[31] Simultaneously, the projected primary deficits weigh on debt developments in 2022-24, albeit to a lesser extent than in 2020-21 (see Graph I.2.47). As a result, the debt-to-GDP ratio is expected to decline marginally in the EU, to around 85% in 2023 and 84% in 2024, respectively (92% and 91% in the euro area).

(29) Differences in EU financed investment between Member States depend on the allocation of RRF grants and other EU funds, as well as the degree of absorption.

(30) These debt data are not consolidated for intergovernmental loans (see Box I.5.1. for further information).

(31) The "snowball effect" captures the impact of interest expenditure on the annual accumulation of debt, as well as the impact of real GDP growth and inflation (GDP deflator) on the debt ratio.

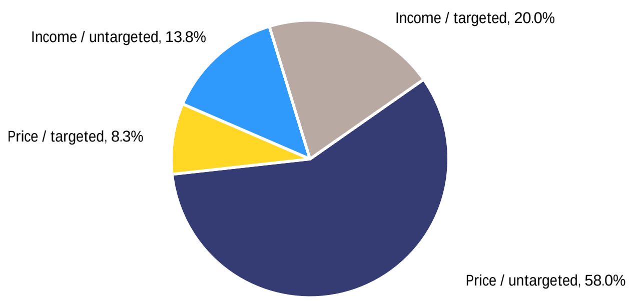
Box I.2.4: **Fiscal policy measures to mitigate the impact of high energy prices**

The increase in energy prices has prompted most Member States to implement fiscal policy measures to mitigate the social and economic impact on households and firms. This box takes stock of the overall budgetary impact of the measures currently in place and their nature. Furthermore, it explores the budgetary consequences if high energy prices required a prolongation of measures beyond the currently announced plans.

In 2022, the net budgetary cost of measures to mitigate the impact of high energy prices is estimated at 1.2% of GDP in the EU.

This box addresses the cost of energy measures from a budgetary perspective, i.e. only measures with a direct budgetary impact on the general government accounts are taken into account. Regulatory measures or measures implemented by public companies outside the perimeter of general government are not included, unless the government provides a compensation to the companies involved (e.g. in the form of a subsidy or a capital transfer). For the purposes of this estimation, '*energy measures*' are defined as: (1) measures that have a direct impact on the marginal cost of energy consumption for households and/or firms ('*price measures*'); (2a) measures that provide temporary income support to households (hence, permanent increases in wages and salaries, pensions or other social benefits are not considered to be energy measures, as they are not to be reversed when energy prices decrease again); (2b) measures that provide compensation to firms (other than price measures) in energy-intensive industries (both '*income measures*'); and (3) revenues from (new taxes or levies on) windfall profits by energy companies. [1] Based on this definition, for 2022 as a whole, Member States have adopted measures with a net cost of close to EUR 200 billion (1.2% of GDP), by the cut-off date of this forecast. The vast majority of these measures are price measures (roughly two thirds). Therefore, they may distort the price signal and reduce incentives to contain energy consumption and increase energy efficiency. The adopted measures can be further characterised by whether they are targeted (or not) to households and firms most vulnerable to energy price hikes. Conversely, untargeted measures are broad-based measures that apply to the majority of the population without (much) differentiation based on income or specific needs. For 2022, more than 70% of measures have been untargeted. Taking both criteria together, almost 60% of measures can be considered to be untargeted price measures (see Graph 1).

Graph 1: **Energy measures in 2022 by category**



[1] Revenue from (taxes or levies on) windfall profits form a special category as this is does not constitute a support measure, but rather a source of funding. This particular type of revenue is included in the estimates given the very direct link with increased energy prices, and because many Member States are already using or are contemplating the use of this revenue source to fund support measures.

(Continued on the next page)

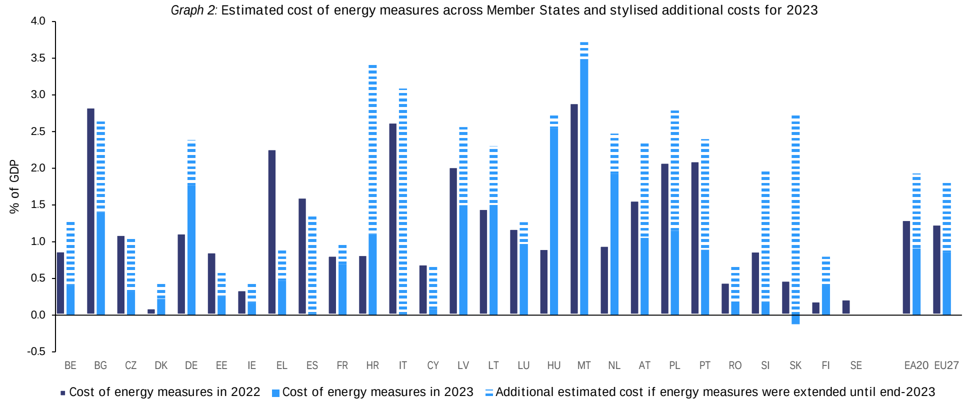
Box (continued)

As energy prices are set to remain high in 2023, the currently announced measures may underestimate the ultimate budgetary costs.

In line with the Commission's customary 'no-policy-change assumption', [2] the projections for 2023 take into account measures that have been credibly announced and specified in sufficient detail by the cut-off date of this forecast. On this basis, the net budgetary cost of energy measures for 2023 is forecast at around EUR 144 billion (0.9% of GDP), below 2022. Costs have been projected based on when the measures entered into force and their announced expiry date. They differ in size across Member States, reflecting country-specific factors such as the design of their national policy packages and energy mix. Importantly, at the cut-off date, some Member States had not yet announced which energy measures they plan for 2023. Moreover, in several Member States, energy measures are planned to expire in the course of 2023 (some as early as the end of the first quarter of the year). Yet, if energy prices remain high, Member States may decide to prolong existing measures or to implement new ones. The current projection for the budgetary cost of measures related to the high energy prices is largely driven by a few large Member States that have already announced significant full-year policy packages. As a result, for a number of Member States and for the EU as a whole, the budgetary cost of energy measures in 2023 may be underestimated.

Complementing the budgetary projections included in this forecast, the Commission services have tentatively estimated the potential additional budgetary cost of energy measures, if the existing measures were to be extended throughout 2023. This is necessarily a highly stylised exercise, using the Autumn Forecast as a starting point, and disregarding the impact that the extension of energy measures could possibly have on economic activity and inflation. This exercise indicates that, if energy measures had to be kept in place for the full year 2023, their total net cost could increase by an additional 1% of GDP in both the EU and the euro area, reaching close to 2% of GDP in 2023, significantly higher than in 2022. [3] The picture is mixed at the level of individual Member States, depending on the characteristics of the energy measures that are currently in force or have been announced, including their generosity and expiry dates. Although these estimates are surrounded by considerable uncertainty, they illustrate how future energy price developments may impact fiscal outcomes. Graph 2 presents the budgetary cost of energy measures in 2022 and 2023 as included in this Autumn Forecast, and adds for 2023 the estimated additional budgetary cost of extending the energy measures throughout that year.

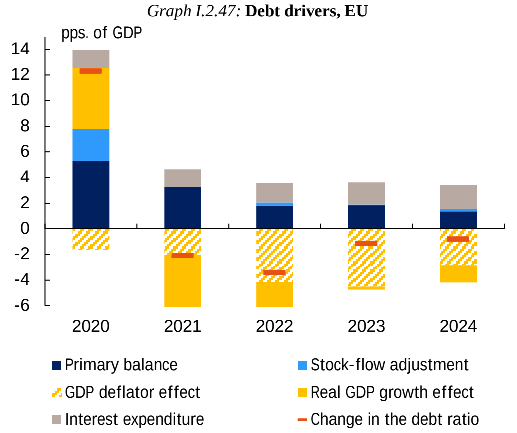
Graph 2: Estimated cost of energy measures across Member States and stylised additional costs for 2023



(2) European Commission (EC-DG ECFIN) (2016), "The no-policy-change assumption in the Commission's forecast." In EC *Report on Public Finances in EMU*, European Economy Institutional Paper 045, pp. 34-48, December 2016.

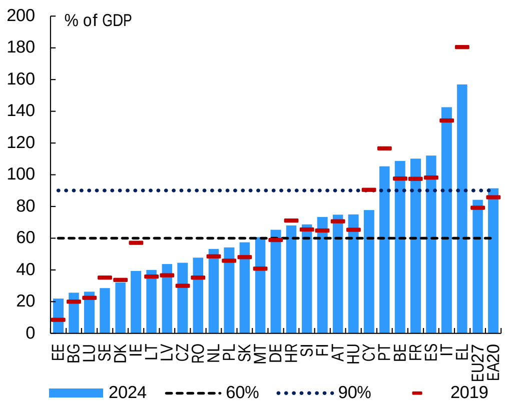
(3) For some specific Member States, this estimate also assumes the effective use of budgetary appropriations currently foreseen by some governments to finance additional energy measures in 2023, the details of which have not yet been specified. Its budgetary impact has already been reflected in the projections for the general government deficit and debt in 2023 underlying this Autumn Forecast, but not in the overall budgetary cost of energy measures in that year.

Graph I.2.47: **Debt drivers, EU**



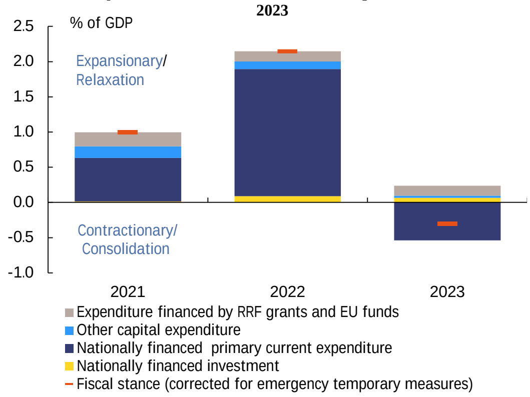
In 2024, debt ratios are set to remain above the 2019 levels in most Member States. By the end of the forecast horizon, half of the Member States are expected to have debt ratios greater than 60% of GDP, with Belgium, Greece, Spain, France, Italy, and Portugal expected to have debt ratios greater than 100% of GDP (see Graph I.2.48). Furthermore, in most Member States, the ratios are projected to remain above 2019 levels at the end of the forecast horizon.

Graph I.2.48: **General government debt developments**



The fiscal stance is set to be further expansionary in 2022. The fiscal stance[32] is estimated to be significantly expansionary in the EU in 2022, by around 2¼% of GDP. This follows an expansionary stance of 1% of GDP in 2021 (see Graph I.2.49).[33][34] Nationally financed net primary current expenditure is expected to contribute significantly to the expansionary fiscal stance in 2022, by around 1¾ pps. of GDP, driven by the above-mentioned energy-related measures. Other expansionary contributions come from public investment paid for by national budgets, spending paid for by the RRF and other EU funds, as well as from other capital expenditure.

Graph I.2.49: **EU fiscal stance and its components: 2021-2023**



A lower impact of energy-related measures leads to a less supportive fiscal stance in 2023. Owing primarily to the lower impact of the energy-related measures compared to 2022, the fiscal stance is currently projected to turn slightly contractionary in 2023 (by around ¼% of GDP). At the same time,

(32) The fiscal stance measures the short-term impulse to the economy from discretionary fiscal policy. Following the Council recommendations on the 2021 Stability and Convergence Programmes, the net expenditure aggregate used to assess the fiscal stance was adjusted to include expenditure financed by RRF grants and other EU funds and to exclude the COVID-19-related temporary emergency measures.

(33) COVID-19 temporary emergency measures mainly consist of transfers necessary to keep afloat households and firms hit by the pandemic. However, their direct impact on economic growth is assumed to be limited and not necessarily related to the time of disbursement, due to the pandemic-related restraints on economic activity (e.g. widespread lockdowns, travel restrictions, etc.). The historically high households' saving rates in 2020 and 2021 seem to corroborate this assumption. For the EU aggregate, the budgetary impact of these measures is projected to decline from 3.2% of GDP in 2021 to 0.8% in 2022 and to zero in 2023. If COVID-19 temporary emergency measures were not excluded, the EU fiscal stance would remain expansionary in 2021 (by 1% of GDP), it would appear broadly neutral in 2022 and more contractionary in 2023 (by around 1¼%).

(34) Since the adoption of NextGenerationEU (NGEU), the conventional indicators of fiscal surveillance underestimate the fiscal impulse provided to aggregate demand, given that expenditure financed by the EU does not show up in those indicators. Instead, the estimated fiscal stance considers the unprecedented fiscal support provided at EU level. In other words, in the presence of NGEU, the business-as-usual indicator of the fiscal stance underestimates the fiscal impulse provided to aggregate demand.

nationally financed investment and expenditure financed by the RRF and other EU funds are set to provide additional support to the economy next year, besides contributing to reduce reliance on imported energy. Overall, in absence of additional measures, fiscal policy is projected to support the ongoing normalisation of monetary policy in the euro area and in the rest of the EU.

3. RISKS

The projections for economic growth and inflation are surrounded by exceptionally large risks. The realisation of the key working assumptions underpinning the Autumn 2022 Forecast – regarding the evolution of the geopolitical situation and its reverberations in commodity markets and beyond (see Box I.1.1) – is subject to high risks. The potential for further disruptions unleashed by Russia's war of aggression remains huge. In addition, the succession of two extreme shocks in just three years poses formidable challenges to households, firms, and governments alike. A large degree of uncertainty still looms over the path of adjustment to these shocks. In such an environment, the risk of policy missteps increases, as the policy response requires a careful balancing act between different and often conflicting needs.

Risks to growth are judged to be skewed to the downside while inflation risks are to the upside. Despite a series of significant upward revisions to the inflation outlook, risks to headline inflation remain on the upside, particularly in the outer year.

A major downside risk for growth pertains to the security of gas supplies. Key risk factors include a complete stop of gas flowing from Russia, disruptions in the global markets for LNG or insufficient reduction in consumption in the EU. Colder than average temperatures this winter would aggravate the risk of insufficient gas storage in the winter of next year, given limited substitutability of gas for heating. These risk factors motivate the design of the alternative scenarios presented in Special Issue 4.1, which finds that economic costs in terms of lower economic growth and higher inflation could be sizeable, should these risks materialise.

Adverse supply shocks in other commodity markets also continue to pose a risk, particularly to inflation. Prices of other commodities, including oil and some agricultural commodities, have retrenched in recent months. Amid elevated uncertainty and ongoing geopolitical tensions, commodity prices may move higher than assumed in the forecast baseline. By contrast, normal weather conditions might reduce pressure on commodity prices and gas consumption in the EU.

Inflationary pressures could become more entrenched and weigh on the recovery. The hit to real income raises the risk of wage settlements that are not commensurate to the competitiveness shock suffered by the economy. Such a risk is amplified in economies featuring widespread automatic wage indexation or cost-of-living adjustment. Firms may attempt to pass on to consumers a larger share of the cost increases. These risks are in turn amplified in economies and sectors that are less exposed to competitive pressures or had been in a better position before the energy shock.[42] Optimal from the point of view of individual firms and workers, these strategies would, however, delay the necessary adjustment to the terms of trade shock and result in stronger inflationary pressures and greater income and employment loss.

Rising borrowing costs could amplify pre-existing financial vulnerabilities in the corporate sector. More costly financing, compounded by strongly rising production costs at the time when demand cools, affect firms' cash flows and worsen their profit outlook. For many corporates, mainly the most indebted ones and in the hardest hit sectors, there is a risk that liquidity strains turn into solvency

(42) In its April 2022 World Economic Outlook release, the IMF considers that "[...] given that inflationary shocks are originating outside the labor market, falling real wages are helping to slow inflation, and monetary policy is tightening more aggressively, the chances of persistent wage-price spirals emerging appear limited". At the same time in a recent bulletin, the BIS cautions against "extrapolating behaviour from low-inflation periods [...]. If inflation remains high, households may ask for higher wages to make up for lost purchasing power and firms may raise prices to protect profit margins. And stubbornly high inflation may lead to institutional changes such as automatic indexation and cost-of-living adjustment clauses". See International Monetary Fund (IMF) (2022). "Wage Dynamics Post-COVID-19 and Wage-Price Spiral Risks." *World Economic Outlook*, Ch. 2, October 2022 and Boissay F., De Fiore F., Igan D., Pierres-Tejada A. and D. Rees (2022). "Are major advanced economies on the verge of a wage-price spiral?," *BIS Bulletin 53, May*.

problems that lead to default or bankruptcy. Banks, particularly those with high exposures to the most affected sectors or the hardest hit countries, would also be negatively affected. This could amplify and lengthen the negative impact of the supply shocks.

Potential inconsistency between fiscal and monetary policy objectives could have adverse consequences. Fiscal policy could turn out significantly more expansionary than projected, under the customary no-policy-change assumption (see Box I.2.4). Large fiscal support risks countering the disinflationary objective pursued by the monetary authorities, forcing them to a stronger tightening of monetary policy with negative consequences for growth. Moreover, an uneven change in risk premia on sovereign debt could raise the risk of financial fragmentation and impede the efficient transmission of monetary policy. The lags in the monetary policy transmission add to the challenge faced by the monetary authorities. On the one hand, an excessively loose monetary policy risks de-anchoring inflation expectations, with inflation becoming entrenched. On the other hand, the still largely exogenous nature of the inflationary shock may lead to overestimating the underlying inflationary pressures. In this case, excessive tightening of monetary policy would bring inflation down more quickly than currently expected, but at the cost of larger output and employment losses.

Risks stemming from the global economy remain important. Risks stemming from commodity markets would have a proportionally larger impact on emerging economies. Additional pressures on cost of living would reduce demand for EU exports. Moreover, the risks of policy miscalibration in the current environment are not limited to the EU. On the one hand, inflation might become entrenched if inflation expectations de-anchor. On the other hand, there is a risk that monetary policy is tightened faster than warranted by underlying economic conditions, resulting in a global recession, but also more subdued external inflationary pressures. Further monetary policy tightening in advanced economies and especially the Federal Reserve, brings the risk of debt distress for emerging market economies. A sluggish growth in trade and quickly abating global inflationary pressure could constrain the capacity of EU firms to continue to pass on price increases to the extent done so far. Finally, the COVID-19 pandemic remains a lingering risk. The possibility that a resurgence of the pandemic, also in the EU, could bring renewed disruptions to the economy cannot be excluded. At the same time, a stronger pick-up in growth in China and other parts of emerging Asia could come with additional pressure on commodity markets and especially gas, complicating the EU's strategy to diversify gas supplies.

The adverse impact of climate change increases threats to the EU and global economy. A long-running drought and a series of extreme heatwaves made summer 2022 the continent's hottest on record. The increasing frequency of extreme weather conditions not only negatively affects agricultural production, but also dampens production of renewable energies and increases electricity consumption at a time when the EU is already struggling with an energy crisis. Floodings are a threat to housing wealth and infrastructure in general. On agriculture, as well as on energy, climate change has an inflationary front, while it also negatively affects growth as destructions weigh on the stock of capital.

4. SPECIAL ISSUES

4.1. COMMODITY-DRIVEN INFLATION: MACRO EFFECTS AND RISKS

Developments in energy markets are key drivers of the projected slowdown in economic activity and high inflation. Commodity-driven inflation, associated with Russia's war of aggression against Ukraine, and supply disruptions of natural gas, particularly, are key drivers of the projected worsening of the economic outlook with major risks remaining.

This section assesses the potential impact of the realisation of key risks in energy markets on the baseline forecast. The analysis proceeds in two steps. First, the Commission's estimated macro model identifies the driving forces shaping past and projected output and price dynamics in the baseline forecast. This identification helps assess the economic cost of alternative paths for the evolution of energy supplies and prices.

The analysis builds on the Commission's Global Multi-Country Model (GM), featuring the euro area and the rest of the world (RoW).[36] The model features a prominent role for energy commodities in production and consumption. It also captures salient economic features of the COVID-19 shock[37] such as fluctuations in households' savings behaviour, firms' liquidity constraints and labour hoarding (short-time work). The model estimates rest on a rich dataset of over 30 time series, including, among others, historical and forecast data from national accounts and trade data, as well as market-based expectations of gas and oil prices based on futures markets, in line with the assumptions included in the baseline forecast (see Box I.5.1).

In the model, energy commodities act on the economy through multiple transmission channels, namely:

- Energy commodities enter the model as an imported intermediate input with limited substitutability.
- Energy commodity prices also directly feed into consumer prices (e.g. fuel and gas for heating).
- Second-round effects driven by higher production costs and wages propagate the above direct effects to other goods and services included in the consumption basket.
- In addition, higher energy prices adversely impact business investment by deteriorating the liquidity position of firms.
- The model does not include energy-related (tax) policies beyond excise duties.[38]

The modelling approach and scenario design incorporate key stylised facts of natural gas markets. While the ongoing diversification has helped to increase imports from other sources, Europe's import capacity remains limited as it depends on specific infrastructure (pipelines and LNG terminals). In the model, very low substitution elasticities between gas and other production inputs

(36) The Global Multi-Country (GM) model, a macroeconomic model in the New Keynesian tradition, has been developed by DG ECFIN and the Joint Research Centre of the European Commission. The analysis considers a two-region configuration with the euro area and the rest of the world. For a detailed description of the core GM model, see Albonico, A., L. Calès, R. Cardani, O. Croitorov, F. Di Dio, F. Ferroni, M. Giovannini, S. Hohberger, B. Pataracchia, F. Pericoli, P. Pfeiffer, R. Raciborski, M. Ratto, W. Roeger, and L. Vogel (2019). "The Global Multi-Country Model (GM): an Estimated DSGE Model for the Euro Area Countries." European Commission (DG ECFIN) Discussion Paper No. 102.

(37) For recent extensions of the GM model to fit the main particularities in COVID-period data, see R. Cardani, O. Croitorov, M. Giovannini, P. Pfeiffer, M. Ratto, and L. Vogel (2022). "The euro area's pandemic recession: A DSGE-based interpretation." *Journal of Economic Dynamics and Control.*

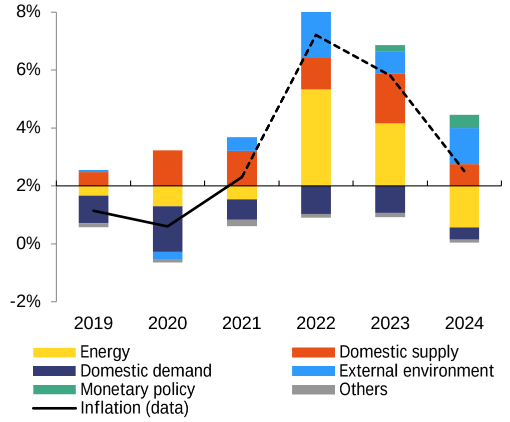
(38) For an analysis on support policies, see, for instance, G. Bethuyne, A. Cima, B. Döhring, Å, Johannesson Lindén, R. Kasdorp, and J. Varga (2022) "Targeted income support is the most social and climate-friendly measure for mitigating the impact of high energy prices." VOXEU, June 6.

capture these limited substitution possibilities and costly adjustments.[39]

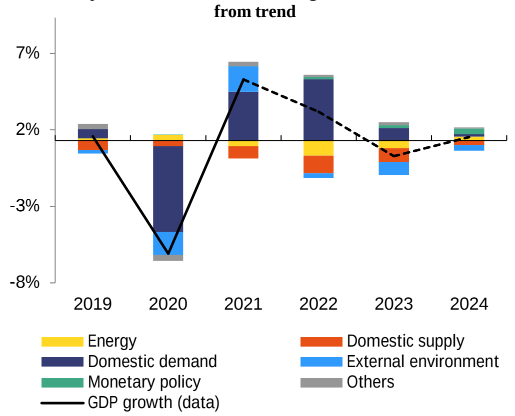
4.1.1. A model-based breakdown of projected inflation and growth

Energy prices continue to dominate euro area price and, to a lesser extent, output dynamics. Based on the forecast's external assumptions and the model estimates, Graph I.4.1 displays the decomposition of past and projected inflation.[40] In 2022 and 2023, prices of energy commodities, most notably natural gas, drive a substantial share of consumer inflation in the euro area. Namely, in 2023, they add around 2¼ pps. to the projected inflation rate, measured by the private consumption deflator, of 5.8% in 2023, partly via second-round effects. The negative terms of trade effect of energy prices and its impact on private demand also reduce next year's expected GDP growth (by -½ pps.) after a large negative impact in 2022 (-1 ppt.), as shown in Graph I.4.2. The gradual stabilisation and subsequent partial reversal of commodity prices contribute markedly to the forecast decline in inflation and to an increase in real growth to its trend growth in 2024.

Graph I.4.1: **Euro area consumption deflator growth, deviations from trend**



Graph I.4.2: **Euro area real GDP growth, deviations from trend**



Import prices drive up inflation and slow growth. Prices of imported non-energy goods and services are projected to keep inflation high in all three forecast years, but most notably in 2024 (+1¼ pps.). Inflation in the outer year would otherwise fall below 2%, according to the model estimation. At the same time, elevated imported non-energy inflation also weighs negatively on euro area GDP growth in 2023 and 2024.

While domestic demand shocks support growth, supply conditions are expected to worsen. Shocks to domestic demand remain among the few positive growth factors, even if their contribution eases markedly over the forecast horizon. After a strong positive impact in 2022 (+4 pps.), following the reopening of the economy, these shocks add around ¾ ppt. to growth in 2023 before fading in 2024. Relative to 2020, the negative contribution of

(39) The model distinguishes household and business demand for natural gas. The scenario calibrates the constant elasticity of substitution parameters between gas and other inputs to 0.04 (households) and 0.06 (firms). Due to adjustment costs and monopolistic competition in the model, the very short-run substitution is even more limited. Technically, a price shock triggers a reduction in gas volume, coupled with prolonged difficulties in accessing alternatives.

(40) In Graphs I.4.1 and I.4.2, the solid black line shows the historical data, and the dashed line represents the European Commission's forecast for inflation and growth, respectively. The coloured bars show the contribution of the drivers of the (historical and projected) deviations in inflation and GDP from the target inflation rate and long-run trend growth. Bars above (below) the horizontal axis indicate positive (negative) contributions in a given year. Positive and negative contributions sum up to the values of the black line. Drivers of deviations are the following shocks: (1) prices of energy commodities (2) domestic supply conditions, mainly productivity fluctuations and labour and goods market adjustment as captured by wage and price mark-up shocks; (3) domestic demand shocks, including pandemic-specific shocks (i.e. lockdowns) and discretionary fiscal policy; (4) shocks to world demand, international trade and exchange rates; (5) monetary policy as deviations from an estimated interest rule (stabilising inflation and the output gap in the model).

these shocks to inflation diminishes.[41] Adverse supply (productivity) factors emerging in 2021 are expected to continue to dampen GDP growth, shaving off around 1 ppt. of GDP growth in 2023. The estimated positive contribution of these shocks to inflation remains high throughout the forecast horizon, albeit it falls significantly in 2024.

Monetary policy continues to be supportive of growth. The modelling framework includes an estimated interest-rate response to deviations of inflation from the central bank's target and the output gap. According to this simple rule, the assumed path for interest rates contributes slightly positively to inflation and growth over the forecast horizon.

Overall, the model estimates point to an important role of terms of trade in shaping the baseline forecast. Unfavourable terms of trade - mainly persistently elevated prices of natural gas and rest of the world export prices – are important drivers of the baseline forecast for both inflation and growth. In addition, unfavourable domestic supply conditions continue to weigh on economic prospects, while the growth-supporting impact of domestic demand shocks, mainly associated with the reopening of the economy, quickly fades over the forecast period.

4.1.2. Risk scenarios

Considerable uncertainty in energy markets still surrounds the economic outlook. Despite the realisation of major downside risks since the Spring Forecast, important risk factors remain. [42] Further supply cuts from Russia and insufficient reductions in gas consumption are important downside risks. The analysis below estimates the economic costs associated with the realisation of these risks.

The analysis considers two main risk factors: (i) a full stop of remaining pipeline gas imports from Russia (from around 7% of total EU gas imports in October compared to 40% before 2022) in mid-December and (ii) cold winters in the next two years, which ceteris paribus raise gas demand by around 12% between December and March, compared to the implicit baseline assumption, roughly in line with the maximum consumption observed in 2014-2021. It is important to note that the modelling of these hypothetical events does not necessarily imply that the probability of such events happening is high. The choice of scenarios rather aims to illustrate the potential economic consequences of important downside risks. Finally, the scenarios do not include economic policy responses to the shocks beyond the workings of automatic fiscal stabilisers and the estimated monetary policy response.

Should these risks materialise, the EU would face severe gas shortages. The shortfall in gas imports and higher-than-anticipated demand would accelerate storage depletion during winter 2022/2023. Still, high gas storage levels of more than 90% in October and reduced gas consumption should provide sufficient buffers until early 2023.[43] However, gas storage would not be sufficiently refilled ahead of winter 2023/2024. This missing buffer stock would lead to a major gas shortage in that winter unless the shortfall in imports from Russia is substituted with other sources and the increase in gas consumption is restrained.

The scenarios underline the importance of anticipation and management of demand, particularly regarding 2024. The two scenarios differ in their assumptions about expected demand management and the ability to refill storage in 2023. The *first scenario* ('*preparedness*') assumes that the shortfall in imports from Russia is partly satisfied by

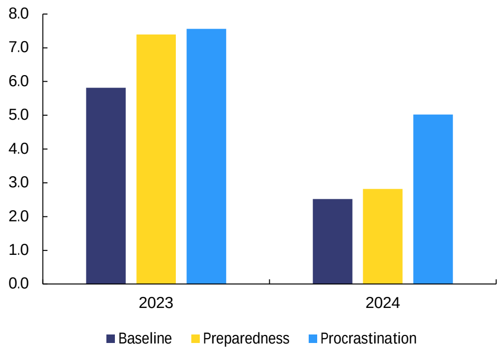
(41) For about a decade prior to the pandemic, these shocks kept inflation below its target. Pre-COVID forecasts at the European Commission have analysed the `secular stagnation' hypothesis. For analysis through the lens of the GM model. See, for example, European Commission (2018), "Drivers of the euro area recovery - evidence from an estimated model" in *European Economic Forecast: Spring 2018*, Institutional Paper 77, Box 1.3, pp. 64-67.

(42) The gas cuts from Russia are, to a large extent, in line with the Spring Forecast's severe scenario (although timing and magnitude differ). See European Commission (EC–DG ECFIN) (2022). "Alternative scenarios on the economic outlook", in EC *European Economic Forecast: Spring 2022*, Institutional Paper 173, Special Topic, pp. 51-55.

(43) See also ENTSO-G (2022), "Winter Supply Outlook 2022/2023" for a more detailed discussion of risk scenarios for the next winter.

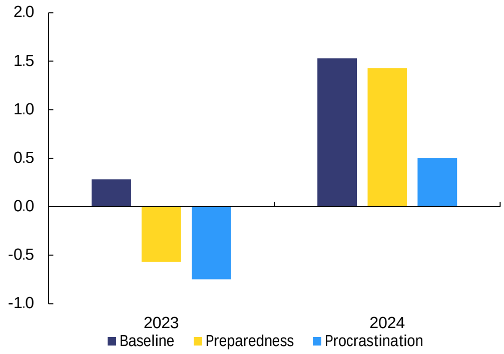
increased imports from other sources, albeit at a higher cost, starting in early 2023. Higher prices also help bring down demand. The combination of increased imports from other sources and lower gas consumption allows building up sufficient storage by the end of 2023 to get by in winter 2023/2024. By contrast, the *second scenario* (`*procrastination*') assumes that the refilling of storage is delayed. Ahead of the heating season 2023/2024, gas storage volumes would fall to around 30% below the levels needed to meet demand in the cold winter. Very large gas price increases are then necessary to induce sufficient demand reduction while avoiding the economic costs of a full-scale curtailment. In this second scenario, procrastination implies an outsized cost for short-run adjustment.

Graph I.4.3: Inflation rates across scenarios (in pps.), euro area (consumer price deflator)



Model simulations show high macroeconomic costs in case these risks materialise. In both scenarios, inflation increases and euro area GDP growth contracts significantly in 2023. High gas prices propel inflation by more than 1½ pps. above the baseline and would thus reach around 7.5% in 2023. At the same time, higher prices reduce domestic consumption and investment, and deteriorate competitiveness. As a result, real GDP grows by around up to 1 ppt. less than expected in the forecast baseline (see Graphs I.4.3 and I.4.4). Higher prices for natural gas also further reduce the euro trade balance-to-GDP ratio (-2 pps. compared to the forecast baseline).

Graph I.4.4: Real GDP growth rates across scenarios (in pps.), euro area



However, anticipation and preparedness can avoid even higher costs in 2024. In the '*procrastination*' scenario, in 2024, GDP growth is significantly lower, around 1ppt. below the forecast baseline, and inflation remains around 2½ pps. above the baseline projection, implying inflation rates above 5% until 2024. By contrast, in the preparedness scenario, growth and inflation differ only slightly from the forecast baseline in 2024.

These stylised simulations cover only selected channels. The model simulations cannot cover all the risks emanating from energy markets. For example, disruptions to infrastructure pose severe risks to gas supply in the EU. Additional channels include import markets, world demand and financial markets, as discussed, for example, in the Special Issue of the Spring Forecast.[44] Finally, as with any model-based assessment, the simulations are subject to high uncertainty at this juncture. Still, they highlight the merit of coordinated and decisive forward-looking action to avert the major economic fallout of the realisation of some risks.

[44] See "Alternative scenarios on the economic outlook" (2022), ibid.

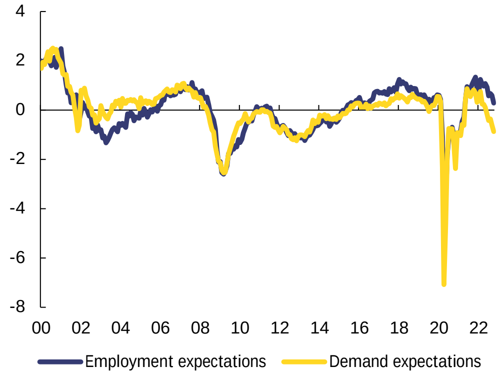
4.2. CAN THE EU LABOUR MARKET WITHSTAND A SLOWDOWN IN ECONOMIC ACTIVITY?

This special topic tries to assess whether the EU labour market is likely to withstand the projected economic recession and subsequent mild expansion, with analysis largely relying on data from the European Commission Business and Consumer Surveys (BCS).

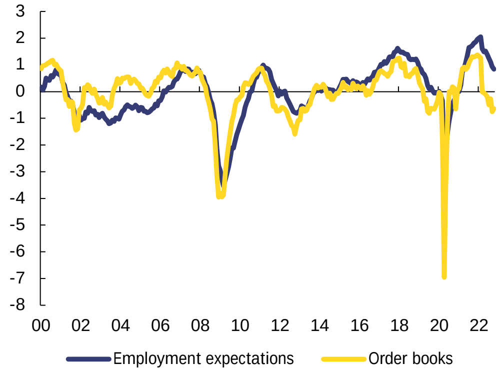
The EU labour market bounced back strongly from the pandemic shock. At the onset of the COVID-19 crisis, job retention schemes shielded workers and their incomes from a pronounced slump. Against the backdrop of the contraction of real GDP of almost 14% in the EU in the first half of 2020 compared to the last quarter of 2019, headcount employment decreased by a mere 3%, though hours worked fell by a massive 15%. With the (intermittent) economic recovery starting in the third quarter of 2020, headcount employment also started to rise again and increased in all but one quarters until the second quarter of this year. By then, both headcount employment and hours worked in the EU had surpassed their pre-pandemic levels, by 1.7% and 1%, respectively. By historical standards, this was a period of very job-rich growth. The mirror image of these dynamics is that productivity performed fairly poorly, even if it did recover its pre-pandemic level.

Employment and demand expectations moved in lockstep in the past two decades. BCS data show that managers' employment expectations tend to closely follow demand expectations in services and industry[45] (see Graph I.4.5-I.4.6). This relationship held even after the pandemic crisis broke out.[46]

Graph I.4.5: **Employment and demand expectations in services, EU**



Graph I.4.6: **Employment and demand expectations in industry, EU**

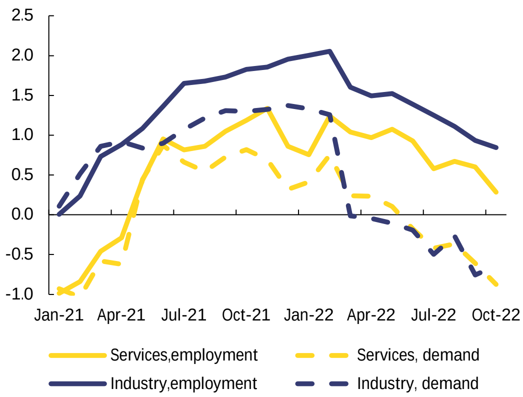


Still, demand and employment expectations in both industry and services saw some decoupling in recent months. Since mid-2021, employment expectations have outpaced demand expectations, underscoring the strong performance of the EU labour market. The gap between the two series grew to the highest level in two decades in both sectors. The discrepancy is apparent particularly after March 2022, when demand expectations started to ease markedly unlike expectations for employment (see Graph I.4.7). Still, the index of employment expectations also started to fall, indicating easing demand for labour.

[45] The sectors of services and industry are covered in this analysis as the surveys in the construction and retail sectors do not cover expectations for demand.

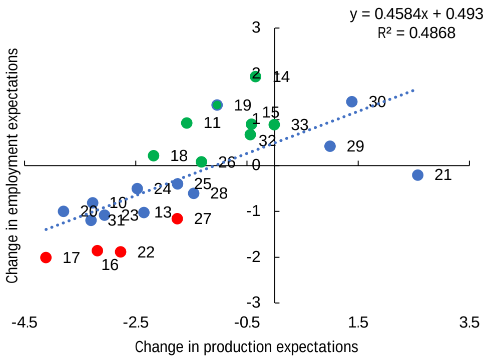
[46] Throughout this analysis, employment expectations in services refer to the balance of responses to question 5 ("How do you expect your firm's total employment to change over the next 3 months?") of the Joint Harmonised EU Services Survey. Demand expectations in services refer to the balance of answers to question 3 ("How do you expect the demand (turnover) for your company's services to change over the next 3 months?") of the same survey. In industry, question 7 ("How do you expect your firm's total employment to change over the next 3 months?") of the Joint Harmonised EU Industry Survey is the corresponding question for employment expectations while question 5 ("How do you expect your production to develop over the next 3 months?") is used to proxy demand expectations.

Graph I.4.7: **Employment and demand expectations, EU**



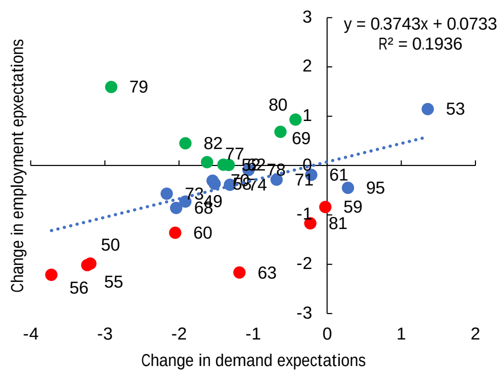
Disaggregated data show that employment expectations decoupled from demand expectations in a number of industrial subsectors. While demand expectations fell in nearly all subsectors between mid-2021 and autumn 2022, expectations for employment did not fall in nearly half of surveyed subsectors. The group of resilient subsectors appears considerably diverse in their major business activity (in green in Graph I.4.8).(47) The fall in the aggregate measure of demand and employment expectations over this period is mainly driven by energy-intensive subsectors (in red in Graph I.4.8.).(48)

Graph I.4.8: **Changes in employment and demand expectations in industry, EU, Jun-21 to Oct-22**



The strength of labour demand in the services sector appears more widespread than in industry. Similarly to industry, managers in almost all surveyed subsectors expected a worsening in demand conditions between mid-2021 and Autumn 2022. By contrast, a markedly lower share of managers across subsectors expected a decline in employment expectations or only a very mild contraction. The trend line is flatter, and dispersion is greater (Graph I.4.9). In particular, a contact-intensive subsector 'travel agency, tour operator and other reservation service and related activities' (79), remains considerably upbeat in expectations about employment amid markedly worsening outlook for demand.(49) By contrast, contact-intensive sectors of 'food and beverage service activities' (50), 'accommodation' (55), 'food service activities' (56)(50) are among the most impacted in terms of expected developments in employment expectations relative to demand expectations in their firm.

Graph I.4.9: **Changes in employment and demand expectations in services, EU, Jun-21 to Oct-22**



The decoupling of employment expectations from demand expectations emerged as labour shortages increasingly became a hurdle to production. Evidence of unmet demand for labour arose with economic

(47) 11 - Manufacture of beverages, 14 - Manufacture of wearing apparel, 15 - Manufacture of leather and related products, 18 - Printing and reproduction of recorded media, 19 - Manufacture of coke and refined petroleum products

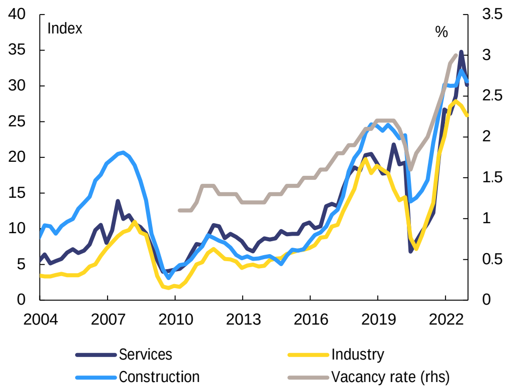
(48) 16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, 17 - Manufacture of paper and paper products, 22 - Manufacture of rubber and plastic products

(49) 69 - Legal and accounting activities, 80 - Security and investigation activities, 82 - Office administrative, office support and other business support activities, also contribute markedly to strong labour demand in services.

(50) Along with 59 - Motion picture, video and television programme production, sound recording and music publishing activities, 60 - Programming and broadcasting activities, 63 - information service activities, 81 - Services to buildings and landscape activities.

activity picking up from the pandemic lows, but according to BCS data, the share of managers reporting labour as a factor limiting production in their firms increased sharply in mid-2021 (see Graph I.4.10). Reported labour shortages in industry peaked in April 2022 and eased only mildly in the second half of 2022. In services, the peak was reached in July 2022. In parallel, vacancy rates reported by Eurostat, progressively picked up to a multi-year high in the second quarter of 2022.

Graph I.4.10: **Labour shortages and vacancies, EU**

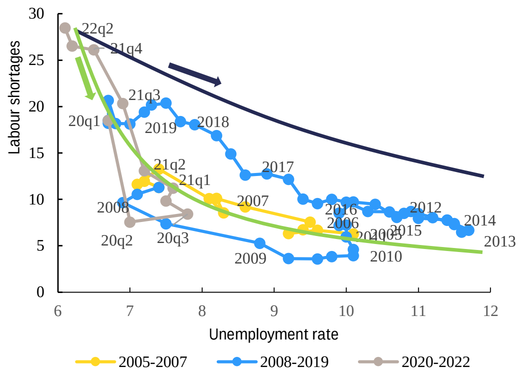


Re-absorption of labour shortages could partly shield the labour market from the impact of slowing economic activity. Amid a tightening labour market, the unemployment rate in the EU has stabilised at record-low levels so far this year, falling from 6.3% in January to 6% in September. As employment expectations are gradually falling, the high share of labour shortages may decline before unemployment rates start increasing.

Labour shortages can act as a buffer to an increase in unemployment in the face of an economic slowdown. Estimates of the relationship between unemployment and economic growth (Okun's law), augmented by labour shortages on a panel of EU countries over the 20 years before the pandemic, suggest that labour shortages play a statistically significant - though rather weak - role in reducing the transmission of a fall in GDP to unemployment.[51]

The cushioning effect of labour shortages depends crucially on the matching efficiency of the labour market. A high degree of labour shortages can be compatible with either an overall tight labour market or a low degree of matching efficiency in the labour market. Though relatively stable in the short term, the Beveridge curve, see Graph I.4.11,[52] can shift in time due to structural changes in the economy. In particular, a worsening matching efficiency in the labour market, due to, e.g. skills mismatch or constrained mobility, shifts the Beveridge curve outward, meaning that the same level of vacancies or labour shortages go hand in hand with a higher unemployment rate. The trade-off implicit in the Beveridge curve, however, may not be linear: the steepness of the curve may increase at low rates of unemployment, as an additional job vacancy may not be filled as quickly as when there is a large pool of job seekers compared to vacancies.

Graph I.4.11: **Beveridge curve , EU**



With unchanged matching efficiency, the labour market is set to remain resilient throughout the slowdown. In this case, a slowdown in demand produces a relatively mild increase in the unemployment rate in its initial phase, as the vacancy rates (or the degree of labour shortages) decrease before unemployment starts to rise. In Graph I.4.11.,

(51) A 1-point increase in labour shortages in manufacturing decreases the unemployment rate by less than 0.01 pps. in the benchmark specification with no lags of the unemployment rates and GDP growth. The addition of the lags of the unemployment rate and GDP growth further decreases the impact of labour shortages. For further details, see Hüfner and Klein (2012), "The German labour market: Preparing for the future", OECD WP No. 983.

(52) The relationship between unmet demand for labour – vacancy rates or labour shortages – and unemployment rates. In Graph I.4.11, the indicator of labour shortages is defined as a weighted average (based on value-added weights) of sectoral indicators of labour shortages in manufacturing, services and construction.

this situation is represented by the green line, suggesting a roughly stable Beveridge curve.[53]

Otherwise, the EU economy could suffer a larger increase in the unemployment rate. Job shedding in sectors most affected by the energy crisis, and a low ability of the labour market to match the affected workers with existing vacancies would suggest a deterioration in matching efficiency. In Graph I.4.11, the EU labour market would move along the dark blue line.

The possibility of a 'soft landing' for the labour market has also received attention in the US, as economists try to assess the potential impact of monetary policy tightening. As US economic activity has softened and its labour market remains very tight, a hotly debated question is whether there can be a "soft landing" for the labour market, i.e., whether job vacancies can fall from their historical highs without a substantial rise in unemployment. Blanchard *et al* (2022)[54] argue that the current low unemployment rate and the very high vacancy-to-unemployment ratio suggest that not only is the labour market overheated but also that labour market matching has worsened, reflecting higher labour reallocation and lower matching efficiency, in the wake of the massive dislocations produced by the pandemic on the labour market. Counter-arguments to this conclusion claim that a soft landing is indeed possible, under two conditions. The first condition is likely to be met: in the current tight labour market, a fall in the vacancy rate would have a smaller effect on people's chances of finding a job than would be the case if vacancies started out from lower levels, closer to historical averages. The second condition is that the economic slowdown is mild, associated with only a limited increase in job separations.[55] In recent months, the US economy seems to corroborate the soft-landing hypothesis, as recent data show a sharp decline in job vacancies and little change in unemployment.[56]

In the EU, there is no evidence of deterioration in the efficiency of labour market matching. The evidence suggests that the increase in labour shortages is largely linked to the sharp increase in labour demand in the aftermath of COVID-19, with no significant increase in mismatch. Labour market mismatch (along skills, sectors and regions) was not a significant contributor to unemployment during the pandemic period. The pandemic shock was exogeneous and largely temporary, though with differentiated impact across sectors. Any increase in mismatch was also partly temporary and much smaller in magnitude than after 2008.[57] Finally, and perhaps most importantly, at the current juncture labour shortages appear to be broad-based, widespread across many subsectors rather than concentrated in a few segments of the labour market. The available evidence suggests that the approaching slowdown in demand is likely to ease some of the existing labour shortages before markedly affecting unemployment. Over the medium term, the resilience of the labour market also depends on additional economic shocks, affecting the length and depth of the economic downturn as well as the policy response.

(53) Labour market resilience at the beginning of the downturn would also be consistent with a counter-clockwise cycle in the Beveridge space, as vacancies (or shortages) react faster to cyclical changes than unemployment.

(54) Blanchard, O., A. Domash, and L.H. Summers (2022). "Bad News for the Fed from the Beveridge Space," Peterson Institute for International Economics, Policy Brief 22-7.

(55) Figura, A, and C Waller (2022), "What Does the Beveridge Curve Tell Us about the Likelihood of a Soft Landing?", FEDS Notes, Federal Reserve Board of Governors, 29 July; Bok, B, N. Petrosky-Nadeau, R. G. Valletta, and M. Yilma (2022), "Finding a Soft Landing along the Beveridge Curve", FRBSF Economic Letter 2022-24.

(56) Petrosky-Nadeau, N., R.G. Valletta, and M. Yilma: "Sliding safely down the Beveridge curve", VoxEU, 21 Oct 2022.

(57) For more detail on these findings, see: Kiss, Á., Turrini A., and Vandeplas, A. (2022), "Slack vs. tightness in euro area labour markets: growing mismatch after COVID-19?", Quarterly Report of the Euro Area 21(2), European Commission, Directorate-General for Economic and Financial Affairs.

4.3. THE EFFECT OF RISING ENERGY AND CONSUMER PRICES ON HOUSEHOLD FINANCES, MATERIAL DEPRIVATION AND ENERGY POVERTY IN THE EU

This section offers insights into the impact of rising energy prices and living costs on material and social deprivation and energy poverty in the EU, based on recent work by Menyhert (2022).[58][59]

High and rising inflation is eroding the purchasing power of households. Given that inflation is driven mostly by the prices of energy and food, low-income households are likely to be impacted more strongly due to relatively high spending on those essential items and less elastic consumer demand. Analysis of microdata from the latest available wave of the Household Budget Survey (EU-HBS) from 2015 confirms that low-income households may spend up to 40% more of their total budget on food and energy (rather than goods or services) than more affluent population segments. Graph I.4.12 shows that the combined expenditure share of food and energy ranges from 23% to 66% across the EU, with substantial within-country differences between income quintiles, and with 'poorer' countries (in terms of GDP per capita or mean household consumption) ranking higher. Many of these differences in consumption structure are driven by food expenditures, but the share of households' energy spending also decreases with income. Further analysis also reveals that low-income households also tend to devote a higher fraction of their energy spending on less elastic housing-related expenses rather than on transportation.

Consumers' assessment of the financial situation of their household continued to worsen, particularly among low-income households. An update of the analysis presented in the Summer 2022 interim forecast, based on the results from the Commission's harmonised EU-wide consumer surveys between June and October 2022, shows further significant deterioration of consumers' assessment of the past and expected financial situation of their household across all income groups. For the lower income group (which in the consumer surveys is the lower quartile), this deterioration also implies an ever-increasing share of people in financial distress – that is, having to draw on their savings or running into debt - from already high levels. At 30% in October 2022, this share was much higher than on average across the remaining three income quartiles (14.1%). Furthermore, the share of respondents reporting that their household's financial situation in the 12 months preceding the survey had got a lot worse has increased most sharply amongst lower income households. The same goes for the expected evolution of the financial situation over the 12 months following the survey.

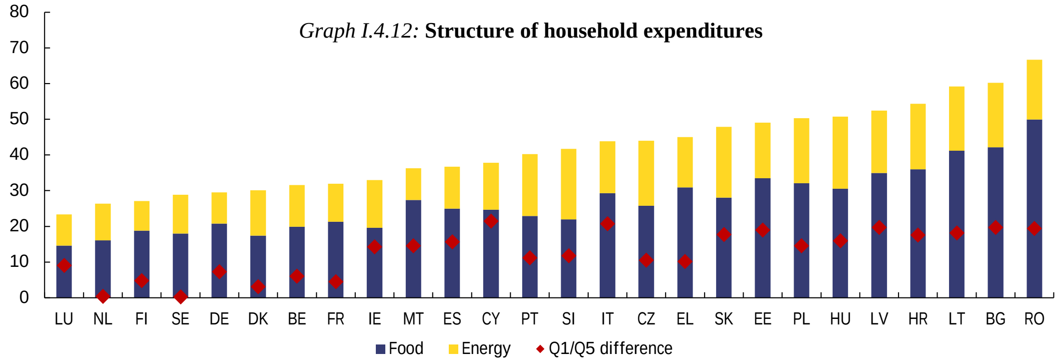
Quantifying the potential impact of the effects of rising prices on the key indicators of poverty and social exclusion is not straightforward. Part of the reason lies with data lags and limitations surrounding European household surveys on income and consumption, but equally important is the fact that many leading social policy indicators used by the Commission are only indirectly affected by changes in households' living costs. For example, of the three components of the AROPE indicator measuring the share of population at risk of poverty or social exclusion, the material and social deprivation (MSD) component, or its severe variant (SMSD) respond unequivocally to losses in households' purchasing power.[60]

[58] Menyhert, B. (2022), The effect of rising energy and consumer prices on household finances, poverty and social exclusion in the EU, *JRC Science for Policy Report,* Publications Office of the European Union, Luxembourg.

[59] More detailed analysis will be included in European Commission (2022), Proposal for a Joint Employment Report 2023, November 2022, forthcoming.

[60] The AROPE rate is the share of the total population that is either at risk of poverty; severely materially and socially deprived; or living in a household with a very low work intensity. The at-risk-of-poverty rate is based on the threshold of 60% of national median (equivalised) income, and is independent of purchasing power considerations. Similarly, the indicator of low-work-intensity has a non-monetary focus and is driven by changes in individuals' and households' labour force participation. For details on the indicator of material and social deprivation, see https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Living_conditions_in_Europe_-_material_deprivation_and_economic_strain#Material_and_social_deprivation .

Graph I.4.12: **Structure of household expenditures**

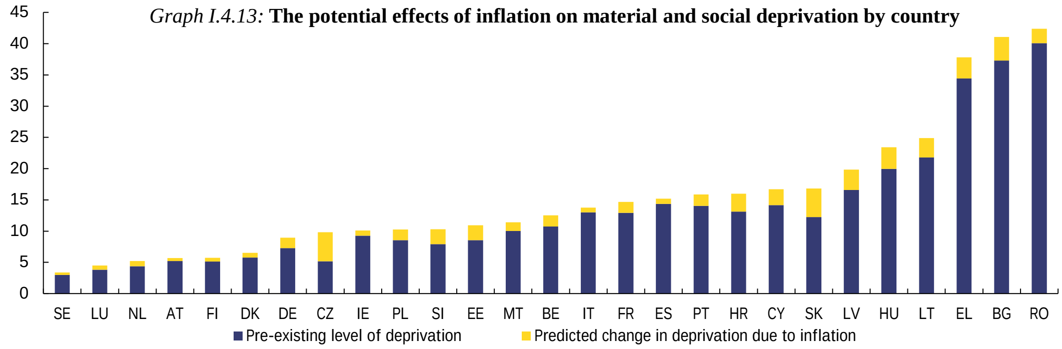


Notes: Analysis of microdata from the 2015 wave of the EU-HBS based on Menyhert (2022). The bars represent the average share of food and energy expenditures in households' total consumption by country. The markers denote the percentage point difference in the combined food and energy expenditure share across households of the first (Q1) and fifth (Q5) income quintiles in each country. Data for Austria are missing.

Between January and September 2022, rising living costs likely increased Material Social Deprivation by around 2 pps. at EU level and by up to 6 pps. in some Member States (Graph I.4.13). The predicted effects of inflation on (standard or severe) material and social deprivation are estimated using a regression-based analysis that identifies (within-household) changes over time from (between-household) differences in the cross-section, based on the strong statistical relationship between household income and the incidence of (standard or severe) material and social deprivation among national populations. The predicted changes in SMSD are somewhat smaller than those discussed here but qualitatively similar. The relevant estimates do not include the impact of income support measures, nor do they factor in substitution effects or other ongoing behavioural or institutional changes. For more methodological details. The strong cross-country correlation shown by the Graph between predicted effects and pre-existing deprivation rates suggests that inflation has widened existing inequalities in social deprivation across the EU.

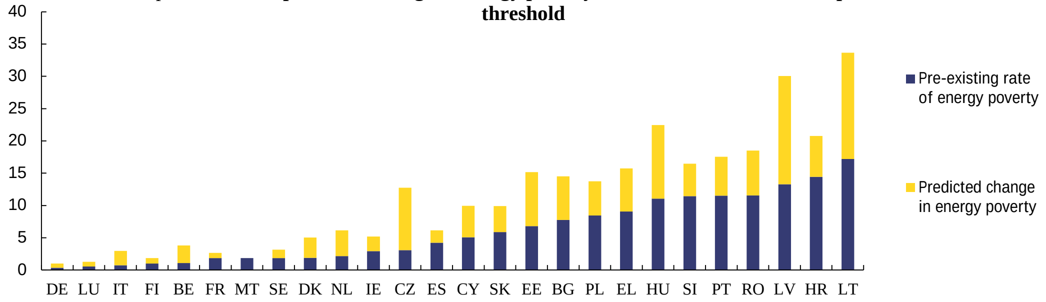
It is also possible to quantify the effect of rising energy and consumer prices on measures of energy poverty. The latter is defined as a situation in which households are unable to access essential energy services, and is measured in a variety of ways. One set of energy poverty indicators focuses on households' self-reported inability to keep one's own home adequately warm, or pay one's utility bills without arrears. Using the same data and methodology as the one used for MSD predictions, Graph I.4.15 shows the predicted increase in energy poverty as a result of rising living costs. Between January and September 2022, rising living costs likely increased households' energy poverty based on self-reported deprivation by 0-3 pps. in most Member States. Since these calculations do not account for potential demand-side effects or relative price changes, the relevant estimates are best considered as lower-bound estimates of the true effect of rising prices on self-reported deprivation-based energy poverty.

Graph I.4.13: **The potential effects of inflation on material and social deprivation by country**



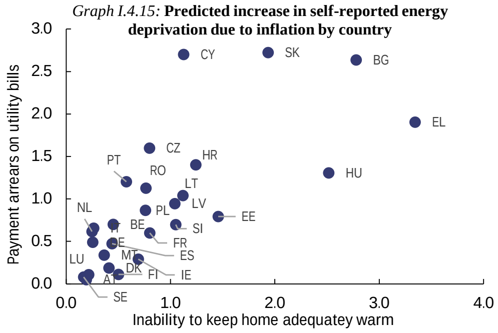
Notes: Analysis of microdata from the 2019 wave of the EU-SILC based on Menyhert (2022). The bars represent the pre-existing level and predicted change in the MSD rate, as calculated from the change in households' living cost adjustments and estimated real income elasticities

Graph I.4.14: **The predicted change in energy poverty based on a fixed relative expenditure threshold**



Notes: Calculation based on microdata from the 2015 wave of EU-HBC based on Menyhert (2022). The figures represent the share of population whose energy expenditure share exceeds 30% of total household expenditures, based on both observed energy expenditures (i.e. pre-existing rate of energy poverty) and inflation adjusted hypothetical data (i.e. predicted change in energy poverty). Figures for Austria are missing.

Graph I.4.15: **Predicted increase in self-reported energy deprivation due to inflation by country**



Notes: Analysis of microdata from the 2019 wave of the EU-SILC based on Menyhert (2022). The markers represent the predicted change (in pps.) in energy poverty based on two deprivation-based indicators of energy poverty.

Alternative gauges of energy poverty that focus **on households' energy expenditures** tend to predict considerably higher consequences. These metrics allow for a more direct consideration of energy price trends as the main driver of inflation. Using basic comparative statics (e.g. pre-inflation and post-inflation comparisons) and simple thresholds for financial distress (e.g. a 30% threshold for the energy expenditure share), one can infer where financial distress from rising energy prices is expected to increase. Graph I.4.15 shows that, assuming no energy saving or substitution on the part of households, rising energy prices between January and September 2022 would have increased the share of households' with energy expenditures above 30% by 5 pps. in the EU as a whole and up to 17 pps. in some Member States. Given the likely fiscal support measures and behavioural responses, the true effects are expected to be somewhat smaller.

5. BOXES

Box I.5.1: **Some technical elements behind the forecast**

The cut-off date for taking information into account in this European Economic Forecast was 31 October 2022. Ad-hoc assumptions underpinning this forecast, relating to, e.g. the geo-political situation, are detailed in Box I.1.1.

Exchange and interest rates

The forecast builds on the technical assumption of fixed nominal exchange rates for all currencies (see Table 1 and Table 31 in the Statistical Annex).

Assumptions for interest rates are market-based. Short-term interest rates for the euro area are derived from futures contracts. Long-term interest rates for the euro area, as well as short- and long-term interest rates for other Member States, are calculated using implicit forward swap rates, corrected for the current spread between the interest rate and swap rate. In cases where no market instrument is available, the fixed spread vis-à-vis the euro area interest rate is taken for both short- and long-term rates.

Commodity prices

Assumptions for Brent oil, gas and electricity prices are based on futures markets, using the average over the 10-day reference period between 13 and 26 October.

Trade policies and assumptions

For trade policy, this forecast pencils in only the measures that have been implemented until the cut-off date, as detailed in Box xx. and includes bans on specific exports and imports (see https://eu-solidarity-ukraine.ec.europa.eu/eu-sanctions-against-russia-following-invasion-ukraine_en).

ESA 2010

The forecast is based on the ESA 2010 system of national accounts for all Member States, the EU and the euro area aggregates.

Calendar effects on GDP growth and output gaps

The number of working days may differ from one year to another. The Commission's annual GDP forecasts are not adjusted for the number of working days, but quarterly forecasts are.

The working-day effect in the EU and the euro area is estimated to be limited in 2022, 2023 and 2024, implying that adjusted and unadjusted annual growth rates differ only marginally (by up to ±0.1 pps.), but it may be significant in the case of some Member States.

Table 1:
Technical assumptions

		Autumn 2022 forecast			Spring 2022 forecast	
	2021	2022	2023	2024	2022	2023
3-month EURIBOR (percentage per annum)	-0.5	0.2	3.1	3.0	-0.1	1.3
10-year government bond yields (percentage per annum) (a)	-0.4	1.2	2.3	2.4	0.8	1.1
USD/EUR exchange rate	1.18	1.04	0.98	0.98	1.09	1.08
GBP/EUR exchange rate	0.86	0.85	0.87	0.87	0.84	0.83
RMB/EUR exchange rate	7.63	6.98	7.11	7.11	7.00	6.97
JPY/EUR exchange rate	129.9	137.40	146.45	146.45	135.61	137.38
EUR nominal effective exchange rate (annual percentage change) (b)	1.30	-4.30	-0.50	0.00	-2.20	-0.50
Natural gas (EUR/Mwh) (c)	47.1	134.80	146.52	110.32	97.83	80.36
Electricity (EUR/Mwh) (d)	107.23	265.60	396.11	248.79	234.31	210.54
Oil price (USD per barrel)	70.7	101.8	85.0	78.0	103.6	93.5
Oil price (EUR per barrel)	59.8	98.4	86.4	79.3	95.0	86.6

(a) 10-year government bond yields for the euro area are the German government bond yields.
(b) 42 industrial countries EU-27, TR CH NR US UK CA JP AU MX NZ KO CN HK RU BR. (c) ICE Dutch TTF. (d) GDP - weighted average of electricity prices in DE, FR, IT, ES, NL, BE, AT.

(Continued on the next page)

Box (continued)

Estimations of potential GDP and output gaps are not adjusted for working days. Furthermore, since the working-day effect is considered temporary, it is not expected to affect cyclically-adjusted balances.

Euro area enlargement with Croatia

Following the Council Decision (2022/1211/EU) of 12 July 2022 on the adoption by Croatia of the euro on 1 January 2023, in line with past practice, all forecast numbers (i.e. for 2022-24) for the euro area aggregate include Croatia. Croatia has a weight of about 0.5% in the euro area GDP aggregate. For the sake of comparability, most reference forecast numbers from the Spring 2022 Forecast and all historical numbers for the euro area aggregate have been recalculated and refer to the EA20 aggregate. Consequently, all the graphs displaying annual data for the euro area present the EA20 aggregate for historical and forecast years.

Inclusion of new candidate countries

Following their application for EU membership in spring 2022, the European Council granted Ukraine and Moldova candidate status in June 2022 on the understanding that the countries would take a number of steps outlined in the Commission's Opinion underpinning the Council's decision. Therefore, and after the necessary technical preparations, Ukraine and Moldova will be included in the forecast's candidate country section as of 2023.

The inclusion of the Recovery and Resilience Facility in the forecast

The macroeconomic and budgetary projections in the forecast include the impact of the implementation of the Recovery and Resilience Facility (RRF). Unless mentioned otherwise, the forecast includes the measures incorporated in the Recovery and Resilience Plans as submitted to the Commission. The cash disbursement and expenditure profiles implicit in the forecast are consistent with the time profile of milestones and targets as specified in the Plans and the relevant Council Implementing Decisions. The update of the RRF maximum financial contribution of 30 June 2022 is reflected in the forecast through the working assumption of a proportional adjustment of the cash disbursements in the outer year of the Forecast (2024), without pre-judging the actual update and submission of the national plans in line with Article 18(2) of the RRF Regulation. In case the RRP was not yet endorsed by a Council Implementing Decision, the incorporation of the RRP in the forecast rests on the working assumption of a positive assessment by the Commission and future endorsement by a Council Implementing Decision. The working assumptions in the forecast do not pre-judge the outcomes of future Commission and Council decisions.

Transactions related to the RRF in the forecast are recorded in line with Eurostat's 'Guidance note on the statistical recording of the Recovery and Resilience Facility' of 7 October 2021 (https://ec.europa.eu/eurostat/documents/1015035/12618762/GFS-guidance-note-statistical-recording-recovery-resilience-facility.pdf). In particular, this implies that, except for 2020, the budgetary impact of any expenditure or other costs financed with non-repayable financial support ('grants') from the RRF is neutralised in revenue projections by matching transfers received from the EU. Expenditures financed by loans from the RRF are not neutralised and thus affect the government's balance, while the actual loans by the RRF are recorded as Member States' debt towards the EU.

Budgetary data and forecasts

The forecast incorporates validated public finance data up to 2021 as published in Eurostat's news release 118/2022 of 21 October 2022.

The public finance forecast is made under the 'no-policy-change' assumption, which extrapolates past revenue and expenditure trends and relationships in line with past policy orientations. This may also include the adoption of working assumptions, in particular to deal with structural breaks. The no-policy-change forecast includes all fiscal policy measures that imply a change to past policy orientations on the condition that they are sufficiently detailed as well as adopted or at least credibly announced. For 2023, draft budgets are taken into consideration. The temporary emergency measures taken in response to COVID-19 crisis adopted in 2020, 2021 and 2022 are not treated as one-off and are thus reflected in the

(Continued on the next page)

Box (continued)

estimation of the structural budget balance.

In line with Eurostat's press release, EU and euro area aggregates for general government balance and debt are based exclusively on the Member States' balances and debt. For debt, whereas Eurostat publishes the consolidated figures (corrected for intergovernmental loans, including those made through the European Financial Stability Facility), the projections in the forecast years 2022, 2023 and 2024 are published on a non-consolidated basis. To ensure consistency in the time series, historical data are also published on the same basis. For 2021, this implies an aggregate debt-to-GDP ratio that is somewhat higher than the consolidated general government debt ratio published by Eurostat in its news release 118/2022 of 21 October 2022 (by 1.7 pps. in the EA and by 1.6 pps. in the EU).

PART II

Prospects by individual economy

Euro Area Member States

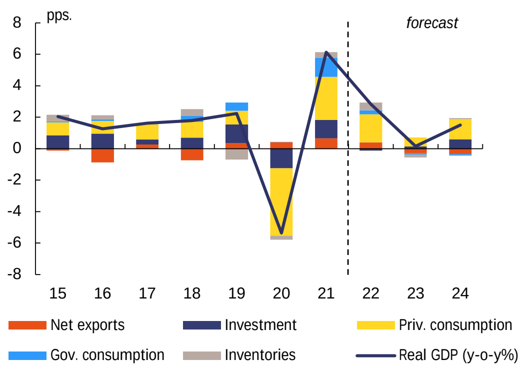
1. BELGIUM

Economic growth in Belgium is expected to reach 2.8% in 2022, 0.2% in 2023 and 1.5% in 2024. Following the strong increases in energy prices, high inflation, which is forecast to reach 10.4% in 2022, 6.2% in 2023 and 3.3% in 2024, is projected to temper the growth of private consumption. The government deficit is projected at 5.2% of GDP in 2022, reflecting the budgetary response to high energy prices. In 2023, the worsening of macroeconomic conditions is projected to widen the budget deficit to 5.8%

After a strong start to 2022, activity weakens

Economic growth is set to reach 2.8% in 2022, as the easing of COVID-19 related restrictions allowed for further expansion of activity in the first half of the year.

Graph II.1.1: **Belgium - Real GDP growth and contributions**



High inflation and the decrease in consumer confidence are projected to curb the expansion of household consumption in the second part of the year. Quarterly GDP growth is estimated at -0.1% in 2022-Q3 and is expected to contract further in 2022-Q4. However, further automatic indexations of wages and social benefits are set to support the purchasing power of households moving forward. As indexation kicks in with a lag, this effect is expected to gain strength in 2023 and accelerate in 2024, when inflation is forecast to substantially slow down.

Uncertainty, higher cost pressures from input prices and wages are also expected to weigh on business investment. At the same time, the RRF is forecast to support gross fixed capital formation, in a context of increased needs for the energy transition. Consequently, after a contraction in 2022, investment is projected to recover slowly in 2023 before rebounding more dynamically in 2024.

After a strong performance of net exports in 2021, a less favourable external environment is set to weigh on exports in 2022 and 2023. The contribution of net exports to GDP growth is projected to be negative over the forecast horizon. All in all, real GDP growth is expected to slow down to 0.2% in 2023 and rebound to 1.5% in 2024.

Slow-down in the labour market

The good performance of employment in 2021 put the Belgian labour market on a strong footing for 2022. However, rising uncertainty and the downturn in economic activity is projected to moderate the performance of the labour market in the second part of 2022 and in 2023. Employment growth is forecast to reach 1.8% in 2022 and 0.3% in 2023, before regaining some strength in 2024, consistent with economic growth. The unemployment rate is expected to increase from 5.8% in 2022 to 6.4% in 2023 before a small decline to 6.3% in 2024.

Inflation on the rise

Headline inflation is forecast to reach an exceptionally high level of 10.4% in 2022. The sharp increases of wholesale gas and electricity prices have transmitted quickly to retail prices, which are expected to remain high next year. The pass-through of increased costs to core inflation components, including via higher wages, is projected to keep inflation elevated over the forecast horizon. As such, headline inflation is set to reach 6.2% in 2023, before slowing down to 3.3% in 2024 on the back of the gradual fall of energy prices.

The energy crisis and the economic slowdown add burden on public finances

While pandemic-related government measures weighed considerably less on public finances in 2022 than in 2021, the budgetary cost of measures to mitigate the impact of high energy prices keeps the projected budget deficit at high levels in 2022, at 5.2 % of GDP compared to 5.6% of GDP in 2021. The higher expenditure from the automatic indexation of public sector wages and social benefits to rising consumer prices is projected to be only partly offset by the impact of higher wages and purchasing power on the revenue side.

In 2023, the government deficit is forecast to increase further to 5.8 %, reflecting the deteriorating macroeconomic landscape, while the cost of energy-related measures is assumed to decline on the back of the announced phasing-out of most of them in the first quarter of 2023. At the same time, the automatic indexation of public sector wages and social benefits, a rising interest rate burden, as well as lower corporate tax revenue due to lower profit margins, are also expected to have a negative impact on the government budget balance.

In 2024, the government balance is projected to slightly narrow, to 5.1% of GDP as crisis measures are assumed to be withdrawn and the economic outlook is expected to improve. The still high government deficit in 2024 also reflects the growth in non-crisis current expenditure, which is notably due to rising ageing costs and to the budgetary impact of recently adopted permanent measures not offset by compensating measures.

Government debt is forecast to decrease from 109% of GDP in 2021 to 106% in 2022 (due to the high GDP deflator), before increasing to 108% of GDP in 2023 and to 109% 2024, driven by high budget deficits.

Table II.1.1:

Main features of country forecast - BELGIUM

		2021			Annual percentage change					
	bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		502.3	100.0	1.6	2.2	-5.4	6.1	**2.8**	**0.2**	**1.5**
Private Consumption		245.8	48.9	1.5	1.7	-8.3	5.5	**3.7**	**1.1**	**2.5**
Public Consumption		120.6	24.0	1.1	2.2	0.0	4.8	**1.1**	**-0.4**	**-0.4**
Gross fixed capital formation		121.5	24.2	2.5	5.0	-5.1	4.9	**-0.5**	**0.6**	**2.5**
Exports (goods and services)		436.3	86.9	3.1	2.4	-5.0	11.3	**4.0**	**1.3**	**3.2**
Imports (goods and services)		431.0	85.8	3.4	2.0	-5.6	10.7	**3.5**	**1.6**	**3.5**
GNI (GDP deflator)		507.0	100.9	1.5	2.3	-5.3	6.0	**2.8**	**0.2**	**1.5**
Contribution to GDP growth:	Domestic demand			1.6	2.6	-5.5	5.1	**1.9**	**0.6**	**1.8**
	Inventories			0.2	-0.7	-0.3	0.4	**0.5**	**-0.2**	**0.1**
	Net exports			-0.1	0.4	0.4	0.7	**0.4**	**-0.3**	**-0.4**
Employment				0.9	1.6	0.1	1.9	**1.8**	**0.3**	**0.6**
Unemployment rate (a)				7.9	5.5	5.8	6.3	**5.8**	**6.4**	**6.3**
Compensation of employees / head				2.1	2.0	-1.6	4.1	**6.4**	**9.0**	**4.3**
Unit labour costs whole economy				1.4	1.4	4.1	-0.1	**5.4**	**9.2**	**3.3**
Saving rate of households (b)				15.1	12.3	20.5	17.0	**12.7**	**13.2**	**12.4**
GDP deflator				1.7	1.8	1.5	2.9	**6.7**	**5.0**	**3.1**
Harmonised index of consumer prices				2.0	1.2	0.4	3.2	**10.4**	**6.2**	**3.3**
Terms of trade goods				-0.3	0.8	1.2	-2.0	**-4.8**	**0.0**	**0.6**
Trade balance (goods) (c)				0.6	0.8	1.3	0.8	**-2.2**	**-2.4**	**-2.0**
Current-account balance (c)				2.2	0.1	1.1	0.4	**-2.7**	**-2.9**	**-2.6**
General government balance (c)				-2.3	-1.9	-9.0	-5.6	**-5.2**	**-5.8**	**-5.1**
Structural budget balance (d)				-2.2	-3.2	-6.1	-5.1	**-5.6**	**-5.2**	**-4.4**
General government gross debt (c)				100.0	97.6	112.0	109.2	**106.2**	**107.9**	**108.6**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

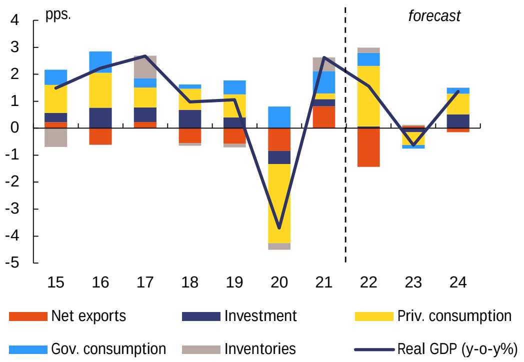
2. GERMANY

Just as supply chain headwinds are starting to abate, soaring energy costs exert a new drag on income and output growth. Together with costlier borrowing, this is likely to weigh on investment. Further losses in purchasing power amid high inflation are expected to curtail private consumption, despite partial relief from policy support. GDP is forecast to grow by 1.6% in 2022 but decline by 0.6% in 2023 before recovering by 1.4% in 2024. The government deficit is expected to remain elevated as pandemic-related expenditure gives way to measures mitigating the impact of high energy prices.

Growing weakness

Germany cleared the prepandemic level of output only in the third quarter of 2022, later than many other Member States. The economy grew throughout the first three quarters in 2022 driven by an ongoing recovery of private consumption, benefiting from the reopening of services and the use of pandemic-induced savings, although purchasing power was increasingly constrained by inflation. Exports were suffering from lingering trade disruptions aggravated by the Russian war of aggression against Ukraine. While production of equipment was still increasing, energy intensive intermediate industries were cutting output. Investment dynamics were wavering.

Graph II.2.1: Germany - Real GDP growth and contributions



Heading for recession

In recent months, sentiment indicators have deteriorated markedly, reflecting the increase of energy costs. As these are set to remain elevated well into 2024, and policy support is assumed to relieve households only partially, private consumption is set to decrease this winter and take time to recover afterwards. Local energy-intensive products are being replaced with imports, which is expected to depress activity in coming quarters. While order backlogs are still high, order inflows are weakening. Supply bottlenecks have eased but remain a constraint on production.

The pressure on margins from sharp increases in producer prices, weakens the outlook for equipment investment. Higher building and borrowing costs are expected to weigh on construction. However, the gradual adjustment of supply chains and overall solid corporate finances should set the stage for a resumption of investment growth in the course of 2023. With supply bottlenecks easing, exporters would be then able to unwind production backlogs and benefit from recovering global demand.

Overall, real GDP is set to grow by 1.6% in 2022 and to decrease by 0.6% in 2023, before rebounding by 1.4% in 2024. A downside risk to the forecast is that delays to diversifying energy supplies and to reaching energy savings targets could cause shortages and rekindling energy price inflation in the winter of 2023-24.

Employment to stay stable

At 45.5 million in the second quarter of 2022, employment was 0.4% above the pre-pandemic level, while the unemployment rate remained stable at the historically low level of 3.0%. Whereas hiring expectations have deteriorated in recent months, reported labour shortages continue increasing and employment is expected to remain broadly stable.

Wage growth averaged 5% on an annual basis in the first half of 2022 and is set to continue at a similar rate in 2023 and 2024, supported by an increase in the minimum wage and a tight labour market. However, the recoup in real wages is expected to be partial and protracted as suggested by wage negotiation outcomes throughout 2022. The household saving rate is set to come down but stay just above its pre-pandemic level over the forecast horizon.

Trade disruptions, more expensive energy imports and the resumption of foreign travel have led to a significant decrease in the current account surplus in 2022. An expected improvement in terms of trade would result in a rebound over the forecast horizon to be moderated by a projected increase in the import content of production.

Inflation to stay elevated

In October 2022, HICP inflation reached 11.6% and is expected to come out at 8.8% for the year, driven by the surge in energy prices, rising input costs and a boost to service sector wages. The staggered pass-through of wholesale energy prices and a tight labour market are set to lead to a moderate decline in the inflation rate to 7.5% in 2023.

Energy measures keep deficit up

With the phasing out of COVID-19 related measures, the deficit is projected to further decline to 2.3% of GDP in 2022 after 3.7% of GDP in 2021. However, the underlying improving fiscal position is offset by various measures adopted this year to mitigate the economic and social impact of high energy prices (1.2% of GDP in 2022, 1.8% of GDP in 2023), preventing a larger deficit decline in 2022. These energy-related measures, and especially the “gas price break”, are expected to increase the deficit again to 3.1% in 2023 and 2.6% in 2024.

The energy-related relief packages include for 2022 a one-time lump sum bonus for energy costs and the advanced abolition of the surcharge for renewable energies, as well as a reduction in fuel prices and public transport costs. The main measures against rising energy prices in 2023 and 2024 comprise the introduction of a “gas price brake” for households and companies that is expected to use up around half of the announced EUR 200 bn fund (around 5% of GDP). Other measures include the reduction of the value added tax on gas and district heating from 19% to 7%, as well as adjustments to the income tax to counter the tax bracket creep.

After peaking at 68.6% in 2021, the government debt-to-GDP ratio is projected to decrease to 67% in 2022, 66% in 2023 and 65% in 2024. Despite continuing high deficits, the decline in the debt ratio is partly driven by the growth of nominal GDP on the back of high inflation, the reduction in the portfolio of bad banks and the decline of cash reserves.

Table II.2.1:

Main features of country forecast - GERMANY

		2021			Annual percentage change					
		bn EUR Curr. prices	**% GDP**	**03-18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
GDP		3601.8	100.0	1.3	1.1	-3.7	2.6	**1.6**	**-0.6**	**1.4**
Private Consumption		1773.8	49.2	1.0	1.6	-5.7	0.4	**4.5**	**-0.9**	**1.5**
Public Consumption		797.5	22.1	1.7	2.6	4.0	3.8	**2.2**	**-0.6**	**1.0**
Gross fixed capital formation		783.8	21.8	1.7	1.9	-2.3	1.2	**0.3**	**-0.6**	**2.3**
Exports (goods and services)		1693.9	47.0	4.5	1.3	-9.3	9.7	**1.4**	**0.9**	**3.0**
Imports (goods and services)		1502.4	41.7	4.6	2.9	-8.5	9.0	**5.0**	**0.8**	**3.4**
GNI (GDP deflator)		3729.5	103.5	1.6	1.1	-4.1	3.2	**1.5**	**-0.7**	**1.3**
Contribution to GDP growth:	Domestic demand			1.2	1.8	-2.6	1.3	**2.8**	**-0.8**	**1.5**
	Inventories			-0.1	-0.1	-0.2	0.5	**0.2**	**0.0**	**0.0**
	Net exports			0.2	-0.6	-0.8	0.8	**-1.4**	**0.1**	**-0.1**
Employment				0.8	0.9	-0.8	0.1	**1.2**	**-0.1**	**0.3**
Unemployment rate (a)				6.5	3.0	3.7	3.6	**3.1**	**3.5**	**3.5**
Compensation of employees / head				1.9	3.4	0.4	3.1	**4.5**	**5.4**	**4.3**
Unit labour costs whole economy				1.3	3.3	3.4	0.6	**4.1**	**6.0**	**3.2**
Saving rate of households (b)				17.3	18.3	23.6	22.9	**19.6**	**19.5**	**19.0**
GDP deflator				1.3	2.1	1.8	3.1	**5.3**	**6.8**	**3.6**
Harmonised index of consumer prices				1.5	1.4	0.4	3.2	**8.8**	**7.5**	**2.9**
Terms of trade goods				0.2	1.1	2.8	-4.2	**-6.6**	**2.0**	**1.9**
Trade balance (goods) (c)				7.0	6.2	5.6	5.3	**2.5**	**3.2**	**3.7**
Current-account balance (c)				6.4	7.7	7.1	7.4	**3.7**	**4.7**	**5.0**
General government balance (c)				-0.9	1.5	-4.3	-3.7	**-2.3**	**-3.1**	**-2.6**
Structural budget balance (d)				1.1	0.8	-2.9	-3.1	**-2.0**	**-2.4**	**-2.2**
General government gross debt (c)				70.5	58.9	68.0	68.6	**67.4**	**66.3**	**65.4**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

3. ESTONIA

Real GDP is forecast to decrease marginally in 2022. Positive private consumption and net exports growth are expected to be offset by the unwinding of temporary foreign intangibles' investments. Economic growth is forecast to resume in 2023, as inflationary pressures ease and investment rebounds, and to continue at a moderate pace thereafter. Consumer price inflation is set to soar to 19.3% this year, on the back of substantial increases in the prices of energy, food and industrial commodities. A price cap on electricity and other policy measures are set to steadily reduce headline inflation over 2023-2024. The government deficit is projected to expand to 3.7% of GDP in 2023 before falling again in 2024, while public debt is expected to increase mildly, to 21.9% of GDP in 2024.

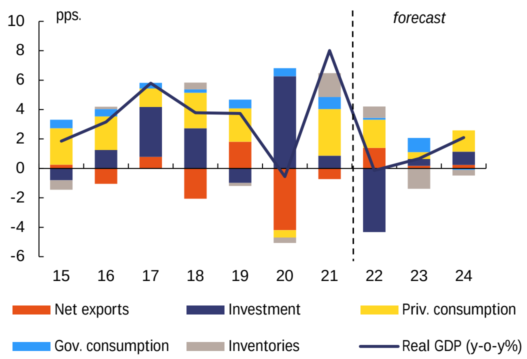
The economic engine started sputtering

Economic growth is forecast to stall in 2022 at -0.1%, after a robust expansion. In the first half of the year, gross fixed capital formation reflected the unwinding of some large foreign intangible investments initiated in late 2021, while construction activity slowed in the wake of higher prices and supply bottlenecks. On the upside, households continued spending their savings accumulated during the pandemic-related lockdowns and augmented by the withdrawal of second-pillar pension assets. However, consumption is expected to recede in the second half of 2022, as purchasing power falls due to the surge in consumer price inflation. While the global trade slowdown caused by Russia's war of aggression against Ukraine has dragged down exports of goods, imports were kept elevated by the need to build up stocks. Exports of services have continued rising this year, after the strong 2021 performance. With imports of services falling sharply, due to the foreign disinvestment, net exports are forecast to provide a positive growth impulse in 2022.

As Estonia's flexible economy reacted early to the surge in energy prices, it is also expected to adapt quickly to their stabilisation and eventual decline. Real GDP is forecast to increase to 0.7% in 2023 – supported by all demand components, including a robust fiscal stimulus – and to pick up to 2.1% in 2024. Private consumption is projected to increase in parallel with rising real disposable incomes. Investment is set to rebound in 2023 and to further expand in 2024, despite tightening financial conditions, thanks to the previously accumulated corporate savings. Investment in equipment is expected to pick up strongly, in a drive to diversify to less energy-intensive manufacturing. Construction activity is expected to focus on infrastructure projects, also supported by EU funds, while residential construction is forecast to be held back by softer demand for new dwellings, due to relatively high house prices and less favourable mortgage rates.

Foreign trade is forecast to contribute positively to output growth in 2023-24, with lower firms' demand for imported inputs and exports of services continuing to perform very well, particularly in information technologies and in transport and logistics.

Graph II.3.1: **Estonia - Real GDP growth and contributions**



Labour market stays tight

Employment is forecast to expand sizeably in 2022 as past GDP growth translated into job openings. The resulting labour market tightness fuelled robust wage rises, although still below inflation. It also stimulated an increase in the labour force, already swelled by the inflow of people fleeing the war in Ukraine. The unemployment rate is thus estimated to rise to 6.1% this year and 6.6% in 2023, before falling again in 2024. Wages are still expected to grow strongly in 2023, driven by the public sector, and more moderately in 2024.

Inflation falling rapidly from the 2022 peak

Consumer price inflation is projected to have peaked in the summer at 25.2% and to start declining in the fourth quarter of 2022, thanks to newly introduced measures capping retail electricity prices and limiting the increase in gas and heating prices from October 2022 until 2026. Overall, HICP inflation is forecast to reach 19.3% this year. With prices of oil and non-energy commodities, as well as of imported foodstuffs, already below their peak and not expected to rise again in the forecast horizon, headline inflation is projected at 6.6% in 2023 and 2.6% in 2024. Core inflation, however, is set to slow down less quickly, as firms pass persistently higher input costs onto final prices.

An expansionary budget adds to the 2023 deficit

The general government deficit is forecast to reach 2.3% in 2022, a similar level to 2021. Tax revenue is projected to grow by about 12% in 2022 compared to the previous year, buttressed by the strong labour market and an inflation-related boost for VAT revenue, while consumption is still buoyant. However, expenditure growth is set to be likewise high, reflecting spending on measures to mitigate the impact of high energy prices (around 0.9% of GDP), defence, integration of people fleeing the war in Ukraine and social benefits.

The deficit is forecast to increase markedly to 3.7% of GDP in 2023, as revenues are projected to be negatively impacted by the slowing economy and by the increase in the tax-free allowance in personal income tax. At the same time, expenditure is set to rise as a share of GDP, due to the announced substantial wage increases for many public employees (teachers, internal security), as well as to plans to spend more on defence, education and child benefits. These expenditure measures are expected to be permanent. The deficit is projected to decrease only gradually to 3.3% of GDP in 2024, when economic activity is set to pick up.

Public debt is expected to increase from 17.6% of GDP in 2021 to 21.9% in 2024, still the lowest ratio in the EU.

Table II.3.1:

Main features of country forecast - ESTONIA

	2021		Annual percentage change						
bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP	31.4	100.0	3.2	3.7	-0.6	8.0	**-0.1**	**0.7**	**2.1**
Private Consumption	15.1	48.1	3.6	4.6	-1.0	6.4	**4.0**	**0.9**	**2.8**
Public Consumption	6.2	19.8	2.4	3.1	2.8	4.0	**0.6**	**5.0**	**-0.5**
Gross fixed capital formation	9.1	28.9	4.4	-3.7	24.7	2.8	**-15.0**	**2.0**	**3.8**
Exports (goods and services)	24.6	78.3	6.9	6.1	-5.3	19.9	**5.1**	**1.6**	**3.6**
Imports (goods and services)	24.7	78.7	6.7	3.8	0.4	21.0	**3.3**	**1.4**	**3.4**
GNI (GDP deflator)	30.9	98.3	3.3	4.0	0.2	7.3	**0.7**	**0.8**	**2.1**
Contribution to GDP growth:	Domestic demand		3.9	1.9	6.3	4.9	**-2.3**	**1.9**	**2.3**
	Inventories		0.0	-0.2	-0.4	1.6	**0.8**	**-1.4**	**-0.4**
	Net exports		-0.2	1.8	-4.2	-0.7	**1.4**	**0.2**	**0.2**
Employment			0.6	1.3	-2.7	0.1	**2.8**	**-0.1**	**0.5**
Unemployment rate (a)			8.6	4.5	6.9	6.2	**6.1**	**6.6**	**6.2**
Compensation of employees / head			8.0	7.2	6.2	9.8	**9.7**	**9.7**	**4.7**
Unit labour costs whole economy			5.3	4.7	3.9	1.8	**12.9**	**8.8**	**3.1**
Saving rate of households (b)			6.1	11.8	14.3	10.5	**4.2**	**6.0**	**6.2**
GDP deflator			4.5	3.2	-0.5	6.0	**14.3**	**6.9**	**3.0**
Harmonised index of consumer prices			3.4	2.3	-0.6	4.5	**19.3**	**6.6**	**2.6**
Terms of trade goods			0.7	-0.7	1.1	0.6	**-0.7**	**0.0**	**0.4**
Trade balance (goods) (c)			-8.7	-3.3	-0.9	-4.1	**-7.0**	**-7.2**	**-7.0**
Current-account balance (c)			-3.8	2.4	-1.0	-1.8	**0.4**	**0.7**	**1.1**
General government balance (c)			0.4	0.1	-5.5	-2.4	**-2.3**	**-3.7**	**-3.3**
Structural budget balance (d)			-0.2	-0.4	-4.0	-4.1	**-1.8**	**-2.5**	**-2.3**
General government gross debt (c)			7.3	8.5	18.5	17.6	**18.7**	**19.3**	**21.9**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.
Note : Contributions to GDP growth may not add up due to statistical discrepancies.

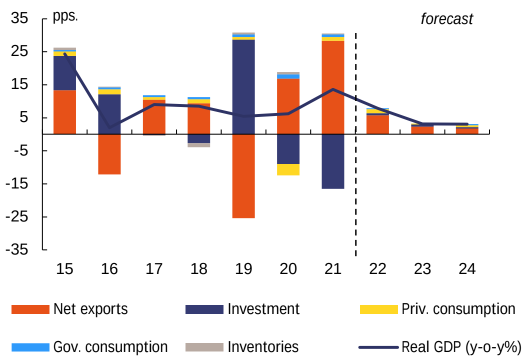
4. IRELAND

GDP is expected to grow by 7.9% in 2022, then to moderate to 3.2% in 2023 and 3.1% in 2024 on the back of lower purchasing power and uncertainty weighing on investment. Net exports, particularly of multinational corporations, are expected to remain resilient and be the main driver of growth. Inflation is expected to peak at 8.3% this year and to remain high at 6.0% in 2023 before moderating to 2.8% in 2024. The fiscal outlook is benign, with the budget balance posting surpluses throughout the forecast years.

Still favourable developments despite global headwinds

Ireland's real GDP grew robustly in the first half of 2022 by 10.9% year-on-year, driven by private consumption, investment, and strong net exports. However, sharply higher inflation is squeezing households' real income and weighing on consumer sentiment, as already shown by lower retail sales over the summer. Manufacturing in Ireland held up well but business sentiment has been moderating since summer.

Graph II.4.1: **Ireland - Real GDP growth and contributions**



On the back of rising energy bills and cost-of-living, private consumption is expected to fall over the coming quarters. The large savings accumulated during the acute phase of the pandemic will cushion the impact of higher prices. Irish households continue to engage in considerable saving activity, partly for precautionary reasons. Generally, the financial situation of Irish households remains solid, with the unemployment rate at historic lows and wages rising, albeit more slowly than inflation.

Investment activity is projected to be strong in 2022. In the first half of the year, total investment grew by 22.5% year-on-year. Building and construction activity beat expectations and increased by 18% year-on-year. Investment growth is set to moderate in 2023 and 2024 due to rising borrowing costs and high uncertainty.

Exports, notably of multinational corporations producing medical devices, pharmaceuticals and those providing information and communication services, remain the driving force behind Ireland's very strong economic growth. These sectors are generally expected to remain resilient and supply difficulties have reportedly diminished.

GDP is expected to grow by 7.9% in 2022, then to moderate to 3.2% in 2023 and 3.1% in 2024 on the back of lower purchasing power and uncertainty weighing on investment. Modified domestic demand, which better reflects underlying domestic economic activity, is expected to expand by 8.6% in 2022, 2.0% in 2023 and 3.4% in 2024.

Employment at record high

The labour market is tight. By the second quarter of 2022, 2.55 million people were in work, the highest number on record. The unemployment rate stood at 4.3% in September. Participation rates, particularly of women, have substantially risen due to more flexible working arrangements, and youth activity also increased. Skill and labour shortages are widespread. Inward migration has picked up, with non-Irish nationals, including Ukrainians, contributing materially to the expanding labour force and alleviating some labour shortages. Employment is expected to keep increasing but at a moderating pace, in line with the projected slowdown in economic activity.

High inflation set to persist

HICP inflation remained elevated throughout the summer and stood at 8.6% in September.

The energy component is the main driver, though all other main categories show price increases of 5% or more compared to the previous year, with food prices accelerating notably over the last months. Inflation is projected to peak in the last quarter of 2022 before slowly declining in 2023 and 2024 as energy inflation base effects taper off. Wage pressures are expected to intensify in the coming months, fuelling core inflation. Inflation is forecast to reach 8.3% in 2022, 6.0% in 2023 and 2.8% in 2024.

Ireland's high concentration of exports in a few fields and companies may continue to cause volatility in the country's economic growth figures.

Projected budgetary surplus in 2023 amid downside fiscal risks

Ireland's general government budget balance is projected to turn to a small surplus of 0.2% of GDP in 2022 from a deficit of 1.7% in 2021. Revenue growth in 2022 is projected to be strong, amid continued strong corporate earnings growth and high wage increases, both fuelling tax revenues. This forecast assumes that the measures to mitigate the impact of high energy prices on household energy bills – amounting to 0.3% of GDP in 2022 – will end by February 2023, limiting government expenditure growth.

In 2023 and 2024, government budget surpluses are forecast to increase to 0.8% and 1.2% of GDP, respectively, amid a resilient labour market. Further notable policy measures with a bearing on the budget balance are the end of the energy-related temporary welfare measures introduced in the 2023 budget (0.2% of GDP) and a provision of a contingency in 2023 for people fleeing the war in Ukraine.

The general government debt-to-GDP ratio is projected to decrease from 55.4% in 2021 to 44.7% in 2022, and further to 41.2% in 2023 and 39.3% in 2024, in spite of transfers of 2 and 4 billion EUR to the National Reserve Fund in 2022 and 2023, respectively.

Risks to the fiscal outlook are tilted to the downside. The current very high intake of corporate taxes may be temporary and thus also entails downward risks for Irish public finances.

Table II.4.1:

Main features of country forecast - IRELAND

		2021			Annual percentage change					
	bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		426.3	100.0	4.3	5.4	6.2	13.6	**7.9**	**3.2**	**3.1**
Private Consumption		100.8	23.6	2.2	2.5	-11.9	4.7	**5.3**	**1.3**	**2.6**
Public Consumption		52.2	12.3	1.7	6.5	10.5	6.1	**2.0**	**-0.7**	**2.9**
Gross fixed capital formation		99.2	23.3	5.9	100.9	-16.5	-39.0	**2.7**	**2.9**	**1.9**
Exports (goods and services)		573.0	134.4	6.8	11.8	11.2	14.1	**10.9**	**4.6**	**4.1**
Imports (goods and services)		405.1	95.0	5.8	42.3	-2.1	-8.3	**9.4**	**4.3**	**4.1**
GNI (GDP deflator)		323.2	75.8	3.8	5.6	4.1	13.2	**8.6**	**1.4**	**0.8**
Contribution to GDP growth:	Domestic demand			2.7	30.2	-11.2	-14.6	**2.1**	**0.9**	**1.3**
	Inventories			0.1	0.6	0.7	0.3	**0.0**	**0.0**	**0.0**
	Net exports			2.2	-25.4	16.9	28.3	**5.8**	**2.3**	**1.8**
Employment				1.5	3.0	-2.8	6.0	**3.1**	**0.8**	**0.6**
Unemployment rate (a)				9.1	5.0	5.9	6.2	**4.4**	**4.8**	**5.0**
Compensation of employees / head				2.2	3.8	3.7	2.6	**3.6**	**6.0**	**5.2**
Unit labour costs whole economy				-0.5	1.3	-5.1	-4.2	**-1.0**	**3.6**	**2.6**
Saving rate of households (b)				10.3	10.2	25.2	23.9	**17.7**	**16.4**	**13.1**
GDP deflator				1.2	3.6	-1.6	0.7	**9.8**	**5.4**	**4.4**
Harmonised index of consumer prices				1.1	0.9	-0.5	2.4	**8.3**	**6.0**	**2.8**
Terms of trade goods				-0.7	3.1	-2.4	-9.1	**0.5**	**-1.0**	**1.1**
Trade balance (goods) (c)				24.7	33.1	38.1	39.2	**42.0**	**42.3**	**42.1**
Current-account balance (c)				-1.5	-19.8	-2.7	14.2	**18.1**	**18.2**	**17.8**
General government balance (c)				-5.1	0.5	-5.0	-1.7	**0.2**	**0.8**	**1.2**
Structural budget balance (d)				-2.1	2.7	-2.2	-2.9	**-2.4**	**-0.8**	**0.3**
General government gross debt (c)				66.1	57.0	58.4	55.4	**44.7**	**41.2**	**39.3**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

5. GREECE

After a better-than-expected outturn in the first half of 2022, high energy costs and the worsening of the external environment point to a considerable slowdown. However, the Recovery and Resilience Plan will provide notable support to the economy, while the broad-based government support measures to mitigate the impact of high energy prices are set to partly cushion the impact of high inflation on businesses and on households' real disposable income. These measures will continue until the end of 2023 without, however, hindering primary surpluses in the coming years.

The economy proved robust in the face of intensifying headwinds

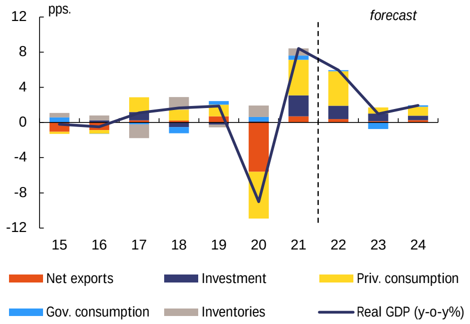
Despite rising inflationary pressures and a lingering energy crisis, the economy posted a solid growth rate of 7.8% over the first half of the year, compared to the same period last year. Growth was largely driven by private consumption and services exports due to a buoyant tourist season, while investment started to slow down already in the second quarter, amidst still favourable financing conditions for businesses. Goods exports continued growing, despite the challenging international environment. The labour market kept creating jobs but at a slower pace, with unemploymentrate declining to12.2%in August.

Expansion slows due to higher inflation

Economic activity is projected to slow down significantly from the second half of this year, partly mitigated by higher minimum wages and government support. Households are expected to adjust their consumption decisions to higher prices and the associated erosion of real incomes. Amid high uncertainty, tighter financing conditions, rising input costs and slowing demand, investment growth is likely to lose pace, but continues to be supported by the Recovery and Resilience Plan. Growth in goods exports is forecast to decelerate, in line with the projected slowdown of the European and global economies in the second half of 2022 and in 2023. Tourism, however, will remain robust, as the sector is expected to continue to record considerable gains from high-income source countries. Overall, real GDP growth is forecast at 6.0% in 2022 and 1.0% in 2023.

With the external environment slowly improving and inflation declining more strongly as of the second half of 2023, growth is expected to record a broad-based uptick towards the end of the same year and to provide a positive base effect going forward. For 2024 as a whole, growth is set to pick up moderately to 2.0%, driven by the gradual recovery of private consumption and improving external demand.

Graph II.5.1: **Greece - Real GDP growth and contributions**



Wage growth to fall behind inflation

Weakening job creation, broadly in line with the projected deceleration of GDP growth, and the absence of the indexation of public wages and social benefits are expected to keep nominal wage growth below inflation. However, the latest increase in the minimum wage and government measures to mitigate the impact of high energy prices, as well as tax reductions that directly affect household income, are set to partially offset the drop in real wages. Inflation is forecast to peak in the last quarter of 2022 and to decline only gradually thereafter. Increasing energy prices are the main driver, but the pass-through to other components is set to gain pace. HICP inflation is projected to reach 10.0% in 2022 and to fall to 6.0% in 2023,before easing to 2.4% in 2024.

Downside risks surround the outlook. The fall in household incomes in many countries of origin of foreign tourists and the increased geopolitical tensions in the region could weigh on tourism.

Return to primary surpluses despite the crisis

The general government deficit is forecast to decrease from 7.5% of GDP in 2021 to 4.1% in 2022, mainly driven by the phasing out of pandemic-related measures and the economic recovery. The outcome could have been even better, had it not been for the measures implemented to mitigate the impact of high energy prices that mainly consist of subsidies to energy users and cuts to indirect taxes on transport services. Since spring 2022, the government has taken additional measures for households and businesses, increasing their fiscal impact in 2022 from the 1.1% of GDP estimated in spring to 2.3% of GDP.

The general government deficit is expected to narrow further to 1.8% of GDP in 2023, bringing the primary balance to a surplus of 1.1% of GDP. Apart from the energy support measures planned for 2023, the forecast factors in a package of new permanent measures announced by the government in September, with an estimated fiscal cost of 0.4% of GDP in 2023. The package includes permanent tax cuts, most notably the abolition of the solidarity surcharge to public sector employees and pensioners, and measures on the public sector wage bill. The decrease of the fiscal deficit can be mainly attributed to the reduction in the fiscal cost of the measures to mitigate the impact of high energy prices (net of new taxes on windfall profits of energy producers) from 2.3% of GDP in 2022 to 0.5% in 2023 and to economic growth.

The general government deficit is forecast to decrease further to 0.8% of GDP in 2024, which corresponds to a primary surplus of 2.2%. As the economic recovery continues, and the negative output gap narrows, the primary balance is forecast to improve due to the cyclical component. Beyond that, the forecast assumes that the energy measures would be phased out by 2024, which contributes to the improvement of the primary balance.

Public debt is expected to decrease further to 171.1% of GDP in 2022, 161.9% in 2023 and 156.9% in 2024 supported by the increase in nominal GDP in all years and lower deficits in 2023 and 2024.

Fiscal risks remain, stemming from pending legal cases, most notably the litigation cases against the Public Real Estate Company.

Table II.5.1:

Main features of country forecast - GREECE

	2021			Annual percentage change						
bn EUR		Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		181.7	100.0	-0.5	1.9	-9.0	8.4	**6.0**	**1.0**	**2.0**
Private Consumption		123.4	67.9	-0.3	1.9	-7.7	5.8	**5.8**	**1.0**	**1.5**
Public Consumption		39.3	21.6	-0.2	2.1	2.6	2.2	**0.6**	**-3.7**	**0.8**
Gross fixed capital formation		24.1	13.3	-4.0	-2.2	1.1	20.0	**11.5**	**6.3**	**3.5**
Exports (goods and services)		74.3	40.9	3.6	4.9	-21.5	24.1	**12.7**	**3.9**	**4.4**
Imports (goods and services)		88.3	48.6	1.6	2.9	-7.3	17.7	**9.9**	**3.1**	**3.3**
GNI (GDP deflator)		180.9	99.6	-0.7	2.1	-8.6	8.5	**6.4**	**1.1**	**1.8**
Contribution to GDP growth:	Domestic demand			-0.7	1.5	-4.7	6.9	**5.6**	**0.8**	**1.7**
	Inventories			-0.1	-0.3	1.3	0.8	**0.0**	**0.0**	**0.0**
	Net exports			0.4	0.7	-5.6	0.7	**0.4**	**0.2**	**0.3**
Employment				0.3	2.2	-1.8	2.7	**1.9**	**0.4**	**0.6**
Unemployment rate (a)				16.7	17.9	17.6	14.7	**12.6**	**12.6**	**12.1**
Compensation of employees / head				0.2	-0.3	-0.6	2.3	**5.3**	**3.9**	**2.7**
Unit labour costs whole economy				1.0	0.0	7.2	-3.1	**1.3**	**3.3**	**1.4**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				1.1	0.2	-0.9	1.3	**9.0**	**5.6**	**2.3**
Harmonised index of consumer prices				1.8	0.5	-1.3	0.6	**10.0**	**6.0**	**2.4**
Terms of trade goods				-0.4	-1.4	-4.1	0.4	**1.5**	**-0.5**	**0.2**
Trade balance (goods) (c)				-13.6	-12.9	-11.9	-14.8	**-19.4**	**-20.6**	**-20.5**
Current-account balance (c)				-7.6	-2.3	-8.0	-8.2	**-8.6**	**-8.6**	**-8.1**
General government balance (c)				-7.1	1.1	-9.9	-7.5	**-4.1**	**-1.8**	**-0.8**
Structural budget balance (d)				6.1	3.8	-2.9	-4.6	**-3.4**	**-1.1**	**-0.5**
General government gross debt (c)				145.1	180.6	206.3	194.5	**171.1**	**161.9**	**156.9**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

6. SPAIN

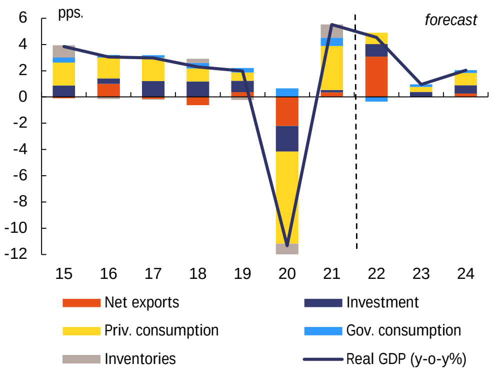
Following strong growth in 2022, the economic expansion in Spain is forecast to decelerate in 2023 amidst the disruptions created by Russia's war of aggression against Ukraine. Headline inflation peaked in July and is set to gradually decline going forward. Despite strong revenue performances, the general government deficit remains above 3% throughout the forecast horizon.

Economic growth is expected to slow down as of mid-2022

Real GDP contracted marginally in the first quarter of 2022 before rebounding strongly in the second quarter underpinned by the recovery of tourism activity. Activity slowed down steeply in the third quarter and is expected to decelerate further in the remainder for the year. This downward trajectory is due to the deterioration of global growth prospects, resulting in reduced confidence of economic agents, and to prolonged pressure on prices, adversely impacting demand. Overall, the rebound of tourism throughout the year, coupled with government measures to mitigate the impact of high energy prices and the continued resilience of the labour market, are expected to help Spain to partly weather the increased headwinds stemming from the uncertain geopolitical context. As a result, the economy is set grow by 4.5% in 2022.

GDP growth is set to remain subdued in the beginning of 2023 before regaining vigour in the second half of the year. Pressures stemming from high energy prices are expected to partially ease from mid-2023, enabling a gradual pick-up in activity on the back of the moderate revival of private consumption and a further normalisation of tourism. In addition, the implementation of the reforms and investments under the Recovery and Resilience Plan are expected to lead to an increased dynamism in aggregate demand. Taking all these factors into account, and considering the low carry-over effect from 2022, GDP growth in 2023 is forecast to reach 1.0%. The expansion is projected to be more robust in 2024 also on the back of invigorated domestic and external demand, including a stronger contribution of investment compared to 2023, and GDP is therefore set to expand by 2.0%.

Graph II.6.1: **Spain - Real GDP growth and contributions**



Strong labour market amid wage pressures

The labour market remained resilient during the pandemic. The unemployment rate is set to remain stable between 2022 and 2023 (at 12.7%) before posting a marginal decline to 12.6% in 2024. Wage growth is set to pick up at the end of this year and in 2023 but at a slower pace than prices, resulting in further losses in households' purchasing power. In 2024 part of the lost purchasing power is set to be recovered thanks to wages set to grow above inflation.

Inflation to remain high in the medium-term

Headline inflation peaked at 10.8% y-o-y in July, on the back of a strong increase in energy and food prices, before declining to 7.3% in October. As a whole, it is projected to reach 8.5% y-o-y in 2022. In 2023, the expected progressive moderation of energy prices and the cooling down of demand are projected to reduce inflation to 4.8%. Furthermore, the impact of government measures to mitigate the impact of high energy prices, notably the VAT reduction on gas and the cap on wholesale gas price, is set to reduce inflationary pressure in the first quarters of next year. For 2024, HICP is projected to decrease to 2.3%. The pass-through from energy and food prices to other goods and services has become increasingly visible in 2022 and will prompt core inflation to remain elevated over the forecast horizon. Upside risks resulting from a more rapid wage adjustment could feed into higher core inflation over the forecast horizon.

Tax revenues keep a strong momentum, but the deficit reduction is set to decelerate

In 2022, the government approved several sets of measures to mitigate the impact of high energy prices that overall amounted to 1.6% of GDP. Some of these measures, including the reductions of VAT on electricity and gas, the exemption from the tax on the value of electricity production or the reduction of the special tax on electricity, are set to reduce government revenue. Others, such as the 20-cent-per-litre fuel rebate, the social heating voucher or several subsidies to low-income households and to the economic sectors hardest hit by the energy crisis, are projected to increase expenditure.

Despite these sets of measures, Spain's headline deficit keeps reducing, driven by strong revenue growth. All the main taxation figures are expected to record a double-digit growth in 2022. Positive labour market developments, robust corporate profits and high inflation are among the main drivers. Additionally, the withdrawal of most pandemic-related measures is expected to contribute to reducing the general government deficit that is set to decrease from 6.9% of GDP in 2021 to 4.6% of GDP in 2022.

In 2023, the general government deficit is projected to narrow further, but more gradually, reflecting the weaker macroeconomic scenario. Revenue growth is expected to moderate, but the overall level in terms of GDP is projected to remain around 4pps. higher than in 2019, even though the pre-pandemic GDP level is set to be reached only in 2024. Some structural factors are behind these developments on the revenue side, such as income support policies, changes in consumption patterns entailing more electronic payments and a possible decrease in the capacity to engage in tax avoidance. On the expenditure side, the phasing out of some energy measures is set to reduce the deficit, but the relinking of pensions to inflation is expected to weigh considerably on the 2023 government budget (estimated cost of 1.4% of GDP). The public deficit is projected to decrease to 4.3% of GDP in 2023.

In 2024, the general government deficit is forecast to decrease to 3.6% of GDP favoured by higher economic growth. Public debt is projected to gradually decrease from 114.0% of GDP in 2022 to 112.1% in 2024, driven by nominal GDP.

Table II.6.1:

Main features of country forecast - SPAIN

		2021		Annual percentage change						
		bn EUR Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		1206.8	100.0	1.4	2.0	-11.3	5.5	**4.5**	**1.0**	**2.0**
Private Consumption		678.8	56.2	1.1	1.1	-12.2	6.0	**1.5**	**0.6**	**1.6**
Public Consumption		258.6	21.4	2.4	1.9	3.5	2.9	**-1.6**	**1.0**	**1.0**
Gross fixed capital formation		238.6	19.8	0.2	4.5	-9.7	0.9	**4.8**	**1.9**	**3.0**
Exports (goods and services)		421.6	34.9	3.3	2.2	-19.9	14.4	**17.2**	**2.7**	**5.0**
Imports (goods and services)		403.7	33.4	2.2	1.3	-14.9	13.9	**8.8**	**2.8**	**4.5**
GNI (GDP deflator)		1213.2	100.5	1.5	2.0	-11.3	5.8	**4.6**	**1.2**	**2.0**
Contribution to GDP growth:	Domestic demand			1.1	1.9	-8.3	4.2	**1.5**	**1.0**	**1.8**
	Inventories			0.0	-0.2	-0.8	1.0	**0.0**	**0.0**	**0.0**
	Net exports			0.3	0.4	-2.2	0.3	**3.1**	**0.0**	**0.3**
Employment				0.4	2.6	-7.6	6.6	**3.3**	**0.9**	**1.5**
Unemployment rate (a)				16.8	14.1	15.5	14.8	**12.7**	**12.7**	**12.6**
Compensation of employees / head				2.2	3.2	2.8	-0.7	**2.6**	**4.9**	**2.7**
Unit labour costs whole economy				1.2	3.8	7.2	0.3	**1.4**	**4.8**	**2.2**
Saving rate of households (b)				7.9	8.2	17.7	13.8	**8.5**	**8.3**	**8.1**
GDP deflator				1.6	1.4	1.2	2.3	**3.5**	**4.3**	**2.4**
Harmonised index of consumer prices				2.0	0.8	-0.3	3.0	**8.5**	**4.8**	**2.3**
Terms of trade goods				-0.2	0.1	2.8	0.1	**-8.8**	**-0.7**	**0.3**
Trade balance (goods) (c)				-4.4	-2.1	-0.8	-1.6	**-5.9**	**-5.9**	**-5.6**
Current-account balance (c)				-2.5	2.1	0.6	1.0	**0.9**	**0.8**	**1.2**
General government balance (c)				-4.4	-3.1	-10.1	-6.9	**-4.6**	**-4.3**	**-3.6**
Structural budget balance (d)				-2.0	-3.8	-3.9	-3.9	**-3.7**	**-3.5**	**-3.4**
General government gross debt (c)				71.1	98.2	120.4	118.3	**114.0**	**112.5**	**112.1**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

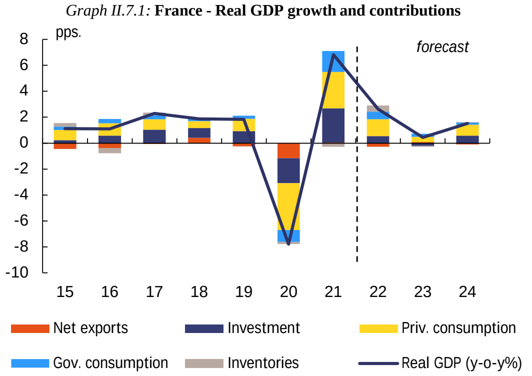
7. FRANCE

Economic activity is set to slow down significantly in the second half of 2022 and in 2023 amid important supply disruptions and higher inflation triggered by the energy crisis. The rise in inflation is set to be sizeable and persistent (5.8%, 4.4% and 2.2% in 2022, 2023 and 2024), although largely attenuated by the measures adopted to mitigate the impact of high energy prices. The general government deficit is forecast to fall to 5.0% of GDP in 2022 and to reach 5.3% in 2023, and 5.1% in 2024. Public debt is set to decline to some 110% of GDP by 2024.

Mild recession in sight

After the strong rebound of 6.8% in 2021, real GDP is set to expand by 2.6% in 2022. GDP surprised on the upside in the first half of 2022. However, rising inflation, triggered by high energy prices, and continued supply chain disruptions are taking a toll on growth, with GDP decelerating to 0.2% in the third quarter. Specifically, private consumption was flat amid a significant decline in consumers' confidence while investment picked up strongly, mainly driven by transport equipment. GDP is expected to contract by 0.2% in the fourth quarter. The government measures aimed at mitigating recent losses of households' purchasing power caused by rising inflation are set to provide some impulse to private consumption. In turn, investment is set to decelerate in the last quarter of 2022 due to rising costs and the decline in final demand.

Graph II.7.1: **France - Real GDP growth and contributions**



Economic activity is expected to remain subdued over the first half of 2023, after a mild contraction in the first quarter, with investment falling on the back of higher production costs and heightened uncertainty. However, the projected moderation of inflation, mainly from energy, is set to allow for a gradual recovery in the second half of the year, with private consumption gaining momentum and investment growth resuming to positive territory. Net exports are forecast to post a slightly positive contribution to growth. For 2023 as a whole, GDP is set to expand only slightly, by 0.4%.

The French economy is projected to keep gaining momentum until the end of 2024 along with the ongoing moderation of energy prices. The gradual rebound is expected to be driven by domestic demand, whereas net exports' contribution to growth is set to turn moderately negative. For the year as a whole, GDP is projected to expand by 1.5%.

Labour market to remain resilient but less

The labour market remained dynamic in the first half of 2022, leading to further declines in the unemployment rate. However, employment is set to decline in the second half amid an increase in hours worked per employee, thereby reducing labour hoarding. Thus, total employment is set to slow down in 2022 (1.0%, still supported by a strong carry-over) and to contract mildly in 2023, by 0.1%. The unemployment rate is expected to fall further, to 7.7% in 2022 and to rise to 8.1% in 2023, before declining again to 7.7% in 2024.

Inflation to remain high in 2023

Inflation is set to increase to 5.8% in 2022, from 2.1% in 2021. Energy prices will be the main driver behind such an increase, although their effect is expected to be largely mitigated by the government's support measures, mainly the cap on electricity and gas regulated prices, which could contribute to reducing overall inflation by more than 3 percentage points. As high energy prices and rising wages are expected to partially pass through onto non-energy goods and services, core inflation is set to accelerate in the coming quarters and to remain relatively high. Thus, despite the projected slowdown in energy inflation as of the second quarter of 2023, inflation is expected to stand at 4.4% in 2023 as a whole, before dropping to 2.2% in 2024.

Deficit to increase in 2023

The general government deficit is forecast to narrow to 5.0% of GDP in 2022, from 6.5% in 2021. The decline is set to be driven by continued dynamism of tax revenues supported by high inflation, the phasing-out of most pandemic-related measures and the lower amount of measures under *France Relance* compared to 2021. These deficit-reducing effects are expected to be partly offset by the measures adopted to mitigate the impact of high energy prices, the budgetary impact (net of indirect tax revenues from renewable producers) of which is estimated at EUR 30 bn. (1.1% of GDP). These measures include, on the one hand, the cap on electricity and gas regulated prices, as well as the discount on liquid fuels aimed to contain price increases and, on the other hand, the indexation of pensions and social benefits, aimed to assuage the effect of higher inflation on households' purchasing power. These projections also incorporate the budgetary impact of the investment plan France 2030 (0.1% of GDP) and the estimated cost to host people fleeing Ukraine, which is assumed to be limited.

The revenue-to-GDP ratio is expected to rise by ½ pp., mainly due to high receipts from indirect and corporate income taxes. In turn, the expenditure ratio is set to decline by some 1 pp.

The government deficit is forecast to rise in 2023, to 5.3% of GDP. Such an expected increase is due to the projected slowdown in economic activity weighing on tax revenues, alongside the extension of measures to mitigate the impact of high energy prices on inflation and on households' purchasing power. The revenue-to-GDP ratio is expected to decline only marginally, whereas the expenditure ratio is set to fall by ¼ pp.

For 2024, the government deficit is set to decline to 5.1% of GDP. While the revenue ratio is expected to decrease by almost 1 pp, the expenditure ratio is projected to decline by some 1 pp., mainly due to the unwinding of measures aimed to mitigate the effects of high energy prices.

From 112.8% of GDP in 2021, public debt is set to decrease to 111.7% in 2022. Thereafter, public debt is forecast to keep falling further, to some 110% of GDP by 2024. The decline in the debt-to-GDP ratio over the whole forecast horizon is expected to be mainly driven by the dynamic nominal growth that is expected to prevail due to the high growth of the GDP deflator.

Table II.7.1:

Main features of country forecast - FRANCE

	2021			Annual percentage change						
	bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		2500.9	100.0	1.2	1.8	-7.8	6.8	**2.6**	**0.4**	**1.5**
Private Consumption		1317.1	52.7	1.3	1.8	-6.7	5.3	**2.5**	**0.7**	**1.6**
Public Consumption		606.4	24.2	1.5	1.0	-4.0	6.4	**2.4**	**1.0**	**0.8**
Gross fixed capital formation		606.2	24.2	1.5	4.0	-8.2	11.5	**2.2**	**-0.9**	**2.4**
Exports (goods and services)		736.5	29.4	2.7	1.6	-16.8	8.8	**7.7**	**3.0**	**4.8**
Imports (goods and services)		785.0	31.4	3.4	2.3	-12.8	8.0	**8.1**	**2.5**	**4.8**
GNI (GDP deflator)		2574.7	103.0	1.3	1.7	-8.3	8.3	**2.7**	**0.4**	**1.5**
Contribution to GDP growth:	Domestic demand			1.4	2.1	-6.5	7.0	**2.4**	**0.4**	**1.6**
	Inventories			0.1	0.0	-0.2	-0.3	**0.5**	**-0.1**	**0.0**
	Net exports			-0.2	-0.3	-1.2	0.1	**-0.3**	**0.1**	**-0.1**
Employment				0.4	1.3	-0.6	2.4	**1.0**	**-0.1**	**0.5**
Unemployment rate (a)				9.2	8.4	8.0	7.9	**7.7**	**8.1**	**7.7**
Compensation of employees / head				2.2	-0.2	-2.9	4.7	**4.7**	**4.5**	**2.6**
Unit labour costs whole economy				1.4	-0.7	4.7	0.4	**3.0**	**4.0**	**1.5**
Saving rate of households (b)				14.4	14.7	20.5	18.3	**16.4**	**15.5**	**15.0**
GDP deflator				1.3	1.3	2.8	1.3	**2.7**	**5.0**	**3.9**
Harmonised index of consumer prices				1.5	1.3	0.5	2.1	**5.8**	**4.4**	**2.2**
Terms of trade goods				0.1	1.3	1.3	-2.0	**-5.0**	**3.5**	**1.7**
Trade balance (goods) (c)				-1.5	-1.4	-2.1	-3.0	**-5.5**	**-4.8**	**-4.5**
Current-account balance (c)				-0.4	-0.7	-2.5	-0.8	**-2.5**	**-1.3**	**-0.8**
General government balance (c)				-4.0	-3.1	-9.0	-6.5	**-5.0**	**-5.3**	**-5.1**
Structural budget balance (d)				-2.8	-3.5	-4.8	-5.7	**-5.0**	**-4.9**	**-4.9**
General government gross debt (c)				82.5	97.4	115.0	112.8	**111.7**	**110.8**	**110.2**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

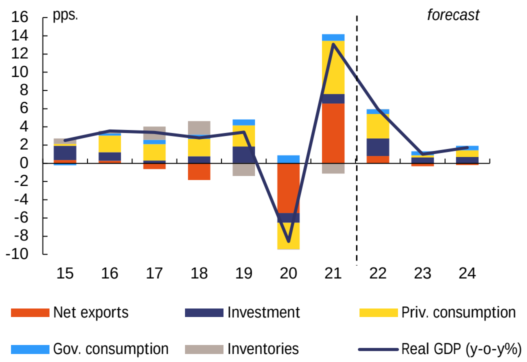
8. CROATIA

Croatia's GDP is forecast to grow by 6% in 2022 on the back of booming exports, investments and household consumption, benefitting from a recovery of tourism and other services. However, rising inflation and declining confidence amidst geopolitical tensions are deteriorating the economic outlook and public finances, affecting most notably 2023 and 2024. Subdued real wage growth and faltering demand from trading partners will depress private consumption and exports. The labour market is projected to remain resilient despite weaker employment growth and persisting labour shortages. A mild recovery of GDP growth is projected in 2024 as inflation moderates, real wage growth resumes and external demand starts to recover.

Inflation and instability set to weigh on growth

Croatia's economy is set to continue with strong, broad-based growth in 2022 (6%) on the back of a positive first half of the year. Booming goods exports and a recovery of tourism and close contact services, together with employment growth, supported household consumption, while both public and private investment picked up. However, persistently high inflation, negative real wage growth and a decline in business and consumer confidence are expected to lead to a technical recession in the last quarter of 2022 and the first quarter of 2023.

Graph II.8.1: **Croatia - Real GDP growth and contributions**



In 2023, although energy and commodity price growth are set to moderate, subdued real disposable incomes are projected to weigh on household consumption, especially in the first half of the year. Subsequently, as inflation moderates and real wage growth resumes, economic activity is expected to slightly recover. Investment growth is set to sustain import growth, while exports weaken as external demand deteriorates, leading to a negative contribution of net exports to growth in 2023. Real GDP is therefore forecast to expand by 1%, with government consumption and investment as the main drivers.

In 2024, real GDP is expected to expand by 1.7%. Private consumption is set to be the main driver of growth, backed by employment and a recovery in real wages. Investment and government consumption are expected to remain robust as RRF and European structural and investment funds continue to be absorbed. Both imports and exports of goods and services are projected to expand, on balance having a mildly negative contribution to growth.

The balance of risks to this forecast is tilted to the downside. Negative risks to the growth outlook relate to a stronger than expected negative impact of rising energy costs on companies' viability and the impact of a possible new downturn in travel on firms in the tourism sector, which have still not fully recovered from the impact of the pandemic. On the upside, Croatia's comparatively diversified supply of gas and a continuation of nearshoring processes by companies in Croatia's key trading partners could benefit the external position.

Resilient labour market in the face of headwinds

After a dynamic 2022, employment growth is set to decelerate to 0.2% in 2023 due to a slow-down in demand, uncertainty and lagged effects of rising input costs. The unemployment rate is projected to remain at 6.3% next year, benefitting from the entry into force of the labour market reform and the deployment of new active labour market policies in the green and digital transitions, with a particular focus on the long-term unemployed and other disadvantaged groups. In 2024, the assumed mild acceleration of economic activity is expected to push the unemployment rate down to 5.9%.

Inflation to moderate over the medium term

HICP inflation is forecast to remain high and above the EA average in 2022 and 2023, reaching 10.1% and 6.5%, respectively, as the increases in energy and commodity prices pass through to core inflation. Price caps and reduced indirect taxes, together with strong base effects, are expected to moderate inflation in 2023. In 2024, negative energy inflation in particular is projected to push the inflation rate lower towards the euro area average.

Fiscal adjustment stifled by inflation and uncertainty

After a reduction to 2.6% of GDP in 2021, the general government deficit is forecast to reduce further to 1.6% in 2022, driven by the phasing out of COVID-19-related measures and strong nominal growth supporting government revenues. On the revenue side, indirect tax receipts are expected to grow despite tax cuts, backed by strong economic activity and high inflation, while direct taxes and contributions are set to benefit from rising employment and nominal wages. Meanwhile, the phasing out of COVID-19-related support measures and further savings on debt servicing costs are projected to curb expenditure growth.

The government adopted several measures to mitigate the impact of high energy prices for households and companies. In addition to permanent cuts in VAT rates on energy products, authorities introduced temporary price-related measures like cuts in excise duties and price caps on electricity and gas. The impact of these measures, envisaged to be in force through March 2023, is estimated at 2.8% of GDP.

The deficit is projected to increase to 2.4% of GDP in 2023 as measures to support households and companies take effect and the economy slows down. The deficit is projected to increase further to 2.7% in 2024, as the pressures to preserve the adequacy of public wages and social transfers push up government expenditure.

The debt to GDP ratio is expected to drop significantly from 78.4% in 2021 to 70.6% in 2022, due to the strong nominal GDP growth and debt-reducing stock-flow adjustments. The debt ratio is expected to drop further in 2023 (67.8%), before edging up to 68.8% in 2024 as the deleveraging is halted by modest nominal GDP growth, rising deficits and reversing stock-flow adjustments.

Table II.8.1:

Main features of country forecast - CROATIA

		2021			Annual percentage change					
	bn HRK	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		58.2	100.0	1.6	3.4	-8.6	13.1	**6.0**	**1.0**	**1.7**
Private Consumption		33.4	57.4	1.0	4.1	-5.1	9.9	**4.6**	**0.4**	**1.2**
Public Consumption		12.9	22.2	1.8	3.1	4.3	3.0	**2.4**	**2.1**	**2.3**
Gross fixed capital formation		12.1	20.7	1.6	9.0	-5.0	4.7	**9.4**	**2.9**	**3.2**
Exports (goods and services)		29.8	51.3	3.7	6.8	-23.3	36.4	**25.9**	**1.8**	**3.1**
Imports (goods and services)		30.7	52.7	3.2	6.6	-12.4	17.6	**23.7**	**2.2**	**3.2**
GNI (GDP deflator)		58.4	100.4	1.7	3.9	-6.5	11.2	**5.8**	**0.3**	**1.6**
Contribution to GDP growth:	Domestic demand			1.4	4.8	-3.1	7.6	**5.1**	**1.3**	**1.9**
	Inventories			0.2	-1.4	-0.1	-1.1	**0.0**	**0.0**	**0.0**
	Net exports			0.0	0.0	-5.4	6.6	**0.8**	**-0.3**	**-0.2**
Employment				0.4	3.1	-1.2	1.2	**2.2**	**0.2**	**0.6**
Unemployment rate (a)				12.8	6.6	7.5	7.6	**6.3**	**6.3**	**5.9**
Compensation of employees / head				2.2	0.4	1.2	10.4	**7.7**	**6.8**	**3.9**
Unit labour costs whole economy				1.0	0.1	9.4	-1.2	**3.9**	**5.9**	**2.7**
Saving rate of households (b)				6.2	8.5	11.9	10.7	**:**	**:**	**:**
GDP deflator				2.2	2.0	0.7	2.0	**5.5**	**6.3**	**2.4**
Harmonised index of consumer prices				2.0	0.8	0.0	2.7	**10.1**	**6.5**	**2.3**
Terms of trade goods				0.4	0.3	-3.8	-0.4	**-3.6**	**1.4**	**0.1**
Trade balance (goods) (c)				-17.7	-18.8	-17.5	-18.3	**-26.3**	**-25.7**	**-25.8**
Current-account balance (c)				-3.1	2.9	-0.4	3.2	**0.2**	**-0.6**	**-0.8**
General government balance (c)				-3.8	0.2	-7.3	-2.6	**-1.6**	**-2.4**	**-2.7**
Structural budget balance (d)				-1.3	-0.9	-3.8	-3.0	**-3.1**	**-3.1**	**-3.1**
General government gross debt (c)				59.4	71.0	87.0	78.4	**70.0**	**67.2**	**68.0**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

9. ITALY

The energy price shock and the worsening external outlook are set to take their toll and push the Italian economy into a contraction this winter. Thanks to solid growth in the first three quarters of the year, real GDP growth is forecast at 3.8% in 2022, before slowing down to 0.3% in 2023 and picking up to 1.1% in 2024. The inflation rate is set to climb to 8.7% this year and to moderate to 2.3% by 2024. The declining government deficit path, which has been supported also by economic growth, is projected to come to a halt in 2024, slowing down public debt reduction.

Energy price shock interrupts expansion

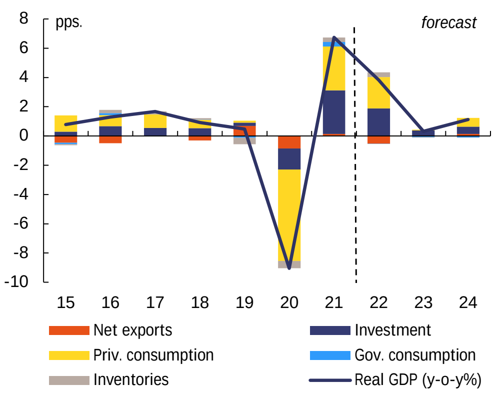
Italy's economy exceeded pre-COVID-19 levels in the second quarter of 2022. The reopening of the economy, after lifting all pandemic-related restrictions, and policy measures to mitigate the impact of high energy prices on firms and households contributed to solid output growth. However, with manufacturing and construction activity already weakening since the summer and reopening dynamics having almost run their course, the negative impact of high energy prices is set to take the upper hand towards the end of the year. The Italian economy is forecast to enter a period of contraction, with a tangible recovery not to be expected before the second half of 2023.

The solid growth performance in the first three quarters of 2022 coupled with a sizeable carryover effect is projected to propel real GDP growth to 3.8%. In 2023, output growth is set to slow down to 0.3%, before picking up to 1.1% in 2024. The projections are based on a no-policy-change assumption, as national elections in late September and the subsequent formation of a new government delayed the adoption of a draft budget for 2023.

Multi-pronged headwinds weigh on demand

With high inflation and feeble employment growth weighing on real disposable incomes, consumer spending is likely to stagnate next year. With the assumed easing of price pressures and moderately accelerating wage growth, private consumption is set to pick up again in 2024. High input costs, tightening financing conditions and slowing demand are projected to dampen corporate investment, while government capital spending is expected to remain robust on the back of RRF-financed investment. In addition, housing investment is set to slow down sizeably, due to higher mortgage rates and the phasing out of building renovation incentives. After registering strong growth this year partly on the back of a buoyant tourism season, exports are forecast to grow more moderately in 2023, in line with external demand. The current-account balance is set to deteriorate sharply, reflecting the energy-related negative terms-of-trade effect.

Graph II.9.1: **Italy - Real GDP growth and contributions**



Signs of a slowdown in employment

Labour demand is decreasing in more energy-intensive sectors such as manufacturing and construction, but employment growth also slowed down in the retail and tourism sector. Overall, jobs growth is expected to remain broadly in line with economic activity over the forecast horizon. The unemployment rate is set to rise, from 8.3% in 2022 to 8.5% in 2024.

Price pressures to remain persistent

Amid broadening price pressures largely originating from sharply rising energy prices, HICP inflation is set to average 8.7% in 2022. Energy prices are assumed to reach their peak end-2022 and start slowly falling thereafter, while wage growth is expected to pick up only gradually and with a lag, as several wage agreements had already been concluded before the energy prices shock. Consumer price inflation is projected to moderate to 6.6% in 2023, before falling further to 2.3% in 2024.

The deficit reduction is set to halt in 2024

The government deficit is projected to decline from 7.2% of GDP in 2021 to 5.1% in 2022. The 2022 budget already contained deficit-increasing measures, including a further reduction of the tax wedge on labour. In addition, the government adopted several fiscal packages since the beginning of the year, mostly to mitigate the economic and social impact of high energy prices. The total budgetary cost of temporary support measures in response to high energy prices is estimated at 2.6% of GDP in 2022, net of revenues from the new tax on windfall profits by energy companies. Favourable revenues and reductions in some budget appropriations also contribute to offsetting the costs of the energy related support measures.

Overall, primary expenditure is set to decrease, following the unwinding of pandemic-related fiscal measures and a substantial reduction in public investment, mainly due to delays in projects supported by the RRF. Conversely, interest expenditure is expected to increase to 4.0% of GDP from 3.6% in 2021, due to higher bond yields. This projection also assumes that the renewal of most public wage contracts for the period 2019-2021 increases the wage bill in 2022.

In the absence of a 2023 budget, the general government deficit is forecast to decrease further to 3.6% of GDP in 2023. Primary expenditure is expected to decline, along with the phasing out of energy support measures. This reduction is partly offset by higher pension expenditure due to the indexation to past inflation and a pick-up in investment. Bond yields are likely to continue putting pressure on debt servicing costs, with interest expenditure remaining stable at 4.0% of GDP.

In 2024, the headline deficit is expected to increase to 4.2% of GDP as current taxes are projected to grow more slowly than nominal GDP and pensions are set to further increase. Interest expenditure is set to further rise to 4.1% of GDP.

Italy's debt-to-GDP ratio is forecast to decrease from 150.3% in 2021 to 144.6% in 2022, thanks to economic growth and a favourable stock-flow adjustment. It is thereafter set to decline slightly, to 142.6% in 2024.

Table II.9.1:

Main features of country forecast - ITALY

		2021			Annual percentage change					
	bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		1782.1	100.0	0.1	0.5	-9.0	6.7	**3.8**	**0.3**	**1.1**
Private Consumption		1030.1	57.8	0.2	0.2	-10.4	5.2	**3.7**	**0.1**	**1.0**
Public Consumption		352.7	19.8	-0.1	-0.6	0.0	1.5	**0.0**	**-0.3**	**-0.5**
Gross fixed capital formation		355.6	20.0	-1.0	1.2	-8.0	16.5	**9.5**	**1.9**	**2.3**
Exports (goods and services)		582.2	32.7	2.1	1.6	-13.5	13.4	**10.9**	**2.2**	**3.9**
Imports (goods and services)		540.2	30.3	1.7	-0.7	-12.1	14.7	**13.5**	**2.2**	**3.4**
GNI (GDP deflator)		1814.0	101.8	0.2	0.2	-8.7	7.3	**4.9**	**-0.2**	**1.2**
Contribution to GDP growth:	Domestic demand			-0.1	0.2	-7.7	6.3	**4.0**	**0.4**	**1.0**
	Inventories			0.0	-0.4	-0.5	0.3	**0.3**	**0.0**	**0.0**
	Net exports			0.2	0.7	-0.8	0.1	**-0.5**	**0.0**	**0.1**
Employment				0.0	0.1	-10.3	7.6	**3.4**	**0.2**	**1.1**
Unemployment rate (a)				9.5	9.9	9.3	9.5	**8.3**	**8.7**	**8.5**
Compensation of employees / head				1.9	1.8	3.8	0.7	**3.0**	**2.5**	**2.7**
Unit labour costs whole economy				1.8	1.4	2.3	1.5	**2.6**	**2.4**	**2.6**
Saving rate of households (b)				12.2	10.0	17.4	14.9	**10.9**	**9.5**	**10.3**
GDP deflator				1.6	0.9	1.6	0.5	**3.1**	**3.3**	**2.6**
Harmonised index of consumer prices				1.7	0.6	-0.1	1.9	**8.7**	**6.6**	**2.3**
Terms of trade goods				-0.2	1.6	4.5	-5.6	**-8.1**	**-1.9**	**1.8**
Trade balance (goods) (c)				1.1	3.4	4.1	3.0	**-0.4**	**-1.0**	**0.0**
Current-account balance (c)				-0.2	3.3	3.9	3.1	**0.8**	**-0.2**	**0.5**
General government balance (c)				-3.1	-1.5	-9.5	-7.2	**-5.1**	**-3.6**	**-4.2**
Structural budget balance (d)				-1.4	-1.9	-5.1	-6.6	**-6.0**	**-4.1**	**-4.6**
General government gross debt (c)				120.2	134.1	154.9	150.3	**144.6**	**143.6**	**142.6**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

10. CYPRUS

Following solid growth in the first half of 2022, economic activity is expected to slow down considerably towards the end of the year due to global headwinds and persistent inflationary pressures. Public finances are projected to remain sound, but the headline surplus is set to grow at a slower pace than before.

Strong GDP growth in 2022

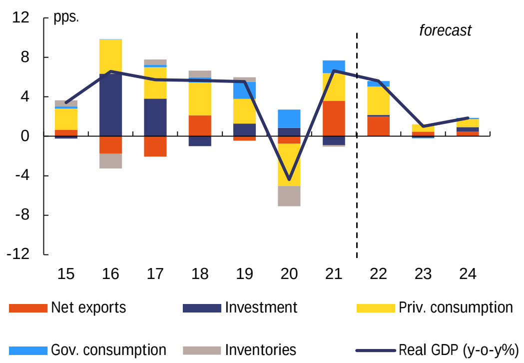
Real GDP increased by 6.3% in the first half of 2022, compared to the same period of 2021, driven mainly by domestic demand. Buoyant private consumption growth was supported by increased employment and savings accumulated during the pandemic. Investment increased supported by the implementation of the Recovery and Resilience Plan (RRP). However, construction investment was negatively affected by the high prices of material and tightening financing conditions. The tourism sector performed well with arrivals and revenues from tourism reaching almost 80%, and 90% of the pre-pandemic levels, respectively in the first three quarter of the year. Exports of Information Communication and Technology (ICT) and of financial and transport services continued to expand in the first half of 2022.

Headwinds to weigh on growth

Starting from the last quarter of 2022, growth is expected to significantly decelerate due to the global economic slowdown, rising interest rates and upward price pressures, in particular for energy. Low purchasing power in Cyprus' trading partners is set to weigh on exports of services, notably tourism. Moreover, weakening consumer and business confidence in Cyprus and increasing interest rates are negatively affecting private consumption and household investments. This is expected to intensify in 2023. Targeted government measures to mitigate the impact of high energy prices and the partial indexation of wages to be implemented in January 2023 are expected to support purchasing power. The wage indexation concerns around 50% of employees covered by collective agreements, limiting somewhat the negative impact on private consumption. Furthermore, the implementation of the Cypriot RRP is expected to support investment over the forecast horizon. Overall, real GDP is forecast to grow by 5.6% in 2022 and to decelerate to 1% in 2023, before slightly picking up in 2024 1.9%.

Significant uncertainty and downside risks to the growth outlook remain, as the tourism sector and other export-oriented services sectors are particularly vulnerable to external shocks.

Graph II.10.1: **Cyprus - Real GDP growth and contributions**



Unemployment is set to decline, but slowly

The unemployment rate is projected to reach 7.2% in 2022 slightly down from 7.5% in 2021. Employment and vacancies were on the rise in the first half of 2022, whereas the slowdown of economic activity is set to put brakes on the labour market positive performance later this year. In 2023, the unemployment rate is forecast to remain stable, before declining to 6.9% in 2024.

Inflation to moderate in 2023

Headline inflation is expected to increase to 8% in 2022, up from 2.3% in 2021. This is mainly due to the exceptionally high oil prices, as Cyprus depends heavily on oil products. The prices of non-energy industrial products and food have also increased as a result of supply chain disruptions and the secondary impact from higher energy prices. In 2023, oil prices are projected to moderate, but the partial indexation of wages is set to have some upward second-round effects on core inflation. Overall, inflation is projected to decelerate to 4.2% in 2023 and to 2.5% in 2024.

Public finances continue to be sound

The fiscal performance has been stronger than expected over 2021 and 2022, supported by the economic rebound. In 2022, the government headline balance is forecast to turn into surplus, reaching 1.1% of GDP.

Government revenues are set to grow strongly in 2022 by 10.2%, supported by high inflation. This is only marginally offset by an increase in public spending of 3.1%. Public expenditure growth remains low due to the phasing out of the COVID-19 related support measures granted to corporations and employees. The costs of measures to mitigate the impact of high energy prices, mainly the reduction of indirect taxation and subsidies on energy bills, are estimated at 0.7% of GDP in 2022.

For 2023, government revenues are projected to increase at a slower pace, reflecting the slowdown in economic activity. Nevertheless, the budget surplus is forecast to reach around 1.1% of GDP in 2023, and 1.6% in 2024. The broadly unchanged budget surplus in 2023 in spite of the economic slowdown is driven by the projected reduction of the cost of measures to mitigate the impact of high energy prices to 0.1% of GDP, as many of them are set to expire by the end of 2022.

The debt-to-GDP ratio is expected to decrease over the coming years on the back of expected nominal GDP growth (including due to the high GDP deflator) and primary surpluses. It is set to reach 89.6% by the end of 2022, and further decline to 84.0% and 77.7% in 2023 and 2024 respectively.

Table II.10.1:

Main features of country forecast - CYPRUS

		2021			Annual percentage change					
	mio EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		24018.9	100.0	2.2	5.5	-4.4	6.6	**5.6**	**1.0**	**1.9**
Private Consumption		14242.7	59.3	2.6	3.9	-6.8	4.5	**4.9**	**1.2**	**1.3**
Public Consumption		4706.1	19.6	1.5	11.9	11.6	6.6	**2.8**	**-0.3**	**0.6**
Gross fixed capital formation		4672.8	19.5	1.6	6.9	4.5	-4.2	**0.7**	**-0.7**	**2.1**
Exports (goods and services)		20804.4	86.6	3.7	8.7	2.2	13.6	**8.0**	**1.4**	**2.1**
Imports (goods and services)		20102.7	83.7	3.8	9.5	3.2	9.0	**5.9**	**0.9**	**1.6**
GNI (GDP deflator)		21989.7	91.6	2.3	3.6	-6.0	5.0	**5.6**	**3.6**	**2.9**
Contribution to GDP growth:	Domestic demand			2.3	5.5	-1.6	3.2	**3.6**	**0.5**	**1.4**
	Inventories			0.1	0.5	-2.0	-0.1	**0.0**	**0.0**	**0.0**
	Net exports			-0.1	-0.5	-0.7	3.6	**2.0**	**0.5**	**0.5**
Employment				1.7	3.8	-1.2	1.3	**1.6**	**0.7**	**1.4**
Unemployment rate (a)				8.6	7.1	7.6	7.5	**7.2**	**7.2**	**6.9**
Compensation of employees / head				1.7	4.4	-0.5	3.8	**4.7**	**7.0**	**3.8**
Unit labour costs whole economy				1.2	2.7	2.9	-1.4	**0.7**	**6.6**	**3.3**
Saving rate of households (b)				3.7	5.7	12.5	10.9	**7.1**	**6.5**	**7.8**
GDP deflator				1.6	1.3	-1.2	2.9	**4.6**	**4.3**	**2.6**
Harmonised index of consumer prices				1.5	0.5	-1.1	2.3	**8.0**	**4.2**	**2.5**
Terms of trade goods				0.7	0.0	-1.2	-0.6	**-8.6**	**0.0**	**0.0**
Trade balance (goods) (c)				-22.6	-20.0	-19.2	-18.0	**-23.8**	**-24.4**	**-24.5**
Current-account balance (c)				-8.5	-5.5	-10.0	-6.8	**-9.6**	**-7.3**	**-6.2**
General government balance (c)				-2.9	1.3	-5.8	-1.7	**1.1**	**1.1**	**1.6**
Structural budget balance (d)				2.5	-0.1	-4.5	-2.2	**-0.7**	**0.2**	**1.1**
General government gross debt (c)				76.2	90.4	113.5	101.0	**89.6**	**84.0**	**77.7**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

11. LATVIA

Latvia's 2022 growth spurt is set to be cut short by an inflation surge and a slowing global economy. The doubling of energy prices ahead of the coming heating season is projected to make households scale back on consumption likely resulting in negative quarterly GDP growth around the year change. In 2023, consumption is expected to partially recover once the heating season is over. However, by that time a slowing external environment is forecast to weigh on Latvia's exports. A pick-up in EU-funded investments is expected to give a boost to public investment in both 2023 and 2024. Energy price growth is forecast to peak before 2023 and services prices are forecast to gradually become the main inflation driver during the forecast horizon. The general government deficit is set to decrease to 3.4% of GDP in 2023 and further to 1.4% in 2024.

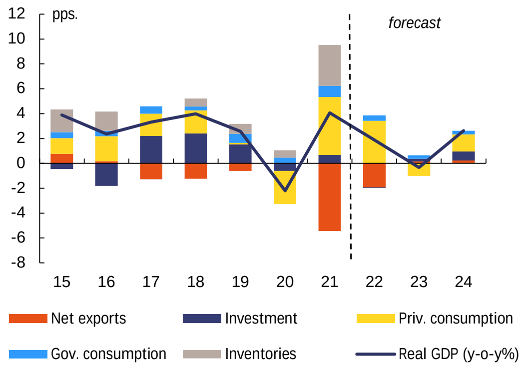
High inflation and slowing external demand set to bring growth to a standstill

2022 started with a strong growth in exports and a recovery in private consumption that was driven by a lifting of the pandemic-related restrictions to economic activity. However, growth is expected to slow in the second part of the year as household disposable incomes shrink amid surging energy prices and exports face headwinds from slowing foreign demand. Overall, on the back of the strong growth in the first half of the year, GDP growth for 2022 is forecast at 1.9%.

In 2023, GDP growth is expected to decline by 0.3% – while the end of the heating season is likely to provide a boost to consumption, this is expected to be a mild increase amid still high energy prices and depleted household savings. Similarly, weakened real disposable incomes and slowing construction and manufacturing elsewhere in the EU means exports are also set to struggle. Private investment growth is forecast to slow amid dwindling savings and rising interest rates. However clearing of the backlog of EU funded projects should provide a timely boost to public investments keeping the economy out of a recession in 2023.

In 2024, growth is expected to pick up to 2.6%. A stabilisation in energy prices is set to provide relief for household budgets and hence foster their consumption. EU-funded investments are expected to have gathered pace by then and private investment would benefit from a relief in construction materials' prices, although higher interest rates are set to dampen household investment. Export growth is expected to continue struggling amid weak growth in Europe and a global investment slowdown, which is forecast to reduce demand for Latvia's sizeable timber industry. Import growth is expected to follow demand dynamics and after a significant slowdown in 2023 it is forecast to pick up in 2024.

Graph II.11.1: **Latvia - Real GDP growth and contributions**



Labour market to remain tight

A structural decline in labour supply is set to keep the labour market tight despite the expected growth trough in 2023. The services' delayed recovery from the pandemic-related restrictions is expected to provide a boost to employment numbers and keep wage growth rapid. Moreover, minimum wage increases in both 2023 and 2024 are set to provide further impetus to wage growth. However, real disposable incomes are forecast to decline in both 2022 and 2023 as inflation is forecast to exceed wage growth. The shock to real disposable incomes is expected to be partially cushioned by the savings accumulated during the pandemic and therefore limiting the impact on private consumption. In 2024, outlook for real disposable incomes is set to turn positive, again.

Energy prices to peak in 2022

In 2022, HICP inflation is forecast to reach 16.9%, but it is expected to peak before the end of 2022 as the full increase in wholesale energy prices is assumed to have been passed on to consumers by then. However, energy prices are expected to remain elevated throughout 2023 and combined with knock-on effects to non-energy prices, inflation is forecast at a rather brisk 8.3% growth. By 2024 energy prices are expected to begin falling, but services price inflation supported by strong wage growth is set to take over as the main inflation driver.

Deficit to remain elevated in 2022

In 2022, the government deficit is projected to remain close to the level of 2021 at 7.1% of GDP. Higher tax revenue in all main tax categories due to high inflation and wage growth is expected to be more than offset by additional public expenditure. Main expenditure increases include measures to mitigate the impact of high energy prices with a budgetary cost of 2.0% of GDP; filling up of the natural gas security reserve; increases in pensions and allowances, as well as continued support to the healthcare sector for mitigating the impact of COVID-19. Meanwhile, the growth of government investment expenditure is expected to be limited by construction capacity constraints as well as supply chain disruptions.

The government deficit in 2023 is projected to decrease to 3.4% of GDP mainly due to an increase in tax revenue in line with nominal GDP growth and the phasing out of the COVID-19 support. Nevertheless, the government's energy support package of 1.5% of GDP will continue to weigh on the budget deficit in 2023, together with increased spending for social payments, defense and support to people fleeing Ukraine. In 2024, the government deficit is forecast to fall to 1.4% of GDP thanks to continuous growth in tax revenue and the expiry of the energy-support measures adopted for 2023.

The debt-to-GDP ratio is expected to decrease to 42.4% in 2022 given a substantial negative stock-flow adjustment. However, despite lower deficits, for the following years debt is foreseen to remain above the 2022 level, driven by the need to replenish the Treasury's cash buffer, and is forecast at 44.0% of GDP in 2023 and 43.6% in 2024.

Table II.11.1:

Main features of country forecast - LATVIA

	2021			Annual percentage change						
mio EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP	33695.9	100.0	3.2	2.6	-2.2	4.1	**1.9**	**-0.3**	**2.6**
Private Consumption	19220.1	57.0	3.5	0.2	-4.6	8.2	**6.0**	**-1.6**	**2.2**
Public Consumption	6943.6	20.6	1.3	3.9	2.4	4.4	**2.1**	**1.5**	**1.5**
Gross fixed capital formation	7499.6	22.3	3.5	6.9	-2.6	2.9	**-0.2**	**0.9**	**3.1**
Exports (goods and services)	21387.0	63.5	6.7	2.1	-0.3	5.9	**7.7**	**0.5**	**2.8**
Imports (goods and services)	22541.1	66.9	6.0	3.1	-0.3	15.3	**10.2**	**0.2**	**2.2**
GNI (GDP deflator)	33653.4	99.9	3.1	2.7	-0.7	4.0	**1.9**	**-0.3**	**2.6**
Contribution to GDP growth:	Domestic demand		3.7	2.4	-2.8	6.2	**3.8**	**-0.5**	**2.4**
	Inventories		0.2	0.8	0.6	3.3	**0.0**	**0.0**	**0.0**
	Net exports		-0.5	-0.6	0.0	-5.4	**-1.9**	**0.2**	**0.2**
Employment			-0.4	-0.1	-2.3	-2.6	**3.4**	**-0.1**	**0.3**
Unemployment rate (a)			11.4	6.3	8.1	7.6	**7.1**	**8.1**	**7.9**
Compensation of employees / head			9.8	7.8	5.0	11.1	**10.7**	**7.2**	**7.2**
Unit labour costs whole economy			6.0	5.0	4.8	4.0	**12.3**	**7.4**	**4.8**
Saving rate of households (b)			4.0	8.9	17.0	14.8	**5.2**	**4.8**	**7.5**
GDP deflator			4.7	2.6	1.0	6.9	**11.0**	**6.2**	**3.8**
Harmonised index of consumer prices			3.9	2.7	0.1	3.2	**16.9**	**8.3**	**1.3**
Terms of trade goods			1.2	0.9	3.2	2.6	**-1.6**	**-1.9**	**3.0**
Trade balance (goods) (c)			-14.4	-8.6	-5.1	-8.2	**-13.5**	**-14.5**	**-11.9**
Current-account balance (c)			-5.3	-0.7	2.8	-2.2	**-6.4**	**-6.8**	**-4.0**
General government balance (c)			-2.4	-0.6	-4.3	-7.0	**-7.1**	**-3.4**	**-1.3**
Structural budget balance (d)			-1.4	-1.4	-3.6	-6.8	**-6.9**	**-2.5**	**-0.8**
General government gross debt (c)			30.3	36.5	42.0	43.6	**42.4**	**44.0**	**43.6**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

12. LITHUANIA

Lithuania's real GDP is expected to increase by only 2.5% in 2022 and 0.5% in 2023 as a result of heightened uncertainty, deteriorating prospects for trading partners and surging input costs and consumer prices. HICP inflation is forecast to reach 18.9% in 2022 before falling substantially in the coming years. In 2022, a relatively high general government revenue is lowering the deficit. However, the projected increase in general government expenditure due to measures to mitigate the economic and social impact of high energy prices and to help people fleeing Ukraine is set to result in a significantly higher deficit in 2023, before it moderates again in 2024.

Economic activity is dampened by geopolitical tensions

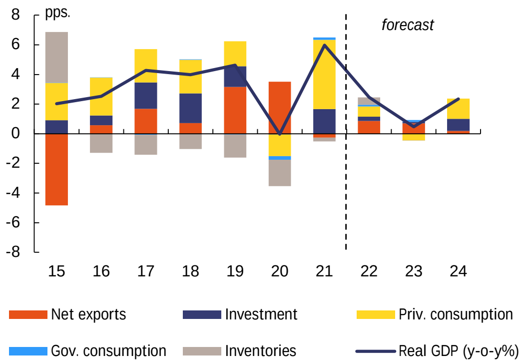
Russia's invasion of Ukraine has led to a drop in confidence, large intermediate input supply disruptions and a considerable loss of exports to Russia, Belarus and Ukraine. At the same time, the strong growth in consumer prices, exceeding the growth of household disposable income, has had a negative impact on private consumption. The surge in energy and other input costs has led to competitiveness losses in some economic sectors and has put a drag on investment. As a result, growth of real GDP is losing pace, and the economy is expected to start contracting in the end of 2022. Nevertheless, real GDP is still forecast to increase by 2.5% in 2022 owing to good economic performance in the beginning of the year.

Growth of real GDP is projected to slow down in 2023 to 0.5%. Considerably higher commodity and consumer prices, heightened interest rates and lasting uncertainty are expected to dampen economic growth in Lithuania's major trading partners, exerting an unfavourable influence on Lithuanian exporters. Higher prices are also forecast to put a drag on domestic demand. In the medium term, as raw material and consumer prices are expected to grow at a slower pace and foreign demand is projected to strengthen, economic activity in Lithuania is forecast to start gathering strength, with the growth rate of real GDP reaching 2.4% in 2024.

Labour market remains tight

In contrast to external factors, the tight labour market is set to continue supporting economic activity. Despite higher uncertainty about the economic outlook, the number of employed keeps rising and the unemployment rate continues falling. A significant number of people fleeing from Ukraine and actively searching for work opportunities has joined the ranks of the employed, thereby helping to address the lack of employees. The vacancy rate, however, remains high, and there is still a large number of firms for which the shortage of workers is limiting growth. This is forecast to drive growth in wages despite weaker developments in labour productivity.

Graph II.12.1: **Lithuania - Real GDP growth and contributions**



Weaker growth is accompanied by elevated inflation

HICP inflation in Lithuania is expected to surge to 18.9% in 2022, but to moderate to 9.1% in 2023 and 2.1% in 2024. Signs of stabilising growth of prices are becoming evident in some groups of goods, while growth of energy prices has been restricted thanks to government measures and lower growth of global oil prices. In the coming months, inflation is projected to stay elevated, but it is anticipated to decrease over the forecast horizon. Inflation is set to be dampened by the expected decline in global energy and other commodity prices, gradual ease of price pressures in the major trading partners, considerably slower growth of wages and a drop, albeit temporary, in purchasing power of households.

General government deficit set to increase in 2023

After a significant decline in 2021, the general government deficit is projected to increase slightly to 1.9% of GDP in 2022, before rising significantly to 4.4% of GDP in 2023.

In 2022, high inflation and wage growth have been driving up the tax revenue (mainly through the relatively high revenue from taxes on production as well as on personal income and wealth). Thus, despite the significant increase in subsidies on energy products, the general government deficit increased only slightly in comparison to 2021.

In 2023, the deficit is projected to be mainly impacted by changes on the expenditure side. Planned government measures to mitigate the economic and social impact of high energy prices are expected to increase the deficit by around 1.5 pps. in 2023. Spending on social benefits, health care, education and other related needs of people fleeing from Ukraine as well as indexation of pensions are expected to further increase general government expenditure while the tax revenue is forecast to remain relatively stable.

The deficit is projected to decline to 1.8% of GDP in 2024 as measures to mitigate the impact of high energy prices are withdrawn. The measures to increase household disposable income are expected to continue to weigh on the public sector balance, but also to be partly offset by higher tax revenue due to the pick up in economic activity and expected tax reforms.

In 2022, public debt is set to stand at 38.0% of GDP. The debt-to-GDP ratio is projected to increase to 41.0% in 2023, mainly due to the high general government deficit, before it slightly decreases to 39.9% in 2024 as the denominator, nominal GDP, continues to grow.

Table II.12.1:

Main features of country forecast - LITHUANIA

		2021		Annual percentage change						
		bn EUR Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		56.2	100.0	3.7	4.6	0.0	6.0	**2.5**	**0.5**	**2.4**
Private Consumption		32.7	58.3	4.1	2.7	-2.4	8.0	**1.2**	**-0.8**	**2.4**
Public Consumption		9.8	17.5	0.8	-0.3	-1.4	0.9	**0.7**	**0.8**	**-0.1**
Gross fixed capital formation		12.0	21.4	5.2	6.6	-0.2	7.8	**1.3**	**0.5**	**4.0**
Exports (goods and services)		45.2	80.5	7.5	10.1	0.4	17.0	**7.3**	**0.9**	**5.6**
Imports (goods and services)		42.7	76.0	7.2	6.0	-4.5	19.9	**6.6**	**0.0**	**5.4**
GNI (GDP deflator)		54.0	96.1	3.6	4.2	0.6	4.9	**2.6**	**0.5**	**2.4**
Contribution to GDP growth:	Domestic demand			4.1	3.0	-1.8	6.5	**1.1**	**-0.2**	**2.2**
	Inventories			-0.1	-1.6	-1.8	-0.3	**0.5**	**0.0**	**0.0**
	Net exports			-0.1	3.2	3.5	-0.3	**0.9**	**0.7**	**0.2**
Employment				-0.1	0.6	-1.6	1.2	**3.8**	**-2.2**	**-0.4**
Unemployment rate (a)				10.1	6.3	8.5	7.1	**6.0**	**7.1**	**7.0**
Compensation of employees / head				7.5	10.6	6.6	11.9	**11.0**	**6.3**	**6.7**
Unit labour costs whole economy				3.6	6.3	4.9	6.8	**12.4**	**3.4**	**3.9**
Saving rate of households (b)				2.6	3.8	12.4	5.8	**4.2**	**3.6**	**4.6**
GDP deflator				3.2	2.7	1.8	6.5	**16.5**	**8.9**	**2.3**
Harmonised index of consumer prices				2.7	2.2	1.1	4.6	**18.9**	**9.1**	**2.1**
Terms of trade goods				0.6	1.3	1.5	-6.4	**-6.9**	**0.6**	**0.0**
Trade balance (goods) (c)				-7.6	-4.8	-0.8	-5.2	**-8.1**	**-7.1**	**-7.2**
Current-account balance (c)				-3.9	3.5	7.3	1.1	**-3.9**	**-2.8**	**-2.6**
General government balance (c)				-2.4	0.5	-7.0	-1.0	**-1.9**	**-4.4**	**-1.8**
Structural budget balance (d)				-0.7	-1.1	-6.9	-1.4	**-1.8**	**-3.5**	**-0.9**
General government gross debt (c)				30.0	35.8	46.3	43.7	**38.0**	**41.0**	**39.9**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

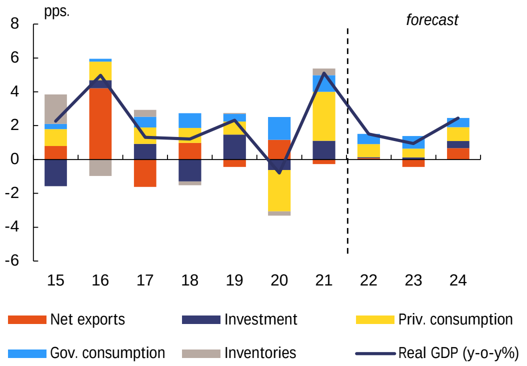
13. LUXEMBOURG

Real GDP growth is projected to slow down to growth rates of 1.5% in 2022, 1% in 2023 and 2.4% in 2024, affected by weaker domestic and external demand, and high uncertainty surrounding consumers and investors' behaviour. Headline inflation is forecast to increase to 8.4% this year, before decelerating to 3.8% in 2023 and further to 3.1% in 2024. The new measures to mitigate the impact of high energy prices and the economic slowdown will weigh on the general government balance, especially in 2023. Resulting deficits are projected to increase the general government debt-to-GDP ratio, although still at a low level.

Growth set to slow down in 2022 and 2023

Real GDP increased by 2.2% in the first half of the year, compared to the same time period in 2021. Nevertheless, growth slowed sharply from 0.7% q-o-q in 2022-Q1 to -0.5% in 2022-Q2, driven by a decline in investment, in particular in construction, and a decrease in private consumption. In 2022 as a whole, GDP is expected to grow at 1.5% y-o-y.

Graph II.13.1: **Luxembourg - Real GDP growth and contributions**



Slowing demand in Luxembourg's main trading partners and weakening financial outlook are forecast to weigh on the GDP growth in 2023, estimated to slow down to 1%. This is also reflected in the lower consumer and business confidence. In particular, the construction sector is set to slow down. Nevertheless, investment and private consumption are forecast to grow at a moderate level, despite rising interest rates expected to weigh on borrowing capacity and demand for mortgages in the country. Private consumption is projected to remain resilient, supported by additional measures introduced by the government in order to tackle high inflation and to maintain households' purchasing power ('Solidaritéitspak 2.0'). These measures include the stabilisation of electricity prices, limitation of the increase in gas prices to 15%, a reduction of heating oil prices and a 1%-VAT cut until the end of 2023.

Positive prospects for 2024

Albeit subject to high uncertainty, better prospects are seen for 2024, with an estimated GDP growth rate of 2.4%. The economy is expected to return to its pre-pandemic trend, supported by growing investments and domestic and external demand.

Labour market set to remain resilient

The labour market is expected to remain resilient, although it is forecast to weaken slightly because of the economic slowdown. Unemployment is set to reach 4.7% this year, before increasing to 5.1% in 2023. The rise in unemployment is projected to remain subdued due to the high job vacancy rate and positive employment prospects in some sectors such as construction. With growth picking up, the unemployment rate is expected to decrease to 4.9% in 2024.

Fiscal support to lower inflation, however core inflation to edge up

Headline inflation is forecast to increase to 8.4% in 2022, mainly driven by energy prices. Nevertheless, energy price inflation is expected to moderate from 2022-Q4 until end 2023, easing inflationary pressures, due to the introduction of the 'Solidaritéitspak 2.0'. Overall, HICP is set to reach 3.8% in 2023, before decreasing to 3.1% in 2024. In turn, core inflation is forecast to rise from 4.7% in 2022 to 5% in 2023, reflecting higher wages and non-industrial goods' prices. Wage increases are driven by two wage indexations expected to take place in 2023, including the one postponed from July 2022.

Support measures drive the decline in the general government balance

In 2022, the general government balance is expected to record a small deficit of 0.1% following the surplus of 0.8% of GDP in 2021. The government balance is projected to decrease as a result of lower GDP growth and the three government packages to support households and corporates facing higher energy prices. Revenue growth is expected to slow down from the high rate in 2021 but continues to benefit from the strong performance of taxes on products and imports, personal income tax and social contributions. The compensation of employees, social transfers, and subsidies are pushing up expenditure growth in 2022. A main driver of this are the measures to mitigate the economic and social impact of high energy prices amounting to 1.2% of GDP. The high inflation impacts expenditure and revenue mainly via the wage indexation that pushes up social contributions, income tax, compensation of employees and social benefits. In addition, VAT revenues benefit from the increase in prices.

In 2023, the deficit is set to increase strongly to 1.7% of GDP. This is mainly caused by the additional government support measures of the 'Solidaritéitspak 2.0' mitigating the impact of high energy prices for households and corporates, but also due to the slowdown in economic activity and the uncertain prospects for financial markets. Revenue is expected to grow at a more moderate pace, because of the 1%-VAT reduction, which is part of the household income support measures, and because corporate income tax is projected to be impacted by the economic and financial environment. Expenditure is expected to increase mainly driven by the energy measures (with an estimated budgetary impact of 1.0% of GDP[68]), and the compensation of public employees due to the two wage indexations expected for 2023. In addition, public investment is planned to remain above 4% of GDP over the forecast horizon, supporting the green and digital transition, public infrastructure, and housing.

The general government deficits are forecast to result in an upward trend of the debt-to-GDP ratio. The positive nominal GDP growth is expected to be offset by new debt issued to finance the deficit of the central government, as the surplus of the social security sector cannot be used for this purpose. Therefore, the debt-to-GDP ratio is projected to increase from 24.5% in 2021 to 26.3% in 2024.

(68) The 1%-VAT reduction is not classified as an energy measure by the COM, which explains the difference with the DBP data.

Table II.13.1:

Main features of country forecast - LUXEMBOURG

		2021		Annual percentage change						
		mio EUR Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		72295.0	100.0	2.6	2.3	-0.8	5.1	**1.5**	**1.0**	**2.4**
Private Consumption		21864.6	30.2	2.3	2.3	-7.3	9.5	**2.6**	**1.7**	**2.7**
Public Consumption		12619.5	17.5	2.8	2.6	7.8	5.4	**3.4**	**4.2**	**3.0**
Gross fixed capital formation		11963.8	16.5	2.1	9.1	-3.6	6.7	**0.4**	**0.8**	**2.5**
Exports (goods and services)		152855.9	211.4	4.4	4.5	0.2	9.7	**2.7**	**1.3**	**3.7**
Imports (goods and services)		127735.9	176.7	4.7	5.7	-0.4	11.8	**3.1**	**1.8**	**4.0**
GNI (GDP deflator)		50469.8	69.8	1.5	-3.6	1.8	6.2	**1.1**	**1.0**	**3.1**
Contribution to GDP growth:	Domestic demand			1.7	2.7	-1.7	5.0	**1.4**	**1.4**	**1.8**
	Inventories			0.1	0.1	-0.3	0.4	**0.0**	**0.0**	**0.0**
	Net exports			0.8	-0.4	1.2	-0.3	**0.1**	**-0.4**	**0.7**
Employment				2.8	3.5	1.7	3.0	**3.1**	**2.1**	**2.8**
Unemployment rate (a)				5.2	5.6	6.8	5.3	**4.7**	**5.1**	**4.9**
Compensation of employees / head				2.6	1.9	1.2	6.0	**5.1**	**4.7**	**3.0**
Unit labour costs whole economy				2.9	3.1	3.8	3.9	**6.7**	**5.9**	**3.3**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				3.0	1.4	4.7	6.2	**5.7**	**4.2**	**2.9**
Harmonised index of consumer prices				2.2	1.6	0.0	3.5	**8.4**	**3.8**	**3.1**
Terms of trade goods				0.7	0.4	1.8	0.1	**-4.2**	**-0.2**	**0.2**
Trade balance (goods) (c)				-0.4	3.3	3.0	2.3	**1.0**	**0.8**	**0.9**
Current-account balance (c)				4.5	-1.4	3.1	5.3	**3.5**	**3.0**	**3.9**
General government balance (c)				1.2	2.2	-3.4	0.8	**-0.1**	**-1.7**	**-0.5**
Structural budget balance (d)				2.0	2.4	-2.1	0.8	**0.2**	**-0.8**	**0.3**
General government gross debt (c)				16.0	22.4	24.5	24.5	**24.3**	**26.0**	**26.3**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

14. MALTA

The Maltese economy is expected to grow strongly by 5.7% in 2022, driven by domestic demand and export of services, including tourism. Growth is forecast to moderate to 2.8% in 2023, as the supporting growth momentum of services exports fades and the impact of higher prices reduces household purchasing power, and reach 3.7% in 2024. Malta has kept energy prices unchanged due to the implementation of sizeable government measures. The government remains committed to keeping energy prices stable also for 2023 and 2024. As a result, the general government deficit is projected to be at 6% in 2022, among the highest in the EU, only gradually decreasing in 2023 and 2024. Public debt remains close to 60% of GDP.

Malta maintains its growth trajectory in an uncertain environment

So far, economic growth in Malta has only been affected by Russia's invasion of Ukraine to a limited extent, given its low direct exposure to trade with these two countries. On the back of a strong economic performance in the first half of 2022, real GDP growth this year is expected to reach 5.7%, driven by robust domestic demand and a strong positive contribution from net exports.

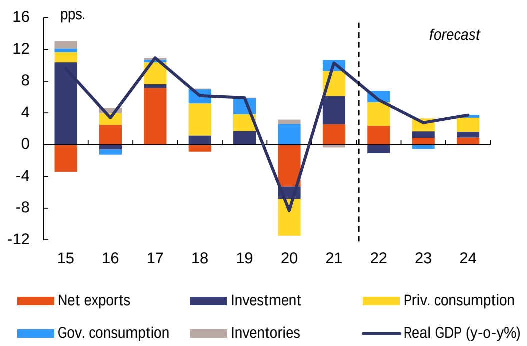
The tourism sector in Malta is expected to show robust growth this year, as the number and expenditure of tourists by August reached around 80% of the 2019 level. In the current volatile environment, real GDP growth is forecast to moderate markedly to 2.8% in 2023 as the positive contribution of net exports diminishes and domestic demand growth slows down, due to weakening private consumption and negative growth in government consumption. In 2024, GDP growth is expected to reach 3.7%, supported by net exports and growth in public consumption.

Overall, exports growth in 2023 is expected to weaken, as the general slowdown in economic performance among Malta's trading partners starts to have a greater negative impact on the Maltese economy.

Labour shortages remain a bottleneck

In the past two years, Malta managed to maintain strong employment growth by limiting the impact of the pandemic through fiscal support. Employment grew by 2.9% in 2021, with the wage support measures remaining largely in place. Employment is set to continue growing at a similar pace in 2022 and over the forecast horizon. Labour shortages are expected to persist. Demand for labour remains strong in tourism and administrative services sectors, while Malta continues to attract foreign workers, adding to its labour force. Malta's unemployment rate is forecast to decline to 3.2% in 2022, and to further decrease to all-time lows in 2023 and 2024.

Graph II.14.1: **Malta - Real GDP growth and contributions**



Inflation increased substantially

Malta's government intervened to keep energy prices unchanged in 2022, with an expressed government's commitment to pursue this line of action over the forecast horizon. Despite this effort, inflation in 2022 is expected to rise to 6.1%. Inflation is particularly high in imported goods, particularly food, transport, hospitality and housing services. These factors will continue to drive price increases in 2023, with inflation expected at 4.0%. At the same time, wage growth is expected to remain moderate.

The government deficit is set to decrease but remain among the highest in the EU

The government deficit is expected to decrease from 7.8% of GDP in 2021 to 6.0% in 2022. The increase in public expenditure related to measures to mitigate the impact of high energy prices is the main factor explaining this still high deficit level despite strong nominal GDP growth and the phasing out of pandemic-related support measures. These energy-related measures are estimated to account for 2.9% of GDP in 2022 and are expected to further rise to 3.5% of GDP in 2023, before declining to 2.7% of GDP in 2024. As a result, the general government deficit is set to decrease only marginally to 5.7% of GDP in 2023 and more markedly to 4.4% in 2024.

Tax revenue is expected to increase over the forecast horizon, in line with nominal GDP. Following further growth in employment, the revenue from social contributions is also projected to continue increasing.

The government debt-to-GDP ratio is set to increase to 57.4% in 2022 and gradually reach 60.6% in 2024 as the primary balance remains negative and nominal GDP growth becomes less dynamic.

Table II.14.1:

Main features of country forecast - MALTA

		2021			Annual percentage change						
	bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		14.7	100.0	4.4	5.9	-8.3	10.3	**5.7**	**2.8**	**3.7**
Private Consumption		6.3	42.6	3.1	4.6	-10.2	7.1	**7.0**	**3.7**	**4.0**
Public Consumption		3.0	20.5	2.7	13.1	15.7	6.7	**6.8**	**-2.6**	**1.8**
Gross fixed capital formation		3.2	22.1	6.9	8.4	-7.7	17.3	**-5.0**	**4.0**	**3.5**
Exports (goods and services)		22.1	150.7	6.3	7.0	-3.8	9.0	**7.2**	**3.1**	**3.8**
Imports (goods and services)		20.1	136.9	5.9	7.9	-0.2	8.0	**6.2**	**2.8**	**3.6**
GNI (GDP deflator)		13.5	92.1	3.8	5.8	-9.8	11.5	**4.9**	**2.8**	**3.7**
Contribution to GDP growth:	Domestic demand			3.6	5.9	-3.6	8.1	**3.3**	**1.9**	**2.8**
	Inventories			0.0	0.1	0.6	-0.4	**0.0**	**0.0**	**0.0**
	Net exports			0.8	0.0	-5.3	2.6	**2.4**	**0.9**	**0.9**
Employment				3.0	5.7	2.8	2.9	**2.9**	**2.5**	**2.5**
Unemployment rate (a)				6.1	3.6	4.4	3.4	**3.2**	**3.1**	**3.0**
Compensation of employees / head				3.5	3.9	-0.7	4.8	**3.4**	**2.4**	**2.0**
Unit labour costs whole economy				2.1	3.6	11.4	-2.2	**0.7**	**2.1**	**0.7**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				2.3	2.4	1.5	1.8	**5.0**	**4.1**	**2.8**
Harmonised index of consumer prices				2.0	1.5	0.8	0.7	**6.1**	**4.0**	**2.4**
Terms of trade goods				0.0	-0.1	-0.3	2.1	**-0.9**	**-0.4**	**0.1**
Trade balance (goods) (c)				-17.5	-11.9	-10.8	-16.7	**-17.7**	**-18.0**	**-17.7**
Current-account balance (c)				-0.8	7.6	1.4	4.9	**5.1**	**5.5**	**6.0**
General government balance (c)				-2.2	0.6	-9.4	-7.8	**-6.0**	**-5.7**	**-4.4**
Structural budget balance (d)				-0.7	-1.5	-5.7	-7.1	**-6.0**	**-5.2**	**-3.8**
General government gross debt (c)				62.3	40.7	53.3	56.3	**57.4**	**59.9**	**60.6**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

15. THE NETHERLANDS

The Dutch economy grew strongly in the first half of 2022 on the back of solid export and investment growth. A decrease in households' real disposable income, tightening financial conditions and the uncertainty caused by Russia's invasion of Ukraine are, however, expected to lead to a modest contraction of economic activity in the second half of the year. Headwinds are expected to persist in both 2023 and 2024 and annual growth is forecast to slow down to 0.6% and 1.3% respectively. For 2023, the authorities have announced a package of measures to mitigate the impact of high energy prices, which is expected to support domestic demand and prevent a more substantial slowdown in GDP growth. The measures taken by the government are forecast to increase the budget deficit to 4.0% of GDP in 2023. With the expiry of the support measures at end of 2023, the deficit is set to decrease to 3.1% of GDP in 2024.

A strong economy at a turning point

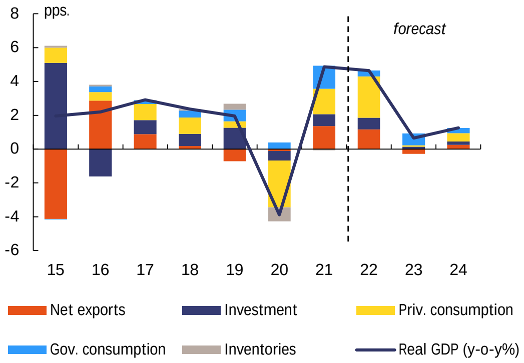
Following strong annual GDP growth in 2021, the Dutch economy continued to grow rapidly in the first half of the year, driven by substantial investment growth and a large contribution from net trade. However, the surging inflation, in part caused by Russia's war of aggression against Ukraine, is starting to weigh on the Dutch economy. With price increases far exceeding wage growth, households are seeing their real disposable income decrease, which is forecast to lead to a small contraction in consumer spending in the second half of 2022. At the same time, tightening financial conditions, labour shortages and the increased uncertainty about the economic outlook are expected to lead to a decline in investment activity.

The Dutch economy is forecast to stagnate in the third quarter and to contract modestly in the fourth quarter. Overall, annual GDP growth in 2022 is forecast at 4.6%.

Economic conditions in 2023 remain challenging, with an expected weak external environment, further tightening of financial conditions and high international energy prices. As a result, both export and business investment growth are set to be subdued throughout 2023. To alleviate the impact of high inflation on households' budgets, the authorities have announced a set of support measures, which are expected to prevent a further slowdown in private consumption growth. Government consumption and investment are projected to grow robustly and contribute substantially to the forecast annual GDP growth of 0.6%.

Real disposable income growth is expected to remain limited in 2024 as the support measures put in place by the authorities are set to expire by end-2023. Investment growth is forecast to pick up slightly and net trade to contribute positively to growth. Uncertainty is, however, expected to remain high and GDP is forecast to grow moderately in 2024 at 1.3%.

Graph II.15.1: **The Netherlands - Real GDP growth and contributions**



A tight labour market

The Dutch labour market remains tight, though unemployment has been gradually picking up in recent months. With global demand weakening, the unemployment rate is forecast to pick up further, from 3.7% in 2022 to 4.3% in 2023 and 4.3% in 2024. Overall, the forecast unemployment rates in 2023 and 2024 remain low in historical perspective. Nominal wage growth is on a clear upward trend, reflecting both the tight labour market and the high inflation, and is expected to increase to 4.5% in 2023.

Surging inflation

The increased uncertainty regarding the supply of gas has led to surging energy prices in recent months. In addition, price pressures have broadened, with core inflation continuing to pick up. As result of this, HICP inflation reached 17.1% in September and 16.8% in October, among the highest in the euro area. Energy prices are expected to remain elevated in the remainder of 2022 and 2023 before declining in 2024. However, the Dutch authorities have announced a price cap on electricity and gas prices, which will apply until end-2023. The price cap is forecast to substantially lower annual inflation in 2023 to 4.2%, down from 11.6% in 2022. Core inflation is set to peak in the beginning of 2023 and gradually decline thereafter. Headline annual inflation is projected to decrease to 3.9% in 2024, with the planned expiry of the price cap on energy preventing a sharper decline in headline inflation.

Support measures drive up deficit in 2023

In 2022, the deficit is forecast to decrease to 1.1% of GDP, driven by higher revenues from income taxes and Dutch gas fields, while spending on COVID-19 related measures is projected to decrease.

For 2023, the government announced a package of both temporary and structural support measures to mitigate the impact of high energy prices on both households and companies. This package includes a price cap on electricity and gas, the extension of a reduction in the excise duty on fuel and the increase of an energy compensation benefit scheme for lower-income households until end 2023. Besides these temporary interventions, different structural measures, such as the rise of the minimum wage by 10% and a decrease in taxes on labour income are planned to enter into effect in 2023. Based on the government's estimates, the fiscal cost of the package is expected to be between EUR 20 billion and EUR 30 billion (some 2 - 3% of GDP), with the cost of the price cap depending on how energy prices develop.

Partly as a result of this large expansionary package, the government deficit is forecast to increase to 4.0% in 2023. As the temporary measures expire at the end of 2023, the deficit is projected to drop slightly to 3.1% in 2024.

Government debt is projected to increase from 50.3% of GDP in 2022 to 52.4% in 2023 and 53.2% in 2024.

Table II.15.1:

Main features of country forecast - NETHERLANDS

		2021			Annual percentage change						
		bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP			856.4	100.0	1.4	2.0	-3.9	4.9	**4.6**	**0.6**	**1.3**
Private Consumption			359.6	42.0	0.5	0.9	-6.4	3.6	**5.8**	**0.2**	**1.1**
Public Consumption			225.2	26.3	1.6	2.8	1.6	5.2	**1.3**	**2.7**	**1.2**
Gross fixed capital formation			184.6	21.6	1.4	6.2	-2.6	3.2	**3.2**	**0.6**	**0.9**
Exports (goods and services)			710.6	83.0	4.1	2.0	-4.3	5.2	**4.6**	**1.4**	**1.7**
Imports (goods and services)			622.7	72.7	3.9	3.2	-4.8	4.0	**3.7**	**1.9**	**1.6**
GNI (GDP deflator)			837.2	97.8	1.5	0.3	-5.1	6.0	**4.8**	**0.8**	**1.6**
Contribution to GDP growth:	Domestic demand				0.9	2.3	-2.9	3.6	**3.5**	**0.9**	**1.0**
	Inventories				0.1	0.3	-0.8	-0.1	**0.0**	**0.0**	**0.0**
	Net exports				0.4	-0.7	-0.1	1.4	**1.2**	**-0.3**	**0.2**
Employment					0.7	2.2	0.6	2.0	**2.9**	**0.5**	**0.5**
Unemployment rate (a)					6.2	4.4	4.9	4.2	**3.7**	**4.3**	**4.3**
Compensation of employees / head					2.0	2.8	3.5	2.2	**3.4**	**4.5**	**4.3**
Unit labour costs whole economy					1.3	3.0	8.4	-0.6	**1.6**	**4.3**	**3.5**
Saving rate of households (b)					13.8	18.3	24.9	23.9	**16.4**	**16.4**	**16.2**
GDP deflator					1.3	3.0	1.9	2.5	**3.4**	**5.0**	**4.4**
Harmonised index of consumer prices					1.5	2.7	1.1	2.8	**11.6**	**4.2**	**3.9**
Terms of trade goods					0.0	0.9	1.0	-2.2	**-5.5**	**-0.2**	**2.0**
Trade balance (goods) (c)					8.7	7.4	7.7	7.3	**5.1**	**4.7**	**6.1**
Current-account balance (c)					6.0	6.9	5.1	7.2	**5.7**	**5.3**	**6.9**
General government balance (c)					-1.8	1.8	-3.7	-2.6	**-1.1**	**-4.0**	**-3.1**
Structural budget balance (d)					0.0	0.8	-1.3	-1.9	**-2.1**	**-4.3**	**-3.1**
General government gross debt (c)					56.8	48.5	54.7	52.4	**50.3**	**52.4**	**53.2**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

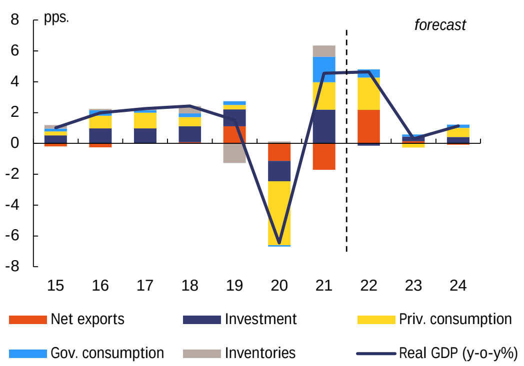
16. AUSTRIA

After a strong first half of 2022, the economy is expected to slow down strongly on the back of high energy prices and a drop in business and consumer sentiment. HICP inflation is forecast to rise substantially in 2022 and to stay high in 2023. The headline deficit as well as the public debt ratio are projected to decrease throughout the forecast horizon, supported by strong nominal growth and dynamic tax revenues.

A strong rebound in 2022

In the first half of the year, Austria's economy experienced a strong expansion. Following a 1.3% q-o-q increase in the first quarter of this year, GDP increased by 1.9% in the second quarter, driven by strong private consumption. However, the energy price shock is set to negatively affect growth dynamics. As a result, real GDP in the second half of 2022 is expected to decrease, by 0.1% in the third quarter and by 0.4% in the fourth quarter. Still, given the strong economic development in the first half of 2022, overall growth is projected to reach 4.6% in 2022.

Graph II.16.1: **Austria - Real GDP growth and contributions**



Subdued growth in 2023 and 2024

The headwinds are expected to only gradually fade over the forecast horizon and economic activity is set to slow down substantially in 2023. The growth rate for 2023 is forecast to stand at 0.3%. With gas and electricity prices assumed to stay high over the first half of 2023, business investment growth is projected to be low in 2023, while consumption is expected to decrease slightly, due to lower real wages and high uncertainty. Several government measures to mitigate the impact of high energy prices are set to almost stabilise household income, avoiding a further substantial decrease. In 2024, wages are expected to slightly overcompensate the HICP in the light of a tight labour market, supporting private consumption in 2024. Overall, real GDP is expected to grow by 1.1% in 2024.

Energy prices drive inflation

In 2022, rising energy prices, especially the increase in electricity and gas prices, drive the noticeable increase of the HICP over the course of the year. Energy prices are expected to remain high over the coming quarters, but to slowly decline as from the end of 2023. As energy prices are typically only gradually passed on to consumers, inflation is forecast to peak in the fourth quarter of 2022, leading to a yearly HICP inflation rate of 8.7% in 2022, before gradually decreasing to 6.7% in 2023 and 3.3% in 2024. Core inflation is projected to reach 5.4% in 2022, staying on a similar level in 2023 before decreasing to 4.1% in 2024.

The labour market weathers the crisis well

The Austrian labour market has performed well in the first half of 2022, with employment climbing up by 2.5% and the unemployment rate declining by 1.2 pps. to 4.8% despite the expected downturn in the second half of the year. The labour market is expected to stay strong also during 2023 and 2024. Employment is set to slightly increase further over the forecast horizon mainly because of increased participation of women and older workers in the labour market. The increase in labour supply is projected to outpace employment growth, causing unemployment to increase slightly. The unemployment rate is forecast to increase from 4.8% to 5.0% in 2023 and to 5.1% in 2024.

Nominal wages are expected to increase by 4.3% in 2022, followed by an increase of 6.6% in 2023 and 4.9% in 2024. Thus, there will be real wage growth only in 2024. Measures reducing the tax burden of households (the eco-social tax reform of 2021, as well as the abolition of the tax bracket creep) in combination with specific measures to mitigate the economic and social impact of high energy prices are expected to help avoid a severe drop of disposable income, especially in 2023 and 2024.

Deficit and debt on a downward path

Austria's public finances are projected to improve over the forecast horizon, despite sluggish growth in 2023 and 2024. The government headline deficit is expected to decrease to 3.4% of GDP in 2022. On the expenditure side, this largely reflects the phasing out of support measures in the context of the COVID-19 crisis (e.g., short-time work, fixed cost subsidies, as well as other transfers), which outweigh the budgetary impact of new measures to mitigate the economic and social impact of high energy prices, which are projected to account for 1.6% of GDP in 2022 and 1.1% in 2023.

These measures include lump-sum payments to all households (0.8% of GDP), support for energy-intensive companies (0.3% of GDP), and some targeted lump-sum payments for specific household groups. Additionally, the purchase of a strategic gas reserve (0.8% of GDP) significantly contributes to the headline deficit in 2022.

On balance, the headline deficit is forecast to fall to 2.8% of GDP in 2023 and to 1.9% in 2024. These improvements are based on strong tax revenue due to stable consumption growth and inflation developments, which increase the tax base, as well as on the continued phasing out of COVID-19 and energy-related measures. However, policy measures taking effect in 2023, such as some energy-related measures, the abolition of the tax bracket creep and the indexation of some social benefits will weigh on budget developments also beyond the forecast horizon.

Public debt is expected to decrease to 78.5% of GDP in 2022 on the back of strong nominal GDP growth. It is set to continue to decrease over the forecast horizon, even though at a slower pace due to less dynamic growth. The public debt to GDP ratio is projected to decline to 76.6% in 2023 and to 74.9% in 2024.

Table II.16.1:

Main features of country forecast - AUSTRIA

	2021				Annual percentage change						
	bn EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		406.1	100.0	1.5	1.5	-6.5	4.6	**4.6**	**0.3**	**1.1**
Private Consumption		202.5	49.9	1.2	0.5	-8.0	3.6	**4.2**	**-0.5**	**1.2**
Public Consumption		88.1	21.7	1.4	1.3	-0.5	7.8	**2.4**	**0.6**	**1.0**
Gross fixed capital formation		107.5	26.5	1.6	4.5	-5.3	8.7	**-0.6**	**1.2**	**1.6**
Exports (goods and services)		227.0	55.9	3.5	4.0	-10.7	9.6	**10.5**	**1.4**	**1.0**
Imports (goods and services)		224.7	55.3	3.5	2.1	-9.2	13.7	**6.7**	**1.2**	**1.1**
GNI (GDP deflator)		408.0	100.4	1.5	2.2	-5.4	4.1	**3.5**	**0.2**	**0.9**
Contribution to GDP growth:	Domestic demand			1.3	1.6	-5.6	5.6	**2.5**	**0.2**	**1.2**
	Inventories			0.1	-1.3	0.1	0.7	**0.0**	**0.0**	**0.0**
	Net exports			0.1	1.1	-1.1	-1.7	**2.2**	**0.1**	**-0.1**
Employment				1.1	1.1	-1.6	2.0	**2.5**	**0.6**	**0.7**
Unemployment rate (a)				5.5	4.8	6.0	6.2	**5.0**	**5.2**	**5.3**
Compensation of employees / head				2.2	2.8	1.8	2.8	**4.3**	**6.6**	**4.9**
Unit labour costs whole economy				1.8	2.3	7.1	0.3	**2.1**	**6.9**	**4.4**
Saving rate of households (b)				14.5	14.0	18.7	17.6	**12.2**	**12.8**	**14.0**
GDP deflator				1.8	1.5	2.6	1.9	**6.1**	**5.8**	**3.7**
Harmonised index of consumer prices				1.9	1.5	1.4	2.8	**8.7**	**6.7**	**3.3**
Terms of trade goods				-0.2	-1.0	0.8	-1.5	**-2.2**	**-0.6**	**0.2**
Trade balance (goods) (c)				0.1	1.1	0.9	-0.1	**0.1**	**-0.1**	**-0.2**
Current-account balance (c)				2.3	2.5	3.0	0.4	**0.2**	**0.0**	**-0.1**
General government balance (c)				-2.3	0.6	-8.0	-5.9	**-3.4**	**-2.8**	**-1.9**
Structural budget balance (d)				-0.7	-0.6	-5.0	-4.6	**-4.1**	**-2.9**	**-1.8**
General government gross debt (c)				75.8	70.6	82.9	82.3	**78.5**	**76.6**	**74.9**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.
Note : Contributions to GDP growth may not add up due to statistical discrepancies.

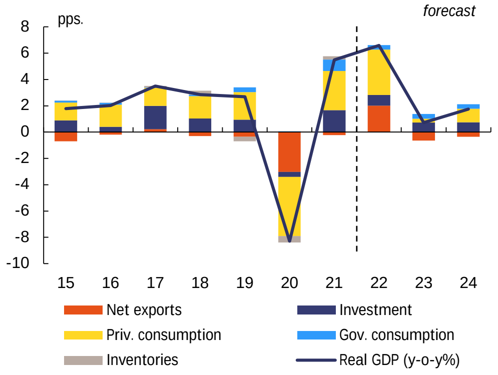
17. PORTUGAL

After a strong recovery, Portugal's economy is projected to slow down substantially in the near term, constrained by weak external demand and high energy prices. Growth is expected to pick up again as of next summer but risks remain on the downside. Public finances are set to gradually improve over the forecast horizon, with the general government deficit narrowing to 1.9% of GDP in 2022, 1.1% in 2023 and 0.8% in 2024.

Strong rebound in tourism supports growth

Portugal's economic growth picked up substantially in annualised terms in the first half of 2022, helped by a strong rebound in foreign tourism. Consequently, exports of services moved above pre-pandemic levels and with an annualised rise of around 70% turned into a major growth contributor. However, in quarter-on-quarter terms, GDP growth slowed abruptly from 2.4% in 2022-Q1 to 0.1% in 2022-Q2 reflecting a substantial disruption in global supply chains, particularly in energy and food markets. Nevertheless, exports of both goods and services performed well in 2022-Q2 and private consumption continued to grow albeit at a slower pace. Investment, however, contracted significantly (3.7% q-o-q) reflecting the plunge in business sentiments, a steep rise in commodity prices, particularly energy, as well higher interest rates.

Graph II.17.1: **Portugal - Real GDP growth and contributions**



The latest short-term indicators suggest a weak growth outlook for the second half of 2022 and the first quarter of 2023, as investment sentiment continues to suffer from global uncertainty and private demand is constrained by elevated energy bills. Overall, taking into account the strong carryover, full-year growth is forecast at 6.6% in 2022, followed by a substantial slowdown to 0.7% in 2023. Along with the projected trajectory in main trading partners, Portugal's growth is set to pick up to 1.7% in 2024. In the external sector, the current-account balance is expected to worsen further in 2022 as the negative impact of energy prices outweighs the strong rebound in foreign tourism. However, the balance is set to improve in 2023 and 2024 amid the projected reversal in terms of trade and further growth in tourism.

Risks to the growth outlook remain significantly on the downside in light of the uncertain global environment and country-specific risks related to the severe drought on the Iberian Peninsula that may have prolonged repercussions on domestic food supplies.

Inflation set to moderate from high level

Inflation increased to 9.5% (y-o-y) in 2022-Q3 reflecting high energy prices, which triggered pass-through effects to other goods and services. Country-specific factors related to the extreme drought also pushed up inflation in Portugal, as unprocessed food prices increased by 18.1% in September (y-o-y) as compared to 12.7% in the euro area. Inflation is forecast to average 8.0% in 2022 and to gradually moderate to 5.8% in 2023 and 2.3% in 2024 amid the assumed decrease in prices of energy and food commodities while service prices are expected to remain high, paced by wage adjustments.

Employment sentiment remains favourable

The monthly unemployment rate stabilised at 6.0% from May until August, marginally above the rates reported earlier in the year but still below pre-pandemic levels. Employment growth meanwhile slowed from 5% (y-o-y) in January to 1% (y-o-y) in August. The job vacancy rate monitored on a quarterly basis reached a historic high of 1.4% in 2022-Q2 and employment expectations remained rather favourable despite the weakening overall economic sentiment. In year-average terms, unemployment is expected to remain stable at 5.9% in 2022 and 2023 and to improve marginally in 2024.

Public finances are set to gradually recover

The general government deficit is expected to decrease to 1.9% of GDP in 2022, from 2.9% of GDP in 2021. Government revenue benefits from the projected strong economic growth and high prices in 2022, reflected in both higher tax revenue and social contributions. The wind-down of COVID-19-related fiscal policy measures is set to curb expenditure. Pre-pandemic upward pressures on current spending, notably on social benefits and the public wage bill, are expected to persist in 2022. The rebound in public investment is also set to continue in 2022. Fiscal policy measures to mitigate the impact of high energy prices – notably, in the form of income support and reduced indirect taxes for both households and firms – are projected to have a budgetary cost of 2.1% of GDP in 2022.

The general government deficit is forecast to continue on a declining path in 2023 and 2024, reaching 1.1% and 0.8% of GDP respectively.

The buoyant performance of government revenue is expected to continue alongside a moderate expansion of expenditure, on the back of the phasing-out of temporary pandemic-related emergency measures and the planned wind-down of energy-related fiscal policy measures. The overall budgetary cost for the latter is forecast to be 0.9% of GDP in 2023, and to have no impact in 2024, when all these measures are set to expire. Public investment is set to continue expanding in both 2023 and 2024, propelled by the implementation of the Portuguese RRP. Risks to the fiscal outlook are linked to contingent liabilities related to publicly guaranteed credit lines, the ongoing negotiation process of public-private partnerships' (PPPs) rebalancing requests, and upward pressures on current expenditures, particularly on the public wage bill and those emerging from inflation and demographic ageing.

Driven by a favourable nominal growth-interest rate differential, the public debt-to-GDP ratio is set to continue its downward path in 2022, reaching 115.9%, already falling below its pre-pandemic levels, and to further moderate to 109.1% in 2023 and 105.3% in 2024.

Table II.17.1:

Main features of country forecast - PORTUGAL

	2021		Annual percentage change						
	bn EUR Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP	214.5	100.0	0.5	2.7	-8.3	5.5	**6.6**	**0.7**	**1.7**
Private Consumption	136.2	63.5	0.7	3.3	-7.0	4.7	**5.4**	**0.5**	**1.6**
Public Consumption	40.4	18.8	0.1	2.1	0.3	4.6	**1.8**	**2.1**	**1.9**
Gross fixed capital formation	43.6	20.3	-1.4	5.4	-2.2	8.7	**4.0**	**3.5**	**3.6**
Exports (goods and services)	89.2	41.6	4.3	4.1	-18.6	13.5	**16.6**	**2.3**	**2.4**
Imports (goods and services)	95.6	44.6	2.9	4.9	-11.8	13.3	**10.9**	**3.4**	**3.0**
GNI (GDP deflator)	211.9	98.8	0.5	2.5	-7.3	5.9	**6.3**	**0.7**	**1.8**
Contribution to GDP growth: Domestic demand			0.1	3.4	-4.9	5.5	**4.6**	**1.4**	**2.1**
Inventories			0.0	-0.3	-0.5	0.3	**0.0**	**0.0**	**0.0**
Net exports			0.4	-0.4	-3.0	-0.2	**2.0**	**-0.7**	**-0.4**
Employment			-0.3	0.8	-1.8	1.9	**1.0**	**0.2**	**0.5**
Unemployment rate (a)			11.2	6.7	7.0	6.6	**5.9**	**5.9**	**5.7**
Compensation of employees / head			1.7	4.8	1.5	4.1	**4.6**	**4.3**	**3.0**
Unit labour costs whole economy			0.9	2.8	8.7	0.6	**-0.9**	**3.8**	**1.7**
Saving rate of households (b)			8.7	7.2	11.9	9.8	**6.0**	**6.5**	**6.8**
GDP deflator			1.8	1.7	2.0	1.4	**3.6**	**5.2**	**2.5**
Harmonised index of consumer prices			1.7	0.3	-0.1	0.9	**8.0**	**5.8**	**2.3**
Terms of trade goods			0.2	0.4	1.6	0.4	**-3.6**	**2.1**	**0.8**
Trade balance (goods) (c)			-8.8	-7.8	-6.5	-7.7	**-11.2**	**-10.5**	**-10.4**
Current-account balance (c)			-5.0	0.1	-1.2	-1.2	**-1.5**	**-0.9**	**-0.8**
General government balance (c)			-5.4	0.1	-5.8	-2.9	**-1.9**	**-1.1**	**-0.8**
Structural budget balance (d)			-1.6	-1.0	-1.7	-1.6	**-2.6**	**-1.2**	**-1.0**
General government gross debt (c)			102.0	116.6	134.9	125.5	**115.9**	**109.1**	**105.3**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

18. SLOVENIA

On the back of robust growth in the first half of 2022 and of a strong carry-over from 2021, growth is forecast to reach 6.2% in 2022 despite an assumed contraction at the end of the year. Growth in 2023 is expected to be significantly lower due to a weaker external environment, high uncertainty and still high inflation. The general government deficit is forecast to narrow to 3.6% in 2022, before increasing to 5.2% in 2023 due to planned investment and government support to mitigate the impact of high energy prices.

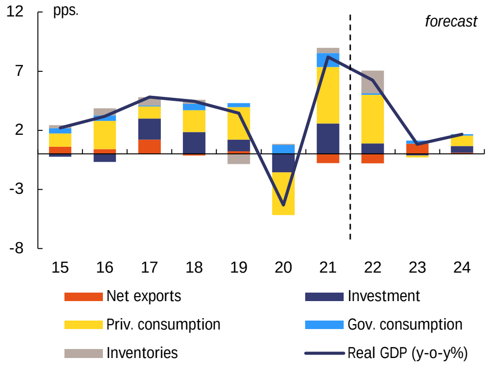
Strong growth in the first half of the year

GDP grew by 8.9% in the first half of 2022, compared to the same period one year earlier. While growth in the first quarter was broad-based, the composition of growth worsened in the second quarter. Consumption and investment contracted compared to the first quarter, while services exports remained strong and business continued to build-up inventories. Imports grew by less than exports, leading to a positive contribution of net exports to growth. Employment continued to expand at a brisk pace in the first half of the year and employment expectations continued to remain strong. On the other hand, confidence indicators have steadily declined since the start of Russia's war of aggression against Ukraine. Industrial production in energy-intensive industries has already weakened pointing to a decline in economic activity in the end of the year. In 2022 as a whole, GDP is expected to grow by 6.2%.

Weaker growth over 2023 and 2024

Following two years of very strong growth, private consumption is projected to contract in 2023 due to the erosion of real incomes by inflation. Thereafter, with inflation expected to ease and employment set to expand, consumption is projected to resume a growth path. Price and demand pressures and increased uncertainty are expected to have strong negative effects on private investment. Public investment is forecast to remain strong due to the expected utilisation of significant residual structural funds and RRF-financed investments. Exports are set to continue growing over the forecast horizon, despite weaker export demand than previously projected. Lower consumption and investment are expected to weigh on imports and the current-account balance is set to slightly improve over the forecast horizon. GDP is projected to increase by 0.8% in 2023 and by 1.7% in 2024.

Graph II.18.1: **Slovenia - Real GDP growth and contributions**



Labour market still strong

Low availability of workers is still the dominant factor on the labour market. Employment is expected to increase by 2.9% in 2022 and is forecast to continue expanding slowly in 2023 and 2024. The unemployment rate is projected to slightly increase from 4.1% in 2022 to 4.3% in 2023 and to decline back to 4.1% in 2024. Wages are expected to increase by a modest 2.2% in 2022 and to accelerate to 6.3% in 2023, broadly on a par with expected inflation.

Inflation has accelerated in 2022

Although softened by the cap of fuel prices and other measures implemented by the government, headline inflation accelerated from 6.3% in the first quarter to 11.3% in the third quarter while core inflation has reached 7.5% in the third quarter. Inflation is expected to remain high until the beginning of 2023, moderating thereafter with the softening of the economic activity. Inflation is projected to average 9.2% for 2022 and 6.5% in 2023, thereafter falling to 3.5% in 2024.

Discretionary measures shape public finances

The general government deficit for 2021 has been revised downwards from 5.2% to 4.7% of GDP, mainly due to higher corporate tax revenues.

In 2022, the deficit is projected to decline to 3.6% of GDP on the back of strong revenue growth from taxes on products, reflecting strong private consumption. On the expenditure side, the expiration of pandemic-related measures more than offsets new measures to mitigate the economic and social impact of high energy prices, which are estimated at 0.9% of GDP. They mainly consist of energy vouchers for natural persons, lower excise duty rates and financial compensation for farmers and companies.

The general government deficit is forecast to peak at 5.2% of GDP in 2023, driven by the government support to the corporate sector to mitigate the impact of high energy prices, amounting to an additional 1.5% of GDP. Current expenditure is forecast to increase by around 9% driven mainly by energy-related measures, compensation of employees and social benefits. Public investment is expected to peak as the previous EU multiannual financial framework draws to a close.

The forecast assumes a gradual consolidation of public finances as government support to mitigate the impact of high energy prices for the corporate sector is gradually phased out and growth picks up.

Projections for 2023 and 2024 are subject to upside country-specific risks including the announced revision of the public sector pay system and possible extraordinary increases of certain social benefits. The authorities have also announced a broad tax reform in 2023, whose parameters are unknown, except for an announced shift of tax burden from labour to capital. None of these possible increases in expenditure is incorporated in the forecast.

The debt-to-GDP ratio is projected to decrease from 74.5% in 2021 to 69.9% in 2022 and 68.8% in 2024 due to the changes in the headline deficit and the large denominator effect, including from the high GDP deflator.

Table II.18.1:

Main features of country forecast - SLOVENIA

		2021		Annual percentage change						
		bn EUR Curr. prices	**% GDP**	**03-18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
GDP		52.2	100.0	2.2	3.5	-4.3	8.2	**6.2**	**0.8**	**1.7**
Private Consumption		26.7	51.1	1.8	5.3	-6.9	9.5	**8.1**	**-0.3**	**1.6**
Public Consumption		10.8	20.6	1.5	1.8	4.1	5.8	**0.6**	**1.3**	**0.6**
Gross fixed capital formation		10.6	20.3	0.4	5.1	-7.9	13.7	**4.4**	**-0.6**	**2.5**
Exports (goods and services)		43.7	83.6	5.9	4.5	-8.6	14.5	**7.1**	**3.3**	**3.6**
Imports (goods and services)		40.4	77.3	5.1	4.7	-9.6	17.6	**8.7**	**2.4**	**3.5**
GNI (GDP deflator)		51.5	98.6	2.1	3.4	-3.5	7.4	**6.1**	**0.8**	**1.7**
Contribution to GDP growth:	Domestic demand			1.4	4.1	-4.4	8.5	**5.1**	**-0.1**	**1.6**
	Inventories			0.1	-0.8	0.1	0.4	**1.9**	**0.0**	**0.0**
	Net exports			0.7	0.2	0.0	-0.8	**-0.8**	**0.9**	**0.1**
Employment				0.6	2.5	-0.7	1.3	**2.9**	**0.3**	**0.5**
Unemployment rate (a)				7.1	4.4	5.0	4.8	**4.1**	**4.3**	**4.1**
Compensation of employees / head				3.7	5.0	3.4	7.9	**2.2**	**6.3**	**4.5**
Unit labour costs whole economy				2.1	3.9	7.3	1.1	**-1.0**	**5.7**	**3.3**
Saving rate of households (b)				13.3	13.4	22.7	18.7	**8.3**	**9.9**	**11.6**
GDP deflator				2.0	2.3	1.3	2.6	**6.6**	**6.2**	**3.7**
Harmonised index of consumer prices				2.3	1.7	-0.3	2.0	**9.2**	**6.5**	**3.5**
Terms of trade goods				-0.4	0.4	0.8	-2.3	**-4.0**	**-0.8**	**0.2**
Trade balance (goods) (c)				-0.6	2.7	5.0	1.7	**-4.4**	**-4.2**	**-3.1**
Current-account balance (c)				0.4	6.1	7.7	4.0	**-0.6**	**-0.5**	**-0.3**
General government balance (c)				-3.4	0.6	-7.7	-4.7	**-3.6**	**-5.2**	**-2.7**
Structural budget balance (d)				-3.1	-1.0	-6.0	-5.5	**-5.8**	**-6.4**	**-3.4**
General government gross debt (c)				48.7	65.4	79.6	74.5	**69.9**	**69.6**	**68.8**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

19. SLOVAKIA

Inflation is forecast to increase sharply to 13.9% in 2023 after reaching an estimated 11.5% in 2022. The rapid rise in energy and commodity prices is expected to increase production costs and to erode the purchasing power of households, constraining real GDP growth to 1.9% in 2022, 0.5% in 2023 and 1.9% in 2024. Inflation boosts public expenditure with a delay compared to tax revenue, resulting in a decrease in the public deficit to 4.2% of GDP in 2022 and an increase to 5.8% of GDP in 2023. Strong nominal GDP growth is set to help to decrease the debt-to-GDP ratio over the forecast horizon.

Weaker growth prospects in the medium term

The Slovak economy is expected to slow down significantly in 2023 due to energy price increases and a global slowdown. Higher energy prices will erode households' purchasing power and increase the production costs of firms, which are already facing supply bottlenecks and will now also be affected by lower demand. Despite expanding by 1.9% in 2022, the Slovak economy is expected to grow by only 0.5% in 2023 before returning to stronger growth of 1.9% in 2024.

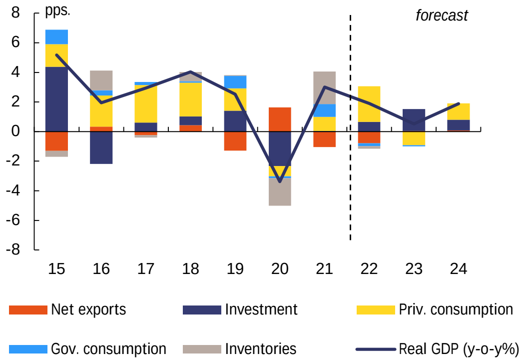
High inflation will continue to weigh on the economic prospects of Slovakia. Regulated energy prices for households are expected to increase sharply at the beginning of 2023, decreasing the purchasing power of households, and their consumption, especially due to the large share of energy in household spending. This significant increase already assumes effective implementation of governmental measures to compensate households and suppliers.

Although consumption is expected to be strong in 2022, it is set to decrease substantially at the end of the year. The saving rate is expected to fall to an all-time low due to a pickup in consumption after the lifting of pandemic-related restrictions and precautionary spending in the anticipation of prolonged high levels of inflation. Consumers already anticipate new regulated energy prices for 2023 and they are expected to moderate their consumption already in 2022-Q4.

Private investment is set to counterbalance some of the effects of lower consumption and exports. Companies face higher pressure from energy prices and wages, but they are expected to pass the price increases onto consumers. A successful absorption of EU structural and RRF funds, as well as government investment will be crucial to keep growth in positive territory in 2023.

Exports are expected to pick up in 2023 and 2024 as supply bottlenecks ease. Demand for some of the main export products, like cars, is set to remain strong despite higher prices. Energy-intensive production is projected to be postponed and the global slowdown is set to further delay the recovery of exports.

Graph II.19.1: **Slovakia- Real GDP growth and contributions**



Labour market remains tight

The weakening of economic activity is expected to moderate further the expansion in employment growth. Due to labour shortages, firms are reluctant to lay off workers and there is a scope for adjustment between labour demand and limited labour supply. The unemployment rate is not projected to be strongly affected by the economic downturn, increasing from 6.3% in 2022 to 6.4% in 2023 and 2024. The compensation of employees is expected to lag behind the spikes in inflation, resulting in real wages declining in 2022, and catching up only slowly in 2023 and 2024.

Inflation rises sharply

The inflation forecast was revised sharply upwards, due to the higher-than-expected impact of regulated energy prices for households, even under the assumption of an effective implementation of governmental measures to mitigate the impact of high energy prices. The gradual expiration of many companies' long-term energy contracts at the end of 2022 is set to raise their production costs. The inflation peak is now expected during early 2023 and non-energy inflation is projected to be more persistent as it is affected by higher costs of inputs and labour. As a result, annual HICP inflation is forecast to remain around 11.5% in 2022 and to rise further to 13.9% in 2023 before stabilising at around 3.5% in 2024.

Budget deficit to increase in 2023

The general government deficit is expected to decrease from 5.5% of GDP in 2021 to 4.2% in 2022, driven by the high growth of nominal GDP that boosts tax revenue. Pandemic-related spending has been withdrawn, but new measures to mitigate the impact of high energy prices keep the deficit at a high level in 2022. The total budgetary cost of energy-related support measures is estimated at 0.2% of GDP in 2022 (net of revenue resulting from the new tax on windfall profits by energy companies).

As a result of a sharp increase in inflation-linked expenditure, the budget deficit is set to increase to 5.8% of GDP in 2023. The strong inflation is boosting nominal tax bases, but higher compensation of employees, a pension reform, and other measures that the government has announced, are expected to increase the government budget deficit. The announced measures for temporary tax on excessive profits of EUR 0.9 bn are projected to bring only a small amount of additional revenue. In 2024, the budget deficit is expected to narrow to 4.6% of GDP as inflationary pressures ease.

Growth in public investment is forecast to accelerate in 2022 and to peak in 2023. While the use of EU structural funds stimulates investments in 2022, the RRF will also contribute to investment activity.

After an increase to an all-time high of 62.2% in 2021, the government debt-to-GDP ratio is set to decline to 59.6% in 2022 and to 57.4% in 2024. The decreasing government debt-to-GDP ratio is impacted by the strong growth of nominal GDP, despite a higher deficit and an increase in the nominal debt value.

Table II.19.1:

Main features of country forecast - SLOVAKIA

		2021		Annual percentage change						
		bn EUR Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		98.5	100.0	4.0	2.5	-3.4	3.0	**1.9**	**0.5**	**1.9**
Private Consumption		56.4	57.2	3.0	2.7	-1.2	1.7	**4.2**	**-1.5**	**1.8**
Public Consumption		21.2	21.5	2.4	4.5	-0.6	4.2	**-0.9**	**-0.4**	**-0.1**
Gross fixed capital formation		18.7	18.9	2.9	6.7	-10.8	0.2	**3.5**	**7.5**	**3.6**
Exports (goods and services)		92.4	93.8	8.6	0.8	-6.4	10.6	**-1.7**	**1.8**	**3.1**
Imports (goods and services)		92.6	94.0	7.0	2.2	-8.2	12.1	**-0.9**	**1.7**	**3.0**
GNI (GDP deflator)		97.3	98.8	3.9	1.7	-2.2	3.0	**1.9**	**0.7**	**1.9**
Contribution to GDP growth:	Domestic demand			2.8	3.8	-3.1	1.9	**2.9**	**0.5**	**1.8**
	Inventories			0.1	0.0	-1.9	2.2	**-0.2**	**0.0**	**0.0**
	Net exports			1.1	-1.3	1.6	-1.0	**-0.8**	**0.0**	**0.1**
Employment				1.1	1.0	-1.9	-0.6	**2.0**	**0.0**	**-0.2**
Unemployment rate (a)				12.7	5.7	6.7	6.8	**6.3**	**6.4**	**6.4**
Compensation of employees / head				5.1	6.8	3.9	6.5	**7.5**	**6.0**	**9.4**
Unit labour costs whole economy				2.1	5.3	5.5	2.8	**7.6**	**5.5**	**7.2**
Saving rate of households (b)				7.5	9.7	11.6	10.3	**4.3**	**5.9**	**5.8**
GDP deflator				1.6	2.5	2.4	2.4	**7.5**	**12.2**	**4.9**
Harmonised index of consumer prices				2.6	2.8	2.0	2.8	**11.8**	**13.9**	**3.6**
Terms of trade goods				-0.8	-0.3	-0.4	-1.1	**-2.9**	**0.3**	**0.1**
Trade balance (goods) (c)				0.3	-0.6	0.9	-0.5	**-4.0**	**-3.5**	**-3.3**
Current-account balance (c)				-2.3	-2.9	-0.2	-2.6	**-6.5**	**-5.6**	**-5.3**
General government balance (c)				-3.4	-1.2	-5.4	-5.5	**-4.2**	**-5.8**	**-4.7**
Structural budget balance (d)				-2.0	-2.1	-4.5	-5.3	**-4.3**	**-5.5**	**-4.4**
General government gross debt (c)				43.4	48.0	58.9	62.2	**59.6**	**57.4**	**57.4**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

20. FINLAND

Finland's economy continued expanding in the first half of 2022 on the back of buoyant demand for services, investment and an inventory build-up. Record high energy prices and inflation, together with tighter financing conditions and a weakening external environment are set to weigh on economic growth in the near term. The general government deficit is forecast to widen in 2023, and remain broadly at the same level in 2024, raising also the debt-to-GDP ratio over the forecast horizon.

Strong results in the first half of 2022

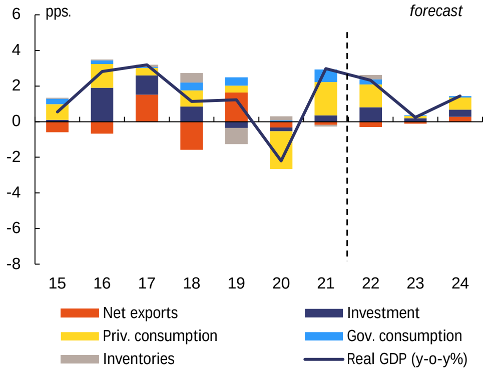
GDP continued to expand in the first half of the year by some 3.5% compared with the same period in 2021. Growth was driven by strong private and public consumption, as well as by a build-up of inventories. Buoyant demand for services and a strong labour market supported private consumption. At the same time, investment growth weakened but is still projected to register positive growth on an annual basis, with construction being the main driver. In contrast, net exports contributed negatively to growth as exports dropped in spring, while imports of services increased in the second quarter. In spite of the current deterioration in economic activity, the strong economic performance in the first half of 2022 is set to put annual real GDP growth at 2.3%.

Multiple pressures on the economy

The economy is facing headwinds from high energy prices and inflation, rising financing costs and weaker external demand. Higher energy bills weigh on households' balance sheets which, in spite of a strong labour market, are set to squeeze private consumption. Tighter financing conditions are expected to keep pressure on corporate investment.

Consequently, it is projected that growth will enter into negative territory in the near term. Overall, real GDP growth is forecast to slow down to 0.2% in 2023. However, the assumed gradual easing of energy prices and the recovery of external demand already in the second half of 2023 are expected to put the economy on a recovery path. Furthermore, private consumption and investment are set to increase by above 1% in 2024. Net exports are projected to also contribute to growth, which is projected to recover to 1.4% in 2024.

Graph II.20.1: **Finland - Real GDP growth and contributions**



Robust labour market performance

In the first half of 2022, employment continued to expand, including for part-time contracts, and compensation of employees grew by some 6% compared with the same period in 2021. In August, the seasonally adjusted unemployment rate stood at 7.0%, 0.6 pps. lower than a year ago, and the annual unemployment rate is projected to stand at 7.0% compared to 7.7% in 2021. This points to the overall strong labour market performance, which has been supporting economic growth so far. At the same time, some sectors are experiencing shortages of labour which are set to impact economic growth in the medium term. The weakening economic conditions, which are already translating into a lower number of vacancies, imply a temporary increase in unemployment rate in 2023. In 2024, against the backdrop of the projected economic recovery, the annual unemployment rate is forecast to be somewhat below the level of 2022.

Unabated inflation

The persistence of energy price inflation since the beginning of 2022 is feeding into prices of other goods and services and exerting pressure on core inflation. In the third quarter of 2022, HICP inflation stood at a record of 8.1%. This is, however, below the average of the EU as a whole, also due to Finland's lower dependency on gas.

Having peaked in 2022-Q3, HICP inflation is forecast to average 7.2% in 2022. Weaker economic activity and lower energy prices are projected to bring the inflation rate down to 4.3% in 2023 and close to 2% in 2024.

Deficit and debt ratio to continue growing

In 2022, the general government deficit is projected to decline compared to 2021 to 1.4% of GDP, due to strong revenue performance, nominal GDP growth and lower expenditure following the gradual withdrawal of COVID-19 measures amounting to 0.2% of GDP.

Against the backdrop of Russia's war of aggression against Ukraine, the Finnish government announced additional spending on defence of 0.3% of GDP in 2022 and 0.4% in 2023. The general government deficit is also set to be affected by the costs of providing temporary protection to people fleeing Ukraine. In addition, the fiscal forecast takes into account measures to mitigate the economic and social impact of high energy prices, which are projected to generate additional spending amounting to 0.4% of GDP in 2023.

The general government deficit is forecast to increase to 2.3% of GDP in 2023 and remain at that level in 2024. Public investment is projected to remain high over the forecast horizon.

Due to a methodological change applied to time series data on debt dating back to 2000, the general government public debt-to-GDP ratio for 2021 was revised up by about 6 pps., from 65.8% to 72.4%. Correspondingly, the forecast for the general government public debt-to-GDP ratio has been revised upwards in 2022, and is expected to stand at 70.7%. It is projected to continue a growing trend over the forecast horizon, amounting to 72.0% in 2023 and 73.3% in 2024.

Table II.20.1:

Main features of country forecast - FINLAND

		2021		Annual percentage change						
bn EUR		Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		251.4	100.0	1.3	1.2	-2.2	3.0	**2.3**	**0.2**	**1.4**
Private Consumption		128.2	51.0	1.9	0.7	-4.0	3.7	**2.5**	**0.2**	**1.3**
Public Consumption		61.4	24.4	1.0	2.0	0.3	2.9	**1.1**	**0.1**	**0.4**
Gross fixed capital formation		59.5	23.7	1.6	-1.5	-0.9	1.5	**3.4**	**0.8**	**1.6**
Exports (goods and services)		99.1	39.4	2.3	6.7	-6.8	5.4	**1.4**	**2.2**	**3.9**
Imports (goods and services)		98.5	39.2	3.5	2.4	-6.0	6.0	**2.1**	**2.4**	**3.2**
GNI (GDP deflator)		255.4	101.6	1.3	1.3	-1.1	2.9	**2.0**	**0.3**	**1.4**
Contribution to GDP growth:	Domestic demand			1.6	0.5	-2.3	2.9	**2.4**	**0.4**	**1.2**
	Inventories			0.1	-0.9	0.2	-0.1	**0.3**	**0.0**	**0.0**
	Net exports			-0.3	1.6	-0.3	-0.2	**-0.3**	**-0.1**	**0.3**
Employment				0.7	1.8	-1.9	3.3	**2.1**	**-0.1**	**0.4**
Unemployment rate (a)				8.3	6.8	7.7	7.7	**7.0**	**7.2**	**6.9**
Compensation of employees / head				2.2	1.2	0.4	2.9	**3.4**	**3.5**	**2.6**
Unit labour costs whole economy				1.5	1.9	0.7	3.3	**3.2**	**3.1**	**1.5**
Saving rate of households (b)				7.7	8.5	12.7	10.3	**5.7**	**5.8**	**5.9**
GDP deflator				1.5	1.5	1.5	2.5	**5.3**	**3.7**	**2.2**
Harmonised index of consumer prices				1.5	1.1	0.4	2.1	**7.2**	**4.3**	**1.9**
Terms of trade goods				-0.7	-0.6	1.5	0.7	**-2.9**	**-0.1**	**0.4**
Trade balance (goods) (c)				3.9	1.0	1.3	1.1	**0.1**	**0.0**	**0.4**
Current-account balance (c)				1.0	-0.3	0.7	0.6	**-0.2**	**-0.3**	**0.1**
General government balance (c)				0.1	-0.9	-5.5	-2.7	**-1.4**	**-2.3**	**-2.3**
Structural budget balance (d)				-1.0	-1.3	-3.9	-2.1	**-1.1**	**-1.5**	**-1.6**
General government gross debt (c)				49.3	64.9	74.8	72.4	**70.7**	**72.0**	**73.3**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.
Note : Contributions to GDP growth may not add up due to statistical discrepancies.

Non-EA Member States

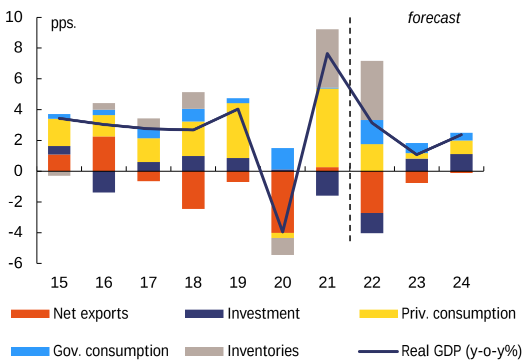
21. BULGARIA

Economic expansion is expected to slow down in the second half of 2022 and in 2023, before somewhat higher growth resumes in 2024. Price increases and higher borrowing costs are set to weigh on household consumption. Export growth is forecast to slow down, in line with the subdued foreign demand until the end of 2023 and then rebound in 2024. Increased EU funds absorption, notably of the RRF, is set to support aggregate investment. With inflation gradually slowing down, GDP growth is projected to accelerate from 1.1% in 2023 to 2.4% in 2024. The government deficit is forecast to decrease to 3.4% of GDP in 2022, as a large amount of the measures to mitigate the impact of high energy prices are offset by higher revenues, and to fall to 2.8% in 2023.

Subdued domestic and foreign demand ahead

During the first half of the year GDP grew by 4% y-o-y, supported by strong export performance. Nevertheless, high inflation weighed on real disposable income and led to a deceleration in quarterly growth of household consumption to 0.5% in Q1 and 0.4% in Q2 2022. After a contraction of 8.3% in 2021, investment continued to decline in the first half of 2022, with non-residential contruction weighing on aggregate investment. Annual HICP inflation is expected to have peaked at 15.6% in September, as the effects from the energy and food price hikes gradually abate.

Graph II.21.1: **Bulgaria - Real GDP growth and contributions**



Overall, GDP growth is forecast to decelerate from 3.1% in 2022 to 1.1% in 2023 on account of lower domestic and foreign demand and then to pick up to 2.4% in 2024, as external conditions improve. Consumer sentiment deteriorated in 2022-Q3, indicating stagnation in household consumption by the end of the year. Household consumption is expected to remain subdued thorougout 2023 and then to pick up gradually in 2024, as inflation pressures abate. An important factor that is set to rein in private demand is the assumed higher interest rates in the next two years. Investment is projected to firm up due to higher absorption of EU funds, including the RRP. The dynamic growth in exports so far, is forecast to decelerate markedly in the second half of 2022 and in 2023 and then to accelerate moderately in 2024, broadly following external demand.

Labour market developents key to determine the path of the economy

The labour market remained tight, with seasonally adjusted unemployment at 4.6% in August. Nominal wages increased strongly at the beginning of the year, when salary updates are usually concentrated, followed by wage increases in the public and services sectors in the second quarter. Producers in manufacturing were able to accommodate the strong wage increases by keeping employment almost unchanged as production activity intensified. By contrast, high wages in the services sector have led to higher untit labour costs. The expected slowdown in both domestic and foreign demand dynamics, however, is set to supress hiring decisions and restrain further rapid wage increases. Wages are expected to grow by 9% in 2023 and 6.7% in 2024.

Inflation to decelerate gradually

Annual HICP inflation is set to come down from 12.8% in 2022 to 7.4% in 2023 and then settle at 3.2% in 2024. The labour market developments suggest that cost pressures in services are likely to lead to a further acceleration of price increases until the end of 2022, and then to gradually abate over 2023 and 2024. Food price inflation is expected to decelerate gradually and is set to be an important factor behind price dynamics in subcomponents like catering services. Energy price inflation is forecast to decelerate and turn negative in the second half of next year and then to remain negative in 2024.

Government deficit set to slowly decrease

The general government deficit is forecast to decrease to 3.4% of GDP in 2022 as the growth in revenue is projected to more than offset the growth in expenditure and to continue its downward path over the forecast period. Increasing prices of products and in particular of those subject to excise duties, as well as growing labour income, are the main drivers of the increases in tax revenue. Measures to mitigate the impact of high energy prices are expected to have a net budgetary effect of 2% of GDP in 2022 as they are partly financed by a levy imposed to the windfall revenues of enterprises in the energy sector and collected by the Electricity System Security Fund. Such measures are expected to continue in 2023.

The total cost of pandemic support measures is projected to fall from 3.8% of GDP in 2021 to less than 1% of GDP in 2022, and together with exceptional increases in wages of some categories of public sector personel are set to phase out as of 2023. At the same time, pension system amendments adopted in 2021 and 2022 and transfers related to the people fleeing Ukraine continue to weigh on public finances. Public investment is expected to increase, mainly supported by EU financing.

Until the adoption of a budget law for 2023, other expenditure items are going to follow the monthly execution of last year. In this context, the budget deficit is forecast to fall to 2.8% of GDP in 2023 and to 2.5% of GDP in 2024. Bulgaria's general government debt is set to decrease to 22.5% of GDP in 2022 benefiting from large cash disbursements from the RRF, provided that all milestones and targets of the national RRP are satisfactorily fulfilled. Debt-to-GDP ratio is forecast to increase thereafter and reach 25.6% in 2024.

Table II.21.1:

Main features of country forecast - BULGARIA

	2021				Annual percentage change					
	bn BGN	**Curr. prices**	**% GDP**	**03-18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
GDP		139.0	100.0	3.2	4.0	-4.0	7.6	**3.1**	**1.1**	**2.4**
Private Consumption		81.0	58.3	3.6	6.0	-0.6	8.8	**3.0**	**0.6**	**1.5**
Public Consumption		26.3	18.9	1.9	2.0	8.3	0.4	**8.4**	**3.6**	**2.7**
Gross fixed capital formation		22.7	16.3	3.8	4.5	0.6	-8.3	**-8.0**	**5.5**	**7.0**
Exports (goods and services)		85.3	61.3	7.2	4.0	-10.4	11.0	**7.1**	**1.5**	**3.3**
Imports (goods and services)		82.9	59.6	7.3	5.2	-4.3	10.9	**11.8**	**2.6**	**3.4**
GNI (GDP deflator)		134.4	96.7	2.7	4.6	-3.2	7.8	**2.4**	**1.0**	**2.4**
Contribution to GDP growth:	Domestic demand			3.7	4.7	1.2	3.6	**2.0**	**1.8**	**2.5**
	Inventories			0.1	0.0	-1.1	3.8	**3.8**	**0.0**	**0.0**
	Net exports			-0.6	-0.7	-4.0	0.2	**-2.7**	**-0.8**	**-0.1**
Employment				0.6	0.3	-2.3	0.2	**0.4**	**0.0**	**0.2**
Unemployment rate (a)				10.6	5.2	6.1	5.3	**5.2**	**5.2**	**5.3**
Compensation of employees / head				8.3	6.9	7.2	11.3	**15.4**	**9.0**	**6.7**
Unit labour costs whole economy				5.6	3.1	9.0	3.6	**12.3**	**7.8**	**4.4**
Saving rate of households (b)				-3.4	:	:	:	**:**	**:**	**:**
GDP deflator				4.3	5.2	4.3	7.1	**12.3**	**4.2**	**3.7**
Harmonised index of consumer prices				3.2	2.5	1.2	2.8	**12.8**	**7.4**	**3.2**
Terms of trade goods				1.9	1.9	4.3	0.6	**4.0**	**-1.8**	**0.0**
Trade balance (goods) (c)				-12.5	-4.7	-3.1	-4.1	**-5.3**	**-7.7**	**-7.8**
Current-account balance (c)				-4.9	1.9	0.0	-0.5	**-1.2**	**-3.0**	**-3.2**
General government balance (c)				-0.5	2.1	-3.8	-3.9	**-3.4**	**-2.8**	**-2.5**
Structural budget balance (d)				0.1	1.7	-2.3	-3.9	**-3.8**	**-2.9**	**-2.8**
General government gross debt (c)				22.7	20.0	24.5	23.9	**22.5**	**23.6**	**25.6**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.
Note : Contributions to GDP growth may not add up due to statistical discrepancies.

22. CZECHIA

Real GDP growth is forecast to moderate to 2.5% this year and to further decline in 2023, due to spillover effects from Russia's war of aggression against Ukraine and elevated price pressures amid tight domestic financial conditions. The inflation rate is set to increase to over 15% this year and remain elevated in 2023. To tackle the high energy inflation, the government is introducing support measures for households and companies. While these increase public expenditures, windfall tax revenues are forecast to reduce the pressure on the budget deficit.

Economic growth to weaken

The Czech economy continued to grow fast in the first half of this year, driven by buoyant investment activity. In the coming quarters, economic growth is expected to be dampened due to a deterioration in consumer and business sentiment and the financial situation of Czech firms and households.

Annual GDP growth is forecast at 2.5% in 2022. In line with weakening foreign demand, a tightening of financial conditions, and high energy prices, real GDP is forecast to stagnate in 2023 and to grow by 1.8% in 2024 reaching pre-pandemic output levels at the beginning of 2024.

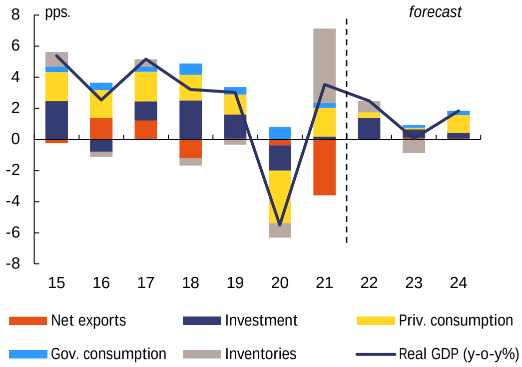
Private consumption is expected to contract towards the end of this year and to remain subdued in 2023, reflecting a decline in real disposable income as household savings cannot fully compensate the loss of purchasing power. The saving rate is forecast to decline in 2023.

Investment activity is expected to pick up significantly in 2022. Despite government investment benefiting from EU structural and RRF funds, investment growth is forecast to be limited in 2023, reflecting lower business confidence, elevated cost pressures and a gradual depletion of inventories from the current elevated levels.

Czechia's industry-based economy, which relies on imports, continues to be strongly affected by supply chain disruptions and high energy prices. Net exports are forecast to have a neutral contribution to economic growth in 2022, but to turn positive in 2023 and 2024.

This outlook is subject to high uncertainty. Most notably, in relation to further disruptions of energy markets and stronger persistence of inflation than in other Member States due to the energy intensity of the Czech economy.

Graph II.22.1: **Czechia - Real GDP growth and contributions**



Labour market to remain robust

The unemployment rate is forecast to remain around 2.6% in 2022. While increasing slightly over the forecast horizon. The rate is expected to stay low in light of the GDP contraction and the displaced persons from Ukraine joining the labour force. Despite the tight labour market in Czechia, real wages are set to decline in 2022 and 2023, as nominal wage growth lags behind inflation before increasing more strongly in 2024.

Inflation to stay high in the medium term

Inflation is expected to peak in the fourth quarter of this year reaching almost 20%. For 2022 as whole, headline inflation is forecast at 15.6% and core inflation at 12.5%, reflecting higher cost of domestic production and imports. Driven by second-round effects, the price level is set to remain elevated also at the beginning of 2023. The impact of government measures, notably the cap on retail gas prices, is expected to mitigate inflation in 2023. Inflation is projected to decelerate to 9.5% in 2023 and to 3.5% in 2024.

Deficit to decline despite measures to mitigate the impact of high energy prices

The Czech budget deficit decreased to 5.1% of GDP in 2021 and is set to further decline to 4.3% in 2022. The decrease comes on the back of a gradual withdrawal of COVID-19 related support measures and a high inflation that boosts tax revenues. At the same time, expenditures are increasing due to the automatic indexation of pensions with inflation, support measures to mitigate the impact of high energy prices (for industry and for households, with total net costs estimated at 1% of GDP) and measures to support the inflow of people fleeing from Ukraine. Due to a high base in 2021, public salaries growth remains contained in 2022.

The budget deficit is forecast to decrease to 4.1% of GDP in 2023. Expenditure is set to increase due to the implementation of a cap on energy prices according to which the government will reimburse energy suppliers for eventual losses when selling electricity and gas at fixed prices. However, this extra expenditure is assumed to be covered by revenue from a windfall tax applied to the largest energy companies and banks as well as a levy on revenues above a certain price ceiling for electricity producers. An additional increase in expenditure results from further indexations of pensions with inflation as well as from additional social measures, both permanent and temporary. The deficit is expected to decrease in 2024 to 3.0% as the energy support measures are assumed to be withdrawn. Still, the deficit estimates for 2023-2024 are subject to high risks given the volatile energy prices and the risk of mismatch between expenditure and revenue from windfall taxes and levies.

As the remaining structural funds from the previous programming period are still being drawn together with those from the new programming period and RRF funds, public investment is set to grow strongly in 2022 and 2023 before dropping to a historical average level in 2024.

While public debt is still low compared to other EU Member States, the pace of its growth in 2020-2021 was above the EU average. The public debt-to-GDP ratio is forecast to rise to 42.9% in 2022, 44.2% in 2023 and 44.5% in 2024, driven by the negative headline balance, being only partly offset by nominal GDP growth.

Table II.22.1:

Main features of country forecast - CZECHIA

		2021			Annual percentage change					
	bn CZK	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		6108.4	100.0	2.9	3.0	-5.5	3.5	**2.5**	**0.1**	**1.8**
Private Consumption		2770.7	45.4	2.5	2.7	-7.2	4.1	**0.8**	**0.2**	**2.3**
Public Consumption		1313.0	21.5	1.2	2.5	4.2	1.5	**0.2**	**0.9**	**1.3**
Gross fixed capital formation		1586.3	26.0	2.7	5.9	-6.0	0.7	**5.3**	**2.0**	**1.3**
Exports (goods and services)		4442.8	72.7	8.1	1.5	-8.0	6.9	**4.6**	**2.7**	**3.9**
Imports (goods and services)		4261.9	69.8	7.2	1.5	-8.2	13.3	**4.8**	**2.6**	**3.7**
GNI (GDP deflator)		5835.0	95.5	2.8	2.4	-4.4	4.1	**2.6**	**0.0**	**2.4**
Contribution to GDP growth:	Domestic demand			2.2	3.3	-4.2	2.4	**1.8**	**0.8**	**1.8**
	Inventories			0.0	-0.3	-0.9	4.8	**0.7**	**-0.9**	**0.0**
	Net exports			0.7	0.0	-0.4	-3.6	**0.0**	**0.1**	**0.1**
Employment				0.7	0.2	-1.7	0.4	**0.4**	**0.7**	**0.6**
Unemployment rate (a)				6.0	2.0	2.6	2.8	**2.7**	**3.3**	**3.6**
Compensation of employees / head				4.3	7.2	3.1	5.0	**7.7**	**6.5**	**6.4**
Unit labour costs whole economy				2.0	4.3	7.3	1.8	**5.5**	**7.1**	**5.0**
Saving rate of households (b)				11.9	13.1	19.2	19.4	**13.6**	**10.9**	**9.4**
GDP deflator				1.5	3.9	4.3	3.3	**9.2**	**8.1**	**4.8**
Harmonised index of consumer prices				1.9	2.6	3.3	3.3	**15.6**	**9.5**	**3.5**
Terms of trade goods				-0.3	0.4	1.8	-0.2	**-5.5**	**-1.8**	**0.5**
Trade balance (goods) (c)				1.8	4.1	4.9	1.2	**-2.9**	**-4.1**	**-3.7**
Current-account balance (c)				-2.9	-0.9	0.7	-2.6	**-5.8**	**-6.9**	**-5.9**
General government balance (c)				-2.1	0.3	-5.8	-5.1	**-4.3**	**-4.1**	**-3.0**
Structural budget balance (d)				0.1	-0.9	-4.3	-4.6	**-3.8**	**-3.1**	**-2.1**
General government gross debt (c)				34.4	30.0	37.7	42.0	**42.9**	**44.2**	**44.5**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

23. DENMARK

Following strong growth in early 2022, economic activity is set to decelerate in the second half of the year and the beginning of 2023. This is driven by high energy prices, high inflation, falling real disposable income, higher interest rates and geopolitical uncertainty due to Russia's war of aggression against Ukraine. While in 2023 the Danish economy is not expected to expand, in 2024 GDP is projected to see a return to growth amidst markedly lower inflationary pressures. Signs of labour market slack could appear in 2023 as employment is projected to decline and the unemployment rate rises slightly. Denmark enters the expected economic downturn with a large government budget surplus. This balance is set to remain positive over the forecast horizon.

Economic expansion hit by high inflation

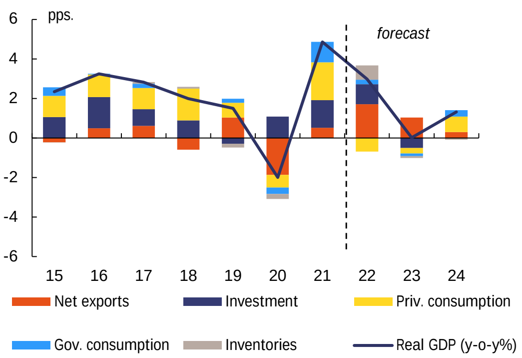
In the first half of 2022 Denmark saw positive economic growth, driven mainly by net exports and the build-up of inventories. Consumption was subdued, in part due to the surge in consumer prices and falling real disposable household income. However, the high level of accumulated savings in the past two years helped soften the impact of the 2022 losses in real disposable income. Construction investment grew in response to rising house prices and housing demand, while tighter financing conditions, higher energy costs and diminishing expectations of future demand weighed on equipment investment. Net exports are likely to contribute positively to growth this year, driven by exports of services, while growth in imports is subdued, reflecting weak domestic demand.

Growth is set to slow markedly in the second half of 2022, as private consumption weakens further and the previous build-up of stocks is partly reversed. The weaker economic growth outlook is expected to persist into 2023 as headwinds remain strong. With consumer prices expected to continue rising faster than incomes until mid-2023, private consumption is projected to remain weak. Investment — in particular in the construction sector — is likely to fall in the face of higher interest rates, expensive building materials and house prices levelling off. Growth rates of both exports and imports are expected to slow in 2023, reflecting falling demand, both domestically and in export markets. Net exports are thus projected to provide smaller positive growth contributions in 2023 and 2024.

Later in 2023 and especially in 2024, lower inflationary pressures as well as projected wage increases as a result of collective bargaining are expected to support households' real disposable income and reinvigorate private consumption. Investment levels are projected to benefit from the expected pickup in domestic and international demand, and equipment investment in particular could turn positive again, albeit with modest growth rates.

Overall, real GDP is forecast to grow by 3.0% in 2022, before reaching a standstill (0.0%) in 2023 and returning to positive growth in 2024, at 1.3%.

Graph II.23.1: **Denmark - Real GDP growth and contributions**



Higher unemployment ahead

Denmark is entering the expected downturn with a very strong labour market. A range of sectors are reporting labour shortages and high employment levels. The unemployment rate is expected to fall in 2022, reaching 4.5% of the labour force before increasing to 5.5% in 2023 and 5.6% in 2024.

Strong imported inflation

Consumer prices have been on a strong upward path since 2021. Prices of imported goods, notably energy, raw materials and food are driving inflationary pressures. There are so far few, if any, signs of a domestically created wage-price spiral. HICP inflation is expected to peak in autumn 2022, followed by a gradual decline in inflationary pressures over the forecast horizon. Annual inflation is projected at 7.9% this year. Energy price inflation is forecast to turn negative from mid-2023 onwards, contributing to a deceleration of headline inflation to 3.7% in 2023 and 2.0% in 2024.

Government finances remain strong

In 2022, the general government budget surplus is expected to fall markedly to 1.8% of GDP, compared with the 3.6% of GDP budget surplus in 2021. On the one hand, this reflects falls in some revenue items, notably the pension yield tax. On the other hand, expenditure is increasing, notably government consumption. While revenue is projected to grow slightly in 2023 and 2024, growth in expenditure, particularly for the public sector wage bill, is expected to outpace that of revenue, leading to a further reduction in the budget surplus. Measures to mitigate the economic and social impact of high energy prices could amount to some 0.2% of GDP over the forecast horizon. Overall, prospects are for a budget surplus of 1.8% of GDP in 2022, 0.5% in 2023 and 0.4% in 2024.

In 2022 the government debt-to-GDP ratio is expected to fall to 33.7% while the continued surplus and denominator effects are expected to bring the debt-to-GDP ratio further down to 32.1% in 2024.

Table II.23.1:

Main features of country forecast - DENMARK

		2021			Annual percentage change					
	bn DKK	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		2504.2	100.0	1.3	1.5	-2.0	4.9	**3.0**	**0.0**	**1.3**
Private Consumption		1141.9	45.6	1.5	1.6	-1.4	4.2	**-1.5**	**-0.6**	**1.7**
Public Consumption		608.4	24.3	1.2	0.8	-1.4	4.2	**0.9**	**-0.6**	**1.4**
Gross fixed capital formation		566.1	22.6	2.1	-1.3	5.1	6.2	**4.5**	**-2.1**	**0.0**
Exports (goods and services)		1494.0	59.7	3.0	4.5	-6.3	8.0	**5.4**	**3.7**	**4.8**
Imports (goods and services)		1315.2	52.5	3.8	3.0	-3.6	8.0	**2.9**	**2.3**	**4.8**
GNI (GDP deflator)		2590.8	103.5	1.6	1.6	-1.7	5.1	**2.7**	**-0.1**	**1.2**
Contribution to GDP growth:		Domestic demand		1.5	0.7	0.1	4.3	**0.6**	**-0.9**	**1.1**
		Inventories		0.0	-0.2	-0.2	0.0	**0.7**	**-0.1**	**-0.1**
		Net exports		-0.1	1.0	-1.9	0.5	**1.7**	**1.0**	**0.3**
Employment				0.4	1.4	-1.1	2.4	**4.3**	**-1.4**	**-0.1**
Unemployment rate (a)				5.9	5.0	5.6	5.1	**4.5**	**5.5**	**5.6**
Compensation of employees / head				2.5	1.9	2.6	2.9	**3.3**	**4.7**	**5.0**
Unit labour costs whole economy				1.6	1.9	3.5	0.6	**4.6**	**3.2**	**3.5**
Saving rate of households (b)				7.7	10.2	11.7	9.3	**10.6**	**10.4**	**10.5**
GDP deflator				1.6	1.0	2.6	2.8	**3.3**	**4.4**	**2.7**
Harmonised index of consumer prices				1.4	0.7	0.3	1.9	**7.9**	**3.7**	**2.0**
Terms of trade goods				0.6	-0.5	1.7	-5.2	**-9.0**	**1.5**	**0.9**
Trade balance (goods) (c)				3.9	5.0	5.3	4.0	**1.5**	**2.6**	**3.5**
Current-account balance (c)				5.6	8.5	7.9	9.0	**6.7**	**7.4**	**7.8**
General government balance (c)				0.6	4.1	0.2	3.6	**1.8**	**0.5**	**0.4**
Structural budget balance (d)				0.4	4.4	2.5	4.2	**1.6**	**1.7**	**1.2**
General government gross debt (c)				39.3	33.7	42.2	36.6	**33.7**	**32.8**	**32.1**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

24. HUNGARY

After strong economic growth in the first half of 2022, Hungary's economy is adjusting to higher commodity prices and tighter financing conditions, resulting in a sharp economic slowdown and high inflation in 2023. Fiscal policy is set to cushion the decline of household income and help to avoid a contraction of the economy, but at the cost of persistently high budget deficits.

A sharp slowdown is expected

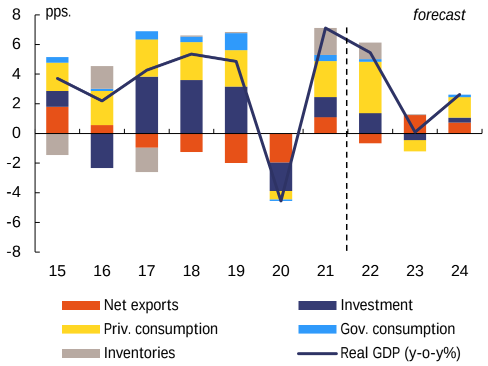
Hungary's economy maintained strong momentum in 2022-Q2 with GDP expanding by 1.1% compared to the previous quarter. However, confidence indicators have deteriorated and monthly data point to weakening consumption, housing transactions, construction activity and lending. Higher inflation and energy prices, as well as tighter financing conditions, are set to constrain economic activity in the coming quarters, with real GDP growth projected to slow down from 5.5% in 2022 to 0.1% in 2023 and recover only to 2.6% in 2024.

Consumption is set to decrease in 2023 as household income is eroded by high inflation. However, households remain partially shielded from rising energy prices and financing costs through administrative caps on residential energy prices and mortgage rates. Investment is also projected to fall next year, squeezed by tight financing conditions and the deteriorating economic outlook. At the same time, corporate investment in energy efficiency is set benefit from government support. Building investment is set to decline particularly as the real estate market is expected to cool and fiscal consolidation measures reduce the volume of public investment from previous high levels.

Weaker external demand is projected to constrain export growth even though supply chain disruptions have eased somewhat. Rising energy prices are expected to increase Hungary's net energy imports by some 5% of GDP between 2021 and 2023. Non-energy imports are set to remain muted, in line with the slowdown of final demand. Consequently, the current account deficit is projected to widen and peak at 7.6% of GDP in 2022, and then gradually narrow to 4.3% in 2024.

This baseline forecast is fraught with downside risks. Energy supply disruptions could have a large economic impact as Hungary has limited possibilities to substitute oil and gas imports from Russia in the short term. High energy prices might also endanger the medium-term investment plans of Hungary's energy intensive manufacturing sector. Finally, persistently high inflation or deteriorating financing conditions might require a tighter economic policy stance.

Graph II.24.1: **Hungary - Real GDP growth and contributions**



Real wages to fall instead of employment

The labour market was robust in the first half of the year, with unemployment falling to 3.3% and nominal wages growing by 14.9% in 2022-Q2. Recent monthly data point to rising unemployment in line with the economic slowdown. However, due to shortages of skilled workers, companies are expected to hold on to their employees, which is set to limit the rise in unemployment. At the same time, high inflation is projected to reduce real wages in 2023.

Non-energy inflation is also running high

HICP inflation accelerated to 20.7% in September after the price cap on residential energy was partly lifted. Non-energy inflation was the highest in the EU at 19.2%, due to domestic inflationary pressure and currency depreciation. Inflation is set to remain high, at 14.8% in 2022 and 15.7% in 2023, before easing to 3.9% in 2024. This forecast assumes that the motor fuel price cap expires in January 2023, adding some 2 pps. to inflation in 2023.

Second-round effects due to the tight labour market are an upside risk to the inflation path.

Public finances enter a challenging period

In 2022, the deficit is forecast to remain high at 6.2% of GDP despite robust revenue growth in the first half of the year. The introduction of several expansionary measures at the beginning of the year and increased spending in response to high energy prices are forecast to put pressure on the public finances in 2022 and beyond.

The deficit is expected to narrow to 4.4% in 2023 before rising again to 5.2% in 2024. The lower deficit in 2023 is driven by additional windfall profits and sectoral tax revenues (reaching 1.4% in 2023), which are set to be largely phased out in 2024, and the impact of the purchase of gas stockpiles by a special governmental entity. Upon the planned sale of these stockpiles in early 2023, the government is set to record additional revenue leading to a lower deficit in 2023 (by 0.6% of GDP).

Current expenditure is set to grow rapidly, especially in 2022 and 2023, driven by high inflation and expenditure on the utility bill protection scheme that subsidises utility companies for the losses incurred due to caps on residential energy prices. The total budgetary cost of measures to mitigate the impact of high energy prices - net of revenue resulting from the new taxes on windfall profits of energy companies - is estimated at 0.9% of GDP in 2022, 2.5% in 2023 and 1.8% in 2024. Capital expenditure is set to moderate over the forecast horizon due to the postponement of public investment projects.

Public debt is projected to decrease slightly from 76.8% of GDP in 2021 to 75.1% in 2024. The sharply worsening financing conditions are projected to increase the debt-servicing costs substantially, from 2.3% of GDP in 2021 to 3.4% in 2024. In the absence of a Council Implementing Decision approving Hungary's RRP, this forecast builds on technical assumptions and includes expenditures planned to be financed by RRF grants, amounting to 0.4% in 2022, 0.7% in 2023 and 0.8% in 2024.

Risks to the fiscal outlook are on the downside, stemming from potentially large central bank losses and uncertainty surrounding financing conditions.

Table II.24.1:

Main features of country forecast - HUNGARY

	2021			Annual percentage change						
bn HUF	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP	55125.6	100.0	2.2	4.9	-4.5	7.1	**5.5**	**0.1**	**2.6**
Private Consumption	26634.1	48.3	1.6	5.0	-1.2	4.9	**7.2**	**-1.5**	**2.6**
Public Consumption	11513.6	20.9	1.5	5.8	-0.5	2.0	**0.8**	**0.0**	**0.9**
Gross fixed capital formation	14987.9	27.2	2.7	12.8	-7.1	5.2	**5.0**	**-1.6**	**1.2**
Exports (goods and services)	44953.3	81.5	7.3	5.4	-6.1	10.3	**6.5**	**3.5**	**4.8**
Imports (goods and services)	44786.6	81.2	6.4	8.2	-3.9	9.1	**7.4**	**2.0**	**3.9**
GNI (GDP deflator)	53392.3	96.9	2.3	6.3	-4.3	6.3	**5.6**	**0.3**	**2.7**
Contribution to GDP growth: Domestic demand			1.8	6.8	-2.6	4.2	**5.0**	**-1.2**	**1.9**
Inventories			-0.2	0.1	0.0	1.8	**1.1**	**0.0**	**0.0**
Net exports			0.7	-2.0	-2.0	1.1	**-0.7**	**1.3**	**0.7**
Employment			0.8	1.1	-1.1	1.0	**1.9**	**0.0**	**0.4**
Unemployment rate (a)			7.4	3.3	4.1	4.1	**3.6**	**4.2**	**4.2**
Compensation of employees / head			4.5	7.0	3.0	8.3	**14.5**	**13.1**	**6.9**
Unit labour costs whole economy			3.1	3.1	6.7	2.1	**10.7**	**13.0**	**4.6**
Saving rate of households (b)			11.3	14.8	15.6	17.4	**11.9**	**10.1**	**10.4**
GDP deflator			3.6	4.8	6.4	6.3	**9.2**	**10.0**	**5.0**
Harmonised index of consumer prices			3.6	3.4	3.4	5.2	**14.8**	**15.7**	**3.9**
Terms of trade goods			-0.4	0.5	2.0	-3.6	**-5.5**	**-0.5**	**1.7**
Trade balance (goods) (c)			0.1	-2.5	-1.0	-3.0	**-8.5**	**-7.3**	**-5.2**
Current-account balance (c)			-2.7	-0.9	-0.9	-4.0	**-7.6**	**-6.3**	**-4.3**
General government balance (c)			-4.4	-2.0	-7.5	-7.1	**-6.2**	**-4.4**	**-5.2**
Structural budget balance (d)			-2.8	-3.6	-5.7	-6.6	**-6.7**	**-3.7**	**-4.5**
General government gross debt (c)			71.3	65.3	79.3	76.8	**76.4**	**75.2**	**75.1**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

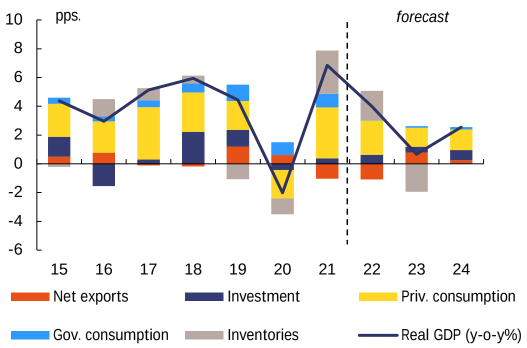
25. POLAND

Following strong GDP growth in 2022, economic activity in Poland is set to weaken due to increased uncertainty, a tightening of financing conditions, and the economy's adjustment to higher commodity prices. Inflation is expected to remain elevated as rising production costs are passed down to consumers. The general government deficit is forecast to widen under the pressure of expenditures related to national defence and the energy crisis.

Growth to remain strong in 2022…

The Polish economy continued its upward trajectory in the first half of 2022, although a marked drop in inventories and investment led to a contraction in real GDP in the second quarter. Data on the real economy suggest that growth was at full steam in the third quarter, with industrial output and retail sales expanding at a solid pace. As a result, despite a deterioration in confidence indicators, the second half of the year is expected to see a relatively good performance, leaving annual real GDP growth in 2022 at a projected 4.0%.

Graph II.25.1: **Poland - Real GDP growth and contributions**



… before decelerating in 2023 and 2024

Economic growth is set to decelerate visibly in 2023 and 2024 and become negative at the beginning of 2023. A reversal in the inventory cycle following a period of strong restocking will likely be the main drag on growth over the next quarters, subtracting almost 2 pps from GDP growth in 2023. Low confidence, elevated cost pressures and increasing financing costs are expected to weigh on private investment growth, especially in construction. Still, a rise in public defence spending and local government investments is set to more than outweigh the drop in private investment, leaving total investment growth in 2023 well into positive territory. Despite elevated inflation, private consumption growth is expected to remain upbeat thanks to significant policy support, low unemployment, and the inflow of displaced persons from Ukraine.

Regarding foreign trade, the assumed easing of supply bottlenecks should support export growth over the forecast horizon. Coupled with low import growth due to the reversal in the inventory cycle, the trade balance is projected to contribute positively to growth in 2023 and 2024. All in all, real GDP is forecast to slow to 0.7% in 2023 and increase to 2.6% in 2024.

Wages to react to weakening growth

Acute labour shortages will likely mean that the adjustment in the labour market to weakening economic activity will come from a deceleration in wage growth rather than an increase in the unemployment rate, as firms are reluctant to lay off workers. Consequently, the unemployment rate is forecast to increase only slightly to 3.1% in 2024. In turn, high inflation allows companies to adapt to rising energy prices by decreasing real wages, which are expected to decline in 2022 and 2023.

Inflation to peak at the beginning of 2023

HICP inflation has continued to surprise on the upside in recent months due to increased prices of commodities, rising production costs and relatively high demand, which allowed businesses to pass costs down to consumers. Going forward, despite the electricity price freeze introduced by the government, energy price inflation is expected to remain elevated mainly due to a hike in natural gas prices, especially at the beginning of 2023. Under the no-policy change assumption, certain price support measures, in particular reductions of VAT rates, are expected to be phased out in January 2023, putting upward pressure on energy prices, too. Strong wage growth, the pass-through of elevated energy prices, and significant policy support are set to continue fuelling core inflation over the next quarters. Nevertheless, as economic activity weakens and high interest rates suppress demand, inflationary pressures are forecast to gradually subside towards the end of the forecast horizon. As a result, after peaking in the beginning of 2023 at almost 19%, inflation is projected to decelerate to 4.3% towards the end of 2024.

This forecast is subject to significant risks mainly tilted to the downside. A more persistent increase in inflation, especially given Poland's tight labour market, could put significant pressure on real incomes. A tightening of financing conditions might constrain fiscal policy, with repercussions to economic growth.

Public finances under pressure

The accumulation of expenditure that had not been included in the original budget combined with the income tax cuts will likely lead to an increase in the general government deficit in 2022, estimated at 4.8% of GDP. The government has taken a series of measures to mitigate the impact of high energy prices, including lowering of VAT rates, cash heating subsidies to households and a multi-annual support scheme for energy-intensive industries, with the total estimated budgetary impact of 2.1% of GDP. Simultaneously, public finances are impacted by the cost of aid to people fleeing Ukraine, which covers social benefits, accommodation subsidies as well as expenditures on education and healthcare.

The general government deficit is expected to increase to 5.5% of GDP in 2023. The government has adopted further support measures to alleviate the impact of high energy prices next year. Electricity prices will be frozen for households within certain consumption limits and capped for households and small and medium enterprises. A fixed-price scheme for coal purchase will be introduced. The expenditures on people fleeing Ukraine are set to continue. The government has also launched a large multi-annual programme of investment in defence, increasing spending in this area up to 3% of GDP per year.

The general government deficit is forecast at 5.2% of GDP in 2024. Most of the extraordinary fiscal measures are set to be terminated, while a gradual normalisation of inflation trends is assumed. The public debt ratio, whose increase is moderated by the high nominal growth, is expected to reach 54.2% of GDP.

Table II.25.1:

Main features of country forecast - POLAND

	2021				Annual percentage change					
	bn PLN	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		2623.9	100.0	4.0	4.5	-2.0	6.8	**4.0**	**0.7**	**2.6**
Private Consumption		1478.1	56.3	3.5	3.4	-3.4	6.3	**4.2**	**2.3**	**2.4**
Public Consumption		493.3	18.8	2.8	6.5	4.9	5.0	**0.2**	**0.6**	**0.9**
Gross fixed capital formation		447.2	17.0	5.2	6.2	-2.3	2.1	**3.7**	**2.5**	**4.3**
Exports (goods and services)		1519.5	57.9	7.5	5.3	-1.1	12.5	**4.2**	**2.8**	**4.6**
Imports (goods and services)		1431.0	54.5	7.0	3.2	-2.4	16.1	**6.4**	**1.5**	**4.2**
GNI (GDP deflator)		2528.4	96.4	3.8	4.5	-1.5	6.8	**4.4**	**1.0**	**2.7**
Contribution to GDP growth:	Domestic demand			3.7	4.3	-1.5	4.9	**3.0**	**1.8**	**2.3**
	Inventories			0.3	-1.1	-1.1	3.0	**2.0**	**-1.9**	**0.0**
	Net exports			0.1	1.2	0.6	-1.0	**-1.1**	**0.8**	**0.2**
Employment				1.1	0.0	0.0	1.5	**1.4**	**0.1**	**0.3**
Unemployment rate (a)				10.8	3.3	3.2	3.4	**2.7**	**3.0**	**3.1**
Compensation of employees / head				4.3	8.6	5.3	3.6	**11.0**	**10.4**	**6.9**
Unit labour costs whole economy				1.3	3.9	7.5	-1.6	**8.1**	**9.8**	**4.6**
Saving rate of households (b)				4.2	2.9	8.8	4.1	**3.9**	**2.4**	**3.5**
GDP deflator				2.1	3.0	4.3	5.1	**12.8**	**10.3**	**5.1**
Harmonised index of consumer prices				2.0	2.1	3.7	5.2	**13.3**	**13.8**	**4.9**
Terms of trade goods				0.5	1.5	3.2	-2.0	**-4.2**	**-1.8**	**0.6**
Trade balance (goods) (c)				-2.8	-0.8	1.3	-1.3	**-4.7**	**-5.1**	**-4.6**
Current-account balance (c)				-3.2	0.8	3.3	-0.1	**-2.9**	**-2.5**	**-1.6**
General government balance (c)				-3.9	-0.7	-6.9	-1.8	**-4.8**	**-5.5**	**-5.2**
Structural budget balance (d)				-2.0	-2.3	-6.0	-2.5	**-5.5**	**-4.7**	**-4.2**
General government gross debt (c)				50.3	45.7	57.2	53.8	**51.3**	**52.9**	**54.2**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

26. ROMANIA

After a strong 2022, Romania's economy is set to slow down with real GDP growth at around 2% in the coming years due higher inflation, tighter financial conditions and the fallout from Russia's war of aggression against Ukraine. Inflation is expected to peak at the end of 2022, remaining still high in 2023, before declining in 2024. Unemployment will hover around 5-6%. The general government deficit is set to gradually fall to 4.8% in 2024, driven by strong revenues and a decrease of current expenditure as a share of GDP, mainly on the back of high nominal GDP growth. The debt-to-GDP ratio is set to be at 47.6% in 2024.

Strong slowdown after high growth

In the first half of 2022, the Romanian economy expanded by 5.7% y-o-y. In particular, private consumption and investments grew strongly as pandemic restrictions were lifted allowing pent-up demand to catch-up. In addition, a strong labour market with higher employment and wage growth supported disposable income as did government measures to mitigate the impact of high energy prices.

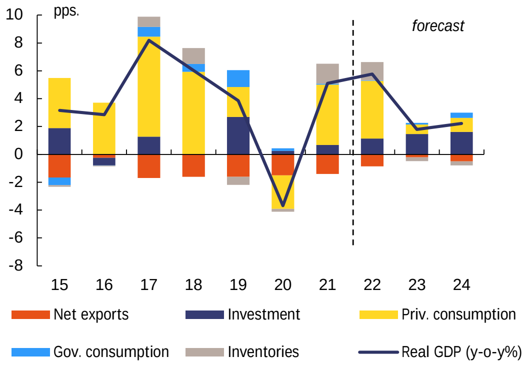
However, for the second half of 2022 and beyond, the fallout from Russia's war of aggression against Ukraine, high inflation, monetary policy tightening and the strong liquidity control are all set to slow down real GDP growth signifcantly. Sectors like agriculture, extractive and chemical industry are projected to be particularly affected.

Still, beyond 2022 and due to the expected inflow of EU funds, in particular from the Recovery and Resilience Facility (RRF), gross fixed capital formation is expected to support real GDP growth. Private consumption growth is expected to remain just positive as inflation is reducing households' disposable income, while government support schemes and a resilient labour market offer some support.

Romania's economy is not expected to get support from the external sector. In 2022, strong domestic demand is set to widen the current account deficit further to [9.1%]. Afterwards, the cooling of the economy provides a limited improvement, due to a lower demand for imports.

Overall, real GDP is projected to grow by 5.8% in 2022, 1.8% in 2023 and 2.2% in 2024. Risks to the macroeconomic forecast are tilted to the downside as delays in the implementation of Romania's RRP could reduce investments and growth.

Graph II.26.1: **Romania - Real GDP growth and contributions**



Labour market broadly follows real GDP

Throughout 2022, the unemployment rate decreased towards pre-pandemic levels and is forecast to reach 5.4% on the back of strong economic growth. Despite a slight increase to 5.8% in 2023, the labour market is set to remain tight, supporting strong nominal private sector wage increases. In 2024, unemployment is expected to decrease a bit, in line with the economy.

Inflation to remain high in 2023

The surge in energy and international food prices, has broadedned into core inflation components, and is set to push nominal wages up. Against this backdrop, inflation is projected to remain persistent over the forecast horizon. As the energy support scheme is supposed to expire in 2023-Q3, retail energy prices are likely to increase. Overall, HICP is set to reach 11.8% in 2022, 10.2% in 2023, before falling to 6.8% in 2024.

Public deficit benefits from high nominal GDP growth

Romania's general government deficit is forecast to decrease to 6.5% of GDP in 2022, compared to 7.1% in 2021. Revenues are set to benefit from solid nominal GDP growth, and from the strong energy-related tax and non-tax revenues. On the expenditure side, public investment is expected to be higher than in 2021, while public wages, social assistance and government purchases are set to rise slower than nominal GDP. The forecast takes into account the measures to mitigate the economic and social impact of high energy prices adopted in April (food vouchers, fuel subsidy) and July (increases in public wages, one-off payment to pensioners), the amendment of the fiscal code and the compensation scheme to deal with the surge in energy prices until August 2023 (which is expected to have a slightly positive budgetary impact excluding the already mentioned economic support measures). The positive impact on revenues from high nominal GDP growth and from the tax administration reform on tax collection contained in the RRP partly offset the upward pressures on deficit from economic and social support measures and from increases in interest payments due to deteriorating market access.

The deficit is forecast to fall to around 5.0% of GDP in 2023, mainly thanks to a decrease of current expenditure as a share of GDP (stemming from the discontinuation of most of the economic and social measures implemented in 2022, about 0.5 p.p. of GDP), and to the effect of automatic stabilisers as nominal economic growth is expected to still be high. Capital expenditure is projected to grow at a sustained pace thanks to the implementation of the RRP, and of other nationally-financed investments. In 2024, the deficit is forecast to decrease to 4.8% of GDP.

The general government debt is projected to decrease to 47.9% of GDP in 2022, 47.3% in 2023, before increasing to 47.6% in 2024.

Risks to the fiscal forecast are tilted to the downside. Uncertainty around the final net impact of the energy measures, lower GDP growth, and the electoral cycle, with elections in 2024, could result in higher budget deficits.

Table II.26.1:

Main features of country forecast - ROMANIA

		2021			Annual percentage change					
	bn RON	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		1181.9	100.0	3.9	3.9	-3.7	5.1	**5.8**	**1.8**	**2.2**
Private Consumption		736.5	62.3	5.8	3.4	-3.9	7.1	**6.7**	**1.1**	**1.6**
Public Consumption		206.1	17.4	0.5	7.2	1.1	0.4	**0.3**	**0.8**	**2.5**
Gross fixed capital formation		285.0	24.1	5.7	12.6	1.1	2.9	**4.7**	**5.6**	**5.9**
Exports (goods and services)		482.8	40.8	10.1	5.4	-9.5	12.5	**8.2**	**3.5**	**4.8**
Imports (goods and services)		549.7	46.5	12.0	8.6	-5.2	14.6	**9.0**	**3.4**	**5.0**
GNI (GDP deflator)		1163.3	98.4	3.8	4.3	-3.8	5.1	**5.3**	**2.2**	**2.4**
Contribution to GDP growth:	Domestic demand			5.6	6.0	-2.0	5.1	**5.3**	**2.3**	**3.0**
	Inventories			-0.2	-0.6	-0.2	1.4	**1.3**	**-0.3**	**-0.3**
	Net exports			-1.5	-1.6	-1.5	-1.4	**-0.9**	**-0.2**	**-0.5**
Employment				-0.6	0.1	-2.1	1.8	**0.5**	**-1.4**	**-0.1**
Unemployment rate (a)				8.2	4.9	6.1	5.6	**5.4**	**5.8**	**5.4**
Compensation of employees / head				11.5	10.9	4.0	4.4	**8.1**	**8.6**	**5.7**
Unit labour costs whole economy				6.6	6.9	5.8	1.2	**2.8**	**5.2**	**3.3**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				8.0	6.8	4.1	5.4	**11.4**	**10.0**	**8.0**
Harmonised index of consumer prices				5.2	3.9	2.3	4.1	**11.8**	**10.2**	**6.8**
Terms of trade goods				1.9	2.1	3.3	0.8	**-1.7**	**-0.3**	**-0.2**
Trade balance (goods) (c)				-9.6	-8.0	-8.6	-9.6	**-11.2**	**-11.3**	**-11.2**
Current-account balance (c)				-7.9	-6.0	-6.3	-7.5	**-9.1**	**-8.8**	**-8.4**
General government balance (c)				-3.2	-4.3	-9.2	-7.1	**-6.5**	**-5.0**	**-4.8**
Structural budget balance (d)				-1.7	-4.7	-7.5	-6.0	**-6.3**	**-4.6**	**-4.3**
General government gross debt (c)				27.2	35.1	46.9	48.9	**47.9**	**47.3**	**47.6**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.
Notes: Due to a break in historical employment data in 2021, employment-related variables have been affected (employment, unemployment as well as cyclically-adjusted and structural fiscal indicators).

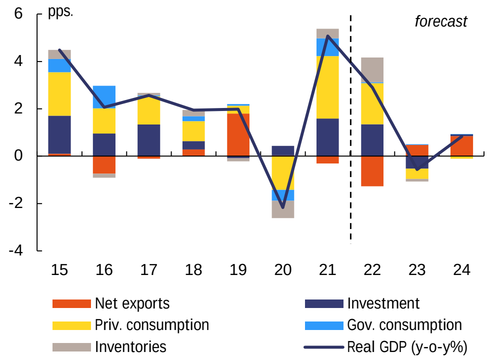
27. SWEDEN

The Swedish economy is set to contract mildly in 2023 as high inflation, rising household debt service and uncertainty weigh on household consumption and investment. Wage pressures are projected to remain contained, in line with the rise in unemployment. This, along with falling commodity and freight prices and easing supply bottlenecks is expected to contribute to the decrease of inflation over the forecast horizon, supporting a gradual recovery as of the second half of 2023. The general government balance is projected to show a slight surplus.

Rising interest rates and inflation weigh on domestic demand…

Sweden had robust real GDP growth in the first half of 2022, supported by strong income and employment gains during the recovery from the pandemic. Private consumption and investment were the main drivers, whereas net foreign demand lowered growth, due to high import growth. Services imports were particularly strong. Inflation started to rise sharply and broaden to a wide range of goods and services during the year. This impacted disposable income and profit margins, contributing to a loss in growth momentum towards year-end.

Graph II.27.1: Sweden - Real GDP growth and contributions



…inducing a modest fall in real GDP

This slowdown is expected to continue in 2023 with private domestic demand under pressure from higher input costs, consumer prices and interest rates. Profit margin erosion and broader uncertainty about the outlook weighs on business investment, even though high capacity utilisation and a need for energy savings call for investment. Private consumption is projected to fall on the back of tighter financing conditions, sharply lower consumer confidence, falling house prices, and lower disposable income. Household real disposable income is particularly vulnerable to monetary tightening as variable interest rates on mortgages are widespread. Private consumption is expected to be cushioned, however, by savings accumulated during the pandemic.

Having grown close to 3% in 2022, real GDP is forecast to decrease by 0.6% in 2023. The economy is expected to recover and grow at a moderate pace of just below 1% in 2024 in view of improved global economic conditions and fading drags from inflation. Risks to private consumption and, thereby, to the recovery, are on the downside, should there be a rise in precautionary savings.

Relatively robust labour market

In view of labour shortages in a wide range of sectors, the labour market is set to remain relatively robust in the face of the projected slowdown. Nevertheless, the unemployment rate is set to rise to just below 8% in 2024 in a delayed response to the expected slowdown.

In the upcoming round of wage negotiations social partners are set to agree to limit nominal wage growth to retain the competitiveness of Swedish manufacturing industry, despite eroding purchasing power for employees and labour market shortages in several sectors. A substantial part of the terms-of-trade losses will, therefore, be absorbed through falling real income of wage earners. Wage drift is expected to edge higher against the background of persistent skills mismatches. This reflects some employees seeking to partly offset cost increases affecting their disposable income.

Inflation to fall gradually

At the beginning of 2022, sharp increases in imported commodities pushed up headline inflation, subsequently spreading to core inflation. At the end of 2022 the HICP inflation rate is set to peak at around 10%. Falling commodity prices, normalising supply conditions expected over the forecast horizon and assumed moderate wage increases pave the way for a decline in inflation over the forecast horizon, to just below 2% in 2024. In 2023, however, the delayed pass-through of the weakening in the krona exchange rate in 2022, along with stickiness of broad-based inflation, is set to lead to a slow pace of reduction.

Fiscal outlook remains strong

The general government balance is expected to remain close to balance over the forecast horizon. In 2022, a small budget surplus is set to be supported by still strong tax revenues, while expenditure should be contained as remaining COVID-related support measures were phased out during the year. The surplus outcome comes despite several amending budgets which have been adopted during the year, encompassing measures equivalent to around ¼% of GDP aimed at mitigating the impact of high energy prices, and emergency spending directed at countering the impact of Russia's invasion of Ukraine.

In the absence of a budget proposal for 2023, following September's general election and the subsequent change of government, the projection reflects the measures that have been announced by the forecast's cut-off date. Notably, these measures do not include a longer-term electricity cost compensation scheme for households and businesses that is expected to be put into place, details of which are not yet known. Overall, this is projected to result in a government budget position close to balance in 2023 and 2024.

The public debt-to-GDP ratio is set to resume its downward path due to a denominator effect and fall to below 30% in 2023 and 2024. This expected decrease reflects to some extent the stepwise debt-reducing repayment of a Riksbank loan for foreign currency reserves over 2021-2023, equivalent to around 3½% of GDP.

Table II.27.1:
Main features of country forecast - SWEDEN

		2021			Annual percentage change					
		bn SEK Curr. prices	**% GDP**	**03-18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
GDP		5451.8	100.0	2.2	2.0	-2.2	5.1	**2.9**	**-0.6**	**0.8**
Private Consumption		2393.5	43.9	2.4	0.7	-3.2	6.0	**4.0**	**-1.0**	**-0.2**
Public Consumption		1411.3	25.9	1.2	0.3	-1.8	2.8	**0.1**	**0.2**	**0.1**
Gross fixed capital formation		1396.6	25.6	3.2	-0.3	1.7	6.3	**5.3**	**-2.0**	**0.2**
Exports (goods and services)		2480.2	45.5	3.6	6.0	-5.5	7.9	**4.3**	**0.1**	**2.9**
Imports (goods and services)		2245.7	41.2	4.0	2.1	-6.0	9.6	**7.8**	**-0.9**	**1.3**
GNI (GDP deflator)		5608.0	102.9	2.3	2.9	-1.6	4.4	**2.7**	**-0.8**	**0.7**
Contribution to GDP growth:	Domestic demand			2.2	0.3	-1.5	5.0	**3.1**	**-0.9**	**0.0**
	Inventories			0.1	-0.1	-0.7	0.4	**1.0**	**-0.1**	**0.0**
	Net exports			0.0	1.8	0.0	-0.3	**-1.3**	**0.5**	**0.9**
Employment				0.9	0.6	-1.3	1.2	**2.9**	**-0.1**	**0.1**
Unemployment rate (a)				7.3	7.0	8.5	8.8	**7.2**	**7.6**	**7.8**
Compensation of employees / head				3.1	2.9	2.5	4.4	**2.8**	**4.4**	**3.8**
Unit labour costs whole economy				1.8	1.5	3.4	0.5	**2.8**	**4.9**	**3.0**
Saving rate of households (b)				12.4	18.1	19.6	18.1	**13.3**	**11.4**	**12.8**
GDP deflator				1.7	2.5	2.0	3.0	**6.3**	**5.2**	**2.0**
Harmonised index of consumer prices				1.4	1.7	0.7	2.7	**8.1**	**6.6**	**1.8**
Terms of trade goods				0.0	1.1	1.1	0.5	**-2.4**	**-1.0**	**0.3**
Trade balance (goods) (c)				4.6	3.9	4.0	3.9	**3.2**	**2.9**	**3.7**
Current-account balance (c)				5.2	5.2	5.9	5.3	**3.3**	**3.3**	**4.2**
General government balance (c)				0.4	0.6	-2.8	-0.1	**0.2**	**0.2**	**0.0**
Structural budget balance (d)				0.3	0.5	-0.7	0.3	**-0.1**	**1.0**	**1.1**
General government gross debt (c)				41.9	35.2	39.5	36.3	**32.1**	**29.4**	**28.5**

(a) Eurostat definition. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

Candidate Countries

28. ALBANIA

Economic growth continues to be driven by domestic demand and strongly growing tourism coupled with rising commodity exports estimated at 3.2% in 2022. Regulated electricity prices and currency appreciation keep the inflation rate below double digits this year. In 2023, weakening private consumption and investment in the face of uncertainty about prices and development of trade partners are expected to slow growth to 2.6% in 2023 before the adaptation of the economy to the energy and price situation allow growth to pick up to about 3.4% in 2024.

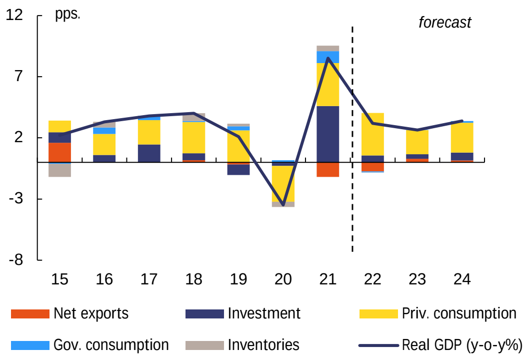
Economy shows resilience in the first half of 2022

The Albanian economy grew by 8.5% last year, and continued to grow by 4.4% in the first half of 2022, driven by private consumption and thriving exports. A tourism season exceeding expectations pushed services exports and commodity exports, mainly primary commodities, construction materials and textiles, benefitted from price advantages and tight supply chains. The so far very strong private consumption is expected to weaken in the second half of the year, despite real wage growth in the private sector and increasing employment as uncertainty mounts about lasting price hikes. This is also expected to decelerate private investment growth. The public subsidies of the regulated electricity price for households and SMEs pose an increasingly heavy burden on public finances and coupled with tightening financing conditions will lead to a cut of public investment, which provided much stimulus in the last two years. Overall, in 2022 the deceleration of domestic demand is expected to dampen import growth only slightly, resulting in a negative contribution of net exports to a projected real growth of 3.2%.

Uncertainty set to weigh on growth

For 2023 and 2024, growth is set to be strongly affected by uncertainty whether the government increases the regulated electricity price and how the war will impact exports to and investment from the main trading partners in the EU. In addition, household consumption in 2023 is expected to be impacted by the negative effect of lasting high food and transport prices as these items account for almost half of the household budgets. The tightening external financing conditions and the likely need for increasing subsidies and social support are expected to limit the possibilities for fiscal stimulus in 2023, when earthquake reconstruction is set to end. Slowing domestic demand is projected to decrease import growth strongly, resulting in a slightly positive contribution of net exports, also helped by moderate service export growth, as tourism to Albania remains relatively cheap and attractive. Economic growth is projected to weaken to 2.6% in 2023. Public energy security policies and decreasing unemployment are expected to support a moderate recovery of private consumption and investment which will lead growth to pick up to about 3.4% in 2024. The labour market has been improving in 2022 with employment exceeding 2019 levels. Moderate employment growth in 2023 and 2024 is expected to gradually decrease the unemployment rate to about 10.5%.

Graph II.28.1: **Albania - Real GDP growth and contributions**



This outlook is subject to downside risks, mainly related to low domestic hydroelectric production due to insufficient rainfall. In this case, the high prices for imported electricity could overburden either the public or the households' budgets.

Rising prices widen the current account deficit

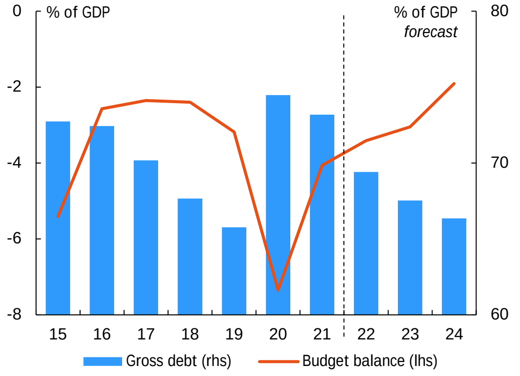
In 2022, rising commodity import prices are projected to widen the merchandise trade deficit even further and to increase the current account deficit by about 0.8 pps to 8.3% of GDP in 2022, despite a growing service surplus and currency appreciation. Decelerating import growth, improving terms of trade and a steady growth of services exports and remittances are set to help the gradual decrease of the current account deficit to 7.4% of GDP in 2024.

Monetary policy normalisation continues

Annual inflation is projected to exceed the central bank's 3% target by about 4 pps in 2022. The Bank of Albania so far raised the key policy interest rate by 1.55 pps to 2.25% to counter the inflationary pressures and is set to continue the normalisation of its monetary policy. For 2023, inflation is expected to subside to 4.1% before approaching the target rate in 2024.

Public finances benefit from higher revenues

Graph II.28.2: **Albania - General government budget balance and gross debt**



Following several tax measures, revenue is set to slightly increase and public expenditure is expected to be limited by financing conditions, administrative capacity and the intention to achieve a positive primary balance in 2024 in line with the new fiscal rule. This is expected to reduce public deficit and debt ratios to about 1.9% and 66.4% of GDP respectively in 2024.

Table II.28.1:

Main features of country forecast - ALBANIA

	2021			Annual percentage change						
	bn ALL	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		1889.8	100.0	3.9	2.1	-3.5	8.5	**3.2**	**2.6**	**3.4**
Private Consumption		1419.4	75.1	4.2	3.3	-3.7	4.4	**4.6**	**2.6**	**3.2**
Public Consumption		222.2	11.8	2.0	2.9	1.5	8.2	**-0.7**	**0.1**	**1.2**
Gross fixed capital formation		457.1	24.2	2.5	-3.6	-1.1	20.3	**2.3**	**1.6**	**2.7**
Exports (goods and services)		578.7	30.6	8.9	2.7	-27.7	46.6	**7.5**	**3.7**	**4.2**
Imports (goods and services)		829.9	43.9	4.7	2.3	-19.2	31.6	**6.9**	**2.0**	**2.7**
GNI (GDP deflator)		1864.0	98.6	3.8	0.9	-3.8	8.8	**3.5**	**2.6**	**3.4**
Contribution to GDP growth:		Domestic demand		4.5	2.1	-3.0	9.1	**4.0**	**2.4**	**3.2**
		Inventories		-0.5	0.2	-0.4	0.5	**0.0**	**0.0**	**0.0**
		Net exports		0.0	-0.2	0.0	-1.2	**-0.7**	**0.3**	**0.1**
Employment				2.2	2.1	-1.9	-0.8	**1.2**	**0.9**	**0.9**
Unemployment rate (a)				15.7	12.1	12.3	12.2	**11.4**	**10.9**	**10.5**
Compensation of employees / head				:	:	:	:	**:**	**:**	**:**
Unit labour costs whole economy				:	:	:	:	**:**	**:**	**:**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				2.3	1.3	0.7	5.9	**6.6**	**4.3**	**3.6**
Consumer price index				2.4	1.4	1.6	2.0	**7.1**	**4.3**	**3.4**
Terms of trade goods				-1.1	-2.8	-9.8	2.8	**-0.2**	**0.5**	**0.2**
Trade balance (goods) (c)				-24.3	-22.8	-22.5	-24.8	**-26.6**	**-26.5**	**-26.1**
Current-account balance (c)				-10.5	-7.9	-8.7	-7.7	**-8.3**	**-7.9**	**-7.4**
General government balance (c)				-7.2	-3.2	-7.4	-4.1	**-3.4**	**-3.0**	**-1.9**
Structural budget balance (d)				:	:	:	:	**:**	**:**	**:**
General government gross debt (c)				65.4	65.8	74.5	73.2	**69.4**	**67.5**	**66.4**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

29. MONTENEGRO

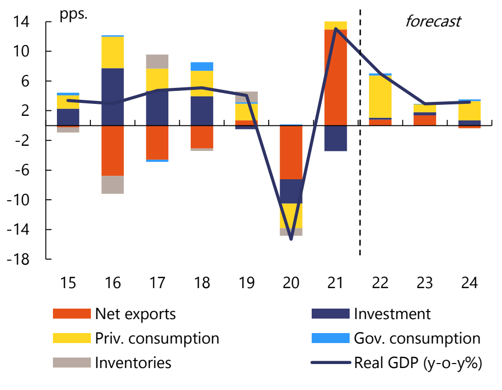
Montenegro's economy kept growing fast in the first three quarters of 2022, driven by private consumption and a good tourism season. However, growth is set to decelerate in 2023 as continued high inflation challenges both household and company balance sheets. A noticeable increase in public sector wages, pensions and social benefits is set to derail the deficit target for 2022 and keep the budget deficit under pressure in the coming years.

Strong growth expected for 2022

Montenegro's economy recorded strong growth, of 9.9% y-o-y, in the first half of 2022. Economic activity was driven by an increase in private consumption and exports, benefiting from a surge in real disposable income and the recovery in tourism, employment and remittances. In contrast, gross fixed capital formation recorded only marginal growth, while government consumption registered slight contraction over the year.

Similar trends continued supporting domestic and external demand in the third quarter of 2022, albeit at a slower pace due partly to base effects. Consequently, GDP growth is estimated to remain strong, averaging around 7% for the whole year.

Graph II.29.1: **Montenegro - Real GDP growth and contributions**



A complicated political landscape

In August, a vote of no confidence saw the government collapse for the second time in 2022. The complexity of the political situation exacerbates already high uncertainties, and postpones the reform process, diverting the focus from imminent economic challenges. Consequently, the present outlook will assume no policy change over the forecast horizon.

Some deceleration ahead

The unfavourable global economic outlook and high uncertainty are weighing on Montenegro's growth prospects. The economy is expected to decelerate amid headwinds from high inflation, increased political uncertainty, as well as tighter financing conditions and weaker external demand. As a result, economic growth is set to moderate in 2023 as these factors weigh on private consumption and tourism exports. Yet, GDP growth is expected to regain some momentum in 2024 as several capital investments in renewable sources of energy (both public and private) start to materialise.

Oil and food import prices are set to remain two key drivers of inflation, trailing global markets trends. Inflation is expected to start decelerating in 2023 as Montenegro has little dependence on gas and a significant share of hydropower production capacities. Therefore, while high oil and electricity prices are affecting domestic demand, growing domestic electricity generation capacities would support exports. Given the strong dependence of Montenegro's small economy on imports, the trade and current account deficits would narrow slightly in 2023 due to the expected slowdown in consumption. The deficits are expected to broaden to some degree again in 2024 as the trend reverses.

Downside risks have increased due to the deteriorating external environment and geopolitical tensions. Montenegro's narrow export base makes it vulnerable to fluctuations in international demand. Moreover, Montenegro has become a target of intense cyber-attacks in the context of Russia's war of aggression against Ukraine.

The banking sector holds solid capital levels and ample liquidity. However, while banks would continue supporting the economy, rising cost of lending is set to cool down domestic demand for loans.

Persistently high unemployment rates

The rebound of tourism had a positive impact on job creation in 2022, with a significant share of new employment recorded –in particular– among women. However, employment growth is expected to decelerate in 2023, as domestic and external demand weakens, and to regain some impulse again in 2024 as construction activity reactivates thanks to some new investments.

Weakening fiscal position

Budget performance kept improving in the first three quarters of 2022 on the back of higher-than-expected inflation and strong output growth, which boosted budget revenue by some 5% above the plan and around 10% higher over the year. However, this situation is expected to start deteriorating quickly in the last quarter of 2022 after a series of new spending measures adds to major increases in public sector wages and pensions, feeding into a substantially higher budget deficit than originally planned for 2022. The fiscal balance is expected to moderate over the medium term only thanks to GDP growth. This same trend is expected for the public debt path in the absence of major debt-financed public investments during the forecast period.

Overall, the balance of risks to the fiscal outlook remains tilted to the downside due to recurrent pressures to increase spending in a volatile political environment.

Table II.29.1:

Main features of country forecast - MONTENEGRO

	2021			Annual percentage change						
mio EUR	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP	4955.1	100.0	3.2	4.1	-15.3	13.0	**7.0**	**2.9**	**3.2**
Private Consumption	3617.1	73.0	:	3.1	-4.6	4.0	**7.7**	**1.4**	**3.6**
Public Consumption	976.6	19.7	:	1.0	0.8	0.5	**1.5**	**0.5**	**1.2**
Gross fixed capital formation	1096.2	22.1	:	-1.7	-11.9	-12.3	**1.2**	**2.0**	**3.5**
Exports (goods and services)	2122.5	42.8	:	5.8	-46.2	81.9	**21.9**	**2.2**	**4.2**
Imports (goods and services)	3081.9	62.2	:	2.7	-20.1	13.7	**13.8**	**-0.3**	**3.9**
GNI (GDP deflator)	5060.2	102.1	:	3.2	-14.3	13.6	**2.8**	**2.9**	**-1.6**
Contribution to GDP growth:	Domestic demand		4.9	1.9	-6.4	0.0	**6.2**	**1.5**	**3.5**
	Inventories		-0.4	1.5	-1.0	0.2	**0.0**	**0.0**	**0.0**
	Net exports		-1.4	0.7	-7.2	12.9	**0.8**	**1.4**	**-0.4**
Employment			:	2.6	-10.1	-2.1	**2.9**	**1.1**	**1.6**
Unemployment rate (a)			18.4	15.4	18.3	18.9	**16.3**	**17.4**	**15.9**
Compensation of employees / head			:	:	:	:	**:**	**:**	**:**
Unit labour costs whole economy			:	:	:	:	**:**	**:**	**:**
Saving rate of households (b)			:	:	:	:	**:**	**:**	**:**
GDP deflator			:	:	:	:	**:**	**:**	**:**
Consumer price index			2.9	0.5	-0.8	2.5	**12.2**	**6.1**	**3.0**
Terms of trade goods			:	:	:	:	**:**	**:**	**:**
Trade balance (goods) (c)			-42.1	-41.7	-39.2	-38.7	**-41.6**	**-40.3**	**-41.0**
Current-account balance (c)			-21.3	-15.0	-26.1	-9.2	**-10.2**	**-9.3**	**-10.1**
General government balance (c)			-3.0	-1.9	-11.1	-1.9	**-5.6**	**-4.3**	**-3.2**
Structural budget balance (d)			:	:	:	:	**:**	**:**	**:**
General government gross debt (c)			48.2	76.5	105.3	82.5	**75.5**	**73.1**	**71.5**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

30. NORTH MACEDONIA

Mounting energy prices and imports led output growth to slow down in the first half of 2022 and the short-term outlook to remain muted. In the next two years, assuming that inflation will abate, and that supply chains will be restored, economic activity is expected to gain pace again, with the external environment gradually proving less of a drag on growth.

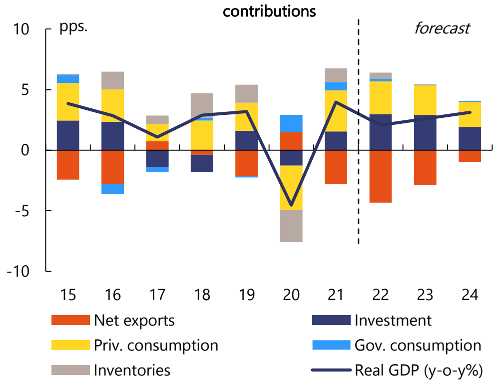
Slowdown in domestic demand ahead

After rebounding by 4% in 2021, economic growth is set to be muted this year and next, mainly due to the steep rise in energy prices. Investment rose strongly in the first half of the year, partly as companies stocked up inventories in expectation of further price increases. While export growth remained strong in the first half, the external environment is deteriorating. The negative contribution from the external side, which in 2022 is driven by strong imports, is expected to diminish over the forecast horizon, mainly as import growth is projected to slow down, in line with weaker domestic demand. More moderate, but still elevated inflation and continued supply disruptions are weighing on private consumption and investment in the next two years.

The external deficit has increased

In the first half of 2022, the worsening trade balance led to the deterioration in the current account, in spite of a marked pick-up in private transfers and a higher surplus in services trade. The deficit in the energy balance soared, as a result of higher prices for gas and electricity. The North Macedonian economy imports over 30% of its domestic energy needs, and fully relies on imports for gas and oil. Looking ahead, the external balance is expected to improve, even as iron and steel manufacturing, which accounts for some 10% of the country's total exports, is hit by elevated electricity and declining metal prices. Prospects for further strengthening FDI inflows, motivated by the start of EU accession negotiations with North Macedonia as well as by the government's subsidies for investment in the special industrial zones, improve the external outlook in the medium term.

Graph II.30.1: North Macedonia - Real GDP growth and contributions



Structural weaknesses continue to impede the labour market

The labour market proved resilient in the first half of the year, benefitting from extensive government support. However, labour market participation remained low, at 66%, as did the employment rate, at 57%, with both still lower for women. Based on data from the 2021 population census, there was a large outflow of young workers from the labour force in the second quarter.

During the forecast horizon, employment growth and the decrease in the unemployment rate are expected to decelerate. This results mainly from the government withdrawing its wage subsidies, coupled with a large number of companies temporarily driving down production times, implying shorter working hours and layoffs.

Price pressures set to abate somewhat

Consumer price inflation has soared since late 2021, mainly as a result of rising food and energy prices, with a marked push in core inflation over the summer. Spillover effects are expected to increase in the first half of 2023. With the projected stabilisation of energy and food prices over the forecast horizon, price increases are set to slow down somewhat in 2023 and beyond.

Energy woes imply fiscal costs

Revenue outperformed projections in the first eight months of 2022, with income from taxes and contributions some 13% above its pre-year level, largely accounting for the annual decline of the fiscal deficit in this period. Still, the government adopted a supplementary budget in May, which raises the 2022 deficit target by 0.7 pps. to 4.2%. This was motivated by the higher-than-projected fiscal cost to cover the losses of the state-owned, gas-fired electricity producer in the regulated market. The low implementation of budgeted capital expenditure in this period also leaves room for reallocating funds towards electricity subsidies. The government has ceased some broad-based measures, such as VAT reductions, in favour of more targeted fiscal support, including block tariffs progressively increasing the cost of electricity for consumers. The deficit is expected to decrease in 2023, but remain elevated, due to further needs to support the economy during the energy crisis. The new organic budget law, adopted by the Parliament in July, puts a cap on the fiscal deficit (3% of GDP in non-crisis times), and on general government debt (60%), which, once applied, will anchor fiscal policy in the medium term.

Risks mainly on the downside

The growth outlook could be challenged if the geopolitical environment aggravates global trade and energy prices, and if the energy balance worsens further. Also, a prolonged disruption of supply chains could depress exports further. On the other hand, the country's EU perspective may spur reforms raising the economy's growth potential and bolstering fiscal sustainability.

Table II.30.1:

Main features of country forecast - NORTH MACEDONIA

		2021		Annual percentage change						
	bn MKD	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		723.2	100.0	3.2	3.2	-4.5	4.0	**2.3**	**2.5**	**2.8**
Private Consumption		476.3	65.9	3.1	3.5	-5.6	5.0	**4.4**	**2.4**	**2.2**
Public Consumption		117.7	16.3	0.3	-0.8	10.1	4.1	**2.4**	**1.1**	**0.3**
Gross fixed capital formation		129.5	17.9	4.0	8.0	-6.1	8.0	**16.7**	**8.1**	**6.9**
Exports (goods and services)		476.8	65.9	8.7	7.2	-10.9	12.3	**8.7**	**9.6**	**8.3**
Imports (goods and services)		592.2	81.9	7.4	8.9	-10.9	13.9	**13.6**	**7.9**	**6.7**
GNI (GDP deflator)		688.5	95.2	2.9	2.4	-3.2	2.9	**2.6**	**3.7**	**3.3**
Contribution to GDP growth:	Domestic demand			3.3	3.8	-3.5	5.6	**6.3**	**3.4**	**3.0**
	Inventories			0.8	1.5	-2.7	1.1	**1.5**	**-0.5**	**0.0**
	Net exports			-0.8	-2.1	1.5	-2.8	**-5.4**	**-0.4**	**-0.2**
Employment				1.9	5.1	-0.4	1.1	**1.1**	**0.9**	**0.7**
Unemployment rate (a)				30.9	17.3	16.4	15.5	**14.8**	**14.7**	**14.6**
Compensation of employees / head				:	7.8	5.8	5.7	**13.7**	**8.4**	**4.0**
Unit labour costs whole economy				:	9.8	10.5	2.8	**12.3**	**6.8**	**1.9**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				2.8	1.6	-0.8	6.1	**10.3**	**7.3**	**2.3**
Consumer price index				1.7	0.8	1.2	3.2	**12.7**	**7.9**	**4.0**
Terms of trade goods				1.5	-0.2	-0.6	-0.4	**0.0**	**0.0**	**0.8**
Trade balance (goods) (c)				-21.9	-17.5	-17.0	-17.5	**-23.3**	**-23.1**	**-22.3**
Current-account balance (c)				-2.8	-3.3	-3.4	-3.5	**-7.8**	**-4.8**	**-3.6**
General government balance (c)				-1.6	-2.1	-8.3	-5.4	**-5.4**	**-4.4**	**-3.3**
Structural budget balance (d)				:	:	:	:	**:**	**:**	**:**
General government gross debt (c)				32.6	40.5	51.9	51.8	**51.4**	**51.6**	**52.5**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

31. SERBIA

Economic growth in Serbia is projected to slow to 2.7% in 2022 and 2.4% in 2023 as the impact of high inflation on real disposable income dampens private consumption. Inflation is set to peak this winter and to decelerate as of spring 2023. Strongly impacted by high capital transfers to finance energy imports, the general government deficit is projected to remain at around 4% of GDP in 2022 and to only slowly decline thereafter. Supported by high nominal GDP growth, the debt-to-GDP ratio is expected to gradually fall throughout the forecast horizon.

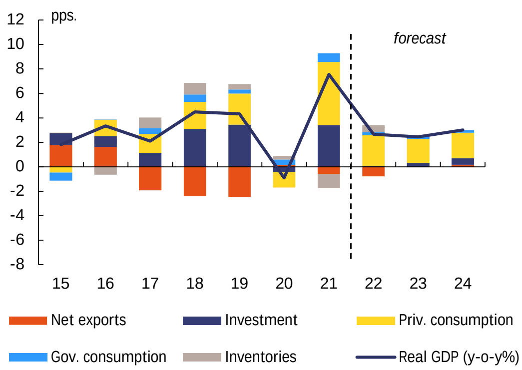
Decelerating expansion in 2022

Following a strong rebound by 7.5% in 2021, the Serbian economy continued to expand at a robust pace of 4.1% y-o-y in the first half of 2022, driven by private consumption and higher inventories. Short-term indicators suggest that the expansion of economic activity started to decelerate in summer. The impact of high inflation on real disposable income and the slowdown in main trading partners in the EU are projected to gradually dampen growth towards the end of the year. Overall expansion of the economy is expected to reach 2.7% in 2022, as a result of increases in private and government consumption and inventories, which are expected to be partially offset by a negative contribution of net exports to growth. Investment is projected to have a neutral contribution to growth, particularly impacted by the base effect from very high public investment in 2021. On the production side, the continued strong performance in the services sector is set to account for the bulk of annual growth, while agriculture and construction are forecast to contribute negatively due to the drought and base effects from high construction activity in 2021.

Growth momentum dampened by inflation

Economic growth is projected to slow down to 2.4% in 2023, mostly on the back of decelerating private consumption due to lower growth of real disposable income, impacted by high inflation. Despite reduced trade dynamics with Serbia's main trading partners in the EU, the contribution of net exports to growth is expected to improve due to decelerating imports and increased export capacity supported by recent foreign direct investment in the tradable sector. GDP growth in 2024 is projected to be mostly driven by private consumption and some pick-up in investment, but to remain below its pre-pandemic rate of somewhat above 4%. The current account deficit, after a sharp increase in 2022, mainly due to the much higher cost of energy imports, is expected to gradually narrow in 2023 and 2024.

Graph II.31.1: **Serbia - Real GDP growth and contributions**



Unemployment to resume gradual decline

Supported by strong employment growth exceeding the pace of arrival of previously inactive workers to the labour market, the unemployment rate is expected to fall below 10% in 2022. The decline in the unemployment rate is set to continue in 2023 and 2024, albeit at a more moderate pace.

Inflation to decelerate from high levels

Inflation continued its steady increase in 2022 reaching 14.0% y-o-y in September. It was initially driven by energy and food prices, but core inflation accounted for 60% of it in the third quarter of the year. After an assumed peak in 2022-Q4, inflation is projected to decelerate as from spring 2023 as base effects from lower price levels in early 2022 are set to subside, leading average annual inflation to slightly decelerate in 2023 and to return to single digits in 2024.

High uncertainty and substantial downside risks

Given Russia's continuing war of aggression against Ukraine, the growth outlook is subject to a high level of uncertainty while risks appear to be tilted to the downside. An even stronger or more durable hike in inflation, maintaining or exceeding the September 2022 level for a prolonged period, particularly due to a durable increase of core inflation in addition to continued pressure from energy and food prices, could further weaken purchasing power and thereby weigh on real growth more than currently anticipated. A deeper than expected slowdown in main trading partners, particularly in the EU, could dampen net exports as compared to the baseline. On the other hand, increased nearshoring of production could have beneficial effects on foreign direct investment and exports.

Deficit and debt levels on a downward path

After dropping to 4.1% of GDP in 2021, the general government deficit is expected to broadly stabilise in 2022.The deficit-reducing impact of a lower volume of fiscal support measures, lower investment spending and strong revenue performance from high nominal growth is set to be broadly offset by high capital transfers to state-owned enterprises in the energy sector to finance more costly gas and electricity imports. Supported by lower needs for energy-related capital transfers, the deficit is forecast to gradually decrease in 2023 and 2024. Following a slight decline to 57.1% in 2021, mostly as a result of very high nominal GDP growth, the general government debt-to-GDP ratio is projected to gradually decline further due to a continued robust increase in nominal GDP.

Graph II.31.2: **Serbia- General government budget balance and gross debt**

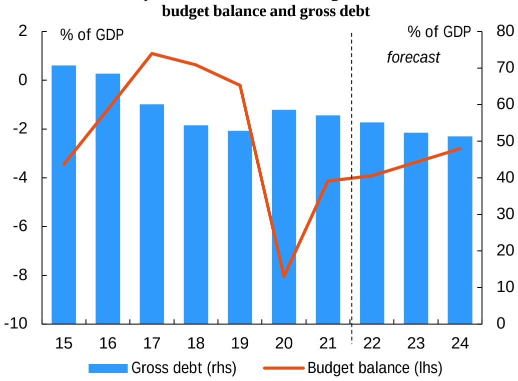


Table II.31.1:

Main features of country forecast - SERBIA

		2021			Annual percentage change					
	bn RSD	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		6270.1	100.0	3.0	4.3	-0.9	7.5	**2.7**	**2.4**	**3.0**
Private Consumption		4134.2	65.9	2.5	3.7	-1.9	7.8	**3.8**	**2.9**	**3.1**
Public Consumption		1056.6	16.9	1.3	1.9	2.8	4.1	**1.4**	**1.0**	**1.3**
Gross fixed capital formation		1448.5	23.1	5.8	17.2	-1.9	15.9	**0.2**	**1.4**	**2.3**
Exports (goods and services)		3416.2	54.5	9.1	7.6	-4.1	19.5	**9.0**	**5.4**	**6.1**
Imports (goods and services)		3905.0	62.3	7.1	10.7	-3.6	17.7	**9.1**	**4.6**	**5.0**
GNI (GDP deflator)		5992.4	95.6	2.7	4.0	1.5	6.0	**1.8**	**2.6**	**3.1**
Contribution to GDP growth:	Domestic demand			3.3	6.3	-1.2	9.3	**2.8**	**2.5**	**2.8**
	Inventories			0.2	0.4	0.3	-1.2	**0.6**	**0.0**	**0.0**
	Net exports			1.1	-2.5	0.1	-0.6	**-0.8**	**0.0**	**0.2**
Employment				-0.6	2.4	-0.2	2.6	**2.5**	**0.3**	**0.5**
Unemployment rate (a)				18.1	11.2	9.7	11.0	**9.7**	**9.5**	**9.2**
Compensation of employees / head				:	:	:	:	**:**	**:**	**:**
Unit labour costs whole economy				:	:	:	:	**:**	**:**	**:**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				6.8	2.4	2.4	5.9	**9.7**	**11.3**	**6.0**
Consumer price index				7.3	1.9	1.6	4.1	**11.9**	**10.6**	**5.6**
Terms of trade goods				:	3.1	1.0	0.5	**-4.5**	**0.6**	**0.0**
Trade balance (goods) (c)				-14.4	-12.2	-11.1	-11.1	**-14.6**	**-14.0**	**-13.8**
Current-account balance (c)				-7.0	-7.0	-4.1	-4.2	**-8.6**	**-7.8**	**-6.5**
General government balance (c)				-2.7	-0.2	-8.0	-4.1	**-3.9**	**-3.4**	**-2.8**
Structural budget balance (d)				:	:	:	:	**:**	**:**	**:**
General government gross debt (c)				50.9	52.8	58.6	57.1	**55.2**	**52.4**	**51.3**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

32. TÜRKİYE

Despite weak economic sentiment and high uncertainty, the economic performance was very strong in the first half of the year. Although economic growth is set to decelerate already in the second half of the year, in the short-term it is expected to be supported by a large carry-over and increased public spending prior to the general election scheduled for June 2023. Medium-term growth prospects are subject to significant policy uncertainty but are likely to remain largely subdued in view of the build-up of significant domestic and external imbalances.

Losing momentum

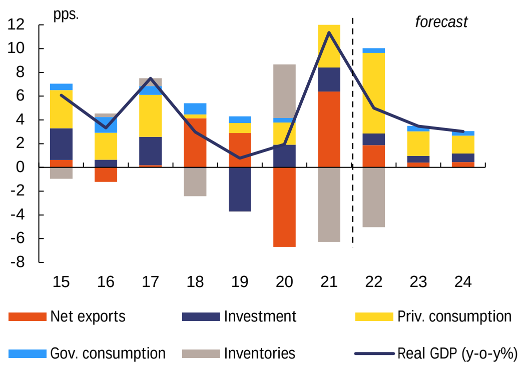
Despite weak economic sentiment indicators and high uncertainty triggered by Russia's war of aggression against Ukraine, Türkiye's economic performance was very strong in the first half of the year. Economic growth was largely driven by household consumption and exports, while contributions from other domestic demand components were more subdued and inventories declined strongly. An overly loose monetary policy stance, keeping real interest rates deeply negative, was instrumental in pushing domestic demand up and further increasing inflation to multiyear highs. With the strong rise in demand and the relative stabilisation of the real effective exchange rate since the start of 2022, imports rebounded as well.

High frequency indicators worsened in the third quarter, indicating some loss of momentum. Having fallen markedly already in the first half of the year, economic sentiment remained low. The index of real sector confidence continued its uninterrupted decline, scoring its lowest level in September as current orders and stocks fell. The manufacturing PMI and the seasonally adjusted capacity utilisation rate in manufacturing declined as well.

Pre-election largesse to support growth in 2023

Although economic growth is set to slow down already in the second half of the year, in the short-term, until the parliamentary and presidential elections scheduled for June 2023, it will be supported by increased public spending and transfers. Private consumption growth is expected to decelerate steeply as pent-up demand built-up during the pandemic dissipates, macroprudential policies tighten consumer credit, and high inflation erodes disposable income. However, the upbeat labour market performance, including sizeable minimum wage increases, and large energy subsidies are set to support household consumption growth. Investment is also expected to support domestic demand, although the elevated country risk is likely to sap its strength. Exports, one of the main recent drivers of economic growth, are forecast to slow down as external demand from major trading partners in the EU weakens. Nevertheless, exports are still expected to increase, sustained by Türkiye's improved competitiveness and its decision not to impose sanctions on Russia. They may also benefit from a relocation of companies out of Russia and from the shortening of global supply chains. Net exports' contribution to economic growth is, nonetheless, forecast to be rather marginal as domestic demand pulls imports up.

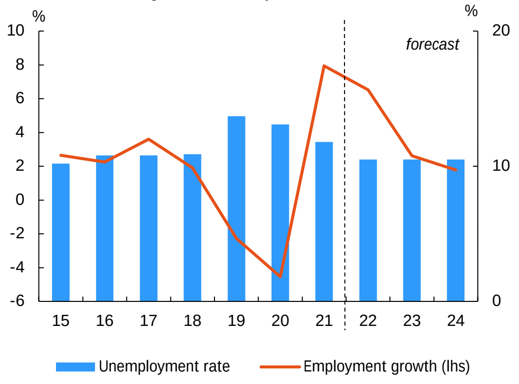
Graph II.32.1: **Türkiye - Real GDP growth and contributions**



Large imbalances constrain medium-term prospects

The post-election outlook is subject to significant policy uncertainty and is likely to remain largely subdued in view of the build-up of significant economic imbalances. Inflation is forecast to remain very high and come down only slowly in an environment of unhinged inflation expectations and unanchored monetary policy. The current account deficit, which increased significantly in 2022 because of a negative terms-of-trade shock and high non-monetary gold imports, is also expected to subside. Faced with increasingly tight global financial conditions and a low level of disposable foreign reserves, ensuring steady balance-of-payment financing will be key for sustaining the projected growth trajectory.

Graph II.32.2: **Türkiye - Labour market**



Growing expenditure pressure to test fiscal rectitude

The budget performance remained strong until mid-2022, posting a surplus and outperforming last year's outcome. However, pressures have built up as the fiscal costs of the measures to mitigate the impact of rising inflation and to support the lira became more and more visible. Strong rises in wages, and in energy-related subsidies and lending, along with a recently announced new government investment scheme in subsidised housing, have also increased demands on the budget. On the other hand, financial repression is expected to artificially supress interest expenditure, while high inflation is set to boost revenue. Altough the headline budget deficit is forecast to increase in the pre-election context, the large snowball effect will likely keep the debt-to-GDP ratio on a downward path.

Risks have increased

Although Türkiye has not joined the EU sanctions against Russia, its extensive economic links with and energy dependency on Russia make it vulnerable to the impact of the military aggression. The expected further tightening of global financial conditions is likely to become increasingly challenging for the economy in view of its reliance on short-term external financing and unorthodox domestic monetary policy. Political risks, stemming from parliamentary and presidential elections scheduled for June 2023, are non-negligible.

Table II.32.1:

Main features of country forecast - TÜRKIYE

		2021		Annual percentage change						
	bn TRY	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		7248.8	100.0	5.6	0.8	1.9	11.4	**5.0**	**3.5**	**3.0**
Private Consumption		4008.0	55.3	5.0	1.5	3.3	15.3	**12.3**	**3.5**	**2.7**
Public Consumption		946.6	13.1	5.3	3.8	2.5	2.6	**3.0**	**3.5**	**3.2**
Gross fixed capital formation		2040.0	28.1	9.0	-12.5	7.4	7.4	**3.5**	**1.7**	**2.0**
Exports (goods and services)		2559.0	35.3	6.4	4.2	-14.4	24.9	**11.3**	**3.0**	**7.2**
Imports (goods and services)		2575.6	35.5	6.4	-5.0	6.7	2.4	**5.9**	**1.9**	**5.8**
GNI (GDP deflator)		7133.5	98.4	5.5	1.7	2.2	11.2	**5.3**	**3.5**	**3.0**
Contribution to GDP growth:		Domestic demand		6.2	-2.3	4.2	11.1	**8.2**	**3.1**	**2.6**
		Inventories		-0.5	0.0	4.5	-6.3	**-5.0**	**0.0**	**0.0**
		Net exports		0.1	2.9	-6.7	6.4	**1.9**	**0.4**	**0.5**
Employment				1.9	-2.3	-4.5	7.9	**6.5**	**2.6**	**1.8**
Unemployment rate (a)				9.8	13.7	13.1	11.8	**10.5**	**10.5**	**10.5**
Compensation of employees / head				13.1	22.4	14.7	22.1	**75.3**	**72.9**	**57.6**
Unit labour costs whole economy				9.2	18.7	7.4	18.3	**77.8**	**71.5**	**55.7**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				9.6	13.8	14.9	29.0	**74.4**	**69.4**	**54.7**
Consumer price index				9.7	15.2	12.3	19.4	**71.7**	**54.1**	**40.4**
Terms of trade goods				:	:	:	:	**:**	**:**	**:**
Trade balance (goods) (c)				-6.8	-3.0	-6.3	-3.0	**-9.4**	**-6.6**	**-5.8**
Current-account balance (c)				-4.6	0.7	-5.0	-1.7	**-5.9**	**-3.3**	**-2.6**
General government balance (c)				-1.6	-4.4	-4.7	-1.1	**-3.5**	**-4.0**	**-3.5**
Structural budget balance (d)				:	:	:	:	**:**	**:**	**:**
General government gross debt (c)				38.6	32.7	39.7	41.8	**39.4**	**38.3**	**37.2**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

Other non-EU Countries

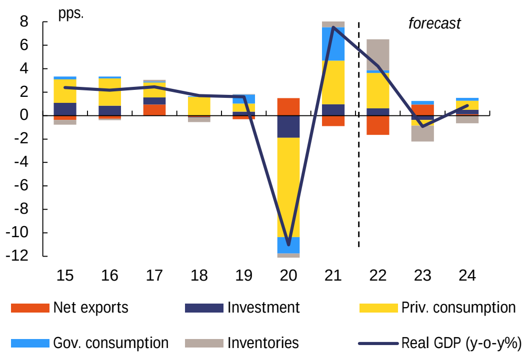
33. THE UNITED KINGDOM

The UK economy is set to slow markedly in the course of 2022 as the impact of higher goods and energy prices and a weaker external environment more than offset the ending of COVID-19 restrictions. GDP is projected to contract in 2023 due to the worse terms of trade, higher interest rates and tightening fiscal policy, with only a modest recovery expected in 2024. Risks are elevated, with recent political developments having increased policy uncertainty and market instability, weighing on investor and consumer confidence.

An incomplete recovery, with high inflation

After growing by by 7.4% in 2021 the UK economy retained positive momentum in early 2022, expanding by 0.7% q-o-q in the first quarter, before slowing to 0.2% in the second quarter. UK GDP remained fractionally below pre-pandemic (end 2019) levels in the second quarter of 2022. The labour market is however tight, with the unemployment rate falling to just 3.6% in August. Total employment is around 500,000 below pre-pandemic levels, with labour force participation down by around 300,000 (1pp). Inflation has increased sharply from 4% in mid-2021 to 10.1% in September 2022. Although increases in food and energy prices accounted for half of the annual rise in prices, core inflation has also picked up. The Bank of England raised policy rates from 0.25% in early 2022 to 2.25% in September, with markets projecting further increases to come.

Graph II.33.1: **The United Kingdom - Real GDP growth and contributions**



The UK has been hit by multiple shocks

The positive boost from the end of Covid-19 restrictions in March has been outweighed by the negative terms of trade shock from higher energy and food prices, aggravated by Russia's invasion of Ukraine. Domestic political turmoil has also added to uncertainty. After the resignation of the Prime Minister in July, the new government released an expansionary mini-budget in September, on top of a cap on energy prices. This pointed to a rising debt-to-GDP ratio in the medium term. Markets reacted with an abrupt rise (over 100bps) in long-term bonds yields, with the Bank of England having to step in to stabilise markets. The resulting loss in credibility led to the resignation of the Chancellor of the Exchequer and the Prime Minister in October. The latest high frequency data is weak. The Flash composite PMI fell to 47.2 in October, while in September consumer confidence levels hit record lows and retail sales volumes were down 7% y-o-y.

Contraction in 2023 and modest recovery in 2024

Monthly GDP data for July and August suggest a contraction in the third quarter of 2022 and a further slowdown is expected in the fourth quarter. Most households face a near doubling of energy costs despite the energy price cap. The new government has indicated it may narrow the scope of support after March 2023 to limit fiscal costs. Higher interest rates are expected to weaken residential investment, while also tightening consumer credit and raising mortgage costs. Although over 80% of mortgages are at a fixed rate, terms are short (2-3 years). The resulting drag on consumption is likely to be mitigated to some extent by a fall in saving rate towards pre-pandemic levels.

Business investment was 8% below end-2019 levels in the second quarter of 2022 and is expected to slow further as firms face an environment of weak consumer demand, high inventories, rising finance costs, and elevated uncertainty. The softer global outlook is set to limit export growth, while imports will be hit by a combination of lower investment and the unwinding of excess inventories. This is projected to lead to a positive contribution to growth from net exports in 2023. In sum, GDP is forecast to grow by 4.0% in 2022, to decline by 0.9% in 2023, and to grow by 0.9% in 2024, with the unemployment rate rising to around 4.4% in 2023 and 4.8% in 2024.

Inflation to remain high into 2023

While headline inflation in coming quarters will in practice be significantly influenced by policy decisions on the scope of the energy price cap, underlying inflationary pressures have picked up. Business and household inflation expectations have increased, unemployment has fallen, and nominal wage growth has risen. Core inflation was 6.4% in September 2022. Inflation is expected to remain at elevated levels into early 2023, then gradually fall back as slack builds and energy price base effects drop out.

Fiscal policy will be in the limelight

In March 2022, the UK's Office for Budget Responsibility projected a fiscal deficit of 1.9% in fiscal year 2023/24 as pandemic spending wound down and taxes rose as a share of GDP. The weaker outlook, higher debt interest costs and the potential fiscal costs of the energy price cap have thrown this projection off course. A new medium-term fiscal plan is due mid-November, which comes after the cut-off date for this forecast. The new government faces pressure to increase cash spending to offset the impact of high inflation on public services and to limit tax rises in a slowing economy, but at the same time to regain market confidence with credible fiscal plans.

Risks are tilted to the downside

Consumer confidence is low and the sharp fall in disposable incomes in 2022/23 could reduce consumption more steeply and for longer than expected. The housing market is a key risk factor, given the recent steep rise in interest rates. The UK saw very rapid growth in inventories in early 2022 and the pace at which this inventory cycle unwinds is also a key risk factor. Uncertainty has weighed heavily on business fixed investment, which has failed thus far to respond to generous temporary tax incentives and remains well below pre-pandemic levels. It is unclear if this downward shift in investment is transitory, or a permanent adjustment to the negative shocks of COVID-19 and the UK's exit from the EU in 2021.

Table II.33.1:

Main features of country forecast - UNITED KINGDOM

	2021				Annual percentage change					
	bn GBP	**Curr. prices**	**% GDP**	**03-18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
GDP		2276.7	100.0	1.7	1.6	-11.0	7.5	**4.2**	**-0.9**	**0.9**
Private Consumption		1376.1	60.4	1.8	1.1	-13.2	6.2	**5.0**	**-0.8**	**1.2**
Public Consumption		509.5	22.4	1.5	4.1	-7.3	12.6	**1.0**	**1.4**	**1.1**
Gross fixed capital formation		392.7	17.2	1.7	1.9	-10.5	5.6	**3.7**	**-2.1**	**2.3**
Exports (goods and services)		636.3	27.9	3.1	1.7	-12.1	-0.3	**7.3**	**1.7**	**1.9**
Imports (goods and services)		653.9	28.7	3.2	2.6	-16.0	2.8	**12.9**	**-1.2**	**1.3**
GNI (GDP deflator)		2266.8	99.6	1.5	3.0	-13.0	9.5	**4.3**	**-0.9**	**0.9**
Contribution to GDP growth:		Domestic demand		1.8	1.8	-11.8	7.5	**3.9**	**-0.6**	**1.4**
		Inventories		0.0	0.0	-0.8	1.2	**2.7**	**-1.4**	**-0.7**
		Net exports		-0.1	-0.3	1.5	-0.9	**-1.6**	**0.9**	**0.1**
Employment				0.9	1.1	-0.9	-0.3	**0.7**	**-0.4**	**0.5**
Unemployment rate (a)				6.0	3.8	4.6	4.5	**3.8**	**4.4**	**4.8**
Compensation of employees / head				3.0	4.0	0.1	4.8	**5.7**	**4.8**	**2.0**
Unit labour costs whole economy				2.3	3.5	11.5	-2.9	**2.1**	**5.4**	**1.6**
Saving rate of households (b)				7.9	5.3	15.8	12.5	**7.2**	**5.3**	**6.5**
GDP deflator				2.1	2.1	5.9	0.4	**5.4**	**7.5**	**2.3**
Consumer price index (CPIH) (e)				2.1	1.7	1.0	2.5	**7.9**	**7.5**	**2.9**
Terms of trade goods				0.6	0.8	-1.1	-1.1	**-2.4**	**-3.2**	**0.2**
Trade balance (goods) (c)				-6.2	-6.6	-6.3	-6.8	**-10.3**	**-10.7**	**-10.7**
Current-account balance (c)				-3.5	-2.8	-3.2	-2.0	**-5.6**	**-6.0**	**-5.8**
General government balance (c)				-4.9	-2.2	-12.8	-8.0	**-6.4**	**-4.4**	**-3.7**
Structural budget balance (d)				:	:	:	:	**:**	**:**	**:**
General government gross debt (c)				67.5	85.5	105.6	105.6	**103.0**	**101.1**	**101.8**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP. (e) CPIH is consumer price index which includes costs of owner-occupied housing

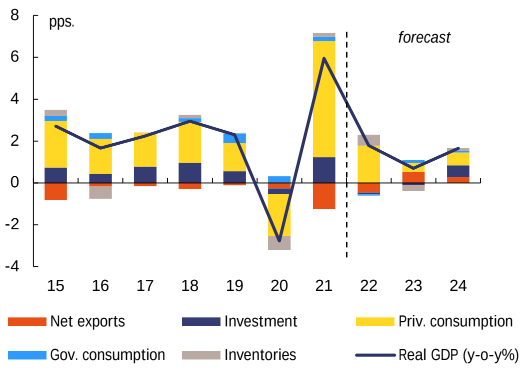
34. THE UNITED STATES

High inflation and rapidly tightening financing conditions are forecast to dampen US economic growth over the forecast horizon. Despite the headwinds, the labour market is projected to remain resilient, with moderate rise in the unemployment rate. Inflation is set to decline gradually as supply constraints recede, energy price inflation eases and domestic demand moderates. The softening monetary conditions are set to pave the way for a modest recovery in 2024. Higher inflation for longer and the impact of geopolitical tensions are the main risks to the outlook.

Growth is expected to slow markedly

With two consecutive quarters of negative GDP growth, the US economy fell into a "technical recession" in the first half of 2022. Private consumption continued to expand at a robust pace on the back of a strong labour market, but output was dragged down by less dynamic inventory build-up and surging imports due to strong household demand for durable goods. High inflation and rapidly tightening financing conditions are set to dampen economic growth over the forecast horizon. The output gap is now positive and is expected to 'cyclically' close in the coming years. Real GDP growth is forecast to moderate from 1.8% in 2022 to 0.7% in 2023. As the policy rate hikes are projected to cease, consumer price inflation to ease, and real disposable incomes to improve, the US economy is projected to rebound in 2024, expanding at a rate of 1.7%.

Graph II.34.1: **The United States - Real GDP growth and contributions**



Policy rates set to rapidly tighten but inflation to gradually ease

After reaching 4.7% in 2021, consumer price inflation possibly peaked at 9.1% y-o-y in July, declining to 8.2% y-o-y in September. Headline inflation is expected to moderate further over the forecast horizon as prior drivers, including supply chain disruptions, high energy and commodity prices, and a strong domestic demand, are set to gradually relent. Services inflation may be slower to decline, as household consumption is pivoting from goods to services and on the back of rent inflation, which is set to remain elevated determined by past house price increases. After reaching 7.9% in 2022, consumer price inflation is forecast to drop to 3.4% in 2023 and then to 2.3% in 2024, still above the Fed's target of 2%.

Monetary policy tightening in response to high inflation is happening at the fastest pace in decades. The Fed introduced the first interest rate hike in March 2022, and the upper rate bound has increased from 0% to 4% within nine months and is set to rise further until early 2023. The resulting steep tightening of financing conditions led to repricing of treasury bonds, with 2-year treasury yields rising from an average of 1.2% in 2022-Q1 to around 4.7% in November 2022.

Domestic demand is set to cool

Employment is currently above the pre-pandemic levels, while the unemployment rate is at a historical low of 3.5%. As the financing conditions tighten and private consumption moderates, the labour demand is forecast to cool. However, there is still pent-up labour demand for many companies following the labour shortage of the pandemic limiting the downturn on the labour market. Reversing the patterns seen during pandemic, households' demand is now shifting from goods to more (labour-intensive) services sector. Labour force participation is set to remain below pre-pandemic levels, moderating the rise of the unemployment rate. Therefore, despite the headwinds, a moderate rise in the unemployment rate is forecasted, with an increase from 3.7% in 2022 to 4.4% in 2024.

Excess savings accumulated during the pandemic have helped keep households' consumption strong so far, but rising interest rates are forecast to weigh on consumer demand. As households' disposable income is eroded by high inflation and the labour market softens, private consumption is set to moderate from 2.6% in 2022 to 0.7% in 2023, with a slight rebound to 0.9% in 2024.

High interest rates, declining corporate profitability and elevated uncertainty are expected to slow down investment. The housing sector reacted swiftly to the rising of interest rates. As mortgage rates surged, housing demand dropped, and residential construction investment started to fall markedly as from 2022-Q2. Gross fixed capital formation is forecast to contract by 0.4% in 2022 and 0.5% in 2023, while easing financing conditions and strengthening construction investment are projected to support a moderate rebound of 2.5% in 2024.

Fiscal policy remains contractionary

The general government deficit is set to fall from around 12% of GDP in 2021 to nearly 6% in 2022. The legislative acts passed (i.e. the *Chips and Science Act* and *Inflation Reduction Act*) in the summer of 2022 are expected to have a minor impact on the US fiscal position over the forecast horizon, also because its impact will be spread over a 10-year period. As domestic demand cools, corporate profits weaken and debt service payment rises, the general government deficit is projected to increase to 6.7% of GDP in 2023 and to 7.1% of GDP in 2024. The general government debt is expected to rise from around 123% in 2022 to close to 127% of GDP in 2024.

Risks are larger than usual and tilted to the downside

A more persistent services inflation may keep headline inflation higher for longer, and a higher than anticipated Fed's terminal policy rate may further depress demand. The strong USD can help tame inflation but could also weaken the net trade's contribution to growth. On the upside, households' balance sheets are strong; almost all household mortgages have 30-year fixed interest rates, and the financial sector remains healthy.

Table II.34.1:

Main features of country forecast - UNITED STATES

		2021		Annual percentage change						
		bn USD Curr. prices	**% GDP**	**03-18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
GDP		23315.1	100.0	2.0	2.3	-2.8	5.9	**1.8**	**0.7**	**1.7**
Private Consumption		15902.6	68.2	2.2	2.0	-3.0	8.3	**2.6**	**0.7**	**0.9**
Public Consumption		3353.7	14.4	0.7	3.4	2.2	1.3	**-0.4**	**0.9**	**0.5**
Gross fixed capital formation		4939.6	21.2	2.3	2.6	-1.2	5.7	**-0.4**	**-0.5**	**2.7**
Exports (goods and services)		2539.6	10.9	4.5	0.5	-13.2	6.1	**7.2**	**2.9**	**4.8**
Imports (goods and services)		3401.4	14.6	3.5	1.1	-9.0	14.1	**8.5**	**-1.1**	**1.9**
GNI (GDP deflator)		23488.2	100.7	2.1	2.2	-3.1	5.7	**1.9**	**0.8**	**1.7**
Contribution to GDP growth:	Domestic demand			2.0	2.4	-2.0	7.0	**1.6**	**0.5**	**1.3**
	Inventories			0.0	0.0	-0.7	0.2	**0.5**	**-0.3**	**0.1**
	Net exports			0.0	-0.1	-0.3	-1.2	**-0.5**	**0.5**	**0.3**
Employment				0.7	1.2	-5.8	3.4	**3.8**	**-0.2**	**0.3**
Unemployment rate (a)				6.2	3.7	8.1	5.3	**3.7**	**4.1**	**4.4**
Compensation of employees / head				2.9	2.8	6.9	5.0	**6.0**	**3.3**	**2.5**
Unit labour costs whole economy				1.6	1.8	3.6	2.4	**8.1**	**2.4**	**1.1**
Saving rate of households (b)				11.6	13.3	21.7	18.3	**14.2**	**14.0**	**13.9**
GDP deflator				1.9	1.8	1.3	4.5	**6.9**	**3.3**	**2.4**
Consumer price index				2.1	1.8	1.2	4.7	**7.9**	**3.4**	**2.3**
Terms of trade goods				-0.1	0.6	-1.1	5.9	**3.6**	**-1.0**	**-0.2**
Trade balance (goods) (c)				-4.9	-4.1	-4.2	-4.7	**-4.8**	**-4.4**	**-4.2**
Current-account balance (c)				-3.5	-2.1	-2.8	-3.7	**-3.8**	**-3.2**	**-2.8**
General government balance (c)				-6.8	-6.4	-15.2	-11.9	**-5.9**	**-6.7**	**-7.1**
Structural budget balance (d)				:	:	:	:	**:**	**:**	**:**
General government gross debt (c)				87.0	108.5	131.8	127.0	**122.8**	**124.7**	**127.0**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.
(*) Employment data from the BLS household survey.

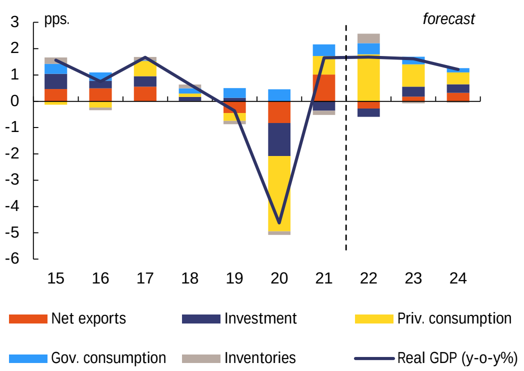
35. JAPAN

After robust growth in the second quarter of 2022, amid the full post-pandemic reopening, economic activity is expected to grow at a slightly slower pace over the remainder of 2022 and into 2023 as cyclical rebound subsides and fiscal support dissipates. Growth is set to decline further towards potential in 2024. Headline average annual consumer inflation is forecast to remain above 2% in 2022-23, before subsiding in 2024 on limited domestic inflationary pressures.

Recovery continues amid full reopening

Economic activity rebounded in the second quarter of 2022, when the COVID-19 containment measures were lifted. Notably, private consumption bounced back, reflecting increased spending out of accumulated savings and continued fiscal support. Private investment rebounded as well, after two years of subdued outturns, backed by rising business confidence.

Graph II.35.1: **Japan - Real GDP growth and contributions**



The expansion is expected to continue at a slower pace in the second half of 2022, despite voluntary consumer restraint due to the recurrent COVID-19 waves. In particular, private consumption is set to benefit from additional fiscal support while private investment is expected to increase reflecting rising machinery replacement spending. In addition, the reopening of the economy to foreign tourists is projected to boost export of services. Overall, real GDP growth is forecast to reach 1.7% in 2022.

Private spending and fiscal support underpin 2023 growth

Real GDP growth is expected to moderate slightly to 1.6% in 2023, as the cyclical forces that supported the recovery gradually dissolve.

On the domestic side, the recovery in private consumption is forecast to continue as the labour market situation improves and government support cushions the impact of higher commodity prices. However, the gradually fading impact of the reopening of the economy is likely to limit the pace of consumption growth. Continued accommodative funding conditions and rising spending on digitalisation and automation are likely to support private investments, but increasing input prices and declining profit margins might limit the scale of the rebound. At the same time, public spending is set to increase reflecting recently announced fiscal stimulus measures.

On the external side, the depreciating currency is forecast to boost exports despite weakening global demand prospects. Services trade, in particular tourism, is likely to be supported by the withdrawal of Japanese travel restrictions and the weaker currency. However, a major boost to tourism revenues could be only expected with the full reopening of China, given the importance of Chinese tourists in Japan. Import growth is projected to moderate as a result of rising global commodity prices and a weaker currency. Overall, net exports are set to be slightly supportive to growth over the forecast horizon, while rising import prices are forecast to reduce current account surplus from 2.8% of GDP in 2021 to around 0.7% of GDP in 2022, before it rebounds to 1.7% of GDP in 2024.

Output growth moderates in 2024

Growth is forecast to soften to 1.2% in 2024 as private consumption slows down on limited prospects for further dissaving by consumers and dwindling fiscal support. At the same time, continued easy monetary policy and lower input costs are likely to support private investments. Still, as cyclical forces abate, structural bottlenecks (e.g. aging society, low labour market mobility, tight product markets) are expected to limit the pace of growth which is likely to move towards potential.

Inflation creeps up

Inflation in Japan has been rising since the beginning of 2022, albeit at a slower pace than in the other advanced economies, reflecting higher utility bills, rising food prices and the fading effect from the cuts in mobile phone charges implemented last year. At the same time, the yen has continued to depreciate reaching the lowest level in 32 years against USD, driven by the interest rate differential vis-à-vis FED, further adding to inflationary pressures.

Going forward, annual headline inflation is expected to increase from 2.5% in 2022 to 3.1% in 2023 reflecting elevated global commodity prices and weakening currency. In 2024, it is projected to subside to 1.8% as domestic inflationary pressures are set to be limited by sluggish wage growth. The Bank of Japan has so far refrained from tightening policy, despite increasing inflation and weakening currency, and the monetary policy is expected to remain accommodative during the forecast horizon.

Fiscal support to be scaled back

Sizeable fiscal stimuli, which sustained demand during the COVID-19 crisis, were partially replaced in 2022 by measures to cushion the impact of higher energy prices on consumers. Going forward, these measures are expected to be gradually discontinued resulting in the projected decline in the size of headline fiscal deficits from around 7% of GDP in 2022 to 4 ¾% of GDP in 2023 and 3 ½% of GDP in 2024. Public debt is forecast to decline from around 264% of GDP in 2022 to around 255% of GDP in 2024.

Risks on the downside for growth and on the upside for inflation

The main downside risks include lower exports due to slower global demand, while weaker currency might further increase inflationary pressures, dampening private demand and resulting in tighter monetary policy.

Table II.35.1:

Main features of country forecast - JAPAN

	2021		Annual percentage change						
	bn JPY Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP	541369.5	100.0	0.8	-0.4	-4.6	1.7	**1.7**	**1.6**	**1.2**
Private Consumption	291931.9	53.9	0.6	-0.5	-5.2	1.3	**3.3**	**1.5**	**0.8**
Public Consumption	116149.6	21.5	1.3	1.9	2.3	2.1	**2.0**	**1.3**	**0.8**
Gross fixed capital formation	136766.6	25.3	0.1	0.5	-4.9	-1.4	**-1.3**	**1.5**	**1.3**
Exports (goods and services)	100040.4	18.5	4.4	-1.5	-11.6	11.8	**3.7**	**3.3**	**3.0**
Imports (goods and services)	103072.9	19.0	3.0	1.0	-6.7	5.1	**5.0**	**2.2**	**1.4**
GNI (GDP deflator)	562015.2	103.8	1.0	-0.3	-4.9	1.8	**2.0**	**1.9**	**1.1**
Contribution to GDP growth: Domestic demand			0.6	0.2	-3.7	0.8	**1.9**	**1.5**	**0.9**
Inventories			0.0	-0.1	-0.1	-0.2	**0.4**	**-0.1**	**-0.1**
Net exports			0.2	-0.4	-0.8	1.0	**-0.3**	**0.2**	**0.3**
Employment			0.3	0.9	-0.5	0.0	**0.2**	**0.2**	**0.2**
Unemployment rate (a)			4.0	2.4	2.8	2.8	**2.7**	**2.5**	**2.5**
Compensation of employees / head			-0.2	0.8	-0.8	1.5	**1.2**	**1.3**	**1.3**
Unit labour costs whole economy			-0.7	2.1	3.5	-0.1	**-0.3**	**-0.1**	**0.3**
Saving rate of households (b)			10.3	10.7	18.6	16.8	**13.7**	**10.2**	**9.8**
GDP deflator			-0.5	0.6	0.9	-0.9	**0.5**	**2.6**	**2.0**
Consumer price index			0.2	0.5	0.0	-0.2	**2.5**	**3.1**	**1.8**
Terms of trade goods			-2.4	0.9	6.8	-9.0	**-10.5**	**0.7**	**1.1**
Trade balance (goods) (c)			0.8	0.0	0.5	0.3	**-2.1**	**-2.0**	**-1.6**
Current-account balance (c)			3.0	3.4	3.0	2.8	**0.7**	**1.2**	**1.7**
General government balance (c)			-5.6	-3.0	-9.0	-7.0	**-6.9**	**-4.7**	**-3.4**
Structural budget balance (d)			:	:	:	:	**:**	**:**	**:**
General government gross debt (c)			204.3	236.3	259.4	262.5	**263.9**	**258.8**	**255.0**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

36. CHINA

China's economy is expected to slow down markedly this year and next, as the outlook remains burdened by the disruptive "Zero Covid" policy and the worsening crisis in the real estate sector. Sporadic COVID-19 outbreaks followed by strict lockdowns are set to continue creating uncertainty and depressing consumer and investment spending. The deleveraging property sector is projected to weigh on investment over the forecast horizon. Moreover, the capacity of the highly indebted and cash-strapped local governments to boost growth through more infrastructure spending is likely to be limited going forward.

Weak domestic demand weighs on growth in 2022

The growth slowdown in China continued in the first quarter of 2022 amidst a worsening real estate crisis, with GDP growing by 4.8% y-o-y. In the second quarter, GDP grew by just 0.4% y-o-y, as China's adherence to a strict zero-COVID policy, and the imposition of strong lockdowns across a significant part of the country, heavily disrupted parts of the economy. Adjustments to the COVID-19 suppression policy and strong fiscal spending on infrastructure contributed to the growth recovery during the third quarter of 2022 (3.9 % y-o-y).

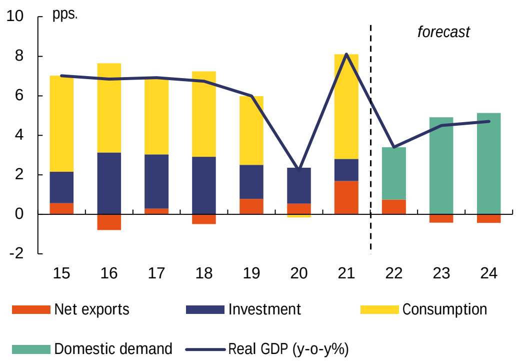
In the first nine months of 2022 the Chinese economy was strongly affected by the increased uncertainty caused by its COVID-19 strategy and the ongoing real estate crisis. Despite a partial recovery, household consumption remained subdued throughout 2022 on the back of poor consumer confidence, rising precautionary savings, low disposable income growth and weak labour market. The worsening crisis in the real estate sector undermined investment growth despite strong fiscal policy support. Overall, GDP growth is expected to significantly weaken in 2022, to 3.4%, significantly below the government's 2022 GDP growth target of "around 5.5%".

A prolonged and uncertain recovery

Although growth is expected to rebound in 2023 to 4.5%, and to 4.7% in 2024, it is projected to stay below its pre-crisis trend. China's economy remains fundamentally burdened by declining productivity growth, an excessively leveraged corporate and local government sector and geopolitical tensions. Furthermore, without a sharp policy reversal, strict pandemic prevention policies and the rapid deleveraging in the real estate sector will continue weighing on growth over the short term.

Household consumption growth is set to rebound in 2023 due to a strong base effect and the expected gradual recovery in consumer sentiment. Yet, households are projected to maintain a higher level of savings as long as uncertainty brought by the COVID-19 policy persists. Household disposable income growth is set to remain below pre-crisis levels, given the slow expected recovery in the labour market and weaker wage growth. This is likely to disproportionally affect migrant rural workers, who face lower labour market protection and could contribute to an increase in inequality.

Graph II.36.1: **China - Real GDP growth and contributions**



Investment faces headwinds despite the announced policy support. Following a strong infrastructure building boost in 2022, spending by local governments and state-owned enterprises will likely slow in 2023 and 2024. Local governments' capacity to finance new investments is set to be squeezed as revenue from land sales to real estate developers (representing up to a third of local government revenue) is expected to remain depressed, after falling around 40% in the first nine months of

2022. Furthermore, part of the 2023 bond quota for local government investment has been used up already in the second half of 2022. The full effect of the real estate sector crisis on investment will likely be visible only in 2023 and 2024, as developers scrapped new projects throughout 2022. Non-real estate private sector investment is projected to recover somewhat after weak growth in 2022 but is set to remain burdened by the weak domestic and global outlook.

Export growth is expected to remain low in both 2023 and 2024, as the slowdown in developed economies depresses external demand. Import growth is forecast to recover in 2023, on the back of a strong base effect and the expected gradual recovery in domestic demand. As a result, and after reaching record levels in 2022, the trade and the current-account balance surpluses are set to shrink over the forecast horizon. Furthermore, the Russian war of aggression against Ukraine and the ongoing trade and technology conflict with the US is expected to weigh on future trade growth and further economic integration.

Numerous downside risks to growth

A fiscal and monetary boost to growth in 2022 failed to offset the joint impact of the COVID-19 suppression measures and the crisis in the real estate sector. The policy response in 2023 is expected to be more targeted due to fiscal constraints and concerns over rising debt. Political considerations are likely to block any significant change to the COVID-19 policy before the National People's Congress in March 2023. With the more transmissible Omicron variant leading to recurrent virus outbreaks and a rise of virus incidence, the current policy remains the biggest risk to growth prospects.

News of numerous real estate construction projects being put on hold or cancelled shattered the credibility of the dominant business model in the sector, based on pre-sales and fast turnover. Despite a strong drop in transactions, prices have so far stagnated. However, given that real estate comprises around 70% of household wealth in China, stronger price corrections could further undermine consumer and investor confidence, weakening growth prospects.

Structural risks to growth in China stem from high levels of corporate and local government debt, poor productivity growth, and a strong reliance on investment as the main growth driver.

Table II.36.1:

Main features of country forecast - CHINA

	2021			Annual percentage change						
	bn CNY	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		114367.0	100.0	9.3	6.0	2.2	8.1	**3.4**	**4.5**	**4.7**
Private consumption		43884.9	38.4	-	-	-	-	**-**	**-**	**-**
Public consumption		18207.2	15.9	-	-	-	-	**-**	**-**	**-**
Gross fixed capital formation		47890.1	41.9	-	-	-	-	**-**	**-**	**-**
Exports (goods and services)		22824.5	20.0	12.4	0.4	2.6	17.4	**1.3**	**1.1**	**1.8**
Imports (goods and services)		19872.3	17.4	11.9	-3.7	-0.4	10.0	**-2.9**	**4.0**	**4.9**
GNI (GDP deflator)		-	-	-	-	-	-	**-**	**-**	**-**
Contribution to GDP growth: Domestic demand				-	-	-	-	**-**	**-**	**-**
Inventories				-	-	-	-	**-**	**-**	**-**
Net exports				-	-	-	-	**-**	**-**	**-**
Employment				-	-	-	-	**-**	**-**	**-**
Unemployment rate (a)				4.1	3.6	4.2	4.0	**-**	**-**	**-**
Compensation of employees/head				-	-	-	-	**-**	**-**	**-**
Unit labour costs whole economy				-	-	-	-	**-**	**-**	**-**
Saving rate of households				-	-	-	-	**-**	**-**	**-**
GDP deflator				3.9	1.3	0.5	4.4	**3.7**	**2.5**	**3.0**
Consumer price index (c)				2.6	2.9	2.5	0.9	**-**	**-**	**-**
Terms of trade goods (b)				-	-	-	-	**-**	**-**	**-**
Trade balance (goods) (b)				4.3	2.8	3.5	3.2	**4.2**	**3.7**	**3.3**
Current-account balance (b)				3.9	0.7	1.7	1.8	**2.5**	**2.1**	**1.7**
General government balance (b)				-	-	-	-	**-**	**-**	**-**
Structural budget balance				-	-	-	-	**-**	**-**	**-**
General government gross debt (b)				-	-	-	-	**-**	**-**	**-**

(a) urban unemployment, as % of labour force. (b) as a percentage of GDP. (c) national indicator.

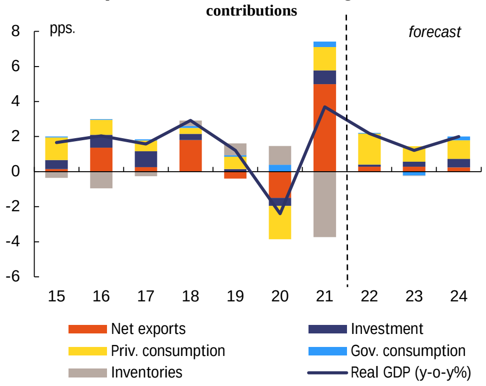
37. EFTA

The EFTA countries have so far weathered well the recent COVID-19 and energy crisis-related turbulences. The economic outlook for all EFTA countries is for moderating growth in 2022-2024, reflecting weaker external demand and lower growth of disposable income due to higher energy prices. Public finances are projected to remain under control despite additional measures to mitigate the economic and social impact of high energy prices. The risks to the forecast are largely on the downside.

Switzerland

Economic growth continued to decelerate to 2.4% year-on-year in the second quarter of 2022, reflecting weakening external demand and rising inflationary pressures. In the first half of 2022, output increased by about 3.4%, compared to a drop in economic activity by 4.6% in the same period a year before. In particular, the service sector and private consumption picked up after the lifting of COVID-19 related containment measures, while exports continued to perform better than expected. On the labour market, short-time working schemes helped to contain the crisis' overall impact on employment.

Graph II.37.1: **Switzerland - Real GDP growth and contributions**



However, in the second half of 2022 and during 2023, the growth dynamics are likely to decelerate markedly, mainly due to a less supportive international environment, reflecting higher energy costs, a slowdown in growth in the main trading partners as well as tighter global financial conditions. The main growth driver during the forecast period is expected to be domestic demand. Pent-up demand will help to keep consumption growth at positive levels in 2022 and 2023, while investment growth is projected to accelerate only towards the end of the forecast period. Export growth is set to decelerate in the second half of 2022 and in 2023, and to strengthen only in 2024. Import growth is expected to remain contained, leading to a small positive growth contribution of net exports.

The usual strengthening of the Swiss currency at times of high uncertainty will help to partially contain the impact of higher energy prices on domestic inflation. Still, consumer price inflation is forecast to increase to around 3% in 2022, largely due to the external energy price shock, but to moderate again in 2023, taking into account base effects. Employment growth is expected to remain low in 2022 and 2023, but to accelerate slightly in 2024, benefiting from the slightly stronger output growth. This will help to bring the unemployment rate back towards pre-pandemic levels. As the fiscal costs of fighting the pandemic have largely subsided, Switzerland's public finances are expected to return to a broadly balanced position in 2022 and 2023 and a small surplus in 2024. Gross public debt ratios are set to continue declining.

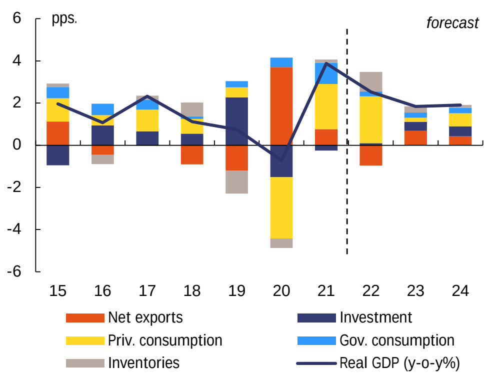
Country-specific risks to the outlook are largely on the downside. In particular, there is a risk related to the Swiss franc's safe-haven status, which could lead to a rapid appreciation, eroding the country's price competitiveness.

Norway

The economic rebound lost some steam in the second quarter of 2022 but remained buoyant, with real GDP expanding by 3.9% y-o-y, compared to 4.9% in the previous quarter. Growth was largely driven by further acceleration in private consumption growth supported by the lifting of COVID-19 related containment measures and the increase in employment. Investment virtually stagnated on a year-on-year basis compared to the previous quarter, partly due to decelerating business investment growth. Despite a positive terms of trade effect following high energy prices, the external sector posed headwinds to growth as imports grew at a faster rate than exports, reflecting pent-up domestic demand.

Growth is expected to be solid in 2022 although decelerating compared to 2021 due to the impact of Russia's war of aggression against Ukraine. Private consumption is set to be the main driver of growth, underpinned by a tight labour market. The recovery of investment is expected to be sluggish due to the continued decline of investment in the oil sector as several large projects are nearing completion. House price inflation decelerated to 4.8% y-o-y in the third quarter of 2022. Residential investment contracted by 4.4% y-o-y in the second quarter, and it is expected to grow marginally in 2022 as a whole due to concurrent headwinds, including the uncertainty about the economic outlook and higher interest rates. Net exports are expected to subtract from growth, as imports are set to increase at a faster pace than exports, largely driven by still buoyant domestic demand.

Graph II.37.2: **Norway - Real GDP growth and contributions**



Economic growth is projected to moderate further in 2023 as high inflation should erode households' real disposable income. Investment growth is set to pick-up slightly, bolstered by the rebound of investment in the petroleum sector with the initiation of scheduled projects. Net exports are expected to add to growth, also benefitting from higher oil and gas prices. Output growth is forecast to inch up in 2024 on the back of increased domestic demand as well as a positive contribution of the external sector to growth.

The sustained increases in food and energy prices following Russia's invasion of Ukraine fuelled a further acceleration of inflation in the third quarter. Average annual consumer price inflation picked-up to 6.7%, bringing average inflation in the first nine months of the year to 5.4%, thus well above the central bank's target of 2%. On 22 September, the Norges Bank's Executive Board raised the key policy rate by another 50 basis points to 2.25%, after having lifted it by a cumulative 125 basis points between March and August.

In order to help contain inflationary pressures, the government proposes to tighten the fiscal stance by reducing spending financed by petroleum revenue in 2023. Policymakers anticipate a structural non-oil deficit of 8.8% of mainland GDP and spending of oil revenues equivalent to 2.5% of the sovereign wealth fund's assets.

Domestic risks to the outlook are clearly tilted to the downside. Uncertainties in the property market and sustained increases in the households' debt service burden due to higher interest rates are raising financial stability concerns. These are however mitigated by significant capital and liquidity buffers held by the Norwegian banks. Regarding the external environment, the volatility of energy prices presents both upside and downside risks, while a deterioration in growth prospects of Norway's main trading partners points to downside risks.

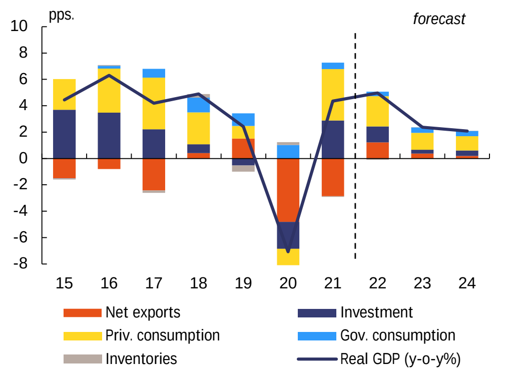
Iceland

The economic rebound continued in Iceland, with real GDP expanding by 7.6% and 6.1% y-o-y in the first and second quarter, respectively. Growth was driven by a surge in exports, robust private consumption and investment. The recovery of exports was supported by strong increase of tourist arrivals, a successful fishing season and favourable prices for aluminium products.

The outlook is for solid growth in 2022, which is set to decelerate over the forecast horizon. While Iceland doesn't have a direct exposure to Russia due to its high reliance on domestically-produced renewable energy, the military aggression has worsened the country's growth outlook through slower trading partners' growth as well as higher import prices for fuels, commodities and food. High inflation is eroding disposable income and dampening private consumption.

Solid growth led to a tight labour market with the unemployment rate declining to 3.9% in August. The labour force participation rate reached the long-term average of 80%. Strong demand for labour was partially met with increasing migration flows. Growth of real wages stopped due to high inflation in the summer months. In line with decelerating GDP growth, employment growth is set to moderate, while the rate of unemployment is expected to hover around the current level.

Graph II.37.3: **Iceland - Real GDP growth and contributions**



The Central Bank of Iceland increased the key interest rate (the rate on seven-day term deposits) four times in 2022 to a new high of 5.75%, but the real interest rate remains negative due to high inflation, which stood at 9.7% y-o-y in August. The key drivers were housing costs, prices of food and fuel. In the first three quarters of 2022, the ISK strengthened as compared to 2021 due to the strong performance of exports. Going forward, inflation is projected to moderate in 2022-2023 in line with a tighter fiscal stance, a cooling housing market and moderating commodity prices.

Following a sizeable fiscal stimulus and a general government deficit of 7.9% GDP in 2021, expiring pandemic-related support measures together with healthy revenue growth are projected to underpin the reduction in the fiscal deficit in 2022. Fiscal policy is set to tighten over the forecast horizon, as set out in the 2023-27 medium-term fiscal strategy. This is expected to help restore fiscal buffers and bring inflation back to target. The draft 2023 budget, targeting a deficit of 2.5% of GDP, foresees a substantial reduction in spending, which expanded due to the pandemic-related support, with social benefits set to increase in line with inflation.

The balance of risks is tilted to the downside. Key risks stem from the deteriorating growth outlook in main trading partners and declining demand for Iceland's exports as well as the forthcoming wage negotiations, which could result in a wage-price spiral.

Table II.37.1:

Main features of country forecast - EFTA

		Iceland				Norway				Switzerland			
(Annual percentage change)		**2021**	**2022**	**2023**	**2024**	**2021**	**2022**	**2023**	**2024**	**2021**	**2022**	**2023**	**2024**
GDP		4.3	**5.0**	**2.4**	**2.1**	3.9	**2.5**	**1.8**	**1.9**	3.7	**2.2**	**1.2**	**2.0**
Private Consumption		7.6	**4.4**	**2.5**	**2.2**	4.9	**5.7**	**0.5**	**1.6**	2.6	**3.5**	**1.8**	**2.1**
Public Consumption		1.8	**1.3**	**1.5**	**1.4**	3.8	**1.0**	**1.1**	**1.2**	2.7	**0.5**	**-2.0**	**2.0**
Gross fixed capital formation		13.6	**5.4**	**1.3**	**1.8**	-0.9	**0.4**	**2.1**	**2.4**	3.0	**0.5**	**1.2**	**2.0**
Exports (good and services)		12.3	**17.1**	**5.7**	**3.6**	4.7	**3.3**	**3.5**	**3.0**	12.5	**5.8**	**2.5**	**3.7**
Imports (goods and services)		20.3	**13.3**	**4.7**	**3.1**	2.3	**8.0**	**3.0**	**3.3**	5.3	**6.9**	**2.7**	**4.2**
GNI (GDP deflator)		2.2	**5.8**	**2.4**	**2.1**	4.3	**2.3**	**1.8**	**1.9**	3.1	**2.2**	**1.2**	**2.0**
Contribution to GDP growth:	Domestic demand	7.3	**3.9**	**2.0**	**1.9**	2.9	**2.6**	**0.9**	**1.4**	2.4	**1.9**	**0.9**	**1.8**
	Inventories	-0.1	**-0.1**	**0.0**	**0.0**	0.2	**0.9**	**0.3**	**0.1**	-3.7	**0.0**	**0.0**	**0.0**
	Net exports	-2.9	**1.2**	**0.4**	**0.2**	0.8	**-1.0**	**0.7**	**0.4**	5.0	**0.3**	**0.3**	**0.2**
Employment		2.1	**2.9**	**1.1**	**0.6**	1.3	**3.0**	**0.3**	**0.5**	0.2	**1.5**	**0.5**	**1.0**
Unemployment rate (a)		6.0	**3.8**	**3.9**	**4.2**	4.4	**3.5**	**3.7**	**3.8**	4.9	**4.6**	**4.8**	**4.5**
Compensation of employee/head		7.1	**9.5**	**5.1**	**3.5**	4.9	**3.9**	**4.5**	**3.5**	3.7	**1.4**	**2.2**	**2.0**
Unit labour cost whole economy		4.8	**7.4**	**3.8**	**2.0**	2.3	**4.4**	**2.9**	**2.0**	0.2	**0.7**	**1.5**	**1.0**
Saving rate of households (b)		8.2	**9.4**	**8.4**	**7.7**	20.9	**19.5**	**20.5**	**21.6**	:	:	:	:
GDP deflator		6.1	**8.3**	**5.7**	**3.7**	16.9	**13.2**	**7.0**	**3.3**	1.4	**3.3**	**2.3**	**1.7**
National index of consumer prices		4.4	**7.6**	**4.9**	**3.1**	3.5	**5.3**	**4.6**	**3.3**	0.6	**3.0**	**2.5**	**2.0**
Terms of trade goods		5.8	**-0.1**	**0.0**	**0.0**	59.8	**13.6**	**4.8**	**2.6**	2.6	**0.0**	**0.0**	**0.0**
Trade balance (goods) (c)		-4.9	**-5.2**	**-5.3**	**-5.1**	11.7	**14.8**	**16.6**	**17.6**	13.6	**14.0**	**14.2**	**14.3**
Current account balance ©		-1.8	**-0.1**	**0.4**	**0.6**	15.0	**17.7**	**19.5**	**20.5**	7.8	**8.3**	**8.6**	**8.6**
General government balance (c)		-7.9	**-4.8**	**-2.6**	**-2.4**	9.9	**5.6**	**3.9**	**3.7**	-0.5	**-0.3**	**0.2**	**0.7**
General government gross debt (c)		74.6	**70.5**	**66.7**	**65.4**	43.2	**35.8**	**32.7**	**31.0**	27.5	**26.3**	**25.1**	**23.5**

(a) as % of total labour force. (b) gross saving divided by adjustd gross disposable income. (c)as a % of GDP.

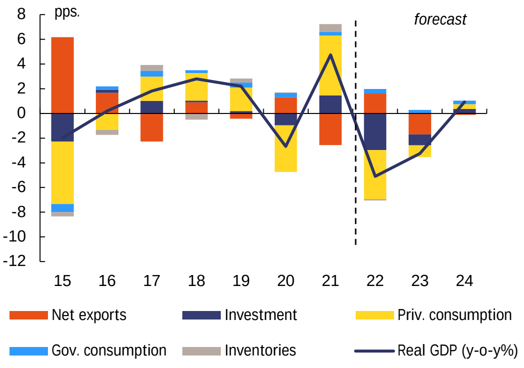
38. RUSSIAN FEDERATION

High oil and gas prices have helped the Russian economy cushion the decline in its GDP in the short term. Although the contraction in 2022 is projected to be milder than previously projected, the recession is set to be more protracted with a further decline in economic activity in 2023 and only a shallow rebound in 2024. The government is set to support the economy although major spending hikes are planned on domestic security and defence rather than social outlays.

High commodity exports prevent economic collapse

Russia ceased to publish key macroeconomic statistics after launching its war of aggression against Ukraine, making it difficult to forecast economic developments. The contraction in the first half of the year was cushioned by elevated energy prices and diversion of Russia's energy exports towards non-sanctioning countries. In addition, the government managed to avoid a financial crisis while sustaining record-low unemployment thanks to a large public sector and providing a limited fiscal stimulus to the economy. Nevertheless, the economy shrank in the second quarter by 1.9% q-o-q for the second consecutive quarter amid declines in the manufacturing, mining and retail trade sectors.

Graph II.38.1: Russia - Real GDP growth and contributions



Economic activity is projected to decline also in the second half of the year, albeit at a more moderate pace, as industry is sustained by production of military equipment, inflation is expected to subside, mitigating a hit to purchasing power, and interest rates decline. Although the government is set to help stabilise the economy to some extent, domestic demand is projected to remain depressed in 2022. A positive contribution to growth is expected to come from the external trade on the back of plummeting imports and a contained fall of exports, reflecting strong demand for Russian oil from Asia. Overall, GDP is projected to decline by 5.1% in 2022.

Contraction is set to continue in 2023 amid depressed demand

In 2023, adjustment processes are expected to continue as Russia becomes increasingly disengaged from the global economy and the government backs efforts to advance the country's self-sufficiency, mainly through import substitution policies. The economy is projected to contract further by 3.2% as private consumption continues to decline amid falling real wages and persisting uncertainty. Withdrawal of Western capital from Russia and reluctance of non-Western countries to invest is expected to further depress investment. The government spending is not projected to fully counter these adverse developments, implying a negative drag of domestic demand on growth.

On the external side, exports are projected to decline further as companies struggle to establish new export routes and the EU's ban on seaborne oil imports and related financial services enters into force. Although Russia is set to divert a part of the sanctioned oil towards "friendly" countries, net exports are projected to contribute negatively to growth. This also reflects a gradual recovery in imports as sanctioned Western goods are replaced by substitutes from non-sanctioning countries.

A shallow rebound in 2024

The economy is projected to stabilise in 2024 and revert to a very moderate growth of less than 1% as domestic demand rebounds modestly. Nevertheless, growth potential will be limited by the lack of Western capital and technologies, continuing brain drain and increasing international isolation.

Monetary easing comes to an end as inflation abates

After the initial surge in inflation to almost 18% y-o-y on the onset of the invasion, price pressures have subsided allowing the Central Bank of Russia to lower the key interest rate from 20% to 7.5% in six consecutive cuts. With the impact of the appreciating rouble on consumer prices almost vanishing after the summer, inflation is projected to remain elevated at 14.2% in 2022 – well above the 4% inflation target – suggesting an end to the rate-cutting cycle. In the following years, inflation is forecast to ease on the back of persisting weak demand and changes in the consumption patterns.

Deficit years ahead

Russia recorded high budgetary surpluses in the first half of 2022 as soaring energy prices boosted government revenues. Easing of oil and gas revenues due to the appreciating rouble and a plunge in gas exports combined with accelerating spending in the subsequent months almost wiped out the surplus by September. As this trend is expected to continue, the 2022 budget balance is projected to end up in a deficit of 2½% of GDP. In 2023, the share of defence and national security as well as social expenditure are set to rise. Nevertheless, growth of the overall spending is set to be tamed by spending cuts on infrastructure and administration. As revenues are projected to decline on the back of falling energy receipts, the deficit is set to widen to 3¼% of GDP. With a modest economic recovery in 2024, the deficit is projected to decline to 2¾% of GDP. As a part of the budget financing is expected to come from the National Wealth Fund, the increase in public debt is expected to be modest with the public debt-to-GDP ratio projected to increase to 20½ % by the end of the forecast horizon.

Downside risks dominate the forecast

Risks to the forecasts are driven by the unpredictability of the war. On the downside they include further depression of private consumption and investment, additional fiscal costs and further trade disruptions should the war escalate. Given government's shift to a more autarkic economy, limited upside risks stem mainly from larger-than-expected fiscal support and higher-than-expected exports.

Table II.38.1:

Main features of country forecast - RUSSIA

	2021				Annual percentage change					
	bn RUB	Curr. prices	% GDP	03-18	2019	2020	2021	2022	2023	2024
GDP		131015.0	100.0	3.2	2.2	-2.7	4.7	**-5.1**	**-3.2**	**0.9**
Private Consumption		65598.9	50.1	5.1	3.8	-7.3	9.5	**-7.9**	**-2.0**	**0.8**
Public Consumption		23276.5	17.8	0.9	2.4	1.9	1.5	**2.1**	**1.5**	**1.5**
Gross fixed capital formation		25968.8	19.8	5.1	1.0	-4.6	6.8	**-15.0**	**-5.0**	**2.0**
Exports (goods and services)		40196.6	30.7	4.4	0.7	-4.1	3.5	**-7.5**	**-5.0**	**2.6**
Imports (goods and services)		27967.8	21.3	6.8	3.1	-11.9	16.9	**-18.4**	**1.0**	**5.0**
GNI (GDP deflator)		127939.7	97.7	3.2	1.5	-1.9	4.8	**-5.0**	**-3.6**	**1.0**
Contribution to GDP growth:	Domestic demand			3.9	2.4	-4.4	6.6	**-6.6**	**-1.5**	**1.0**
	Inventories			-0.1	0.3	0.0	0.6	**-0.1**	**0.0**	**0.0**
	Net exports			-0.3	-0.4	1.3	-2.6	**1.6**	**-1.7**	**-0.1**
Employment				0.5	-0.8	-1.9	1.3	**0.4**	**-0.1**	**0.3**
Unemployment rate (a)				6.4	4.6	5.8	4.8	**4.2**	**4.5**	**4.6**
Compensation of employees / head				:	:	:	:	**:**	**:**	**:**
Unit labour costs whole economy				:	:	:	:	**:**	**:**	**:**
Saving rate of households (b)				:	:	:	:	**:**	**:**	**:**
GDP deflator				11.1	3.3	0.7	16.5	**17.6**	**6.7**	**4.6**
Consumer price index				9.0	4.5	3.4	6.7	**14.2**	**7.1**	**4.7**
Terms of trade goods				2.3	-5.7	-22.7	35.6	**13.7**	**-4.5**	**-0.9**
Trade balance (goods) (c)				10.2	9.8	6.1	10.5	**14.7**	**12.8**	**12.5**
Current-account balance (c)				5.3	3.9	2.2	6.9	**11.5**	**9.1**	**8.9**
General government balance (c)				1.8	3.7	-3.8	0.8	**-2.5**	**-3.2**	**-2.7**
Structural budget balance (d)				:	:	:	:	**:**	**:**	**:**
General government gross debt (c)				13.5	13.7	19.2	17.0	**17.0**	**18.9**	**20.6**

(a) as % of total labour force. (b) gross saving divided by adjusted gross disposable income. (c) as a % of GDP. (d) as a % of potential GDP.

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European Economic Forecast – Autumn 2022

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Table 1: Gross domestic product, volume (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	2.5	0.7	1.7	2.2	-5.4	6.1	2.8	0.2	1.5	6.2	2.0	1.8
Germany	1.9	0.6	1.9	1.1	-3.7	2.6	1.6	-0.6	1.4	2.9	1.6	2.4
Estonia	5.6	-0.4	3.5	3.7	-0.6	8.0	-0.1	0.7	2.1	8.3	1.0	2.4
Ireland	3.6	-0.3	10.3	5.4	6.2	13.6	7.9	3.2	3.1	13.5	5.4	4.4
Greece	2.8	-5.9	0.5	1.9	-9.0	8.4	6.0	1.0	2.0	8.3	3.5	3.1
Spain	3.1	-1.8	2.7	2.0	-11.3	5.5	4.5	1.0	2.0	5.1	4.0	3.4
France	1.9	0.4	1.5	1.8	-7.8	6.8	2.6	0.4	1.5	7.0	3.1	1.8
Croatia	4.1	-2.3	2.4	3.4	-8.6	13.1	6.0	1.0	1.7	10.2	3.4	3.0
Italy	0.9	-1.6	0.9	0.5	-9.0	6.7	3.8	0.3	1.1	6.6	2.4	1.9
Cyprus	4.7	-1.9	3.9	5.5	-4.4	6.6	5.6	1.0	1.9	5.5	2.3	3.5
Latvia	7.4	-1.7	3.1	2.6	-2.2	4.1	1.9	-0.3	2.6	4.5	2.0	2.9
Lithuania	7.1	-0.3	3.3	4.6	0.0	6.0	2.5	0.5	2.4	5.0	1.7	2.6
Luxembourg	4.1	1.2	2.5	2.3	-0.8	5.1	1.5	1.0	2.4	6.9	2.2	2.7
Malta	2.9	2.9	7.5	5.9	-8.3	10.3	5.7	2.8	3.7	9.4	4.2	4.0
Netherlands	2.7	-0.4	2.2	2.0	-3.9	4.9	4.6	0.6	1.3	5.0	3.3	1.6
Austria	2.7	0.3	1.7	1.5	-6.5	4.6	4.6	0.3	1.1	4.5	3.9	1.9
Portugal	1.4	-1.6	2.2	2.7	-8.3	5.5	6.6	0.7	1.7	4.9	5.8	2.7
Slovakia	7.3	1.1	3.3	2.5	-3.4	3.0	1.9	0.5	1.9	3.0	2.3	3.6
Slovenia	4.9	-1.9	3.5	3.5	-4.3	8.2	6.2	0.8	1.7	8.1	3.7	3.1
Finland	3.4	-1.0	1.5	1.2	-2.2	3.0	2.3	0.2	1.4	3.5	1.6	1.7
Euro area (20)	2.1	-0.4	1.9	1.6	-6.1	5.3	3.2	0.3	1.5	5.4	2.7	2.3
Bulgaria	6.6	0.1	2.6	4.0	-4.0	7.6	3.1	1.1	2.4	4.2	2.1	3.1
Czechia	5.3	-0.3	3.7	3.0	-5.5	3.5	2.5	0.1	1.8	3.3	1.9	2.7
Denmark	1.9	-0.1	2.4	1.5	-2.0	4.9	3.0	0.0	1.3	4.7	2.6	1.8
Hungary	2.9	-0.7	3.9	4.9	-4.5	7.1	5.5	0.1	2.6	7.1	3.6	2.6
Poland	5.2	2.6	4.4	4.5	-2.0	6.8	4.0	0.7	2.6	5.9	3.7	3.0
Romania	7.9	-0.6	4.9	3.9	-3.7	5.1	5.8	1.8	2.2	5.9	2.6	3.6
Sweden	3.0	1.0	2.7	2.0	-2.2	5.1	2.9	-0.6	0.8	4.8	2.3	1.4
EU	2.3	-0.2	2.1	1.8	-5.7	5.4	3.3	0.3	1.6	5.4	2.7	2.3
United Kingdom	1.9	0.4	2.4	1.6	-11.0	7.5	4.2	-0.9	0.9	7.4	3.4	1.6
Japan	1.1	0.3	1.0	-0.4	-4.6	1.7	1.7	1.6	1.2	1.7	1.9	1.8
United States	2.4	1.1	2.4	2.3	-2.8	5.9	1.8	0.7	1.7	5.7	2.9	2.3

Table 2: Profiles (qoq) of quarterly GDP, volume (percentage change from previous quarter, 2022-24) 31.10.2022

	2022/1	2022/2	2022/3	2022/4	2023/1	2023/2	2023/3	2023/4	2024/1	2024/2	2024/3	2024/4
Belgium	0.6	0.5	-0.1	-0.4	0.0	0.2	0.3	0.4	0.4	0.4	0.5	0.5
Germany	0.8	0.1	0.3	-0.9	-0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.4
Estonia	0.0	-1.3	-1.4	-0.5	0.8	1.0	1.0	0.4	0.4	0.4	0.4	0.5
Ireland	6.2	1.8	:	:	:	:	:	:	:	:	:	:
Greece	2.9	1.2	:	:	:	:	:	:	:	:	:	:
Spain	-0.2	1.5	0.2	-0.3	0.0	0.3	0.5	0.5	0.5	0.6	0.5	0.5
France	-0.2	0.5	0.2	-0.2	-0.1	0.1	0.3	0.4	0.4	0.4	0.4	0.4
Croatia	2.8	2.0	:	:	:	:	:	:	:	:	:	:
Italy	0.1	1.1	0.5	-0.3	-0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.3
Cyprus	1.4	-0.3	:	:	:	:	:	:	:	:	:	:
Latvia	2.0	0.2	-1.7	0.0	0.1	0.5	0.5	0.4	0.6	0.6	0.7	0.7
Lithuania	0.6	0.3	0.4	-0.4	-0.3	0.5	0.5	0.5	0.6	0.7	0.7	0.7
Luxembourg	0.7	-0.5	-0.2	-0.1	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Malta	1.0	0.8	:	:	:	:	:	:	:	:	:	:
Netherlands	0.4	2.6	0.1	-0.5	0.0	0.2	0.3	0.3	0.3	0.3	0.4	0.4
Austria	1.3	1.9	-0.1	-0.4	-0.3	0.1	0.3	0.4	0.3	0.2	0.2	0.2
Portugal	2.4	0.1	0.4	-0.1	-0.1	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Slovakia	0.3	0.3	0.4	0.4	-0.2	0.0	0.2	0.3	0.5	0.6	0.7	0.8
Slovenia	0.7	0.8	0.0	-0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.6	0.6
Finland	0.5	1.0	0.1	-0.4	-0.3	0.1	0.2	0.3	0.3	0.4	0.4	0.4
Euro area (20)	0.6	0.8	0.2	-0.5	-0.1	0.2	0.3	0.4	0.3	0.4	0.4	0.4
Bulgaria	0.5	0.9	0.1	-0.4	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Czechia	0.6	0.5	-0.3	-0.6	0.1	0.3	0.3	0.5	0.5	0.5	0.5	0.6
Denmark	-0.5	0.9	0.2	-0.8	-0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Hungary	1.8	1.1	0.2	-1.1	0.0	0.2	0.5	0.6	0.8	0.8	0.8	0.8
Poland	2.5	-2.1	1.2	0.3	-0.1	0.4	0.5	0.6	0.6	0.6	0.7	0.7
Romania	5.3	1.8	-1.1	-2.0	0.8	2.0	2.0	0.6	0.1	0.2	0.1	0.0
Sweden	0.0	0.7	0.7	-0.4	-0.4	-0.4	0.0	0.1	0.3	0.3	0.4	0.4
EU	0.7	0.7	0.2	-0.5	-0.1	0.2	0.4	0.4	0.3	0.4	0.4	0.4
United Kingdom	0.7	0.2	-0.6	-0.6	0.0	-0.3	0.0	0.4	0.3	0.4	0.2	0.1
Japan	0.1	0.9	0.6	0.4	0.4	0.2	0.2	0.4	0.3	0.3	0.3	0.3
United States	-0.4	-0.1	0.6	-0.1	0.0	0.1	0.5	0.4	0.5	0.4	0.4	0.4

Note: See note 10 for aggregation details for the EU and EA aggregates.

Table 3: Profile (yoy) of quarterly GDP, volume (percentage change from corresponding quarter in previous year, 2022-24) 31.10.2022

	2022/1	2022/2	2022/3	2022/4	2023/1	2023/2	2023/3	2023/4	2024/1	2024/2	2024/3	2024/4
Belgium	5.3	4.1	1.5	0.5	0.0	-0.3	0.1	0.9	1.2	1.4	1.6	1.8
Germany	3.5	1.7	1.1	0.2	-0.8	-0.8	-0.7	0.6	1.2	1.3	1.4	1.5
Estonia	4.5	0.3	-1.9	-3.2	-2.5	-0.2	2.3	3.2	2.8	2.2	1.6	1.7
Ireland	11.0	10.8	:	:	:	:	:	:	:	:	:	:
Greece	8.0	7.7	:	:	:	:	:	:	:	:	:	:
Spain	6.7	6.8	3.8	1.2	1.4	0.3	0.6	1.5	1.9	2.1	2.1	2.0
France	4.7	4.2	1.0	0.2	0.4	0.0	0.2	0.8	1.3	1.5	1.6	1.7
Croatia	6.8	7.8	:	:	:	:	:	:	:	:	:	:
Italy	6.4	5.0	2.6	1.4	1.0	0.1	-0.2	0.4	0.9	1.1	1.2	1.3
Cyprus	6.3	6.2	:	:	:	:	:	:	:	:	:	:
Latvia	5.1	2.9	0.6	0.6	-1.3	-1.1	1.1	1.5	2.1	2.2	2.4	2.6
Lithuania	4.1	2.8	2.5	0.9	0.1	0.2	0.3	1.2	2.1	2.3	2.5	2.6
Luxembourg	2.7	1.6	1.7	-0.2	-0.5	0.6	1.4	2.2	2.4	2.5	2.5	2.5
Malta	8.1	8.9	:	:	:	:	:	:	:	:	:	:
Netherlands	6.6	5.3	3.9	2.6	2.2	-0.2	-0.1	0.7	1.0	1.2	1.4	1.5
Austria	8.6	6.2	1.8	2.6	1.0	-0.8	-0.4	0.5	1.1	1.2	1.2	1.0
Portugal	12.0	7.4	4.9	2.8	0.3	0.5	0.6	1.1	1.6	1.7	1.8	1.8
Slovakia	2.9	1.3	1.3	1.4	0.9	0.5	0.3	0.3	1.0	1.6	2.1	2.6
Slovenia	9.4	8.3	6.8	1.3	0.8	0.3	0.7	1.3	1.4	1.5	1.8	2.0
Finland	3.8	3.2	2.3	1.2	0.4	-0.5	-0.4	0.3	1.0	1.3	1.5	1.6
Euro area (20)	5.4	4.2	1.9	0.9	0.3	-0.2	-0.1	0.7	1.2	1.4	1.5	1.5
Bulgaria	5.3	4.8	3.0	1.0	0.8	0.5	1.0	2.0	2.3	2.4	2.4	2.4
Czechia	4.6	3.7	1.6	0.1	-0.5	-0.6	0.1	1.2	1.6	1.8	1.9	2.1
Denmark	4.9	3.9	3.3	-0.2	0.0	-0.4	-0.2	0.9	1.5	1.3	1.2	1.2
Hungary	8.0	6.5	5.5	1.9	0.2	-0.7	-0.4	1.3	2.0	2.6	2.8	3.0
Poland	9.2	4.7	3.4	1.8	-0.7	1.8	1.0	1.3	2.1	2.4	2.6	2.8
Romania	6.4	5.0	7.8	3.9	-0.6	-0.4	2.7	5.5	4.7	2.9	1.0	0.4
Sweden	4.1	4.0	2.6	1.0	0.5	-0.6	-1.3	-0.7	0.0	0.7	1.2	1.5
EU	5.6	4.3	2.4	0.9	0.3	-0.2	0.0	0.8	1.3	1.5	1.5	1.6
United Kingdom	10.9	4.4	1.9	-0.3	-1.0	-1.5	-0.9	0.1	0.4	1.1	1.3	1.1
Japan	0.8	1.2	2.1	1.7	2.0	1.4	1.1	1.0	1.0	1.0	1.1	1.0
United States	2.3	1.1	1.1	0.0	0.2	0.4	0.4	0.7	0.9	1.1	1.0	1.0

Note: See note 10 for aggregation details for the EU and EA aggregates.

Table 4: Gross domestic product per capita (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	1.9	-0.1	1.2	1.7	-5.8	5.7	2.1	-0.4	1.2	5.8	1.3	1.2
Germany	2.1	0.6	1.4	0.8	-3.8	2.6	0.7	-1.1	1.3	2.8	0.8	2.2
Estonia	5.8	-0.2	3.2	4.4	-0.6	8.0	-2.4	-0.2	2.2	8.3	-1.9	2.0
Ireland	1.2	-0.9	9.2	4.0	5.1	12.7	6.0	1.6	1.7	12.6	4.2	3.1
Greece	2.5	-5.7	0.9	2.0	-8.8	8.6	6.4	1.4	2.3	8.8	3.9	3.5
Spain	1.3	-2.0	2.6	1.2	-11.8	5.6	3.5	0.3	1.3	5.2	3.0	2.8
France	1.2	-0.1	1.0	1.4	-8.1	6.5	2.2	0.1	1.2	6.7	2.5	1.4
Croatia	4.0	-2.0	3.2	4.0	-8.1	18.0	6.4	1.3	1.9	14.7	3.4	3.0
Italy	0.3	-1.9	1.1	0.7	-8.6	7.3	3.2	-0.2	1.2	7.2	1.8	1.3
Cyprus	2.8	-3.7	3.7	4.1	-5.4	5.6	3.6	-0.3	0.9	4.5	0.4	2.3
Latvia	8.5	-0.1	4.0	3.3	-1.6	5.1	1.6	0.2	3.4	5.5	2.8	3.6
Lithuania	8.5	1.3	4.4	4.9	0.0	5.5	1.9	0.2	3.1	4.7	1.6	1.8
Luxembourg	2.4	-0.9	0.2	0.2	-2.3	3.5	-1.0	-1.3	0.4	5.2	-0.6	0.5
Malta	2.4	2.0	4.8	1.8	-10.3	9.7	3.6	1.0	2.0	8.5	2.0	2.0
Netherlands	2.4	-0.8	1.7	1.3	-4.4	4.3	4.1	-0.2	0.5	4.5	2.7	1.1
Austria	2.2	-0.1	0.8	1.1	-6.9	4.2	3.4	-0.4	0.8	4.0	2.0	1.1
Portugal	1.2	-1.4	2.5	2.7	-8.4	5.5	6.6	0.7	1.7	4.9	5.8	2.7
Slovakia	7.2	1.1	3.2	2.4	-3.5	3.4	0.8	0.0	1.9	3.2	1.7	3.3
Slovenia	4.6	-2.2	3.4	2.6	-4.9	8.0	6.2	0.6	1.5	7.9	2.8	2.6
Finland	3.0	-1.5	1.2	1.1	-2.4	2.8	1.7	-0.1	1.3	3.2	1.1	1.6
Euro area (20)	1.6	-0.6	1.7	1.3	-6.3	5.4	2.5	-0.2	1.3	5.4	2.0	1.9
Bulgaria	7.2	1.0	3.3	4.8	-3.4	8.5	3.8	1.7	3.0	4.9	2.7	3.7
Czechia	4.8	-0.4	3.5	2.6	-5.8	3.6	-0.2	-1.1	1.8	3.4	-1.5	1.8
Denmark	1.5	-0.6	1.8	1.1	-2.2	4.4	2.3	-0.6	0.7	4.3	0.9	1.1
Hungary	3.1	-0.4	4.2	4.9	-4.3	7.6	5.2	0.1	2.8	7.5	1.7	2.3
Poland	5.2	2.4	4.5	4.5	-1.9	7.4	1.4	-0.4	2.8	6.5	-1.5	2.3
Romania	9.0	-0.1	5.4	4.3	-3.1	5.9	6.6	2.6	3.1	6.3	3.4	4.4
Sweden	2.4	0.2	1.6	1.0	-2.9	4.4	2.5	-0.9	0.5	4.2	1.9	1.1
EU	2.0	-0.4	2.0	1.6	-5.7	5.5	2.5	-0.2	1.4	5.4	1.6	1.9
United Kingdom	1.2	-0.3	1.7	1.1	-11.4	6.8	3.9	-1.2	0.6	7.1	3.1	1.3
Japan	1.1	0.4	1.1	-0.1	-4.3	2.2	2.2	2.2	1.8	2.1	2.3	2.3
United States	1.5	0.3	1.6	1.8	-3.1	5.8	0.8	0.3	1.2	5.5	2.5	1.9

Table 5: **Domestic demand, volume (percentage change on preceding year, 2004-2024)** 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	**2009 - 13**	**2014 - 18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	***2021***	***2022***	***2023***
Belgium	2.8	0.7	2.0	1.9	-5.8	5.6	**2.4**	**0.4**	**1.8**	*5.7*	*2.2*	*2.0*
Germany	1.1	0.6	2.1	1.7	-3.0	1.9	**3.2**	**-0.7**	**1.5**	*2.2*	*2.3*	*2.7*
Estonia	6.2	-1.0	4.1	1.7	6.2	6.4	**-1.5**	**0.5**	**1.9**	*7.6*	*-2.0*	*1.8*
Ireland	4.1	-2.5	8.2	43.2	-10.9	-17.6	**3.5**	**1.5**	**2.3**	*-16.7*	*4.2*	*4.0*
Greece	3.0	-7.7	0.7	1.1	-3.4	7.2	**5.2**	**0.8**	**1.5**	*7.1*	*2.4*	*1.4*
Spain	3.6	-3.5	2.9	1.7	-9.4	5.3	**1.5**	**1.0**	**1.8**	*4.7*	*2.1*	*3.4*
France	2.3	0.4	1.6	2.1	-6.6	6.6	**2.8**	**0.3**	**1.6**	*6.6*	*2.7*	*1.4*
Croatia	4.6	-3.7	2.4	3.4	-3.1	6.1	**5.1**	**1.3**	**1.8**	*3.2*	*3.3*	*4.4*
Italy	0.7	-2.3	1.2	-0.2	-8.5	6.8	**4.5**	**0.3**	**1.0**	*6.6*	*2.7*	*1.8*
Cyprus	7.2	-4.6	4.3	6.1	-3.7	3.0	**3.7**	**0.5**	**1.4**	*2.1*	*2.9*	*2.7*
Latvia	8.3	-3.2	3.0	3.2	-2.2	9.6	**3.7**	**-0.5**	**2.2**	*8.8*	*3.2*	*2.9*
Lithuania	9.4	-3.4	3.7	1.5	-3.7	6.9	**1.7**	**-0.2**	**2.2**	*5.8*	*2.9*	*2.9*
Luxembourg	3.0	2.0	2.5	4.1	-2.8	8.2	**2.2**	**2.1**	**2.7**	*7.3*	*2.9*	*2.4*
Malta	2.7	1.0	6.4	7.2	-3.7	8.9	**3.8**	**2.2**	**3.3**	*8.7*	*4.7*	*3.2*
Netherlands	2.3	-1.0	2.1	3.0	-4.2	3.9	**3.9**	**1.0**	**1.1**	*3.7*	*3.4*	*2.1*
Austria	2.1	0.3	1.8	0.4	-5.6	6.6	**2.5**	**0.2**	**1.2**	*4.8*	*2.9*	*1.9*
Portugal	1.8	-3.3	2.6	3.1	-5.4	5.7	**4.5**	**1.3**	**2.1**	*5.0*	*4.4*	*2.7*
Slovakia	6.9	-1.2	3.8	3.9	-5.0	4.1	**2.7**	**0.5**	**1.7**	*3.8*	*2.8*	*3.8*
Slovenia	4.7	-3.5	3.0	3.5	-4.7	9.9	**7.5**	**-0.1**	**1.6**	*10.8*	*3.2*	*2.7*
Finland	3.1	-0.2	1.8	-0.4	-2.0	2.8	**2.6**	**0.4**	**1.2**	*3.5*	*1.9*	*1.4*
Euro area (20)	2.0	-0.9	2.1	2.4	-5.8	4.2	**3.2**	**0.2**	**1.5**	*4.1*	*2.6*	*2.3*
Bulgaria	9.4	-2.8	2.9	4.8	0.1	7.5	**6.0**	**1.9**	**2.5**	*5.3*	*2.4*	*3.3*
Czechia	4.0	-1.2	3.8	3.2	-5.5	7.7	**2.5**	**0.0**	**1.7**	*7.6*	*1.9*	*2.7*
Denmark	2.9	-0.6	2.6	0.5	-0.1	4.6	**1.4**	**-1.1**	**1.1**	*4.7*	*2.2*	*1.8*
Hungary	1.6	-2.2	4.4	7.1	-2.6	6.2	**6.1**	**-1.1**	**1.8**	*5.8*	*2.6*	*1.5*
Poland	6.1	1.3	4.7	3.3	-2.7	8.4	**5.3**	**-0.1**	**2.3**	*7.6*	*3.8*	*3.0*
Romania	11.9	-2.7	5.9	5.3	-2.1	6.2	**6.3**	**1.9**	**2.5**	*7.0*	*2.9*	*3.7*
Sweden	2.8	1.2	3.1	0.2	-2.3	5.6	**4.4**	**-1.1**	**0.0**	*5.5*	*2.4*	*0.7*
EU	2.3	-0.8	2.3	2.5	-5.3	4.5	**3.3**	**0.1**	**1.5**	*4.5*	*2.6*	*2.3*
United Kingdom	1.8	0.6	2.6	1.8	-12.3	8.8	**6.5**	**-1.8**	**0.7**	*8.7*	*3.8*	*1.9*
Japan	0.5	0.7	0.7	0.1	-3.8	0.6	**2.2**	**1.4**	**0.9**	*0.7*	*1.6*	*1.7*
United States	2.2	0.9	2.6	2.3	-2.5	7.0	**2.1**	**0.2**	**1.3**	*6.6*	*3.3*	*2.1*

Table 6: **Final demand, volume (percentage change on preceding year, 2004-2024)** 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	**2009 - 13**	**2014 - 18**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	***2021***	***2022***	***2023***
Belgium	3.7	0.6	3.0	2.1	-5.5	8.1	**3.2**	**0.9**	**2.5**	*7.5*	*2.7*	*2.9*
Germany	3.1	1.1	2.7	1.6	-5.1	4.4	**2.6**	**-0.2**	**2.0**	*4.6*	*2.3*	*3.2*
Estonia	8.2	1.9	3.5	3.6	1.2	11.9	**1.4**	**1.0**	**2.7**	*12.7*	*0.3*	*3.2*
Ireland	4.3	0.4	12.2	23.4	1.7	2.1	**8.6**	**3.7**	**3.6**	*4.1*	*5.4*	*4.6*
Greece	3.8	-6.6	2.0	2.2	-8.5	11.1	**7.2**	**1.8**	**2.5**	*10.5*	*4.9*	*3.8*
Spain	3.6	-2.3	3.2	1.8	-12.2	7.4	**5.6**	**1.5**	**2.7**	*7.1*	*5.1*	*3.8*
France	2.6	0.6	2.1	2.0	-9.0	7.1	**3.9**	**1.0**	**2.4**	*7.2*	*4.0*	*2.9*
Croatia	4.6	-2.9	3.8	4.5	-9.9	14.5	**12.1**	**1.5**	**2.3**	*11.7*	*5.0*	*4.8*
Italy	1.4	-1.8	1.7	0.2	-9.7	8.4	**6.1**	**0.8**	**1.8**	*8.2*	*3.3*	*2.4*
Cyprus	5.6	-2.5	5.8	7.2	-1.1	7.7	**5.7**	**1.0**	**1.8**	*7.1*	*2.4*	*3.6*
Latvia	9.2	-1.0	3.7	2.8	-1.5	8.2	**5.2**	**-0.1**	**2.5**	*7.8*	*2.5*	*3.3*
Lithuania	9.9	0.3	4.2	5.2	-1.9	11.4	**4.2**	**0.3**	**3.7**	*10.3*	*0.6*	*3.0*
Luxembourg	5.3	2.6	3.6	4.4	-0.6	9.3	**2.6**	**1.5**	**3.5**	*9.1*	*3.6*	*3.0*
Malta	6.6	2.7	6.6	7.1	-3.7	9.0	**6.0**	**2.8**	**3.7**	*8.4*	*5.2*	*4.2*
Netherlands	3.6	0.4	3.4	2.5	-4.3	4.5	**4.2**	**1.2**	**1.4**	*5.1*	*3.6*	*2.8*
Austria	3.5	0.5	2.5	1.7	-7.5	7.6	**5.4**	**0.6**	**1.1**	*7.5*	*4.2*	*2.6*
Portugal	2.3	-1.8	3.5	3.4	-9.4	7.7	**7.9**	**1.7**	**2.2**	*7.2*	*6.7*	*3.1*
Slovakia	10.0	1.5	4.3	2.4	-5.7	7.1	**0.6**	**1.1**	**2.4**	*6.8*	*2.9*	*5.6*
Slovenia	7.1	-1.9	4.7	4.0	-6.6	12.0	**7.3**	**1.6**	**2.6**	*11.9*	*4.0*	*4.3*
Finland	4.7	-1.0	2.0	1.5	-3.4	3.5	**2.3**	**0.9**	**2.0**	*3.8*	*2.0*	*2.3*
Euro area (20)	3.0	-0.2	2.9	2.6	-6.9	6.2	**4.3**	**0.9**	**2.2**	*6.4*	*3.5*	*3.1*
Bulgaria	10.1	-0.5	3.7	4.5	-4.1	8.8	**6.4**	**1.7**	**2.8**	*7.0*	*3.2*	*3.6*
Czechia	8.0	0.7	4.8	2.4	-6.6	7.3	**3.4**	**1.1**	**2.7**	*6.5*	*1.6*	*3.1*
Denmark	3.8	-0.2	3.0	2.0	-2.5	5.9	**3.0**	**0.9**	**2.6**	*5.8*	*3.5*	*2.9*
Hungary	6.7	-0.5	5.3	6.3	-4.2	8.0	**6.3**	**1.0**	**3.2**	*7.8*	*3.7*	*3.5*
Poland	6.9	2.2	5.6	4.0	-2.1	9.8	**4.9**	**1.0**	**3.2**	*9.2*	*4.5*	*3.3*
Romania	12.3	-0.2	6.6	5.3	-4.1	7.9	**6.8**	**2.3**	**3.2**	*8.4*	*3.3*	*4.1*
Sweden	4.0	0.9	3.4	2.0	-3.3	6.3	**4.3**	**-0.7**	**1.0**	*6.1*	*2.9*	*1.5*
EU	3.4	-0.1	3.1	2.7	-6.4	6.5	**4.4**	**0.8**	**2.3**	*6.5*	*3.5*	*3.1*
United Kingdom	2.4	0.7	2.8	1.9	-12.3	6.5	**6.6**	**-1.0**	**1.0**	*6.3*	*4.1*	*1.8*
Japan	1.5	0.4	1.3	-0.1	-4.9	2.1	**2.5**	**1.7**	**1.2**	*2.2*	*2.0*	*2.0*
United States	2.7	1.2	2.6	2.1	-3.7	6.9	**2.6**	**0.5**	**1.7**	*6.4*	*3.5*	*2.4*

Table 7: **Private consumption expenditure, volume (percentage change on preceding year, 2004-2024)** 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.5	1.5	1.5	1.7	-8.3	5.5	**3.7**	**1.1**	**2.5**	*6.4*	*4.2*	*2.5*
Germany	0.6	0.9	1.7	1.6	-5.7	0.4	**4.5**	**-0.9**	**1.5**	*0.1*	*4.1*	*3.7*
Estonia	6.8	-1.1	4.0	4.6	-1.0	6.4	**4.0**	**0.9**	**2.8**	*6.4*	*2.5*	*1.5*
Ireland	4.8	-1.4	3.3	2.5	-11.9	4.7	**5.3**	**1.3**	**2.6**	*5.7*	*5.7*	*4.1*
Greece	3.5	-5.6	0.6	1.9	-7.7	5.8	**5.8**	**1.0**	**1.5**	*7.8*	*1.5*	*1.7*
Spain	3.0	-2.4	2.4	1.1	-12.2	6.0	**1.5**	**0.6**	**1.6**	*4.6*	*0.8*	*3.8*
France	1.9	0.6	1.3	1.8	-6.7	5.3	**2.5**	**0.7**	**1.6**	*4.7*	*3.4*	*2.0*
Croatia	3.7	-2.7	1.5	4.1	-5.1	9.9	**4.6**	**0.4**	**1.2**	*10.0*	*2.4*	*3.6*
Italy	0.7	-1.3	1.1	0.2	-10.4	5.2	**3.7**	**0.1**	**1.0**	*5.2*	*2.2*	*1.4*
Cyprus	6.6	-2.6	3.6	3.9	-6.8	4.5	**4.9**	**1.2**	**1.3**	*3.7*	*2.2*	*2.0*
Latvia	8.0	-0.7	2.4	0.2	-4.6	8.2	**6.0**	**-1.6**	**2.2**	*4.8*	*5.0*	*3.8*
Lithuania	9.5	-2.1	3.8	2.7	-2.4	8.0	**1.2**	**-0.8**	**2.4**	*7.3*	*3.9*	*3.1*
Luxembourg	1.9	2.1	3.0	2.3	-7.3	9.5	**2.6**	**1.7**	**2.7**	*7.4*	*3.7*	*2.9*
Malta	2.2	2.0	4.5	4.6	-10.2	7.1	**7.0**	**3.7**	**4.0**	*6.2*	*3.8*	*3.4*
Netherlands	0.9	-0.8	1.6	0.9	-6.4	3.6	**5.8**	**0.2**	**1.1**	*3.5*	*4.6*	*1.9*
Austria	1.7	0.7	1.1	0.5	-8.0	3.6	**4.2**	**-0.5**	**1.2**	*3.3*	*4.1*	*2.3*
Portugal	1.9	-2.0	2.3	3.3	-7.0	4.7	**5.4**	**0.5**	**1.6**	*4.5*	*4.6*	*2.3*
Slovakia	6.6	-0.4	3.4	2.7	-1.2	1.7	**4.2**	**-1.5**	**1.8**	*1.2*	*1.9*	*1.9*
Slovenia	3.0	-0.5	2.7	5.3	-6.9	9.5	**8.1**	**-0.3**	**1.6**	*11.6*	*4.1*	*2.5*
Finland	3.3	0.5	1.4	0.7	-4.0	3.7	**2.5**	**0.2**	**1.3**	*3.1*	*2.1*	*1.7*
Euro area (20)	1.6	-0.4	1.6	1.4	-7.7	3.8	**3.7**	**0.1**	**1.5**	*3.5*	*3.2*	*2.6*
Bulgaria	8.0	-0.1	2.5	6.0	-0.6	8.8	**3.0**	**0.6**	**1.5**	*8.0*	*2.8*	*3.0*
Czechia	3.5	0.2	3.3	2.7	-7.2	4.1	**0.8**	**0.2**	**2.3**	*4.4*	*2.0*	*2.0*
Denmark	2.7	-0.3	2.3	1.6	-1.4	4.2	**-1.5**	**-0.6**	**1.7**	*4.2*	*2.3*	*2.1*
Hungary	1.2	-1.9	4.2	5.0	-1.2	4.9	**7.2**	**-1.5**	**2.6**	*4.6*	*4.8*	*2.5*
Poland	4.6	1.9	4.3	3.4	-3.4	6.3	**4.2**	**2.3**	**2.4**	*6.0*	*4.8*	*3.7*
Romania	11.9	-2.1	7.4	3.4	-3.9	7.1	**6.7**	**1.1**	**1.6**	*7.9*	*2.9*	*3.5*
Sweden	2.7	1.9	2.7	0.7	-3.2	6.0	**4.0**	**-1.0**	**-0.2**	*5.8*	*3.2*	*1.5*
EU	1.9	-0.3	1.9	1.5	-7.1	4.1	**3.7**	**0.1**	**1.5**	*3.8*	*3.3*	*2.7*
United Kingdom	1.8	0.6	2.8	1.1	-13.2	6.2	**5.0**	**-0.8**	**1.2**	*6.2*	*4.8*	*2.0*
Japan	0.7	1.1	-0.1	-0.5	-5.2	1.3	**3.3**	**1.5**	**0.8**	*1.3*	*2.3*	*1.6*
United States	2.5	1.0	2.7	2.0	-3.0	8.3	**2.6**	**0.7**	**0.9**	*7.9*	*3.4*	*2.2*

Table 8: **Government consumption expenditure, volume (percentage change on preceding year, 2004-2024)** 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.7	0.8	0.8	2.2	0.0	4.8	**1.1**	**-0.4**	**-0.4**	*4.4*	*0.8*	*0.3*
Germany	1.3	1.6	2.2	2.6	4.0	3.8	**2.2**	**-0.6**	**1.0**	*3.1*	*0.5*	*0.2*
Estonia	4.2	0.9	2.0	3.1	2.8	4.0	**0.6**	**5.0**	**-0.5**	*3.9*	*2.0*	*0.3*
Ireland	3.6	-2.8	4.0	6.5	10.5	6.1	**2.0**	**-0.7**	**2.9**	*5.4*	*1.5*	*1.2*
Greece	3.6	-4.1	-0.7	2.1	2.6	2.2	**0.6**	**-3.7**	**0.8**	*3.7*	*-1.7*	*-4.1*
Spain	5.8	-0.1	1.1	1.9	3.5	2.9	**-1.6**	**1.0**	**1.0**	*3.1*	*-0.5*	*0.4*
France	1.5	1.6	1.2	1.0	-4.0	6.4	**2.4**	**1.0**	**0.8**	*6.3*	*1.7*	*0.5*
Croatia	3.6	0.6	1.1	3.1	4.3	3.0	**2.4**	**2.1**	**2.3**	*3.1*	*2.6*	*2.2*
Italy	0.5	-0.9	-0.1	-0.6	0.0	1.5	**0.0**	**-0.3**	**-0.5**	*0.6*	*0.9*	*0.9*
Cyprus	3.4	0.2	-0.2	11.9	11.6	6.6	**2.8**	**-0.3**	**0.6**	*8.0*	*3.1*	*1.8*
Latvia	3.4	-2.8	2.7	3.9	2.4	4.4	**2.1**	**1.5**	**1.5**	*4.4*	*1.1*	*0.7*
Lithuania	2.4	-0.6	0.1	-0.3	-1.4	0.9	**0.7**	**0.8**	**-0.1**	*0.5*	*0.1*	*-0.1*
Luxembourg	2.0	3.8	2.7	2.6	7.8	5.4	**3.4**	**4.2**	**3.0**	*4.7*	*3.3*	*2.0*
Malta	3.2	0.9	3.9	13.1	15.7	6.7	**6.8**	**-2.6**	**1.8**	*6.1*	*9.0*	*1.4*
Netherlands	3.0	0.8	0.9	2.8	1.6	5.2	**1.3**	**2.7**	**1.2**	*5.5*	*1.8*	*1.8*
Austria	2.4	0.7	1.1	1.3	-0.5	7.8	**2.4**	**0.6**	**1.0**	*6.7*	*-1.2*	*0.7*
Portugal	1.3	-1.7	0.4	2.1	0.3	4.6	**1.8**	**2.1**	**1.9**	*4.1*	*1.2*	*1.3*
Slovakia	3.0	1.0	2.5	4.5	-0.6	4.2	**-0.9**	**-0.4**	**-0.1**	*1.9*	*-1.7*	*0.2*
Slovenia	3.3	-0.5	1.6	1.8	4.1	5.8	**0.6**	**1.3**	**0.6**	*3.9*	*0.4*	*1.1*
Finland	1.5	0.6	0.8	2.0	0.3	2.9	**1.1**	**0.1**	**0.4**	*3.2*	*1.6*	*-0.8*
Euro area (20)	1.9	0.6	1.2	1.7	1.0	4.3	**1.4**	**0.3**	**0.8**	*3.9*	*0.8*	*0.5*
Bulgaria	2.4	-0.6	2.7	2.0	8.3	0.4	**8.4**	**3.6**	**2.7**	*4.0*	*0.3*	*1.7*
Czechia	0.4	0.1	2.2	2.5	4.2	1.5	**0.2**	**0.9**	**1.3**	*1.6*	*0.6*	*1.3*
Denmark	1.9	0.9	0.9	0.8	-1.4	4.2	**0.9**	**-0.6**	**1.4**	*3.7*	*1.4*	*0.6*
Hungary	0.7	0.5	2.5	5.8	-0.5	2.0	**0.8**	**0.0**	**0.9**	*3.7*	*-0.5*	*0.0*
Poland	4.0	1.3	2.9	6.5	4.9	5.0	**0.2**	**0.6**	**0.9**	*3.4*	*1.3*	*1.8*
Romania	2.7	-0.3	2.0	7.2	1.1	0.4	**0.3**	**0.8**	**2.5**	*0.4*	*0.1*	*-0.1*
Sweden	0.7	1.4	1.6	0.3	-1.8	2.8	**0.1**	**0.2**	**0.1**	*2.8*	*0.8*	*-3.0*
EU	1.9	0.6	1.3	1.9	1.0	4.1	**1.3**	**0.3**	**0.8**	*3.8*	*0.8*	*0.4*
United Kingdom	2.4	0.6	1.0	4.1	-7.3	12.6	**1.0**	**1.4**	**1.1**	*14.3*	*3.6*	*1.4*
Japan	0.7	1.8	1.1	1.9	2.3	2.1	**2.0**	**1.3**	**0.8**	*2.1*	*1.7*	*1.4*
United States	1.5	-0.5	0.8	3.4	2.2	1.3	**-0.4**	**0.9**	**0.5**	*1.1*	*0.0*	*1.6*

Table 9: Total investment, volume (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	5.1	-0.7	3.5	5.0	-5.1	4.9	-0.5	0.6	2.5	7.8	-0.1	3.0
Germany	2.6	0.2	3.0	1.9	-2.3	1.2	0.3	-0.6	2.3	1.5	0.8	2.7
Estonia	7.5	-1.1	4.5	-3.7	24.7	2.8	-15.0	2.0	3.8	3.3	-7.0	5.0
Ireland	4.0	-4.7	19.6	100.9	-16.5	-39.0	2.7	2.9	1.9	-37.6	4.2	5.4
Greece	3.1	-17.6	0.6	-2.2	1.1	20.0	11.5	6.3	3.5	19.6	14.7	8.5
Spain	3.6	-8.4	4.9	4.5	-9.7	0.9	4.8	1.9	3.0	4.3	8.3	5.8
France	3.3	-1.2	2.3	4.0	-8.2	11.5	2.2	-0.9	2.4	11.6	2.0	2.9
Croatia	5.9	-7.4	3.2	9.0	-5.0	4.7	9.4	2.9	3.2	7.6	6.5	8.2
Italy	0.8	-5.6	1.9	1.2	-8.0	16.5	9.5	1.9	2.3	17.0	6.2	4.1
Cyprus	9.7	-12.6	9.4	6.9	4.5	-4.2	0.7	-0.7	2.1	-6.3	5.4	5.8
Latvia	14.3	-5.8	1.5	6.9	-2.6	2.9	-0.2	0.9	3.1	2.9	1.3	2.8
Lithuania	12.6	-4.5	6.5	6.6	-0.2	7.8	1.3	0.5	4.0	7.0	2.7	4.5
Luxembourg	5.7	0.9	0.0	9.1	-3.6	6.7	0.4	0.8	2.5	12.3	1.3	2.1
Malta	3.4	0.1	13.2	8.4	-7.7	17.3	-5.0	4.0	3.5	19.3	2.5	4.9
Netherlands	4.3	-3.8	4.7	6.2	-2.6	3.2	3.2	0.6	0.9	3.5	2.9	2.9
Austria	1.7	-0.2	2.9	4.5	-5.3	8.7	-0.6	1.2	1.6	4.0	3.7	2.3
Portugal	0.6	-8.7	5.6	5.4	-2.2	8.7	4.0	3.5	3.6	6.4	6.5	5.2
Slovakia	8.6	-2.0	3.7	6.7	-10.8	0.2	3.5	7.5	3.6	0.6	10.8	13.4
Slovenia	7.6	-9.5	2.9	5.1	-7.9	13.7	4.4	-0.6	2.5	12.3	3.8	5.0
Finland	4.0	-2.3	3.1	-1.5	-0.9	1.5	3.4	0.8	1.6	1.2	2.1	3.0
Euro area (20)	2.9	-3.2	3.4	6.9	-6.2	3.6	2.8	0.5	2.3	4.3	3.1	3.6
Bulgaria	17.6	-7.9	1.5	4.5	0.6	-8.3	-8.0	5.5	7.0	-11.0	4.0	6.9
Czechia	6.1	-2.7	4.9	5.9	-6.0	0.7	5.3	2.0	1.3	0.9	3.1	5.6
Denmark	4.1	-2.6	4.9	-1.3	5.1	6.2	4.5	-2.1	0.0	5.6	2.7	2.3
Hungary	3.6	-2.9	7.9	12.8	-7.1	5.2	5.0	-1.6	1.2	5.9	0.9	1.2
Poland	11.6	0.4	4.8	6.2	-2.3	2.1	3.7	2.5	4.3	3.8	4.1	3.9
Romania	22.4	-7.4	3.2	12.6	1.1	2.9	4.7	5.6	5.9	2.3	4.8	8.1
Sweden	5.6	-0.5	4.8	-0.3	1.7	6.3	5.3	-2.0	0.2	6.1	2.0	2.5
EU	3.6	-3.0	3.6	6.5	-5.4	3.6	3.0	0.5	2.3	4.2	3.1	3.6
United Kingdom	1.8	-1.0	4.2	1.9	-10.5	5.6	3.7	-2.1	2.3	5.9	3.0	2.2
Japan	-0.5	-0.6	1.6	0.5	-4.9	-1.4	-1.3	1.5	1.3	-1.5	0.3	2.1
United States	1.9	0.7	3.9	2.6	-1.2	5.7	-0.4	-0.5	2.7	6.1	3.4	2.5

Table 10: Investment in construction, volume (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	4.9	0.4	2.6	4.0	-5.6	4.7	1.8	0.4	2.0	8.8	0.5	2.5
Germany	-0.8	1.3	1.6	1.0	3.9	0.0	-1.3	-1.8	1.7	0.7	0.2	1.5
Estonia	10.1	-2.9	4.5	-2.2	4.3	-5.3	-0.3	2.1	3.6	-0.8	0.7	5.1
Ireland	3.2	-14.6	9.9	5.6	-10.0	-2.3	16.4	7.4	6.8	-3.3	6.2	6.8
Greece	0.5	-18.0	-6.4	-14.6	4.5	15.1	15.5	7.2	2.5	10.6	15.4	8.7
Spain	2.5	-11.7	4.4	7.2	-10.2	-3.7	4.2	2.9	3.2	-2.8	4.2	6.8
France	3.0	-1.9	1.1	4.4	-12.0	14.0	0.6	-0.5	2.0	14.0	1.3	2.5
Croatia	2.4	-6.0	0.2	9.6	-4.3	2.7	3.6	3.0	3.1	4.5	3.0	3.0
Italy	0.2	-7.1	-1.0	2.4	-6.5	21.8	11.3	2.3	2.3	22.3	9.2	3.2
Cyprus	9.6	-15.1	8.8	16.6	-1.5	5.5	-4.6	-4.9	0.0	0.7	6.4	6.4
Latvia	12.3	-4.6	1.0	1.2	-6.9	-6.6	-0.6	-0.4	2.6	-6.7	0.5	2.5
Lithuania	11.9	-7.1	4.4	9.8	0.2	1.1	4.5	0.1	3.5	-1.6	2.4	4.6
Luxembourg	3.2	-1.0	1.6	9.2	-5.0	2.9	1.0	2.0	3.2	11.4	1.3	2.2
Malta	0.2	-3.1	15.3	12.4	-3.9	-1.0	-1.2	1.7	3.0	3.8	6.4	6.5
Netherlands	3.8	-7.4	7.1	5.4	0.4	1.7	3.5	1.0	1.3	2.3	2.5	4.7
Austria	0.4	-2.0	1.8	3.6	-3.4	5.8	0.0	0.8	1.3	3.1	2.6	2.0
Portugal	-2.4	-10.8	3.4	7.5	0.7	5.8	3.4	3.3	3.1	4.2	3.3	3.3
Slovakia	9.8	-3.5	1.5	-2.2	4.1	-5.8	1.3	10.0	6.2	-5.7	7.1	5.1
Slovenia	6.7	-14.4	1.6	6.7	-4.6	6.2	5.1	1.8	3.9	0.5	3.5	5.8
Finland	4.3	-1.6	3.5	-1.4	-0.4	1.6	3.5	0.3	0.5	1.6	1.4	0.0
Euro area (20)	1.6	-4.4	1.9	3.3	-4.1	5.9	2.5	0.4	2.1	6.3	2.6	2.9
Bulgaria	25.0	-7.4	-2.6	-5.9	-0.1	-12.5	-9.4	5.2	6.9	-11.4	5.0	8.1
Czechia	2.6	-3.3	3.1	5.1	-1.8	-2.7	6.0	3.1	2.4	0.6	3.8	6.3
Denmark	2.4	-4.5	5.3	2.7	4.7	8.9	7.5	-6.4	-1.4	5.7	3.1	2.1
Hungary	1.5	-5.2	7.5	13.8	-4.2	2.5	2.8	-1.1	-0.6	5.7	0.0	0.8
Poland	10.0	1.9	3.0	7.6	-3.3	3.0	5.2	0.4	1.8	2.4	3.4	2.3
Romania	26.3	-8.9	8.6	11.9	11.4	-5.9	5.6	6.2	6.7	6.1	3.2	7.2
Sweden	5.2	-1.8	6.6	0.0	0.9	-0.6	4.6	-5.3	-3.8	0.8	0.3	1.6
EU	2.2	-4.2	2.3	3.6	-3.4	5.1	2.8	0.2	1.9	5.8	2.5	3.0
United Kingdom	0.3	-1.5	5.1	5.6	-13.4	7.3	3.3	-2.4	2.0	8.7	1.3	1.7
Japan	-4.2	0.1	0.7	1.7	-2.1	-4.0	:	:	:	:	:	:
United States	-2.0	-3.1	3.4	0.8	-0.4	1.5	-8.9	-4.7	2.8	0.2	-1.1	1.1

Table 11: Investment in equipment, volume (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	5.8	-3.9	4.2	5.0	-8.7	6.7	**-3.0**	**0.6**	**3.2**	*12.4*	*-1.3*	*3.8*
Germany	6.6	-1.9	4.1	1.0	-11.0	3.5	**2.2**	**-0.2**	**3.2**	*3.4*	*-0.1*	*4.5*
Estonia	3.4	0.3	3.1	-6.7	-7.4	28.2	**2.0**	**2.4**	**3.9**	*17.8*	*0.8*	*6.5*
Ireland	6.2	4.6	14.5	-2.3	-29.1	26.6	**21.2**	**3.4**	**3.5**	*23.8*	*2.1*	*6.3*
Greece	7.0	-21.8	10.0	2.5	-4.2	33.2	**13.4**	**9.5**	**4.5**	*36.0*	*19.8*	*9.5*
Spain	5.6	-6.2	6.0	2.0	-13.3	6.3	**5.6**	**1.0**	**2.9**	*16.0*	*13.0*	*5.5*
France	3.1	-2.3	3.8	3.0	-10.6	8.5	**2.4**	**-5.1**	**3.9**	*8.5*	*-1.5*	*2.2*
Croatia	10.4	-9.6	6.0	10.4	-7.9	8.8	**19.3**	**2.9**	**3.5**	*12.3*	*12.5*	*15.8*
Italy	1.8	-5.9	5.2	-0.8	-13.0	17.5	**9.6**	**1.4**	**1.7**	*18.0*	*3.4*	*4.9*
Cyprus	10.3	-13.2	9.1	-7.6	14.4	-30.7	**18.0**	**9.0**	**8.0**	*-27.8*	*6.2*	*7.5*
Latvia	18.2	-9.6	1.9	14.5	-1.0	12.9	**-0.1**	**2.4**	**4.0**	*13.7*	*2.1*	*3.1*
Lithuania	12.1	-1.1	9.0	3.5	-2.9	22.7	**-3.4**	**0.9**	**4.4**	*24.1*	*3.2*	*4.5*
Luxembourg	11.2	3.9	-4.5	14.8	-1.5	11.0	**-1.0**	**-1.9**	**1.1**	*16.4*	*1.3*	*2.0*
Malta	5.8	2.6	10.7	0.8	-21.5	70.1	**:**	**:**	**:**	*64.6*	*:*	*:*
Netherlands	5.1	-3.4	4.5	7.9	-11.1	4.8	**2.1**	**-0.4**	**0.1**	*4.7*	*3.1*	*0.6*
Austria	2.6	-0.8	4.0	1.6	-9.5	16.0	**-4.7**	**0.8**	**1.6**	*4.7*	*5.3*	*2.7*
Portugal	5.4	-9.0	10.6	1.8	-11.1	11.9	**4.5**	**2.9**	**3.8**	*9.6*	*13.9*	*8.6*
Slovakia	7.3	-1.1	5.8	13.9	-24.6	10.1	**2.3**	**5.3**	**1.7**	*9.7*	*17.8*	*22.1*
Slovenia	8.8	-6.5	4.9	1.9	-12.1	22.4	**8.6**	**-1.7**	**3.1**	*27.5*	*3.8*	*4.4*
Finland	4.6	-2.8	5.2	-4.4	-0.8	5.5	**3.6**	**1.0**	**3.0**	*1.0*	*5.0*	*9.8*
Euro area (20)	4.8	-3.7	4.9	1.9	-11.7	9.1	**4.0**	**-0.3**	**2.7**	*9.8*	*2.8*	*4.4*
Bulgaria	12.8	-10.0	3.9	15.1	3.3	-3.6	**-7.8**	**5.9**	**7.8**	*-10.1*	*2.8*	*6.6*
Czechia	9.5	-2.9	4.8	2.6	-11.5	4.9	**6.3**	**1.7**	**0.3**	*1.1*	*2.6*	*3.0*
Denmark	5.1	-1.8	4.0	-9.7	1.8	9.6	**-3.8**	**0.6**	**0.9**	*13.4*	*1.3*	*2.9*
Hungary	5.0	-1.8	10.6	12.4	-9.3	7.1	**8.5**	**-1.9**	**2.6**	*7.3*	*2.1*	*1.9*
Poland	14.3	-1.7	6.7	3.5	-4.7	-0.4	**1.2**	**5.4**	**6.9**	*8.5*	*5.8*	*4.0*
Romania	18.9	-5.4	-3.4	5.3	-10.2	22.6	**3.5**	**4.6**	**4.7**	*-1.2*	*6.6*	*9.5*
Sweden	7.9	0.1	3.0	1.1	-6.3	14.3	**1.5**	**-1.6**	**3.8**	*12.4*	*2.5*	*3.6*
EU	5.6	-3.5	4.8	2.0	-10.8	8.9	**3.7**	**0.1**	**2.9**	*9.2*	*2.9*	*4.4*
United Kingdom	3.3	-3.1	3.3	0.4	-13.7	11.7	**5.9**	**-1.4**	**2.6**	*8.6*	*7.5*	*1.4*
Japan	3.8	-1.5	3.2	0.8	-9.7	:	**:**	**:**	**:**	*:*	*:*	*:*
United States	5.8	3.7	3.3	1.8	-8.7	8.7	**3.6**	**2.4**	**2.6**	*11.7*	*5.8*	*3.6*

Table 12: Public investment (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.0	2.3	2.5	2.6	2.7	2.7	**2.9**	**3.0**	**3.0**	*2.7*	*2.8*	*2.8*
Germany	2.0	2.3	2.2	2.4	2.7	2.6	**2.7**	**2.8**	**2.8**	*2.5*	*2.7*	*2.8*
Estonia	5.3	5.6	5.2	5.0	5.7	5.6	**5.4**	**5.9**	**6.1**	*5.7*	*6.3*	*6.8*
Ireland	4.2	2.7	2.0	2.2	2.3	2.1	**2.1**	**2.1**	**2.3**	*2.0*	*2.3*	*2.3*
Greece	5.3	3.6	3.8	2.5	3.1	3.6	**4.9**	**4.3**	**4.2**	*3.6*	*4.8*	*4.8*
Spain	4.4	3.8	2.2	2.2	2.6	2.7	**2.8**	**2.9**	**2.9**	*2.7*	*2.7*	*2.6*
France	4.0	4.1	3.4	3.7	3.7	3.6	**3.7**	**3.7**	**3.6**	*3.6*	*3.6*	*3.6*
Croatia	5.7	4.2	3.3	4.3	5.5	4.7	**4.4**	**4.9**	**5.4**	*4.8*	*5.3*	*5.7*
Italy	3.2	3.0	2.3	2.3	2.6	2.9	**2.6**	**3.1**	**3.3**	*2.9*	*3.2*	*3.7*
Cyprus	3.5	3.5	2.8	2.5	2.8	2.7	**2.7**	**2.9**	**2.7**	*2.7*	*2.7*	*2.6*
Latvia	4.7	5.0	4.6	5.1	5.7	5.2	**5.0**	**5.3**	**5.5**	*5.2*	*6.1*	*5.8*
Lithuania	4.5	4.4	3.3	3.1	4.4	3.1	**2.9**	**3.6**	**3.6**	*3.2*	*3.7*	*3.3*
Luxembourg	4.3	4.1	3.9	4.1	4.6	4.1	**4.2**	**4.4**	**4.3**	*4.0*	*4.1*	*4.2*
Malta	3.7	2.7	3.2	3.8	4.3	3.9	**3.9**	**3.9**	**3.1**	*4.2*	*4.1*	*4.2*
Netherlands	3.9	4.0	3.5	3.4	3.7	3.4	**3.4**	**3.6**	**3.6**	*3.3*	*3.3*	*3.4*
Austria	2.9	3.1	3.0	3.1	3.3	3.5	**3.3**	**3.3**	**3.4**	*3.5*	*3.7*	*3.3*
Portugal	3.8	3.5	1.9	1.8	2.3	2.6	**2.6**	**3.0**	**3.1**	*2.5*	*3.1*	*3.4*
Slovakia	3.4	3.6	4.2	3.6	3.4	3.1	**3.5**	**4.6**	**4.6**	*3.2*	*4.2*	*5.1*
Slovenia	4.3	4.5	3.9	3.8	4.1	4.7	**5.8**	**6.4**	**5.6**	*4.7*	*5.7*	*6.3*
Finland	3.6	3.9	4.1	4.4	4.8	4.2	**4.3**	**4.4**	**4.3**	*4.1*	*4.4*	*4.5*
Euro area (20)	3.3	3.2	2.7	2.8	3.0	3.0	**3.1**	**3.2**	**3.2**	*3.0*	*3.2*	*3.2*
Bulgaria	4.4	4.1	4.0	3.3	3.3	2.6	**2.9**	**3.7**	**4.3**	*3.3*	*5.0*	*5.4*
Czechia	5.1	4.7	4.0	4.4	4.8	4.7	**4.7**	**5.0**	**4.2**	*4.7*	*4.9*	*5.2*
Denmark	2.9	3.4	3.6	3.2	3.6	3.4	**3.4**	**3.5**	**3.5**	*3.5*	*3.5*	*3.8*
Hungary	4.1	3.7	5.1	6.2	6.4	6.3	**5.5**	**5.3**	**5.3**	*5.8*	*5.4*	*5.9*
Poland	3.8	5.2	4.2	4.3	4.5	4.1	**4.1**	**4.5**	**4.6**	*4.1*	*4.2*	*3.9*
Romania	4.7	5.1	3.7	3.5	4.6	4.2	**5.3**	**6.1**	**6.0**	*4.2*	*5.9*	*6.0*
Sweden	4.1	4.4	4.5	4.9	5.0	4.8	**4.8**	**4.9**	**4.9**	*4.8*	*4.8*	*4.8*
EU	3.4	3.4	2.9	3.0	3.3	3.2	**3.3**	**3.4**	**3.5**	*3.2*	*3.4*	*3.5*
United Kingdom	2.7	2.9	2.7	2.8	3.1	3.1	**3.0**	**2.8**	**2.8**	*3.1*	*3.1*	*3.1*
Japan	3.7	3.8	3.7	3.9	4.3	4.4	**4.3**	**4.2**	**4.1**	*4.4*	*4.3*	*4.1*
United States	3.8	3.8	3.2	3.3	3.5	3.2	**3.1**	**3.1**	**3.1**	*3.3*	*3.2*	*3.2*

Table 13: Potential GDP, volume (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.0	1.3	1.2	1.4	1.2	1.4	**1.8**	**1.7**	**1.6**	*1.4*	*1.5*	*1.6*
Germany	1.3	1.1	1.5	0.9	0.6	0.6	**0.7**	**0.7**	**0.8**	*0.9*	*1.0*	*1.1*
Estonia	5.2	0.4	3.0	4.0	3.8	3.1	**2.8**	**1.7**	**1.6**	*3.5*	*2.4*	*2.4*
Ireland	3.8	-0.2	9.9	9.0	7.6	5.0	**5.3**	**4.9**	**4.5**	*5.5*	*5.0*	*4.8*
Greece	2.7	-1.8	-1.8	-0.8	-1.0	-0.3	**0.3**	**0.6**	**1.0**	*-0.1*	*0.3*	*0.9*
Spain	3.5	0.5	0.5	0.9	0.0	0.2	**1.0**	**0.8**	**1.1**	*0.5*	*1.2*	*1.3*
France	1.8	1.1	0.8	0.8	0.8	1.1	**1.2**	**1.1**	**1.1**	*1.2*	*1.4*	*1.4*
Croatia	3.0	-0.3	1.2	2.5	1.9	3.1	**3.3**	**2.8**	**2.6**	*2.7*	*2.9*	*2.7*
Italy	0.7	-0.2	0.0	0.0	-0.1	-0.2	**1.0**	**0.6**	**1.1**	*0.2*	*0.5*	*1.0*
Cyprus	3.7	1.0	1.2	3.6	3.3	3.0	**2.8**	**2.8**	**2.6**	*2.4*	*2.6*	*2.7*
Latvia	6.6	-0.8	2.3	3.4	2.4	2.5	**1.4**	**1.6**	**1.8**	*2.6*	*2.1*	*2.0*
Lithuania	6.1	1.1	2.4	4.3	4.1	4.5	**3.5**	**2.8**	**2.3**	*4.6*	*2.8*	*3.3*
Luxembourg	3.7	2.0	2.2	2.1	1.8	2.0	**2.2**	**2.3**	**2.4**	*2.8*	*2.7*	*3.0*
Malta	2.9	3.3	6.4	6.2	3.6	3.1	**4.4**	**3.8**	**3.9**	*3.1*	*3.7*	*3.8*
Netherlands	1.8	0.7	1.3	1.8	1.5	1.8	**1.9**	**1.8**	**1.8**	*1.6*	*1.6*	*1.7*
Austria	2.0	0.9	1.1	1.1	0.9	1.3	**1.1**	**1.3**	**1.4**	*1.2*	*1.3*	*1.4*
Portugal	0.8	-0.7	0.9	1.6	1.2	1.7	**1.8**	**1.8**	**1.8**	*1.6*	*2.0*	*2.0*
Slovakia	5.8	2.9	2.2	2.4	1.2	1.0	**1.4**	**1.6**	**1.6**	*1.4*	*2.0*	*2.8*
Slovenia	3.5	1.2	1.3	2.7	2.4	2.7	**3.2**	**2.9**	**3.0**	*2.7*	*3.1*	*3.3*
Finland	2.3	0.2	0.8	1.3	1.0	1.2	**1.7**	**1.2**	**1.2**	*1.2*	*1.5*	*1.4*
Euro area (20)	1.8	0.6	1.1	1.1	0.8	0.9	**1.3**	**1.2**	**1.3**	*1.1*	*1.3*	*1.4*
Bulgaria	5.7	0.9	2.5	2.6	2.3	2.4	**1.6**	**1.9**	**2.0**	*1.5*	*1.5*	*1.7*
Czechia	4.4	1.1	2.7	2.3	1.0	1.0	**2.2**	**1.5**	**1.7**	*1.3*	*1.6*	*1.7*
Denmark	1.5	0.9	1.8	1.6	1.4	1.8	**1.8**	**1.5**	**1.4**	*2.4*	*2.3*	*2.1*
Hungary	2.9	0.3	2.6	4.5	3.5	3.5	**3.4**	**2.8**	**2.6**	*3.3*	*4.0*	*3.1*
Poland	3.8	3.7	3.5	3.9	3.4	3.4	**4.0**	**3.2**	**2.9**	*3.9*	*3.6*	*3.4*
Romania	6.5	1.4	3.9	4.2	3.4	2.9	**2.8**	**2.5**	**2.3**	*3.4*	*3.1*	*3.3*
Sweden	2.6	1.6	2.2	2.1	1.8	1.9	**1.6**	**1.5**	**1.5**	*1.9*	*1.7*	*1.7*
EU	2.0	0.8	1.3	1.4	1.0	1.1	**1.5**	**1.3**	**1.4**	*1.3*	*1.5*	*1.6*
United Kingdom	2.1	1.0	1.4	0.8	0.3	0.5	**0.7**	**0.8**	**1.0**	*0.8*	*1.3*	*1.5*
Japan	:	:	:	:	:	:	**:**	**:**	**:**	*:*	*:*	*:*
United States	2.3	1.3	1.9	2.1	1.9	1.6	**2.0**	**1.6**	**1.6**	*1.8*	*2.0*	*2.0*

Table 14: Output gap relative to potential GDP [1] (deviation of actual output from potential output as % of potential GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.3	-1.0	0.1	1.7	-4.9	-0.4	**0.6**	**-0.8**	**-0.9**	*-1.0*	*-0.5*	*-0.3*
Germany	0.1	-1.2	0.5	1.5	-2.9	-0.9	**-0.1**	**-1.4**	**-0.8**	*-2.0*	*-1.4*	*-0.1*
Estonia	5.9	-4.8	0.4	1.1	-3.1	1.5	**-1.4**	**-2.4**	**-2.0**	*0.0*	*-1.5*	*-1.5*
Ireland	1.1	-3.1	1.8	-4.2	-5.4	2.3	**4.9**	**3.2**	**1.7**	*2.5*	*2.8*	*2.5*
Greece	0.4	-13.4	-13.7	-7.0	-14.6	-7.0	**-1.8**	**-1.4**	**-0.5**	*-5.3*	*-2.4*	*-0.3*
Spain	3.1	-6.5	-3.3	2.0	-9.6	-4.8	**-1.5**	**-1.4**	**-0.4**	*-4.9*	*-2.2*	*-0.2*
France	1.6	-1.8	-0.7	2.2	-6.5	-1.2	**0.2**	**-0.5**	**-0.1**	*-1.7*	*0.0*	*0.4*
Croatia	3.9	-2.5	-1.4	2.6	-8.0	0.9	**3.5**	**1.7**	**0.9**	*0.3*	*0.8*	*1.1*
Italy	2.1	-2.5	-2.2	0.7	-8.3	-1.9	**0.8**	**0.6**	**0.6**	*-2.4*	*-0.5*	*0.3*
Cyprus	4.1	-2.6	-2.5	5.2	-2.6	0.8	**3.5**	**1.8**	**1.0**	*0.6*	*0.3*	*1.1*
Latvia	5.7	-6.1	1.5	2.2	-2.3	-0.8	**-0.4**	**-2.3**	**-1.5**	*-1.6*	*-1.7*	*-0.9*
Lithuania	5.0	-5.8	1.5	3.6	-0.4	0.9	**-0.1**	**-2.3**	**-2.3**	*-0.3*	*-1.4*	*-2.1*
Luxembourg	1.4	-2.4	-0.6	-0.4	-2.9	0.1	**-0.6**	**-1.9**	**-1.8**	*0.0*	*-0.5*	*-0.8*
Malta	0.0	-1.7	3.2	4.2	-7.7	-1.3	**-0.1**	**-1.1**	**-1.3**	*-1.3*	*-0.9*	*-0.7*
Netherlands	0.0	-2.3	-0.6	1.4	-4.0	-1.0	**1.7**	**0.5**	**0.0**	*-0.7*	*0.9*	*0.8*
Austria	0.6	-1.0	-0.1	2.2	-5.3	-2.3	**1.1**	**0.1**	**-0.1**	*-2.7*	*-0.2*	*0.3*
Portugal	-0.6	-2.6	-0.7	3.3	-6.4	-2.9	**1.6**	**0.5**	**0.4**	*-3.3*	*0.3*	*0.9*
Slovakia	2.5	-1.9	-0.2	2.3	-2.3	-0.3	**0.2**	**-0.9**	**-0.6**	*-1.1*	*-0.8*	*0.0*
Slovenia	4.9	-4.4	-2.2	3.4	-3.4	1.8	**4.8**	**2.7**	**1.3**	*1.9*	*2.5*	*2.3*
Finland	1.7	-2.4	-1.3	0.4	-2.8	-1.1	**-0.4**	**-1.4**	**-1.2**	*-1.0*	*-0.8*	*-0.5*
Euro area (20)	1.2	-2.6	-1.0	1.3	-5.7	-1.5	**0.4**	**-0.5**	**-0.2**	*-2.0*	*-0.6*	*0.2*
Bulgaria	1.9	0.0	-0.7	1.3	-4.9	-0.1	**1.4**	**0.5**	**0.9**	*-1.0*	*-0.4*	*1.0*
Czechia	3.6	-1.5	0.2	3.0	-3.7	-1.3	**-1.0**	**-2.4**	**-2.3**	*-2.4*	*-2.2*	*-1.2*
Denmark	3.0	-3.4	-1.5	-0.5	-3.8	-0.9	**0.2**	**-1.3**	**-1.4**	*-2.0*	*-1.6*	*-1.9*
Hungary	2.7	-4.0	1.3	3.9	-4.2	-0.9	**1.1**	**-1.6**	**-1.6**	*-0.2*	*-0.5*	*-1.1*
Poland	0.5	0.4	-0.2	3.0	-2.4	0.9	**0.9**	**-1.6**	**-1.9**	*-0.6*	*-0.5*	*-0.9*
Romania	5.3	-2.7	-0.5	1.5	-5.4	-3.4	**-0.6**	**-1.3**	**-1.4**	*-2.5*	*-3.0*	*-2.7*
Sweden	1.4	-2.2	0.0	0.2	-3.7	-0.7	**0.5**	**-1.5**	**-2.1**	*-1.4*	*-0.8*	*-1.2*
EU	1.4	-2.5	-0.9	1.3	-5.4	-1.4	**0.4**	**-0.6**	**-0.4**	*-1.9*	*-0.7*	*0.0*
United Kingdom	1.3	-3.7	0.6	2.9	-8.7	-2.3	**1.1**	**-0.6**	**-0.7**	*-2.2*	*-0.1*	*0.0*
Japan	:	:	:	:	:	:	**:**	**:**	**:**	*:*	*:*	*:*
United States	0.8	-2.2	0.0	1.2	-3.4	0.7	**0.5**	**-0.4**	**-0.3**	*-0.1*	*0.8*	*1.1*

[1] When comparing output gaps between successive forecasts it has to be taken into account that the overall revisions to the forecast may have led to changes in the estimates for potential output.

Table 15: Deflator of gross domestic product (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.0	1.5	1.5	1.8	1.5	2.9	**6.7**	**5.0**	**3.1**	*4.5*	*4.5*	*3.0*
Germany	0.9	1.4	1.7	2.1	1.8	3.1	**5.3**	**6.8**	**3.6**	*3.0*	*5.4*	*3.6*
Estonia	7.7	3.0	2.9	3.2	-0.5	6.0	**14.3**	**6.9**	**3.0**	*5.5*	*8.1*	*3.2*
Ireland	1.5	-0.5	2.2	3.6	-1.6	0.7	**9.8**	**5.4**	**4.4**	*-0.4*	*4.8*	*4.1*
Greece	3.3	0.2	-0.5	0.2	-0.9	1.3	**9.0**	**5.6**	**2.3**	*2.1*	*4.8*	*2.1*
Spain	3.5	0.1	0.6	1.4	1.2	2.3	**3.5**	**4.3**	**2.4**	*2.2*	*3.7*	*2.4*
France	2.1	0.8	0.7	1.3	2.8	1.3	**2.7**	**5.0**	**3.9**	*0.8*	*2.2*	*3.0*
Croatia	4.1	1.5	0.7	2.0	0.7	2.0	**5.5**	**6.3**	**2.4**	*3.2*	*3.8*	*2.4*
Italy	2.3	1.3	1.0	0.9	1.6	0.5	**3.1**	**3.3**	**2.6**	*0.5*	*3.1*	*2.4*
Cyprus	3.3	0.9	-0.1	1.3	-1.2	2.9	**4.6**	**4.3**	**2.6**	*2.7*	*4.5*	*3.2*
Latvia	12.4	0.2	1.9	2.6	1.0	6.9	**11.0**	**6.2**	**3.8**	*6.8*	*7.2*	*5.1*
Lithuania	6.9	1.7	2.0	2.7	1.8	6.5	**16.5**	**8.9**	**2.3**	*6.5*	*7.4*	*3.0*
Luxembourg	4.6	2.9	1.6	1.4	4.7	6.2	**5.7**	**4.2**	**2.9**	*6.8*	*4.0*	*2.1*
Malta	2.3	2.1	2.6	2.4	1.5	1.8	**5.0**	**4.1**	**2.8**	*1.7*	*2.8*	*2.6*
Netherlands	2.0	0.8	1.0	3.0	1.9	2.5	**3.4**	**5.0**	**4.4**	*2.4*	*3.8*	*3.3*
Austria	2.1	1.7	1.8	1.5	2.6	1.9	**6.1**	**5.8**	**3.7**	*1.8*	*3.4*	*3.2*
Portugal	2.7	0.7	1.6	1.7	2.0	1.4	**3.6**	**5.2**	**2.5**	*0.7*	*2.9*	*3.1*
Slovakia	3.0	0.6	0.5	2.5	2.4	2.4	**7.5**	**12.2**	**4.9**	*2.4*	*6.6*	*5.5*
Slovenia	3.1	1.1	1.2	2.3	1.3	2.6	**6.6**	**6.2**	**3.7**	*2.6*	*3.3*	*3.7*
Finland	1.6	2.0	1.2	1.5	1.5	2.5	**5.3**	**3.7**	**2.2**	*2.7*	*3.8*	*2.3*
Euro area (20)	2.1	1.0	1.2	1.7	1.8	2.1	**4.6**	**5.3**	**3.4**	*2.0*	*3.9*	*3.1*
Bulgaria	7.6	2.4	3.3	5.2	4.3	7.1	**12.3**	**4.2**	**3.7**	*6.2*	*9.5*	*3.9*
Czechia	2.1	0.8	1.7	3.9	4.3	3.3	**9.2**	**8.1**	**4.8**	*4.1*	*7.4*	*4.7*
Denmark	2.7	1.5	0.7	1.0	2.6	2.8	**3.3**	**4.4**	**2.7**	*2.4*	*3.3*	*2.3*
Hungary	4.3	2.9	3.3	4.8	6.4	6.3	**9.2**	**10.0**	**5.0**	*6.9*	*5.6*	*4.6*
Poland	3.4	2.2	1.0	3.0	4.3	5.1	**12.8**	**10.3**	**5.1**	*5.8*	*10.0*	*7.8*
Romania	14.0	3.8	3.7	6.8	4.1	5.4	**11.4**	**10.0**	**8.0**	*5.4*	*9.5*	*4.9*
Sweden	1.8	1.3	2.0	2.5	2.0	3.0	**6.3**	**5.2**	**2.0**	*3.0*	*4.3*	*3.9*
EU	2.2	1.1	1.3	2.0	2.0	2.4	**5.2**	**5.7**	**3.5**	*2.3*	*4.4*	*3.4*
United Kingdom	2.9	1.8	1.5	2.1	5.9	0.4	**5.4**	**7.5**	**2.3**	*0.3*	*3.8*	*2.6*
Japan	-1.0	-1.0	0.8	0.6	0.9	-0.9	**0.5**	**2.6**	**2.0**	*-1.0*	*0.5*	*1.5*
United States	2.7	1.5	1.6	1.8	1.3	4.5	**6.9**	**3.3**	**2.4**	*4.2*	*6.4*	*2.8*

Table 16: Price deflator of private consumption (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.8	1.4	1.4	1.4	0.9	2.5	**8.3**	**5.4**	**2.8**	*2.2*	*6.4*	*1.9*
Germany	1.5	1.2	1.0	1.3	0.6	3.1	**7.1**	**6.9**	**2.8**	*3.1*	*6.3*	*3.0*
Estonia	5.7	3.0	1.8	2.5	-1.0	4.3	**18.4**	**6.6**	**2.6**	*4.4*	*11.2*	*2.5*
Ireland	2.1	-0.9	1.0	1.8	0.8	3.9	**6.1**	**5.8**	**2.8**	*3.8*	*6.1*	*3.1*
Greece	3.5	0.5	-0.8	0.0	-1.2	1.0	**9.1**	**6.6**	**2.7**	*1.0*	*6.3*	*1.9*
Spain	3.5	1.3	0.6	1.1	0.0	2.1	**8.5**	**4.8**	**2.1**	*1.9*	*6.2*	*1.9*
France	2.2	0.7	0.6	0.8	1.0	1.6	**5.3**	**4.6**	**2.2**	*1.6*	*4.1*	*3.1*
Croatia	3.4	2.4	0.1	1.1	0.6	2.4	**10.1**	**6.5**	**2.3**	*2.7*	*6.0*	*2.5*
Italy	2.5	1.5	0.5	0.6	0.1	1.6	**7.4**	**5.6**	**2.3**	*1.7*	*5.9*	*2.3*
Cyprus	3.4	1.6	-0.6	0.3	-0.9	0.9	**8.0**	**4.2**	**2.5**	*2.1*	*6.2*	*3.7*
Latvia	10.3	0.7	1.6	3.0	0.8	3.4	**16.9**	**8.3**	**1.3**	*3.4*	*9.4*	*3.5*
Lithuania	4.6	2.8	1.2	2.2	1.1	4.6	**18.9**	**9.1**	**2.1**	*4.6*	*12.5*	*3.0*
Luxembourg	2.7	1.5	1.3	1.7	1.2	1.3	**6.8**	**3.7**	**2.4**	*2.4*	*5.9*	*2.2*
Malta	2.7	2.1	1.0	1.9	1.2	1.2	**5.5**	**4.6**	**2.6**	*1.2*	*4.5*	*3.4*
Netherlands	2.0	1.1	1.0	2.6	1.3	3.5	**7.0**	**6.7**	**3.4**	*3.1*	*7.4*	*2.7*
Austria	2.2	1.9	1.8	1.8	1.5	2.3	**8.7**	**6.7**	**3.3**	*2.4*	*5.5*	*2.6*
Portugal	3.2	0.8	1.0	0.8	0.6	1.4	**6.0**	**3.9**	**2.1**	*1.2*	*4.5*	*2.0*
Slovakia	4.4	1.9	0.6	2.7	2.2	3.3	**12.6**	**13.6**	**4.0**	*3.3*	*9.1*	*6.3*
Slovenia	3.4	1.6	0.4	1.3	-0.6	3.5	**12.2**	**6.0**	**2.7**	*3.8*	*5.8*	*3.3*
Finland	1.6	2.4	0.9	1.0	0.5	1.7	**6.8**	**4.0**	**1.7**	*2.0*	*4.4*	*2.2*
Euro area (20)	2.3	1.2	0.8	1.1	0.6	2.3	**7.2**	**5.8**	**2.5**	*2.3*	*5.8*	*2.7*
Bulgaria	5.5	1.5	2.5	2.0	-0.6	6.0	**11.0**	**7.5**	**4.0**	*3.6*	*11.9*	*4.7*
Czechia	2.8	1.2	1.2	2.8	2.9	2.9	**17.5**	**12.0**	**5.5**	*3.1*	*11.7*	*5.4*
Denmark	1.9	1.8	0.6	0.9	0.4	2.1	**9.9**	**4.7**	**2.4**	*2.1*	*4.5*	*2.3*
Hungary	5.0	3.7	1.9	4.6	3.4	5.9	**14.8**	**15.7**	**3.9**	*6.3*	*9.0*	*4.1*
Poland	2.9	2.6	0.4	2.2	3.5	5.2	**15.0**	**12.5**	**4.8**	*5.4*	*11.8*	*7.3*
Romania	8.3	4.5	1.9	5.4	2.3	5.5	**12.0**	**10.4**	**7.0**	*5.5*	*9.1*	*5.3*
Sweden	1.3	1.2	1.4	2.1	0.8	1.9	**8.3**	**6.9**	**1.6**	*1.9*	*5.7*	*4.0*
EU	2.4	1.3	0.8	1.3	0.8	2.5	**8.0**	**6.4**	**2.8**	*2.5*	*6.3*	*3.1*
United Kingdom	2.6	2.0	1.1	1.7	1.0	2.6	**9.3**	**10.3**	**2.2**	*2.4*	*8.3*	*2.5*
Japan	-0.2	-1.0	0.7	0.5	0.3	-0.5	**2.4**	**3.1**	**1.8**	*-0.5*	*1.1*	*1.5*
United States	2.7	1.4	1.3	1.5	1.1	4.0	**6.2**	**3.5**	**2.4**	*3.9*	*5.9*	*2.8*

Table 17a: Harmonised index of consumer prices (national index if not available), (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.6	1.9	1.5	1.2	0.4	3.2	**10.4**	**6.2**	**3.3**	*3.2*	*7.8*	*1.9*
Germany	2.1	1.5	1.1	1.4	0.4	3.2	**8.8**	**7.5**	**2.9**	*3.2*	*6.5*	*3.1*
Estonia	5.8	3.1	1.7	2.3	-0.6	4.5	**19.3**	**6.6**	**2.6**	*4.5*	*11.2*	*2.5*
Ireland	2.6	0.1	0.2	0.9	-0.5	2.4	**8.3**	**6.0**	**2.8**	*2.4*	*6.1*	*3.1*
Greece	3.4	1.9	-0.1	0.5	-1.3	0.6	**10.0**	**6.0**	**2.4**	*0.6*	*6.3*	*1.9*
Spain	3.4	1.8	0.5	0.8	-0.3	3.0	**8.5**	**4.8**	**2.3**	*3.0*	*6.3*	*1.8*
France	2.2	1.5	0.9	1.3	0.5	2.1	**5.8**	**4.4**	**2.2**	*2.1*	*4.9*	*3.1*
Croatia	3.4	2.2	0.4	0.8	0.0	2.7	**10.1**	**6.5**	**2.3**	*2.7*	*6.1*	*2.8*
Italy	2.4	2.0	0.6	0.6	-0.1	1.9	**8.7**	**6.6**	**2.3**	*1.9*	*5.9*	*2.3*
Cyprus	2.5	1.9	-0.3	0.5	-1.1	2.3	**8.0**	**4.2**	**2.5**	*2.3*	*5.2*	*2.7*
Latvia	9.0	1.7	1.3	2.7	0.1	3.2	**16.9**	**8.3**	**1.3**	*3.2*	*9.4*	*3.5*
Lithuania	4.9	2.8	1.3	2.2	1.1	4.6	**18.9**	**9.1**	**2.1**	*4.6*	*12.5*	*3.0*
Luxembourg	3.3	2.2	1.0	1.6	0.0	3.5	**8.4**	**3.8**	**3.1**	*3.5*	*6.8*	*2.3*
Malta	2.6	2.1	1.2	1.5	0.8	0.7	**6.1**	**4.0**	**2.4**	*0.7*	*4.5*	*2.6*
Netherlands	1.7	2.0	0.7	2.7	1.1	2.8	**11.6**	**4.2**	**3.9**	*2.8*	*7.4*	*2.7*
Austria	2.2	2.1	1.5	1.5	1.4	2.8	**8.7**	**6.7**	**3.3**	*2.8*	*6.0*	*3.0*
Portugal	2.6	1.5	0.7	0.3	-0.1	0.9	**8.0**	**5.8**	**2.3**	*0.9*	*4.4*	*1.9*
Slovakia	4.1	2.2	0.6	2.8	2.0	2.8	**11.8**	**13.9**	**3.6**	*2.8*	*9.8*	*6.8*
Slovenia	3.6	1.9	0.6	1.7	-0.3	2.0	**9.2**	**6.5**	**3.5**	*2.0*	*6.1*	*3.3*
Finland	1.5	2.4	0.7	1.1	0.4	2.1	**7.2**	**4.3**	**1.9**	*2.1*	*4.5*	*2.3*
Euro area (20)	2.4	1.7	0.8	1.2	0.3	2.6	**8.5**	**6.1**	**2.6**	*2.6*	*6.1*	*2.7*
Bulgaria	7.8	2.3	0.0	2.5	1.2	2.8	**12.8**	**7.4**	**3.2**	*2.8*	*11.9*	*5.0*
Czechia	3.1	1.8	1.1	2.6	3.3	3.3	**15.6**	**9.5**	**3.5**	*3.3*	*11.7*	*4.5*
Denmark	2.0	1.8	0.5	0.7	0.3	1.9	**7.9**	**3.7**	**2.0**	*1.9*	*5.1*	*2.7*
Hungary	5.7	4.0	1.2	3.4	3.4	5.2	**14.8**	**15.7**	**3.9**	*5.2*	*9.0*	*4.1*
Poland	2.8	3.0	0.4	2.1	3.7	5.2	**13.3**	**13.8**	**4.9**	*5.2*	*11.6*	*7.3*
Romania	8.1	4.8	1.0	3.9	2.3	4.1	**11.8**	**10.2**	**6.8**	*4.1*	*8.9*	*5.1*
Sweden	1.7	1.3	1.2	1.7	0.7	2.7	**8.1**	**6.6**	**1.8**	*2.7*	*5.3*	*3.0*
EU	2.6	1.9	0.8	1.4	0.7	2.9	**9.3**	**7.0**	**3.0**	*2.9*	*6.8*	*3.2*
United Kingdom	2.4	2.6	1.5	1.7	1.0	2.5	**7.9**	**7.5**	**2.9**	*2.5*	*7.0*	*3.6*
Japan	0.3	-0.4	1.0	0.5	0.0	-0.2	**2.5**	**3.1**	**1.8**	*-0.2*	*1.6*	*1.5*
United States	3.2	1.6	1.5	1.8	1.2	4.7	**7.9**	**3.4**	**2.3**	*4.7*	*7.3*	*3.1*

Table 17b: All-items HICP, excluding energy and unprocessed food (national index if not available), (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.8	1.8	1.7	1.6	1.5	1.4	**5.0**	**6.7**	**3.8**	*1.4*	*3.8*	*3.4*
Germany	1.5	1.2	1.4	1.4	0.9	2.3	**5.0**	**5.6**	**3.3**	*2.3*	*3.8*	*3.7*
Estonia	4.8	2.4	2.1	2.3	0.2	2.4	**11.5**	**7.2**	**4.2**	*2.4*	*7.1*	*3.4*
Ireland	2.2	-0.4	0.5	0.9	-0.1	1.6	**5.1**	**5.9**	**3.7**	*1.6*	*4.3*	*4.5*
Greece	3.2	1.0	0.1	0.5	-1.0	-0.7	**5.6**	**4.7**	**2.7**	*-0.7*	*2.6*	*1.5*
Spain	2.9	1.3	0.6	1.0	0.6	0.7	**5.1**	**4.4**	**2.8**	*0.7*	*3.9*	*2.7*
France	1.7	1.2	0.8	1.2	1.0	1.2	**3.7**	**4.4**	**2.5**	*1.2*	*2.9*	*3.0*
Croatia	3.2	1.7	0.8	1.1	0.8	1.8	**7.7**	**5.8**	**2.7**	*1.8*	*4.3*	*3.3*
Italy	2.2	1.8	0.7	0.6	0.5	0.8	**3.9**	**4.1**	**2.4**	*0.8*	*2.5*	*2.1*
Cyprus	1.3	1.3	-0.1	0.6	-0.6	1.0	**5.3**	**5.2**	**3.2**	*1.0*	*3.2*	*3.2*
Latvia	8.0	0.9	1.6	2.7	1.1	2.0	**10.5**	**6.3**	**1.8**	*2.0*	*6.7*	*4.1*
Lithuania	3.8	2.0	2.0	2.5	2.5	3.2	**13.3**	**7.3**	**2.4**	*3.2*	*8.6*	*3.3*
Luxembourg	2.6	2.2	1.5	1.8	1.4	1.5	**4.7**	**5.0**	**3.4**	*1.5*	*3.8*	*3.2*
Malta	2.2	1.5	1.4	1.4	0.8	0.7	**6.2**	**4.1**	**2.5**	*0.7*	*4.4*	*2.6*
Netherlands	1.2	1.9	0.8	2.2	2.1	1.6	**5.5**	**5.7**	**2.9**	*1.6*	*3.7*	*3.7*
Austria	1.7	2.0	1.9	1.6	2.0	2.1	**5.4**	**5.4**	**4.1**	*2.1*	*3.9*	*3.2*
Portugal	2.3	1.0	0.8	0.5	0.0	0.3	**6.1**	**5.8**	**2.7**	*0.3*	*3.7*	*2.2*
Slovakia	3.2	2.0	1.1	2.5	2.4	3.4	**10.1**	**8.7**	**3.7**	*3.4*	*8.1*	*3.1*
Slovenia	3.0	1.1	0.8	1.8	1.0	1.0	**6.3**	**4.9**	**3.2**	*1.0*	*4.4*	*2.7*
Finland	1.1	2.2	0.9	1.0	0.8	1.4	**4.6**	**2.8**	**1.7**	*1.4*	*3.8*	*2.4*
Euro area (20)	1.9	1.4	1.0	1.2	0.9	1.5	**4.8**	**5.0**	**2.9**	*1.5*	*3.5*	*3.1*
Bulgaria	7.6	2.1	0.1	2.5	2.0	1.9	**10.2**	**8.0**	**4.1**	*1.9*	*9.5*	*6.1*
Czechia	2.6	1.2	1.5	2.3	3.7	3.8	**12.5**	**8.9**	**3.4**	*3.8*	*8.9*	*4.0*
Denmark	1.6	1.6	0.7	0.8	0.9	1.1	**5.2**	**4.3**	**3.1**	*1.1*	*2.9*	*1.4*
Hungary	4.7	3.7	1.8	3.7	3.7	4.5	**14.0**	**14.4**	**5.0**	*4.5*	*8.4*	*4.0*
Poland	2.0	2.4	0.6	2.3	4.2	4.2	**10.4**	**10.9**	**5.6**	*4.2*	*8.3*	*4.9*
Romania	7.5	4.7	1.1	3.8	3.3	3.1	**8.6**	**10.5**	**7.5**	*3.1*	*7.1*	*4.8*
Sweden	1.1	1.3	1.1	1.6	1.5	1.6	**5.6**	**5.9**	**2.5**	*1.6*	*4.1*	*3.0*
EU	2.1	1.6	1.0	1.4	1.3	1.8	**5.8**	**5.9**	**3.3**	*1.8*	*4.2*	*3.3*
United Kingdom	1.6	2.6	1.6	1.8	:	:	**:**	**:**	**:**	*:*	*:*	*:*
Japan	:	:	:	:	:	:	**:**	**:**	**:**	*:*	*:*	*:*
United States	:	:	:	:	:	:	**:**	**:**	**:**	*:*	*:*	*:*

Table 18: Harmonised index of consumer prices (national index if not available), (percentage change on preceding year, 2022-24) 31.10.2022

	2022/1	2022/2	2022/3	2022/4	2023/1	2023/2	2023/3	2023/4	2024/1	2024/2	2024/3	2024/4
Belgium	9.1	9.9	11.0	11.4	8.5	7.5	6.2	2.8	4.4	3.3	2.7	2.7
Germany	6.1	8.3	9.4	11.3	10.1	8.4	7.2	4.5	3.7	3.3	2.6	2.1
Estonia	12.5	20.4	24.1	19.9	15.8	7.4	1.8	2.7	2.9	2.9	2.3	2.3
Ireland	5.9	8.4	9.1	9.4	8.3	6.3	5.7	3.9	3.4	3.0	2.6	2.3
Greece	6.6	10.4	11.5	11.5	9.8	6.6	4.6	3.4	2.7	2.4	2.4	2.2
Spain	7.9	8.9	10.0	7.3	6.1	5.1	4.9	3.2	2.6	2.4	2.2	2.2
France	4.2	5.9	6.5	6.7	6.0	4.6	3.6	3.3	2.6	2.2	2.2	2.0
Croatia	6.4	10.8	12.6	12.2	8.9	7.5	5.7	4.3	3.2	2.5	2.0	1.6
Italy	6.0	7.4	8.9	12.3	9.1	7.6	6.0	4.1	2.7	2.3	2.1	2.0
Cyprus	5.7	8.8	9.7	7.6	5.5	4.1	3.5	3.6	3.0	2.7	2.2	2.1
Latvia	9.2	16.4	21.6	19.9	17.9	9.3	5.5	2.0	1.3	1.1	1.3	1.3
Lithuania	13.9	18.5	21.5	21.3	16.8	10.4	6.8	3.5	2.4	2.3	1.8	1.8
Luxembourg	6.8	9.5	8.9	8.5	6.3	3.3	3.0	2.7	3.3	3.3	2.9	2.7
Malta	4.3	5.8	7.1	7.4	5.3	4.3	3.5	3.1	2.5	2.4	2.4	2.3
Netherlands	8.9	10.4	14.1	13.0	7.6	5.8	2.2	1.5	6.7	3.9	2.8	2.4
Austria	5.5	7.9	9.9	11.4	9.5	7.5	6.3	3.6	4.0	3.5	3.1	2.6
Portugal	4.4	8.2	9.5	9.8	8.4	6.3	5.0	3.5	2.7	2.4	2.1	2.1
Slovakia	8.5	11.8	13.3	13.7	16.6	14.0	12.5	12.5	4.7	3.7	3.1	2.7
Slovenia	6.3	9.0	11.3	10.1	10.4	6.6	5.1	4.3	4.2	3.6	3.2	3.0
Finland	4.8	7.0	8.1	8.9	7.3	4.3	3.1	2.5	2.4	2.3	1.4	1.3
Euro area (20)	6.2	8.0	9.3	10.2	8.4	6.7	5.4	3.7	3.3	2.8	2.4	2.1
Bulgaria	8.9	13.4	15.2	13.9	12.1	7.5	5.7	4.7	3.6	3.4	3.0	3.0
Czechia	10.2	15.0	17.4	19.7	17.6	11.1	6.2	4.1	3.9	3.7	3.5	3.1
Denmark	5.4	8.2	10.2	7.8	6.6	3.7	1.4	3.3	2.5	2.3	1.9	1.5
Hungary	8.3	11.0	18.0	21.7	23.6	20.3	12.7	7.6	4.2	3.8	3.8	3.8
Poland	9.0	12.8	14.9	16.2	18.7	14.5	12.7	9.9	5.5	5.4	4.6	4.3
Romania	8.2	12.4	13.3	13.3	12.9	8.8	11.3	8.1	7.2	7.5	6.9	5.8
Sweden	4.9	7.7	9.4	10.4	9.3	7.1	5.6	4.7	2.0	1.8	1.7	1.8
EU	6.5	8.8	10.3	10.7	9.2	7.3	5.9	4.2	3.5	3.0	2.6	2.3
United Kingdom	5.5	7.9	9.0	9.0	9.0	8.0	7.0	6.0	4.0	3.0	2.5	2.0
Japan	0.9	2.4	2.9	3.7	3.6	3.3	2.8	2.4	2.1	1.8	1.7	1.6
United States	8.0	8.6	8.2	7.0	5.4	3.4	2.6	2.3	2.2	2.2	2.3	2.4

Table 19: Price deflator of exports of goods in national currency (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.9	1.2	-0.5	0.4	-3.5	8.7	**18.0**	**5.5**	**0.1**	*10.0*	*10.0*	*0.1*
Germany	0.7	0.7	0.3	0.4	-0.7	4.5	**13.5**	**5.3**	**0.8**	*4.5*	*12.5*	*2.7*
Estonia	4.4	1.3	0.8	-0.4	-2.0	10.4	**22.2**	**7.4**	**3.0**	*10.4*	*10.5*	*2.5*
Ireland	0.6	-0.5	0.4	-0.4	-7.0	-2.3	**9.8**	**5.9**	**3.2**	*-4.2*	*6.2*	*3.8*
Greece	3.3	-0.3	-1.8	-0.5	-12.8	14.1	**33.0**	**7.5**	**2.0**	*18.4*	*10.2*	*2.7*
Spain	3.0	1.3	0.4	0.4	-1.2	9.2	**9.4**	**2.1**	**1.5**	*9.0*	*11.5*	*1.6*
France	2.0	0.3	-0.1	1.1	-1.4	6.0	**16.3**	**8.3**	**3.4**	*6.2*	*8.8*	*1.8*
Croatia	4.3	1.7	-1.1	0.5	-4.1	7.0	**10.0**	**5.5**	**2.1**	*6.9*	*5.0*	*4.0*
Italy	2.1	1.1	0.5	0.6	-0.6	5.6	**11.0**	**5.6**	**4.1**	*5.5*	*6.4*	*4.2*
Cyprus	3.2	1.7	0.5	0.4	-1.0	2.1	**12.0**	**6.0**	**2.5**	*1.6*	*8.0*	*0.8*
Latvia	11.0	3.1	0.7	-0.2	-1.1	14.3	**23.0**	**4.0**	**2.0**	*14.3*	*9.5*	*4.0*
Lithuania	8.6	1.4	-0.9	-0.2	-5.0	5.9	**15.3**	**5.1**	**1.3**	*5.9*	*5.6*	*2.4*
Luxembourg	5.7	1.6	1.3	-0.4	-0.1	7.9	**18.0**	**4.7**	**3.0**	*7.0*	*6.7*	*2.3*
Malta	1.0	-0.5	0.1	1.4	-1.2	3.7	**10.0**	**5.5**	**2.6**	*5.6*	*10.0*	*5.0*
Netherlands	2.8	0.9	-0.8	-0.2	-4.3	10.0	**21.0**	**5.6**	**0.0**	*10.1*	*10.4*	*0.7*
Austria	1.9	0.8	0.1	-1.1	-1.2	6.3	**5.6**	**2.7**	**2.2**	*2.5*	*3.0*	*1.1*
Portugal	2.5	0.8	-0.6	-0.3	-2.4	7.6	**15.5**	**1.9**	**0.9**	*7.8*	*6.0*	*0.9*
Slovakia	1.5	0.0	-0.6	-0.3	-2.7	5.4	**18.6**	**6.9**	**4.9**	*5.4*	*9.5*	*2.7*
Slovenia	2.2	0.8	0.4	-0.6	-2.0	5.0	**20.7**	**7.3**	**3.2**	*5.8*	*9.6*	*2.8*
Finland	0.5	0.2	0.3	-0.7	-5.7	13.4	**18.5**	**4.5**	**1.8**	*13.6*	*9.9*	*2.0*
Euro area (20)	1.8	0.8	0.1	0.3	-2.2	6.0	**14.4**	**5.5**	**1.8**	*5.9*	*9.7*	*2.2*
Bulgaria	14.7	0.7	0.7	1.7	-2.0	16.9	**29.0**	**7.0**	**4.0**	*17.4*	*11.5*	*3.5*
Czechia	-1.3	0.9	-0.4	1.0	1.0	4.8	**11.0**	**7.0**	**4.0**	*5.0*	*5.9*	*3.0*
Denmark	3.5	1.3	-0.2	-0.2	-1.5	2.8	**9.2**	**9.0**	**3.1**	*2.4*	*7.0*	*3.1*
Hungary	0.0	2.0	0.8	1.7	4.7	7.8	**20.2**	**7.5**	**0.1**	*7.7*	*5.5*	*-1.2*
Poland	1.8	5.1	1.1	3.2	2.7	10.1	**20.0**	**11.0**	**3.6**	*9.9*	*11.0*	*5.5*
Romania	10.4	3.8	-0.5	2.2	0.8	11.4	**17.0**	**7.5**	**3.2**	*11.4*	*11.8*	*3.5*
Sweden	2.2	-1.2	2.3	3.4	-4.2	5.6	**19.5**	**4.0**	**0.8**	*5.6*	*12.5*	*5.8*
EU	1.8	0.9	0.2	0.6	-1.7	6.3	**14.9**	**5.9**	**1.9**	*6.2*	*9.7*	*2.5*
United Kingdom	3.3	2.8	0.7	1.8	-2.9	5.2	**18.1**	**8.8**	**2.4**	*5.6*	*4.6*	*1.3*
Japan	0.1	-1.7	-0.1	-3.8	-2.9	7.1	**14.1**	**6.9**	**2.8**	*7.0*	*4.3*	*0.4*
United States	3.8	0.8	-1.2	-1.6	-3.9	14.2	**12.5**	**1.2**	**1.0**	*14.2*	*10.3*	*2.0*

Table 20: Price deflator of imports of goods in national currency (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	3.9	1.5	-0.9	-0.4	-4.6	10.9	**24.0**	**5.5**	**-0.5**	*10.8*	*12.8*	*-0.8*
Germany	1.8	0.4	-0.6	-0.6	-3.4	9.1	**21.5**	**3.3**	**-1.1**	*9.1*	*14.6*	*0.9*
Estonia	3.2	1.9	-0.3	0.2	-3.1	9.8	**23.0**	**7.4**	**2.6**	*9.8*	*13.0*	*1.5*
Ireland	1.7	-0.6	1.5	-3.4	-4.7	7.5	**9.3**	**7.0**	**2.1**	*3.5*	*7.3*	*3.4*
Greece	3.5	0.8	-2.0	0.9	-9.0	13.7	**31.0**	**8.0**	**1.8**	*17.7*	*12.0*	*1.5*
Spain	3.3	1.6	0.4	0.3	-3.9	9.1	**20.0**	**2.8**	**1.2**	*9.2*	*14.7*	*0.5*
France	2.4	0.5	-0.9	-0.1	-2.7	8.1	**22.3**	**4.7**	**1.7**	*8.1*	*13.9*	*0.4*
Croatia	2.5	1.6	-0.2	0.2	-0.3	7.4	**14.1**	**4.0**	**2.0**	*7.4*	*8.0*	*4.0*
Italy	4.3	1.1	-1.1	-0.9	-4.8	11.9	**20.8**	**7.6**	**2.3**	*12.0*	*13.3*	*2.5*
Cyprus	3.6	1.8	-1.4	0.4	0.2	2.8	**22.5**	**6.0**	**2.5**	*2.8*	*10.0*	*0.8*
Latvia	9.0	2.9	-0.8	-1.1	-4.2	11.4	**25.0**	**6.0**	**-1.0**	*11.5*	*13.0*	*2.5*
Lithuania	6.0	2.7	-1.7	-1.6	-6.4	13.2	**23.8**	**4.5**	**1.3**	*13.2*	*9.5*	*2.3*
Luxembourg	4.3	1.5	0.6	-0.8	-1.9	7.8	**23.2**	**5.0**	**2.8**	*8.7*	*10.0*	*2.2*
Malta	0.7	1.1	-1.3	1.6	-0.9	1.6	**11.0**	**5.9**	**2.5**	*2.1*	*13.0*	*5.8*
Netherlands	2.9	1.4	-1.3	-1.1	-5.2	12.4	**28.0**	**5.8**	**-2.0**	*12.5*	*14.0*	*-0.1*
Austria	2.8	1.2	-0.2	-0.1	-1.9	7.9	**8.0**	**3.3**	**2.0**	*5.8*	*6.2*	*0.4*
Portugal	3.2	-0.1	-1.0	-0.7	-4.0	7.1	**19.8**	**-0.2**	**0.1**	*7.0*	*8.8*	*-1.6*
Slovakia	2.4	1.0	-0.2	0.1	-2.3	6.5	**22.2**	**6.6**	**4.8**	*6.5*	*11.0*	*2.6*
Slovenia	3.3	1.4	0.0	-1.0	-2.8	7.4	**25.7**	**8.2**	**3.0**	*8.7*	*12.1*	*2.3*
Finland	3.1	0.7	-0.7	-0.1	-7.1	12.6	**22.0**	**4.6**	**1.4**	*13.0*	*11.0*	*2.2*
Euro area (20)	2.8	0.9	-0.7	-0.6	-3.9	9.7	**21.6**	**4.7**	**0.4**	*9.6*	*13.2*	*0.8*
Bulgaria	9.5	0.6	-0.6	-0.1	-6.0	16.2	**24.0**	**9.0**	**4.0**	*15.0*	*11.9*	*4.3*
Czechia	-0.3	1.1	-0.8	0.6	-0.8	4.9	**17.5**	**9.0**	**3.5**	*4.9*	*8.2*	*2.9*
Denmark	2.5	0.6	-0.4	0.3	-3.1	8.4	**20.0**	**7.4**	**2.2**	*8.8*	*10.9*	*2.8*
Hungary	1.1	2.3	0.4	1.2	2.7	11.8	**27.2**	**8.0**	**-1.6**	*11.7*	*10.4*	*-1.7*
Poland	0.8	4.8	0.0	1.7	-0.4	12.4	**25.2**	**13.0**	**3.0**	*11.5*	*15.5*	*5.0*
Romania	2.7	4.0	-0.2	0.2	-2.5	10.5	**19.0**	**7.8**	**3.4**	*10.5*	*12.0*	*4.0*
Sweden	2.8	-1.4	2.0	2.3	-5.3	5.1	**22.5**	**5.0**	**0.5**	*5.1*	*14.5*	*5.5*
EU	2.7	1.0	-0.5	-0.3	-3.5	9.6	**21.7**	**5.5**	**0.7**	*9.5*	*13.1*	*1.3*
United Kingdom	2.8	2.1	0.4	1.0	-1.8	6.3	**21.0**	**12.4**	**2.2**	*4.2*	*14.4*	*1.5*
Japan	7.7	-0.5	-1.4	-4.7	-9.1	17.7	**27.6**	**6.2**	**1.6**	*17.6*	*11.3*	*0.4*
United States	5.8	-0.2	-2.1	-2.1	-2.8	7.8	**8.6**	**2.2**	**1.2**	*7.8*	*7.9*	*1.3*

Table 21: Terms of trade of goods (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	-1.0	-0.2	0.4	0.8	1.2	-2.0	**-4.8**	**0.0**	**0.6**	*-0.7*	*-2.5*	*1.0*
Germany	-1.0	0.4	0.9	1.1	2.8	-4.2	**-6.6**	**2.0**	**1.9**	*-4.2*	*-1.8*	*1.8*
Estonia	1.1	-0.6	1.1	-0.7	1.1	0.6	**-0.7**	**0.0**	**0.4**	*0.6*	*-2.2*	*1.0*
Ireland	-1.0	0.0	-1.1	3.1	-2.4	-9.1	**0.5**	**-1.0**	**1.1**	*-7.5*	*-1.0*	*0.4*
Greece	-0.2	-1.2	0.2	-1.4	-4.1	0.4	**1.5**	**-0.5**	**0.2**	*0.6*	*-1.6*	*1.2*
Spain	-0.4	-0.3	0.0	0.1	2.8	0.1	**-8.8**	**-0.7**	**0.3**	*-0.2*	*-2.8*	*1.1*
France	-0.4	-0.2	0.8	1.3	1.3	-2.0	**-5.0**	**3.5**	**1.7**	*-1.7*	*-4.5*	*1.3*
Croatia	1.8	0.1	-0.9	0.3	-3.8	-0.4	**-3.6**	**1.4**	**0.1**	*-0.4*	*-2.8*	*0.0*
Italy	-2.2	0.0	1.6	1.6	4.5	-5.6	**-8.1**	**-1.9**	**1.8**	*-5.8*	*-6.1*	*1.7*
Cyprus	-0.4	0.0	2.0	0.0	-1.2	-0.6	**-8.6**	**0.0**	**0.0**	*-1.1*	*-1.8*	*0.0*
Latvia	1.8	0.2	1.5	0.9	3.2	2.6	**-1.6**	**-1.9**	**3.0**	*2.5*	*-3.1*	*1.5*
Lithuania	2.4	-1.3	0.9	1.3	1.5	-6.4	**-6.9**	**0.6**	**0.0**	*-6.4*	*-3.5*	*0.1*
Luxembourg	1.3	0.1	0.7	0.4	1.8	0.1	**-4.2**	**-0.2**	**0.2**	*-1.5*	*-3.0*	*0.1*
Malta	0.3	-1.6	1.4	-0.1	-0.3	2.1	**-0.9**	**-0.4**	**0.1**	*3.4*	*-2.7*	*-0.8*
Netherlands	-0.2	-0.5	0.6	0.9	1.0	-2.2	**-5.5**	**-0.2**	**2.0**	*-2.1*	*-3.2*	*0.8*
Austria	-0.8	-0.4	0.3	-1.0	0.8	-1.5	**-2.2**	**-0.6**	**0.2**	*-3.2*	*-3.0*	*0.7*
Portugal	-0.6	0.9	0.5	0.4	1.6	0.4	**-3.6**	**2.1**	**0.8**	*0.8*	*-2.6*	*2.5*
Slovakia	-0.9	-1.1	-0.4	-0.3	-0.4	-1.1	**-2.9**	**0.3**	**0.1**	*-1.1*	*-1.4*	*0.1*
Slovenia	-1.1	-0.6	0.5	0.4	0.8	-2.3	**-4.0**	**-0.8**	**0.2**	*-2.6*	*-2.2*	*0.5*
Finland	-2.5	-0.5	1.0	-0.6	1.5	0.7	**-2.9**	**-0.1**	**0.4**	*0.5*	*-1.0*	*-0.2*
Euro area (20)	-1.0	-0.1	0.7	0.8	1.7	-3.4	**-6.1**	**0.7**	**1.4**	*-3.5*	*-3.1*	*1.4*
Bulgaria	4.8	0.1	1.2	1.9	4.3	0.6	**4.0**	**-1.8**	**0.0**	*2.1*	*-0.3*	*-0.8*
Czechia	-1.0	-0.2	0.3	0.4	1.8	-0.2	**-5.5**	**-1.8**	**0.5**	*0.2*	*-2.1*	*0.1*
Denmark	1.0	0.7	0.2	-0.5	1.7	-5.2	**-9.0**	**1.5**	**0.9**	*-5.9*	*-3.5*	*0.3*
Hungary	-1.1	-0.3	0.4	0.5	2.0	-3.6	**-5.5**	**-0.5**	**1.7**	*-3.6*	*-4.4*	*0.5*
Poland	1.0	0.3	1.0	1.5	3.2	-2.0	**-4.2**	**-1.8**	**0.6**	*-1.5*	*-3.9*	*0.5*
Romania	7.4	-0.3	-0.4	2.1	3.3	0.8	**-1.7**	**-0.3**	**-0.2**	*0.8*	*-0.2*	*-0.5*
Sweden	-0.6	0.2	0.3	1.1	1.1	0.5	**-2.4**	**-1.0**	**0.3**	*0.4*	*-1.7*	*0.2*
EU	-0.9	-0.1	0.6	0.9	1.8	-3.1	**-5.8**	**0.3**	**1.2**	*-3.1*	*-3.0*	*1.2*
United Kingdom	0.5	0.7	0.2	0.8	-1.1	-1.1	**-2.4**	**-3.2**	**0.2**	*1.3*	*-8.6*	*-0.2*
Japan	-7.1	-1.3	1.3	0.9	6.8	-9.0	**-10.5**	**0.7**	**1.1**	*-9.0*	*-6.3*	*0.0*
United States	-2.0	0.9	0.9	0.6	-1.1	5.9	**3.6**	**-1.0**	**-0.2**	*6.0*	*2.3*	*0.7*

Table 22: Total population (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	0.6	0.8	0.5	0.5	0.5	0.4	0.7	0.6	0.4	0.4	0.7	0.6
Germany	-0.2	0.0	0.6	0.2	0.1	0.0	0.9	0.4	0.1	0.0	0.7	0.2
Estonia	-0.2	-0.2	0.3	-0.6	0.0	0.0	2.3	0.8	-0.1	0.0	2.9	0.4
Ireland	2.4	0.5	1.0	1.4	1.1	0.8	1.7	1.5	1.4	0.8	1.1	1.3
Greece	0.3	-0.2	-0.4	-0.1	-0.2	-0.2	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Spain	1.7	0.3	0.1	0.8	0.5	-0.1	1.0	0.7	0.7	-0.1	1.0	0.6
France	0.7	0.5	0.4	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.6	0.3
Croatia	0.0	-0.3	-0.8	-0.6	-0.5	-4.2	-0.4	-0.3	-0.2	-3.9	0.0	0.0
Italy	0.6	0.4	-0.1	-0.2	-0.5	-0.6	0.6	0.5	-0.1	-0.6	0.6	0.5
Cyprus	1.8	1.8	0.2	1.4	1.1	0.9	2.0	1.3	1.0	0.9	1.9	1.2
Latvia	-1.0	-1.6	-0.9	-0.7	-0.6	-0.9	0.3	-0.5	-0.7	-0.9	-0.8	-0.7
Lithuania	-1.3	-1.6	-1.1	-0.3	0.0	0.5	0.6	0.3	-0.7	0.3	0.2	0.7
Luxembourg	1.6	2.2	2.2	2.1	1.5	1.6	2.5	2.2	2.0	1.6	2.9	2.2
Malta	0.5	0.8	2.6	4.0	2.2	0.5	2.0	1.7	1.7	0.9	2.1	2.0
Netherlands	0.3	0.4	0.5	0.7	0.6	0.5	0.5	0.8	0.8	0.5	0.5	0.5
Austria	0.5	0.4	0.8	0.5	0.4	0.4	1.2	0.7	0.4	0.4	1.9	0.7
Portugal	0.2	-0.2	-0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia	0.1	0.0	0.1	0.1	0.1	-0.4	1.1	0.5	0.0	-0.2	0.6	0.3
Slovenia	0.3	0.4	0.1	0.8	0.7	0.2	0.1	0.2	0.2	0.2	0.9	0.5
Finland	0.4	0.5	0.3	0.1	0.2	0.2	0.6	0.4	0.2	0.2	0.5	0.1
Euro area (20)	0.5	0.2	0.2	0.3	0.2	0.0	0.7	0.5	0.2	0.0	0.7	0.4
Bulgaria	-0.5	-1.0	-0.7	-0.7	-0.6	-0.8	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Czechia	0.4	0.2	0.2	0.4	0.3	0.0	2.7	1.2	0.0	0.0	3.4	0.8
Denmark	0.4	0.4	0.6	0.4	0.2	0.4	0.7	0.6	0.6	0.4	1.7	0.7
Hungary	-0.2	-0.3	-0.2	0.0	-0.2	-0.4	0.3	0.0	-0.2	-0.4	1.9	0.2
Poland	0.0	0.2	0.0	-0.1	-0.1	-0.5	2.6	1.0	-0.2	-0.5	5.3	0.7
Romania	-1.0	-0.5	-0.5	-0.4	-0.6	-0.8	-0.8	-0.8	-0.8	-0.4	-0.8	-0.8
Sweden	0.6	0.8	1.2	1.0	0.7	0.6	0.4	0.3	0.3	0.6	0.4	0.3
EU	0.3	0.2	0.2	0.2	0.1	-0.1	0.8	0.5	0.1	-0.1	1.1	0.4
United Kingdom	0.7	0.7	0.7	0.5	0.4	0.7	0.3	0.3	0.3	0.3	0.3	0.3
Japan	0.1	-0.1	-0.1	-0.2	-0.4	-0.5	-0.5	-0.5	-0.5	-0.3	-0.4	-0.4
United States	0.9	0.8	0.7	0.5	0.4	0.1	1.0	0.4	0.5	0.1	0.3	0.5

Table 23: Total employment in persons (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.4	0.4	1.1	1.6	0.1	1.9	1.8	0.3	0.6	1.8	1.0	0.8
Germany	0.8	0.7	1.2	0.9	-0.8	0.1	1.2	-0.1	0.3	0.0	0.8	0.5
Estonia	1.3	-1.1	1.5	1.3	-2.7	0.1	2.8	-0.1	0.5	0.1	0.7	1.0
Ireland	3.3	-1.9	3.1	3.0	-2.8	6.0	3.1	0.8	0.6	3.9	2.8	0.8
Greece	1.6	-2.4	1.6	2.2	-1.8	2.7	1.9	0.4	0.6	0.5	1.2	1.2
Spain	3.1	-3.4	2.2	2.6	-4.2	2.5	3.1	0.8	0.9	2.4	2.8	1.1
France	0.8	0.0	0.7	1.2	-0.7	2.5	1.0	-0.1	0.5	1.8	1.1	0.4
Croatia	2.0	-3.0	1.8	3.1	-1.2	1.2	2.2	0.2	0.6	1.2	1.6	1.8
Italy	0.9	-0.8	0.8	0.5	-2.2	0.6	2.2	-0.3	0.6	0.6	0.6	1.1
Cyprus	3.5	-1.6	3.0	3.8	-1.2	1.3	1.6	0.7	1.4	1.2	0.9	1.8
Latvia	2.0	-3.1	0.2	-0.1	-2.3	-2.6	3.4	-0.1	0.3	-2.6	0.7	0.5
Lithuania	0.0	-1.8	1.3	0.6	-1.6	1.2	3.8	-2.2	-0.4	1.2	0.2	0.1
Luxembourg	3.6	2.0	3.0	3.5	1.7	3.0	3.1	2.1	2.8	3.1	2.6	2.5
Malta	1.6	2.4	5.7	5.7	2.8	2.9	2.9	2.5	2.5	1.6	2.1	2.0
Netherlands	1.3	-0.4	1.5	2.3	-0.5	2.0	2.9	0.5	0.5	1.8	2.0	1.1
Austria	1.5	0.6	1.2	1.1	-1.6	2.0	2.5	0.6	0.7	2.1	2.9	0.9
Portugal	-0.1	-2.6	2.0	0.8	-1.8	1.9	1.0	0.2	0.5	2.1	1.0	0.9
Slovakia	1.8	-0.5	2.0	1.0	-1.9	-0.6	2.0	0.0	-0.2	-0.6	1.9	0.6
Slovenia	1.4	-1.5	1.9	2.5	-0.7	1.3	2.9	0.3	0.5	1.4	0.9	1.5
Finland	1.7	-0.3	0.7	1.8	-1.9	3.3	2.1	-0.1	0.4	2.0	1.0	0.4
Euro area (20)	1.3	-0.6	1.3	1.3	-1.5	1.4	1.8	0.1	0.5	1.1	1.3	0.8
Bulgaria	2.8	-2.1	0.6	0.3	-2.3	0.2	0.4	0.0	0.2	0.2	0.2	0.4
Czechia	1.5	-0.5	1.3	0.2	-1.7	0.4	0.4	0.7	0.6	0.1	2.2	0.3
Denmark	1.3	-1.2	1.4	1.4	-1.1	2.4	4.3	-1.4	-0.1	2.6	1.9	1.1
Hungary	-0.7	-0.1	2.9	1.1	-1.1	1.0	1.9	0.0	0.4	2.0	1.7	0.6
Poland	3.0	-0.3	1.2	0.0	0.0	1.5	1.4	0.1	0.3	1.5	0.4	0.3
Romania	-0.4	-1.7	0.2	0.1	-2.1	1.8	0.5	-1.4	-0.1	-8.9	0.8	0.8
Sweden	0.8	0.5	1.8	0.6	-1.3	1.2	2.9	-0.1	0.1	1.3	2.1	0.9
EU	1.3	-0.7	1.2	1.1	-1.4	1.4	1.8	0.0	0.4	0.7	1.2	0.7
United Kingdom	1.0	0.3	1.6	1.1	-0.9	-0.3	0.7	-0.4	0.5	-0.8	0.9	1.0
Japan	0.5	-0.4	0.9	0.9	-0.5	0.0	0.2	0.2	0.2	0.0	0.3	0.3
United States	0.9	-0.1	1.6	1.2	-5.8	3.4	3.8	-0.2	0.3	3.2	3.3	1.1

Note: For the countries publishing also employment in full-time equivalents (see note 6) as well as the EU and EA aggregates, this table now also displays employment in persons, limiting the comparability to figures published in previous forecasts.

Table 24: Total employment in full-time equivalents (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Spain	2.5	-4.0	2.4	2.6	-7.6	6.6	**3.3**	**0.9**	**1.5**	*6.6*	*3.3*	*1.6*
France	0.9	-0.1	0.6	1.3	-0.6	2.4	**1.0**	**-0.1**	**0.5**	*1.8*	*1.1*	*0.4*
Italy	0.6	-1.4	0.8	0.1	-10.3	7.6	**3.4**	**0.2**	**1.1**	*7.5*	*2.4*	*1.8*
Netherlands	1.3	-0.6	1.7	2.2	0.6	2.0	**2.9**	**0.5**	**0.5**	*1.8*	*2.0*	*1.1*
Euro area	1.1	-0.9	1.3	1.3	-3.3	1.4	**2.0**	**0.2**	**0.7**	2.6	1.6	0.9
EU	1.1	-0.9	1.3	1.1	-2.7	1.4	**1.9**	**0.1**	**0.6**	*0.7*	*1.5*	*0.8*

Table 25: Unemployment rate [1] (number of unemployed as a percentage of total labour force, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	8.0	8.0	7.7	5.5	5.8	6.3	**5.8**	**6.4**	**6.3**	*6.3*	*5.8*	*5.6*
Germany	9.1	5.9	4.0	3.0	3.7	3.6	**3.1**	**3.5**	**3.5**	*3.6*	*3.3*	*3.2*
Estonia	6.8	12.2	6.3	4.5	6.9	6.2	**6.1**	**6.6**	**6.2**	*6.2*	*6.8*	*6.9*
Ireland	5.2	14.4	8.5	5.0	5.9	6.2	**4.4**	**4.8**	**5.0**	*6.2*	*4.6*	*5.0*
Greece	9.4	18.7	23.4	17.9	17.6	14.7	**12.6**	**12.6**	**12.1**	*14.7*	*13.7*	*13.1*
Spain	9.6	22.0	19.7	14.1	15.5	14.8	**12.7**	**12.7**	**12.6**	*14.8*	*13.4*	*13.0*
France	8.4	9.5	9.8	8.4	8.0	7.9	**7.7**	**8.1**	**7.7**	*7.9*	*7.6*	*7.6*
Croatia	11.3	13.6	13.3	6.6	7.5	7.6	**6.3**	**6.3**	**5.9**	*7.6*	*6.3*	*6.0*
Italy	7.2	9.6	11.7	9.9	9.3	9.5	**8.3**	**8.7**	**8.5**	*9.5*	*9.5*	*8.9*
Cyprus	4.4	9.5	12.7	7.1	7.6	7.5	**7.2**	**7.2**	**6.9**	*7.5*	*7.8*	*7.3*
Latvia	8.6	16.1	9.3	6.3	8.1	7.6	**7.1**	**8.1**	**7.9**	*7.6*	*7.3*	*7.1*
Lithuania	7.0	14.4	8.2	6.3	8.5	7.1	**6.0**	**7.1**	**7.0**	*7.1*	*7.2*	*7.2*
Luxembourg	4.7	5.1	6.0	5.6	6.8	5.3	**4.7**	**5.1**	**4.9**	*5.3*	*5.2*	*5.1*
Malta	6.7	6.5	4.7	3.6	4.4	3.4	**3.2**	**3.1**	**3.0**	*3.5*	*3.6*	*3.6*
Netherlands	5.7	6.5	6.8	4.4	4.9	4.2	**3.7**	**4.3**	**4.3**	*4.2*	*4.0*	*4.2*
Austria	5.5	5.3	5.9	4.8	6.0	6.2	**5.0**	**5.2**	**5.3**	*6.2*	*5.0*	*4.8*
Portugal	8.9	14.2	11.1	6.7	7.0	6.6	**5.9**	**5.9**	**5.7**	*6.6*	*5.7*	*5.5*
Slovakia	13.7	13.6	9.8	5.7	6.7	6.8	**6.3**	**6.4**	**6.4**	*6.8*	*6.7*	*6.3*
Slovenia	5.6	8.1	7.7	4.4	5.0	4.8	**4.1**	**4.3**	**4.1**	*4.8*	*4.8*	*4.6*
Finland	7.7	8.2	8.6	6.8	7.7	7.7	**7.0**	**7.2**	**6.9**	*7.7*	*7.2*	*6.9*
Euro area (20)	8.4	10.8	10.0	7.6	8.0	7.7	**6.8**	**7.2**	**7.0**	*7.7*	*7.3*	*7.0*
Bulgaria	10.2	11.7	8.9	5.2	6.1	5.3	**5.2**	**5.2**	**5.3**	*5.3*	*5.4*	*5.3*
Czechia	6.6	6.9	4.1	2.0	2.6	2.8	**2.7**	**3.3**	**3.6**	*2.8*	*2.6*	*2.6*
Denmark	4.3	7.4	6.0	5.0	5.6	5.1	**4.5**	**5.5**	**5.6**	*5.1*	*4.8*	*4.7*
Hungary	7.0	10.3	5.3	3.3	4.1	4.1	**3.6**	**4.2**	**4.2**	*4.1*	*3.8*	*4.0*
Poland	14.0	9.9	6.4	3.3	3.2	3.4	**2.7**	**3.0**	**3.1**	*3.4*	*4.1*	3.9
Romania	8.5	8.8	7.1	4.9	6.1	5.6	**5.4**	**5.8**	**5.4**	*5.6*	*5.5*	*5.3*
Sweden	6.8	8.3	7.2	7.0	8.5	8.8	**7.2**	**7.6**	**7.8**	*8.8*	*7.8*	*7.0*
EU	8.8	10.4	9.2	6.8	7.2	7.0	**6.2**	**6.5**	**6.4**	*7.0*	*6.7*	*6.5*
United Kingdom	5.2	7.8	5.0	3.8	4.6	4.5	**3.8**	**4.4**	**4.8**	*4.5*	*4.0*	*4.0*
Japan	4.2	4.6	3.1	2.4	2.8	2.8	**2.7**	**2.5**	**2.5**	*2.8*	*2.7*	*2.6*
United States	5.1	8.7	4.9	3.7	8.1	5.3	**3.7**	**4.1**	**4.4**	*5.4*	*3.6*	*3.5*

[1] Series following Eurostat definition, based on the Labour Force Survey.

Table 26: Compensation of employees per head (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.9	2.3	1.1	2.0	-1.6	4.1	**6.4**	**9.0**	**4.3**	*4.2*	*6.0*	*5.5*
Germany	1.0	2.1	2.7	3.4	0.4	3.1	**4.5**	**5.4**	**4.3**	*3.4*	*3.4*	*4.0*
Estonia	14.6	2.5	6.6	7.2	6.2	9.8	**9.7**	**9.7**	**4.7**	*7.6*	*7.0*	*4.5*
Ireland	4.9	-1.2	2.3	3.8	3.7	2.6	**3.6**	**6.0**	**5.2**	*3.6*	*3.8*	*7.8*
Greece	4.8	-3.3	-2.2	-0.3	-0.6	2.3	**5.3**	**3.9**	**2.7**	*1.4*	*3.5*	*2.2*
Spain	4.5	1.4	0.5	3.2	2.8	-0.7	**2.6**	**4.9**	**2.7**	*-0.6*	*2.8*	*3.0*
France	2.9	2.2	1.5	-0.2	-2.9	4.7	**4.7**	**4.5**	**2.6**	*4.9*	*3.8*	*3.3*
Croatia	4.7	1.0	0.0	0.4	1.2	10.4	**7.7**	**6.8**	**3.9**	*5.6*	*3.0*	*2.7*
Italy	3.0	1.5	0.7	1.8	3.8	0.7	**3.0**	**2.5**	**2.7**	*-0.9*	*2.5*	*1.3*
Cyprus	3.6	1.0	-0.6	4.4	-0.5	3.8	**4.7**	**7.0**	**3.8**	*4.7*	*4.1*	*4.5*
Latvia	23.0	-0.6	7.7	7.8	5.0	11.1	**10.7**	**7.2**	**7.2**	*11.0*	*5.6*	*6.0*
Lithuania	14.9	1.1	6.8	10.6	6.6	11.9	**11.0**	**6.3**	**6.7**	*11.4*	*8.7*	*6.2*
Luxembourg	3.8	2.3	2.1	1.9	1.2	6.0	**5.1**	**4.7**	**3.0**	*5.1*	*4.8*	*3.6*
Malta	3.1	2.9	3.7	3.9	-0.7	4.8	**3.4**	**2.4**	**2.0**	*5.5*	*3.8*	*2.9*
Netherlands	2.6	2.1	1.1	2.8	3.5	2.2	**3.4**	**4.5**	**4.3**	*2.1*	*3.1*	*3.7*
Austria	2.7	1.9	2.2	2.8	1.8	2.8	**4.3**	**6.6**	**4.9**	*3.4*	*1.5*	*2.6*
Portugal	3.2	0.6	1.2	4.8	1.5	4.1	**4.6**	**4.3**	**3.0**	*3.8*	*4.2*	*2.6*
Slovakia	8.0	3.0	3.8	6.8	3.9	6.5	**7.5**	**6.0**	**9.4**	*5.9*	*7.8*	*7.0*
Slovenia	6.5	1.4	2.6	5.0	3.4	7.9	**2.2**	**6.3**	**4.5**	*5.4*	*3.6*	*5.5*
Finland	3.5	2.3	0.7	1.2	0.4	2.9	**3.4**	**3.5**	**2.6**	*4.4*	*3.3*	*3.0*
Euro area (20)	2.7	2.0	1.5	2.2	1.0	3.9	**4.2**	**4.9**	**3.6**	*4.0*	*3.4*	*3.4*
Bulgaria	10.2	8.3	7.4	6.9	7.2	11.3	**15.4**	**9.0**	**6.7**	*9.5*	*9.7*	*7.7*
Czechia	5.7	1.6	5.0	7.2	3.1	5.0	**7.7**	**6.5**	**6.4**	*5.7*	*2.4*	*5.3*
Denmark	3.5	2.2	1.6	1.9	2.6	2.9	**3.3**	**4.7**	**5.0**	*3.2*	*3.6*	*2.9*
Hungary	7.9	1.0	3.7	7.0	3.0	8.3	**14.5**	**13.1**	**6.9**	*9.2*	*8.7*	*6.5*
Poland	4.1	4.7	4.5	8.6	5.3	3.6	**11.0**	**10.4**	**6.9**	*5.0*	*9.5*	*8.0*
Romania	19.6	2.3	10.2	10.9	4.0	4.4	**8.1**	**8.6**	**5.7**	*5.7*	*8.3*	*7.0*
Sweden	4.0	2.6	2.7	2.9	2.5	4.4	**2.8**	**4.4**	**3.8**	*4.3*	*2.7*	*3.7*
EU	2.9	2.1	1.8	2.7	1.2	4.0	**4.6**	**5.2**	**3.9**	*4.1*	*3.8*	*3.7*
United Kingdom	4.5	1.9	2.2	4.0	0.1	4.8	**5.7**	**4.8**	**2.0**	*5.4*	*4.5*	*3.0*
Japan	-0.2	-1.0	0.9	0.8	-0.8	1.5	**1.2**	**1.3**	**1.3**	*0.2*	*0.9*	*0.9*
United States	3.9	2.1	2.5	2.8	6.9	5.0	**6.0**	**3.3**	**2.5**	*5.6*	*5.4*	*3.9*

Note: See note 6 on concepts and sources where countries using full time equivalents are listed.

Table 27: Real compensation of employees per head [1] (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	0.1	0.8	-0.3	0.5	-2.4	1.6	**-1.7**	**3.4**	**1.4**	*2.0*	*-0.4*	*3.4*
Germany	-0.4	0.8	1.7	2.1	-0.2	0.0	**-2.5**	**-1.4**	**1.5**	*0.3*	*-2.7*	*1.0*
Estonia	8.4	-0.5	4.6	4.6	7.2	5.4	**-7.4**	**2.8**	**2.1**	*3.1*	*-3.8*	*1.9*
Ireland	2.8	-0.3	1.2	1.9	2.9	-1.2	**-2.4**	**0.2**	**2.3**	*-0.2*	*-2.1*	*4.5*
Greece	1.3	-3.8	-1.4	-0.3	0.5	1.4	**-3.5**	**-2.5**	**0.0**	*0.4*	*-2.6*	*0.3*
Spain	1.0	0.2	-0.1	2.1	2.8	-2.7	**-5.4**	**0.1**	**0.6**	*-2.5*	*-3.2*	*1.1*
France	0.6	1.5	0.8	-1.0	-3.9	3.1	**-0.6**	**0.0**	**0.4**	*3.2*	*-0.2*	*0.2*
Croatia	1.2	-1.4	-0.1	-0.7	0.7	7.9	**-2.1**	**0.3**	**1.5**	*2.9*	*-2.9*	*0.1*
Italy	0.5	0.0	0.2	1.2	3.6	-0.9	**-4.1**	**-3.0**	**0.4**	*-2.5*	*-3.2*	*-1.0*
Cyprus	0.2	-0.6	0.0	4.1	0.5	2.9	**-3.0**	**2.7**	**1.3**	*2.5*	*-2.0*	*0.8*
Latvia	11.6	-1.3	6.0	4.7	4.2	7.4	**-5.3**	**-1.0**	**5.8**	*7.3*	*-3.5*	*2.4*
Lithuania	9.8	-1.7	5.6	8.2	5.4	7.0	**-6.7**	**-2.6**	**4.6**	*6.5*	*-3.4*	*3.1*
Luxembourg	1.1	0.8	0.8	0.2	0.0	4.6	**-1.7**	**1.0**	**0.6**	*2.6*	*-1.0*	*1.4*
Malta	0.4	0.7	2.7	1.9	-1.9	3.5	**-2.0**	**-2.1**	**-0.6**	*4.2*	*-0.7*	*-0.4*
Netherlands	0.6	0.9	0.0	0.1	2.1	-1.3	**-3.4**	**-2.1**	**0.8**	*-0.9*	*-4.0*	*1.0*
Austria	0.5	0.0	0.4	1.0	0.3	0.4	**-4.1**	**-0.1**	**1.5**	*1.0*	*-3.8*	*0.0*
Portugal	0.0	-0.3	0.1	3.9	0.9	2.7	**-1.3**	**0.4**	**0.9**	*2.6*	*-0.3*	*0.6*
Slovakia	3.5	1.0	3.1	4.0	1.7	3.1	**-4.5**	**-6.7**	**5.2**	*2.6*	*-1.1*	*0.7*
Slovenia	2.9	-0.2	2.1	3.6	4.0	4.3	**-8.9**	**0.3**	**1.7**	*1.6*	*-2.1*	*2.1*
Finland	1.9	0.0	-0.2	0.3	-0.1	1.2	**-3.2**	**-0.5**	**0.9**	*2.4*	*-1.1*	*0.8*
Euro area (20)	0.4	0.8	0.7	1.1	0.4	1.5	**-2.8**	**-0.9**	**1.0**	*1.7*	*-2.2*	*0.7*
Bulgaria	4.5	6.6	4.8	4.8	7.8	5.0	**4.0**	**1.4**	**2.6**	*5.7*	*-2.0*	*2.8*
Czechia	2.8	0.4	3.7	4.3	0.2	2.1	**-8.3**	**-4.9**	**0.8**	*2.6*	*-8.3*	*-0.1*
Denmark	1.6	0.3	1.0	1.0	2.2	0.9	**-6.0**	**0.0**	**2.5**	*1.1*	*-0.9*	*0.6*
Hungary	2.8	-2.6	1.8	2.3	-0.4	2.2	**-0.3**	**-2.2**	**2.9**	*2.8*	*-0.3*	*2.3*
Poland	1.1	2.1	4.1	6.3	1.7	-1.5	**-3.5**	**-1.9**	**2.0**	*-0.4*	*-2.1*	*0.6*
Romania	10.4	-2.2	8.1	5.2	1.6	-1.0	**-3.5**	**-1.7**	**-1.2**	*0.2*	*-0.8*	*1.6*
Sweden	2.7	1.4	1.2	0.8	1.6	2.5	**-5.1**	**-2.3**	**2.2**	*2.4*	*-2.8*	*-0.2*
EU	0.5	0.8	0.9	1.4	0.4	1.4	**-3.1**	**-1.1**	**1.1**	*1.6*	*-2.3*	*0.6*
United Kingdom	1.9	-0.1	1.1	2.3	-0.9	2.1	**-3.3**	**-4.9**	**-0.2**	*2.9*	*-3.5*	*0.5*
Japan	0.0	-0.1	0.3	0.4	-1.1	2.0	**-1.2**	**-1.7**	**-0.5**	*0.7*	*-0.2*	*-0.6*
United States	1.1	0.7	1.2	1.3	5.7	0.9	**-0.2**	**-0.2**	**0.1**	*1.7*	*-0.4*	*1.1*

[1] Deflated by the price deflator of private consumption.

Note: See note 6 on concepts and sources where countries using full time equivalents are listed.

Table 28: Labour productivity (real GDP per occupied person) (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.1	0.3	0.5	0.6	-5.4	4.2	**1.0**	**-0.1**	**0.9**	*4.4*	*1.0*	*1.0*
Germany	1.1	-0.1	0.7	0.1	-2.9	2.5	**0.4**	**-0.6**	**1.0**	*2.8*	*0.8*	*1.9*
Estonia	4.2	1.0	2.0	2.4	2.2	7.9	**-2.9**	**0.8**	**1.6**	*8.2*	*0.3*	*1.4*
Ireland	0.3	1.6	7.0	2.4	9.3	7.1	**4.6**	**2.4**	**2.5**	*9.2*	*2.6*	*3.6*
Greece	1.2	-3.6	-1.1	-0.3	-7.3	5.6	**4.0**	**0.6**	**1.3**	*7.8*	*2.2*	*1.9*
Spain	0.6	2.4	0.3	-0.6	-4.1	-1.0	**1.2**	**0.1**	**0.5**	*-1.4*	*0.7*	*1.7*
France	1.1	0.5	0.8	0.5	-7.2	4.3	**1.6**	**0.5**	**1.0**	*5.1*	*2.0*	*1.4*
Croatia	2.0	0.7	0.5	0.3	-7.5	11.7	**3.7**	**0.8**	**1.1**	*8.9*	*1.8*	*1.1*
Italy	0.3	-0.1	0.2	0.4	1.4	-0.8	**0.4**	**0.1**	**0.0**	*-0.8*	*0.1*	*0.0*
Cyprus	1.1	-0.2	0.9	1.7	-3.2	5.3	**4.0**	**0.3**	**0.5**	*4.3*	*1.4*	*1.6*
Latvia	5.3	1.7	2.9	2.7	0.1	6.8	**-1.5**	**-0.2**	**2.3**	*7.2*	*1.3*	*2.4*
Lithuania	7.0	1.7	2.0	4.0	1.6	4.7	**-1.3**	**2.8**	**2.7**	*3.8*	*1.6*	*2.5*
Luxembourg	0.5	-0.7	-0.5	-1.2	-2.5	2.1	**-1.5**	**-1.1**	**-0.3**	*3.7*	*-0.3*	*0.2*
Malta	1.3	0.5	1.7	0.2	-10.8	7.2	**2.7**	**0.3**	**1.2**	*7.7*	*2.0*	*2.0*
Netherlands	1.4	0.2	0.4	-0.2	-4.5	2.8	**1.7**	**0.2**	**0.7**	*3.2*	*1.2*	*0.4*
Austria	1.2	-0.3	0.4	0.4	-4.9	2.5	**2.1**	**-0.3**	**0.5**	*2.4*	*1.0*	*1.0*
Portugal	1.5	1.0	0.2	1.9	-6.6	3.5	**5.6**	**0.5**	**1.2**	*2.8*	*4.8*	*1.7*
Slovakia	5.5	1.6	1.3	1.5	-1.5	3.6	**0.0**	**0.5**	**2.1**	*3.6*	*0.4*	*2.9*
Slovenia	3.4	-0.4	1.5	1.0	-3.7	6.8	**3.3**	**0.5**	**1.1**	*6.6*	*2.8*	*1.6*
Finland	1.7	-0.7	0.8	-0.6	-0.3	-0.3	**0.2**	**0.4**	**1.1**	*1.4*	*0.6*	*1.2*
Euro area (20)	1.0	0.5	0.7	0.3	-3.0	3.8	**1.2**	**0.1**	**0.9**	*4.2*	*1.1*	*1.3*
Bulgaria	3.7	2.3	2.0	3.7	-1.7	7.4	**2.7**	**1.1**	**2.1**	*4.0*	*1.9*	*2.7*
Czechia	3.8	0.2	2.4	2.8	-3.9	3.2	**2.1**	**-0.6**	**1.3**	*3.2*	*-0.3*	*2.4*
Denmark	0.5	1.1	1.0	0.1	-0.9	2.3	**-1.3**	**1.4**	**1.4**	*2.0*	*0.7*	*0.7*
Hungary	3.6	-0.6	1.0	3.7	-3.5	6.0	**3.4**	**0.1**	**2.3**	*5.0*	*1.9*	*1.9*
Poland	2.2	3.0	3.2	4.5	-2.0	5.3	**2.6**	**0.6**	**2.2**	*4.4*	*3.3*	*2.7*
Romania	8.4	1.2	4.7	3.7	-1.7	3.2	**5.2**	**3.2**	**2.4**	*16.2*	*1.7*	*2.8*
Sweden	2.1	0.5	1.0	1.4	-0.8	3.8	**0.0**	**-0.4**	**0.8**	*3.5*	*0.1*	*0.5*
EU	1.2	0.6	0.9	0.7	-3.0	3.9	**1.4**	**0.2**	**1.0**	*4.6*	*1.2*	*1.5*
United Kingdom	0.9	0.1	0.8	0.5	-10.2	7.9	**3.5**	**-0.5**	**0.4**	*8.3*	*2.4*	*0.6*
Japan	0.6	0.7	0.1	-1.2	-4.1	1.6	**1.5**	**1.4**	**1.0**	*1.7*	*1.6*	*1.5*
United States	1.6	1.3	0.7	1.0	3.2	2.5	**-1.9**	**0.9**	**1.3**	*2.4*	*-0.4*	*1.2*

Note : See note 6 on concepts and sources where countries using full time equivalents are listed.

Table 29: Unit labour costs, whole economy [1] (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.7	1.9	0.5	1.4	4.1	-0.1	**5.4**	**9.2**	**3.3**	*-0.2*	*5.0*	*4.4*
Germany	-0.1	2.2	1.9	3.3	3.4	0.6	**4.1**	**6.0**	**3.2**	*0.5*	*2.6*	*2.1*
Estonia	10.0	1.5	4.5	4.7	3.9	1.8	**12.9**	**8.8**	**3.1**	*-0.6*	*6.7*	*3.0*
Ireland	4.6	-2.8	-4.4	1.3	-5.1	-4.2	**-1.0**	**3.6**	**2.6**	*-5.2*	*1.3*	*4.0*
Greece	3.5	0.3	-1.2	0.0	7.2	-3.1	**1.3**	**3.3**	**1.4**	*-5.9*	*1.2*	*0.3*
Spain	4.0	-0.9	0.3	3.8	7.2	0.3	**1.4**	**4.8**	**2.2**	*0.8*	*2.1*	*1.2*
France	1.8	1.7	0.6	-0.7	4.7	0.4	**3.0**	**4.0**	**1.5**	*-0.2*	*1.8*	*1.9*
Croatia	2.6	0.2	-0.6	0.1	9.4	-1.2	**3.9**	**5.9**	**2.7**	*-3.1*	*1.1*	*1.5*
Italy	2.7	1.6	0.6	1.4	2.3	1.5	**2.6**	**2.4**	**2.6**	*-0.1*	*2.4*	*1.3*
Cyprus	2.4	1.3	-1.5	2.7	2.9	-1.4	**0.7**	**6.6**	**3.3**	*0.4*	*2.7*	*2.8*
Latvia	16.8	-2.3	4.8	5.0	4.8	4.0	**12.3**	**7.4**	**4.8**	*3.5*	*4.2*	*3.5*
Lithuania	7.4	-0.6	4.8	6.3	4.9	6.8	**12.4**	**3.4**	**3.9**	*7.3*	*7.1*	*3.7*
Luxembourg	3.3	3.1	2.7	3.1	3.8	3.9	**6.7**	**5.9**	**3.3**	*1.4*	*5.1*	*3.4*
Malta	1.8	2.4	1.9	3.6	11.4	-2.2	**0.7**	**2.1**	**0.7**	*-2.1*	*1.8*	*1.0*
Netherlands	1.2	1.9	0.6	3.0	8.4	-0.6	**1.6**	**4.3**	**3.5**	*-1.0*	*1.9*	*3.2*
Austria	1.4	2.3	1.7	2.3	7.1	0.3	**2.1**	**6.9**	**4.4**	*1.0*	*0.5*	*1.6*
Portugal	1.7	-0.4	1.0	2.8	8.7	0.6	**-0.9**	**3.8**	**1.7**	*1.0*	*-0.6*	*0.8*
Slovakia	2.4	1.4	2.4	5.3	5.5	2.8	**7.6**	**5.5**	**7.2**	*2.2*	*7.4*	*3.9*
Slovenia	3.0	1.7	1.0	3.9	7.3	1.1	**-1.0**	**5.7**	**3.3**	*-1.1*	*0.8*	*3.9*
Finland	1.8	3.1	-0.1	1.9	0.7	3.3	**3.2**	**3.1**	**1.5**	*3.0*	*2.7*	*1.7*
Euro area (20)	1.7	1.5	0.9	1.9	4.6	0.1	**3.0**	**4.8**	**2.7**	*0.1*	*2.3*	*2.1*
Bulgaria	6.2	5.8	5.3	3.1	9.0	3.6	**12.3**	**7.8**	**4.4**	*5.4*	*7.7*	*4.8*
Czechia	1.8	1.4	2.6	4.3	7.3	1.8	**5.5**	**7.1**	**5.0**	*2.4*	*2.8*	*2.8*
Denmark	3.0	1.0	0.5	1.9	3.5	0.6	**4.6**	**3.2**	**3.5**	*1.1*	*2.8*	*2.2*
Hungary	4.1	1.6	2.7	3.1	6.7	2.1	**10.7**	**13.0**	**4.6**	*4.0*	*6.7*	*4.5*
Poland	1.9	1.7	1.2	3.9	7.5	-1.6	**8.1**	**9.8**	**4.6**	*0.6*	*6.0*	*5.1*
Romania	10.4	1.1	5.2	6.9	5.8	1.2	**2.8**	**5.2**	**3.3**	*-9.0*	*6.4*	*4.1*
Sweden	1.9	2.1	1.7	1.5	3.4	0.5	**2.8**	**4.9**	**3.0**	*0.8*	*2.6*	*3.2*
EU	1.6	1.5	0.9	2.0	4.7	0.1	**3.2**	**5.0**	**2.8**	*0.0*	*2.5*	*2.2*
United Kingdom	3.5	1.8	1.3	3.5	11.5	-2.9	**2.1**	**5.4**	**1.6**	*-2.7*	*2.0*	*2.4*
Japan	-0.8	-1.7	0.8	2.1	3.5	-0.1	**-0.3**	**-0.1**	**0.3**	*-1.4*	*-0.7*	*-0.6*
United States	2.3	0.8	1.8	1.8	3.6	2.4	**8.1**	**2.4**	**1.1**	*3.2*	*5.9*	*2.7*

[1] Compensation of employees per head divided by labour productivity per head, defined as GDP in volume divided by total employment.

Note: See note 6 on concepts and sources where countries using full time equivalents are listed.

Table 30: Real unit labour costs [1] (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	-0.3	0.4	-1.0	-0.4	2.5	-2.9	**-1.3**	**4.0**	**0.1**	*-4.5*	*0.4*	*1.4*
Germany	-1.0	0.8	0.2	1.1	1.6	-2.4	**-1.2**	**-0.7**	**-0.4**	*-2.4*	*-2.6*	*-1.4*
Estonia	2.1	-1.5	1.5	1.4	4.4	-3.9	**-1.2**	**1.8**	**0.1**	*-5.7*	*-1.3*	*-0.1*
Ireland	3.0	-2.3	-6.4	-2.2	-3.6	-4.8	**-9.8**	**-1.7**	**-1.7**	*-4.8*	*-3.3*	*-0.1*
Greece	0.2	0.2	-0.6	-0.2	8.2	-4.3	**-7.1**	**-2.2**	**-1.0**	*-7.9*	*-3.4*	*-1.7*
Spain	0.4	-1.0	-0.4	2.3	5.9	-1.9	**-2.0**	**0.5**	**-0.1**	*-1.4*	*-1.5*	*-1.1*
France	-0.3	0.9	-0.1	-2.0	1.9	-0.9	**0.2**	**-0.9**	**-2.3**	*-1.0*	*-0.4*	*-1.1*
Croatia	-1.4	-1.3	-1.2	-1.9	8.6	-3.2	**-1.5**	**-0.3**	**0.3**	*-6.1*	*-2.6*	*-0.9*
Italy	0.3	0.4	-0.4	0.5	0.7	1.0	**-0.6**	**-0.9**	**0.1**	*-0.6*	*-0.6*	*-1.1*
Cyprus	-0.9	0.4	-1.3	1.4	4.1	-4.2	**-3.7**	**2.2**	**0.7**	*-2.3*	*-1.8*	*-0.3*
Latvia	3.9	-2.5	2.8	2.3	3.8	-2.7	**1.2**	**1.1**	**1.0**	*-3.1*	*-2.8*	*-1.5*
Lithuania	0.4	-2.2	2.7	3.5	3.1	0.3	**-3.5**	**-5.1**	**1.6**	*0.7*	*-0.3*	*0.7*
Luxembourg	-1.2	0.2	1.0	1.7	-0.8	-2.2	**0.9**	**1.7**	**0.4**	*-5.1*	*1.1*	*1.3*
Malta	-0.6	0.2	-0.6	1.2	9.7	-4.0	**-4.1**	**-1.8**	**-2.1**	*-3.8*	*-1.0*	*-1.6*
Netherlands	-0.8	1.0	-0.4	-0.1	6.3	-3.1	**-1.7**	**-0.7**	**-0.8**	*-3.4*	*-1.8*	*0.0*
Austria	-0.6	0.6	-0.1	0.8	4.4	-1.7	**-3.7**	**1.1**	**0.6**	*-0.7*	*-2.8*	*-1.5*
Portugal	-1.0	-1.1	-0.6	1.1	6.6	-0.8	**-4.3**	**-1.4**	**-0.8**	*0.3*	*-3.3*	*-2.2*
Slovakia	-0.6	0.8	2.0	2.7	3.0	0.4	**0.1**	**-5.9**	**2.1**	*-0.2*	*0.8*	*-1.5*
Slovenia	-0.1	0.6	-0.2	1.7	6.0	-1.5	**-7.2**	**-0.5**	**-0.4**	*-3.6*	*-2.4*	*0.2*
Finland	0.2	1.0	-1.3	0.4	-0.7	0.7	**-2.0**	**-0.5**	**-0.7**	*0.3*	*-1.1*	*-0.5*
Euro area (20)	-0.4	0.5	-0.3	0.2	2.3	-2.0	**-1.5**	**-0.5**	**-0.7**	*-1.9*	*-1.6*	*-1.0*
Bulgaria	-1.3	3.4	1.9	-2.0	4.5	-3.3	**0.0**	**3.5**	**0.7**	*-0.8*	*-1.7*	*0.9*
Czechia	-0.2	0.6	0.8	0.4	2.8	-1.5	**-3.4**	**-0.9**	**0.2**	*-1.6*	*-4.3*	*-1.8*
Denmark	0.3	-0.5	-0.2	0.8	0.9	-2.1	**1.2**	**-1.1**	**0.8**	*-1.2*	*-0.5*	*-0.1*
Hungary	-0.2	-1.2	-0.6	-1.6	0.2	-3.9	**1.4**	**2.7**	**-0.4**	*-2.7*	*1.0*	*-0.1*
Poland	-1.5	-0.5	0.3	0.9	3.1	-6.3	**-4.1**	**-0.4**	**-0.4**	*-4.9*	*-3.7*	*-2.5*
Romania	-3.1	-2.6	1.5	0.1	1.6	-4.0	**-7.7**	**-4.4**	**-4.3**	*-13.7*	*-2.8*	*-0.8*
Sweden	0.1	0.8	-0.3	-1.0	1.3	-2.4	**-3.2**	**-0.3**	**1.1**	*-2.1*	*-1.6*	*-0.7*
EU	-0.6	0.3	-0.4	0.0	2.3	-2.3	**-1.9**	**-0.6**	**-0.7**	*-2.7*	*-1.8*	*-1.1*
United Kingdom	0.6	-0.1	-0.1	1.4	5.3	-3.2	**-3.1**	**-2.0**	**-0.6**	*-3.0*	*-1.7*	*-0.2*
Japan	0.2	-0.7	0.0	1.5	2.6	0.8	**-0.8**	**-2.6**	**-1.7**	*-0.5*	*-1.2*	*-2.1*
United States	-0.4	-0.7	0.1	0.0	2.3	-2.0	**1.1**	**-0.9**	**-1.2**	*-1.0*	*-0.5*	*-0.1*

[1] Nominal unit labour costs divided by GDP price deflator.

Note: See note 6 on concepts and sources where countries using full time equivalents are listed.

Table 31: Nominal bilateral exchange rates against ecu/euro (2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	:	:	:	:	:	:	:	:	:	:	:	:
Germany	:	:	:	:	:	:	:	:	:	:	:	:
Estonia	:	:	:	:	:	:	:	:	:	:	:	:
Ireland	:	:	:	:	:	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:	:	:	:	:	:
Spain	:	:	:	:	:	:	:	:	:	:	:	:
France	:	:	:	:	:	:	:	:	:	:	:	:
Croatia	:	:	:	:	:	:	:	:	:	:	:	:
Italy	:	:	:	:	:	:	:	:	:	:	:	:
Cyprus	:	:	:	:	:	:	:	:	:	:	:	:
Latvia	:	:	:	:	:	:	:	:	:	:	:	:
Lithuania	:	:	:	:	:	:	:	:	:	:	:	:
Luxembourg	:	:	:	:	:	:	:	:	:	:	:	:
Malta	:	:	:	:	:	:	:	:	:	:	:	:
Netherlands	:	:	:	:	:	:	:	:	:	:	:	:
Austria	:	:	:	:	:	:	:	:	:	:	:	:
Portugal	:	:	:	:	:	:	:	:	:	:	:	:
Slovakia	:	:	:	:	:	:	:	:	:	:	:	:
Slovenia	:	:	:	:	:	:	:	:	:	:	:	:
Finland	:	:	:	:	:	:	:	:	:	:	:	:
Euro area (20)	:	:	:	:	:	:	:	:	:	:	:	:
Bulgaria	1.9553	1.9558	1.9558	1.9558	1.9558	1.9558	**1.9558**	**1.9558**	**1.9558**	*1.9558*	*1.9558*	*1.9558*
Czechia	28.5248	25.4858	26.7625	25.6705	26.4551	25.6385	**24.6008**	**24.5360**	**24.5360**	*25.6462*	*24.4762*	*24.4184*
Denmark	7.4515	7.4492	7.4501	7.4661	7.4542	7.4370	**7.4396**	**7.4385**	**7.4385**	*7.4370*	*7.4398*	*7.4396*
Hungary	253.3236	284.1829	311.6277	325.2967	351.2494	358.4616	**392.2972**	**413.3300**	**413.3300**	*358.5622*	*372.0402*	*374.4420*
Poland	3.9477	4.1650	4.2500	4.2976	4.4430	4.5649	**4.7030**	**4.7881**	**4.7881**	*4.5655*	*4.8578*	*4.9487*
Romania	3.6429	4.3138	4.5204	4.7453	4.8383	4.9214	**4.9308**	**4.9150**	**4.9150**	*4.9212*	*4.9455*	*4.9452*
Sweden	9.3051	9.3059	9.5622	10.5891	10.4848	10.1461	**10.5590**	**10.9876**	**10.9876**	*10.1470*	*10.3558*	*10.3151*
EU	:	:	:	:	:	:	:	:	:	:	:	:
United Kingdom	0.7050	0.8554	0.8225	0.8778	0.8897	0.8595	**0.8464**	**0.8695**	**0.8695**	*0.8597*	*0.8352*	*0.8348*
Japan	146.0047	117.6698	130.2843	122.0058	121.8458	129.8621	**137.3981**	**146.4490**	**146.4490**	*129.8649*	*135.6138*	*137.3780*
United States	1.3169	1.3451	1.1711	1.1195	1.1422	1.1824	**1.0355**	**0.9838**	**0.9838**	*1.1828*	*1.0905*	*1.0797*

Table 32: Nominal effective exchange rates to rest of a group [1] of industrialised countries (percentage change on preceding year, 2004-2024)

31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	0.9	-0.2	0.8	-0.6	1.9	0.5	**-1.8**	**-0.2**	**0.0**	*0.7*	*-0.4*	*-0.1*
Germany	1.0	-0.3	0.9	-0.9	2.4	0.7	**-2.4**	**-0.4**	**0.0**	*1.2*	*-0.6*	*-0.1*
Estonia	0.8	0.1	2.5	-0.3	2.5	0.5	**-2.2**	**-1.2**	**0.0**	*0.4*	*0.0*	*-0.1*
Ireland	1.9	-0.6	0.1	-2.0	1.8	0.9	**-5.2**	**-1.1**	**0.0**	*1.3*	*-2.8*	*-0.3*
Greece	0.8	0.3	2.0	0.0	3.3	1.9	**1.3**	**-0.2**	**0.0**	*2.4*	*2.1*	*0.0*
Spain	0.8	-0.1	0.9	-0.5	2.2	0.6	**-1.5**	**-0.2**	**0.0**	*0.9*	*-0.1*	*-0.1*
France	1.0	-0.4	0.7	-0.9	2.1	0.6	**-2.5**	**-0.2**	**0.0**	*1.1*	*-0.6*	*-0.1*
Croatia	1.5	-0.8	2.1	-0.2	0.7	1.2	**-1.1**	**-0.7**	**0.0**	*1.2*	*0.4*	*0.0*
Italy	1.0	-0.3	1.0	-0.8	2.3	0.9	**-1.4**	**-0.5**	**0.0**	*1.3*	*-0.4*	*-0.1*
Cyprus	0.9	-0.2	0.8	-0.9	2.8	0.5	**-2.6**	**-0.4**	**0.0**	*1.2*	*0.1*	*-0.1*
Latvia	-1.3	0.5	2.9	-0.4	3.5	0.9	**-2.6**	**-2.2**	**0.0**	*0.6*	*0.8*	*0.0*
Lithuania	0.6	0.6	3.4	-0.6	3.8	1.1	**-2.8**	**-2.5**	**0.0**	*0.8*	*0.7*	*0.0*
Luxembourg	0.5	-0.1	0.6	-0.4	1.5	0.4	**-1.0**	**-0.1**	**0.0**	*0.5*	*-0.1*	*0.0*
Malta	1.5	-0.9	0.3	-1.2	1.7	0.8	**-0.7**	**0.2**	**0.0**	*1.3*	*0.1*	*0.0*
Netherlands	0.8	-0.1	0.7	-0.5	1.8	0.4	**-1.5**	**-0.1**	**0.0**	*0.6*	*-0.3*	*-0.1*
Austria	0.5	-0.1	0.8	-0.6	1.8	0.6	**-0.8**	**-0.3**	**0.0**	*0.8*	*-0.4*	*0.0*
Portugal	0.7	-0.2	0.6	-0.4	1.7	0.5	**-1.5**	**-0.2**	**0.0**	*0.6*	*-0.3*	*-0.1*
Slovakia	6.0	1.2	1.0	-0.2	1.8	0.4	**-0.2**	**-0.2**	**0.0**	*0.5*	*0.1*	*0.1*
Slovenia	-0.3	0.4	1.3	-0.2	2.0	0.8	**8.3**	**-0.6**	**0.0**	*0.8*	*0.4*	*0.0*
Finland	1.1	-0.3	1.7	-0.6	2.5	0.5	**-2.7**	**-0.6**	**0.0**	*0.7*	*-0.3*	*-0.1*
Euro area (19)	1.0	-0.3	0.9	-0.8	2.2	0.7	**-2.0**	**-0.4**	**0.0**	*1.0*	*-0.5*	*-0.1*
Bulgaria	0.6	0.6	2.1	0.4	3.3	2.0	**2.1**	**-0.1**	**0.0**	*2.4*	*2.7*	*0.0*
Czechia	5.3	-0.6	1.3	-0.3	-1.3	3.8	**3.9**	**0.0**	**0.0**	*3.9*	*5.3*	*0.3*
Denmark	0.9	-0.5	1.1	-0.6	2.5	0.4	**-2.2**	**0.1**	**0.0**	*0.7*	*-0.8*	*-0.2*
Hungary	0.5	-3.0	-0.4	-2.1	-5.7	-1.4	**-7.0**	**-5.5**	**0.0**	*-1.3*	*-3.3*	*-0.6*
Poland	5.2	-3.1	1.0	-1.1	-1.4	-2.4	**-3.8**	**-2.3**	**0.0**	*-2.4*	*-6.2*	*-1.9*
Romania	1.2	-3.1	0.4	-2.0	0.4	-0.6	**0.6**	**0.2**	**0.0**	*-0.5*	*0.8*	*0.0*
Sweden	0.0	1.9	-2.4	-3.6	3.7	3.4	**-6.3**	**-4.0**	**0.0**	*3.7*	*-3.0*	*0.3*
EU	1.2	-0.4	0.8	-0.9	2.0	0.7	**-2.7**	**-0.6**	**0.0**	*1.0*	*-0.7*	*-0.4*
United Kingdom	-1.4	-2.0	-0.1	-0.3	0.8	4.5	**-2.0**	**-3.3**	**0.0**	*5.2*	*1.9*	*-0.1*
Japan	-0.3	1.9	-0.1	5.1	2.8	-6.2	**-12.1**	**-6.8**	**0.0**	*-5.5*	*-7.8*	*-1.8*
United States	-3.8	0.7	4.5	3.7	2.6	-3.9	**8.2**	**5.2**	**0.0**	*-3.6*	*6.3*	*0.7*

[1] 42 countries: EU-27, TR, CH, NO, US, UK, CA, JP, AU, MX, NZ, KO, CN, HK, RU and BR.

Table 33: Total expenditure, general government (as a percentage of GDP, 2004-2024)

31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	49.9	55.3	53.3	51.9	58.9	55.5	**54.2**	**55.6**	**54.4**	*54.8*	*54.0*	*53.4*
Germany	45.3	46.3	44.3	45.0	50.4	51.3	**49.5**	**49.1**	**47.9**	*51.5*	*48.8*	*46.9*
Estonia	34.9	40.2	39.0	39.4	44.9	41.5	**40.3**	**41.8**	**41.5**	*42.3*	*43.6*	*42.7*
Ireland	35.3	48.4	29.2	24.3	27.3	24.8	**22.2**	**20.7**	**19.6**	*24.9*	*23.0*	*21.2*
Greece	47.2	56.3	50.4	47.8	59.7	57.4	**54.4**	**52.4**	**45.5**	*56.9*	*53.5*	*47.6*
Spain	39.3	46.9	43.0	42.3	51.9	50.6	**48.7**	**47.9**	**46.6**	*50.6*	*48.4*	*47.0*
France	53.0	56.9	56.6	55.4	61.5	59.0	**57.9**	**58.1**	**57.0**	*59.2*	*57.0*	*55.8*
Croatia	46.2	49.0	46.6	46.1	54.0	48.5	**47.2**	**47.4**	**48.0**	*49.2*	*48.6*	*48.5*
Italy	47.3	50.4	49.5	48.5	56.8	55.3	**54.1**	**53.3**	**52.1**	*55.5*	*54.0*	*53.0*
Cyprus	38.5	42.2	41.2	38.1	44.6	43.1	**40.2**	**40.4**	**40.4**	*44.1*	*41.0*	*40.0*
Latvia	35.8	42.1	38.6	38.2	42.2	44.0	**43.3**	**40.6**	**38.2**	*44.9*	*44.0*	*39.4*
Lithuania	35.2	40.3	34.3	34.7	42.7	37.5	**37.6**	**39.9**	**37.8**	*38.7*	*41.5*	*39.3*
Luxembourg	40.4	41.9	40.9	43.1	46.7	42.9	**43.3**	**44.7**	**43.5**	*42.3*	*42.7*	*42.3*
Malta	41.9	41.2	37.1	36.1	46.0	44.8	**43.1**	**42.5**	**39.8**	*45.5*	*43.9*	*42.8*
Netherlands	43.2	47.4	43.9	42.1	47.8	46.6	**44.8**	**46.8**	**44.9**	*46.3*	*45.2*	*44.6*
Austria	50.9	52.1	50.3	48.6	56.7	56.0	**52.3**	**51.7**	**51.0**	*55.9*	*51.9*	*50.3*
Portugal	45.6	50.2	46.7	42.5	49.2	47.8	**45.9**	**45.5**	**45.0**	*48.1*	*46.1*	*45.1*
Slovakia	38.0	42.3	42.1	40.5	44.8	46.3	**45.0**	**47.1**	**44.7**	*46.8*	*44.2*	*43.3*
Slovenia	45.4	52.0	46.7	43.2	51.2	49.3	**46.6**	**48.2**	**45.5**	*49.1*	*47.3*	*46.3*
Finland	48.1	54.8	55.3	53.3	57.1	55.5	**53.5**	**54.2**	**53.6**	*54.9*	*53.9*	*53.4*
Euro area (20)	46.5	50.3	47.9	46.9	53.5	52.3	**50.5**	**50.3**	**49.0**	*52.4*	*50.3*	*48.8*
Bulgaria	36.6	36.2	38.0	36.3	41.5	40.6	**43.7**	**43.0**	**41.9**	*43.1*	*43.9*	*43.1*
Czechia	41.5	43.7	40.8	41.1	47.2	46.5	**45.2**	**46.0**	**43.2**	*46.4*	*44.5*	*43.7*
Denmark	50.8	56.7	52.7	49.7	53.5	50.8	**48.2**	**47.9**	**47.8**	*51.0*	*48.3*	*47.1*
Hungary	49.6	49.5	48.0	46.1	51.1	48.4	**49.3**	**49.0**	**47.7**	*47.9*	*47.3*	*46.4*
Poland	43.8	44.5	41.8	41.9	48.2	44.2	**44.1**	**46.3**	**45.0**	*44.2*	*43.9*	*43.0*
Romania	35.6	37.9	34.9	36.0	41.5	39.9	**39.7**	**38.0**	**36.8**	*39.9*	*41.1*	*39.6*
Sweden	51.0	51.1	49.8	49.1	52.1	49.5	**48.9**	**48.0**	**47.7**	*50.2*	*49.1*	*47.2*
EU	46.6	49.9	47.5	46.6	52.8	51.5	**49.8**	**49.7**	**48.4**	*51.6*	*49.6*	*48.2*
United Kingdom	41.4	45.9	41.7	40.6	52.1	48.2	**46.7**	**44.4**	**43.7**	*47.8*	*43.6*	*42.1*
Japan	34.9	40.1	38.8	38.8	46.1	44.6	**44.7**	**42.0**	**40.6**	*44.2*	*43.1*	*40.6*
United States	37.5	41.4	38.1	38.2	47.4	45.1	**39.7**	**40.1**	**40.2**	*45.0*	*38.1*	*37.0*

Table 34: Total revenue, general government (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	49.1	51.0	51.5	49.9	49.9	49.9	48.9	49.8	49.3	49.3	49.0	49.0
Germany	43.7	44.6	45.5	46.5	46.1	47.5	47.2	46.0	45.3	47.8	46.3	45.9
Estonia	36.2	40.0	38.9	39.5	39.4	39.0	38.0	38.1	38.2	40.0	39.3	39.1
Ireland	35.1	33.5	27.9	24.7	22.3	23.2	22.3	21.5	20.8	23.0	22.4	21.6
Greece	39.7	44.4	48.8	49.0	49.8	50.0	50.3	50.5	44.7	49.4	49.2	46.6
Spain	39.4	36.9	38.7	39.2	41.8	43.7	44.1	43.6	43.0	43.7	43.6	42.6
France	49.9	51.3	53.3	52.3	52.5	52.5	52.9	52.8	51.9	52.8	52.4	52.7
Croatia	43.2	42.5	44.8	46.3	46.7	46.0	45.7	45.1	45.2	46.4	46.4	46.7
Italy	44.3	46.6	47.0	47.0	47.3	48.1	49.0	49.7	47.9	48.3	48.5	48.7
Cyprus	37.9	36.7	39.0	39.4	38.8	41.4	41.3	41.6	42.0	42.4	40.7	39.9
Latvia	34.4	37.1	37.7	37.6	37.8	37.0	36.3	37.2	36.9	37.6	36.7	36.4
Lithuania	34.0	34.2	34.3	35.2	35.6	36.5	35.8	35.5	36.0	37.7	37.0	37.0
Luxembourg	42.0	42.1	42.7	45.4	43.3	43.7	43.2	43.0	43.0	43.2	42.6	42.4
Malta	38.8	38.4	37.9	36.6	36.7	37.0	37.0	36.8	35.4	37.5	38.3	38.2
Netherlands	42.7	43.0	43.6	43.9	44.1	44.0	43.8	42.8	41.9	43.8	42.5	42.6
Austria	48.3	48.9	49.2	49.2	48.7	50.0	48.8	48.9	49.1	50.0	48.8	48.9
Portugal	41.0	42.1	43.3	42.6	43.4	44.9	44.0	44.4	44.2	45.3	44.2	44.1
Slovakia	35.3	36.9	40.0	39.3	39.4	40.9	40.8	41.3	40.1	40.7	40.5	40.7
Slovenia	44.2	44.7	44.7	43.8	43.4	44.6	43.0	43.0	42.7	43.9	43.0	42.9
Finland	51.8	52.6	53.6	52.4	51.6	52.8	52.1	51.9	51.4	52.4	51.7	51.7
Euro area (20)	44.6	45.5	46.4	46.3	46.4	47.2	47.1	46.7	45.7	47.3	46.6	46.3
Bulgaria	38.1	33.9	37.3	38.4	37.7	36.7	40.4	40.2	39.4	39.0	40.2	40.7
Czechia	39.5	40.2	40.9	41.3	41.5	41.4	40.8	41.9	40.2	40.5	40.2	39.8
Denmark	54.9	54.2	53.1	53.8	53.8	54.4	49.9	48.4	48.2	53.3	49.2	47.7
Hungary	43.1	45.7	45.8	44.0	43.5	41.3	43.1	44.6	42.5	41.1	41.3	41.4
Poland	40.2	38.9	39.7	41.1	41.3	42.4	39.3	40.8	39.9	42.3	39.9	38.6
Romania	33.2	32.3	33.0	31.6	32.3	32.8	33.1	33.0	32.1	32.8	33.6	33.3
Sweden	52.9	50.3	50.1	49.7	49.3	49.4	49.1	48.2	47.7	50.0	48.7	47.7
EU	44.8	45.4	46.2	46.0	46.1	46.8	46.4	46.1	45.2	46.9	46.0	45.7
United Kingdom	38.1	37.8	38.1	38.4	39.3	40.2	40.3	40.0	40.0	39.5	39.7	39.8
Japan	30.9	31.4	35.1	35.7	37.2	37.6	37.8	37.3	37.1	36.6	36.6	36.4
United States	32.5	31.1	33.0	31.8	32.2	33.2	33.8	33.5	33.1	33.3	32.4	32.2

Table 35: Net lending (+) or net borrowing (-), general government (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	-0.7	-4.3	-1.9	-1.9	-9.0	-5.6	-5.2	-5.8	-5.1	-5.5	-5.0	-4.4
Germany	-1.6	-1.7	1.2	1.5	-4.3	-3.7	-2.3	-3.1	-2.6	-3.7	-2.5	-1.0
Estonia	1.3	-0.2	-0.1	0.1	-5.5	-2.4	-2.3	-3.7	-3.3	-2.4	-4.4	-3.7
Ireland	-0.2	-14.9	-1.3	0.5	-5.0	-1.7	0.2	0.8	1.2	-1.9	-0.5	0.4
Greece	-7.6	-11.9	-1.6	1.1	-9.9	-7.5	-4.1	-1.8	-0.8	-7.4	-4.3	-1.0
Spain	0.1	-9.9	-4.3	-3.1	-10.1	-6.9	-4.6	-4.3	-3.6	-6.9	-4.9	-4.4
France	-3.1	-5.7	-3.3	-3.1	-9.0	-6.5	-5.0	-5.3	-5.1	-6.5	-4.6	-3.2
Croatia	-3.0	-6.5	-1.8	0.2	-7.3	-2.6	-1.6	-2.4	-2.7	-2.9	-2.3	-1.8
Italy	-3.0	-3.8	-2.5	-1.5	-9.5	-7.2	-5.1	-3.6	-4.2	-7.2	-5.5	-4.3
Cyprus	-0.6	-5.4	-2.2	1.3	-5.8	-1.7	1.1	1.1	1.6	-1.7	-0.3	-0.2
Latvia	-1.4	-5.0	-0.9	-0.6	-4.3	-7.0	-7.1	-3.4	-1.3	-7.3	-7.2	-3.0
Lithuania	-1.2	-6.2	0.1	0.5	-7.0	-1.0	-1.9	-4.4	-1.8	-1.0	-4.6	-2.3
Luxembourg	1.6	0.3	1.8	2.2	-3.4	0.8	-0.1	-1.7	-0.5	0.9	-0.1	0.1
Malta	-3.1	-2.8	0.8	0.6	-9.4	-7.8	-6.0	-5.7	-4.4	-8.0	-5.6	-4.6
Netherlands	-0.5	-4.4	-0.2	1.8	-3.7	-2.6	-1.1	-4.0	-3.1	-2.5	-2.7	-2.1
Austria	-2.5	-3.3	-1.2	0.6	-8.0	-5.9	-3.4	-2.8	-1.9	-5.9	-3.1	-1.5
Portugal	-4.6	-8.0	-3.4	0.1	-5.8	-2.9	-1.9	-1.1	-0.8	-2.8	-1.9	-1.0
Slovakia	-2.7	-5.4	-2.1	-1.2	-5.4	-5.5	-4.2	-5.8	-4.7	-6.2	-3.6	-2.6
Slovenia	-1.2	-7.3	-1.9	0.6	-7.7	-4.7	-3.6	-5.2	-2.7	-5.2	-4.3	-3.4
Finland	3.6	-2.1	-1.7	-0.9	-5.5	-2.7	-1.4	-2.3	-2.3	-2.6	-2.2	-1.7
Euro area (20)	-2.0	-4.7	-1.5	-0.6	-7.0	-5.1	-3.5	-3.7	-3.3	-5.1	-3.7	-2.5
Bulgaria	1.5	-2.3	-0.7	2.1	-3.8	-3.9	-3.4	-2.8	-2.5	-4.1	-3.7	-2.4
Czechia	-2.0	-3.5	0.1	0.3	-5.8	-5.1	-4.3	-4.1	-3.0	-5.9	-4.3	-3.9
Denmark	4.0	-2.5	0.5	4.1	0.2	3.6	1.8	0.5	0.4	2.3	0.9	0.6
Hungary	-6.5	-3.9	-2.2	-2.0	-7.5	-7.1	-6.2	-4.4	-5.2	-6.8	-6.0	-4.9
Poland	-3.6	-5.6	-2.1	-0.7	-6.9	-1.8	-4.8	-5.5	-5.2	-1.9	-4.0	-4.4
Romania	-2.4	-5.7	-1.9	-4.3	-9.2	-7.1	-6.5	-5.0	-4.8	-7.1	-7.5	-6.3
Sweden	1.9	-0.8	0.3	0.6	-2.8	-0.1	0.2	0.2	0.0	-0.2	-0.5	0.5
EU	-1.8	-4.6	-1.4	-0.5	-6.7	-4.6	-3.4	-3.6	-3.2	-4.7	-3.6	-2.5
United Kingdom	-3.3	-8.1	-3.6	-2.2	-12.8	-8.0	-6.4	-4.4	-3.7	-8.3	-3.9	-2.3
Japan	-4.1	-8.7	-3.7	-3.0	-9.0	-7.0	-6.9	-4.7	-3.4	-7.6	-6.5	-4.1
United States	-5.0	-10.3	-5.1	-6.4	-15.2	-11.9	-5.9	-6.7	-7.1	-11.7	-5.7	-4.9

Table 36: Interest expenditure, general government (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	4.3	3.5	2.6	2.0	1.9	1.7	**1.5**	**1.6**	**1.7**	*1.7*	*1.4*	*1.4*
Germany	2.7	2.3	1.2	0.8	0.6	0.6	**0.6**	**0.7**	**0.8**	*0.6*	*0.5*	*0.5*
Estonia	0.2	0.1	0.0	0.0	0.0	0.0	**0.1**	**0.3**	**0.4**	*0.0*	*0.0*	*0.2*
Ireland	1.1	3.3	2.5	1.3	1.0	0.8	**0.7**	**0.7**	**0.7**	*0.8*	*0.8*	*0.7*
Greece	4.6	5.6	3.5	3.0	3.0	2.5	**2.4**	**3.0**	**3.0**	*2.5*	*2.4*	*2.3*
Spain	1.7	2.5	2.9	2.3	2.2	2.2	**2.2**	**2.3**	**2.2**	*2.2*	*2.1*	*2.0*
France	2.7	2.5	1.9	1.4	1.3	1.4	**1.8**	**2.5**	**2.9**	*1.4*	*1.4*	*1.5*
Croatia	1.7	2.7	3.0	2.2	2.0	1.5	**1.3**	**1.1**	**1.1**	*1.6*	*1.4*	*1.3*
Italy	4.6	4.7	4.0	3.4	3.5	3.6	**4.0**	**4.0**	**4.1**	*3.5*	*3.5*	*3.2*
Cyprus	2.9	2.6	2.8	2.2	2.1	1.8	**1.5**	**1.3**	**1.2**	*1.8*	*1.6*	*1.3*
Latvia	0.5	1.7	1.0	0.7	0.6	0.5	**0.5**	**0.6**	**0.5**	*0.5*	*0.6*	*0.6*
Lithuania	0.7	1.7	1.3	0.9	0.7	0.4	**0.3**	**0.4**	**0.6**	*0.4*	*0.3*	*0.3*
Luxembourg	0.2	0.5	0.4	0.3	0.2	0.2	**0.2**	**0.2**	**0.3**	*0.2*	*0.1*	*0.1*
Malta	3.6	3.0	2.1	1.3	1.3	1.1	**1.1**	**1.3**	**1.3**	*1.2*	*1.1*	*1.1*
Netherlands	2.1	1.8	1.2	0.8	0.7	0.6	**0.6**	**0.6**	**0.6**	*0.6*	*0.4*	*0.4*
Austria	3.1	2.8	2.1	1.4	1.3	1.1	**1.1**	**1.1**	**1.2**	*1.1*	*1.0*	*1.0*
Portugal	2.8	4.0	4.1	3.0	2.9	2.4	**2.1**	**2.5**	**2.5**	*2.4*	*2.2*	*2.2*
Slovakia	1.6	1.6	1.6	1.2	1.2	1.1	**1.0**	**1.0**	**1.1**	*1.1*	*1.1*	*1.0*
Slovenia	1.4	1.9	2.8	1.7	1.6	1.2	**1.1**	**1.1**	**1.1**	*1.3*	*1.2*	*1.1*
Finland	1.5	1.3	1.1	0.9	0.7	0.5	**0.6**	**0.7**	**0.8**	*0.5*	*0.5*	*0.5*
Euro area (20)	2.9	2.9	2.2	1.6	1.5	1.5	**1.6**	**1.8**	**1.9**	*1.5*	*1.4*	*1.3*
Bulgaria	1.3	0.7	0.8	0.6	0.5	0.5	**0.5**	**0.5**	**0.5**	*0.5*	*0.5*	*0.5*
Czechia	1.0	1.3	0.9	0.7	0.8	0.8	**1.1**	**1.2**	**1.2**	*0.7*	*0.9*	*0.9*
Denmark	1.9	1.9	1.2	0.7	0.6	0.6	**0.6**	**0.5**	**0.5**	*0.5*	*0.6*	*0.5*
Hungary	4.1	4.4	3.1	2.2	2.3	2.3	**2.9**	**3.1**	**3.4**	*2.3*	*2.7*	*3.0*
Poland	2.4	2.6	1.7	1.4	1.3	1.1	**1.7**	**2.8**	**2.9**	*1.1*	*1.5*	*1.8*
Romania	1.0	2.0	1.4	1.0	1.2	1.3	**1.8**	**2.0**	**2.2**	*1.4*	*1.5*	*1.6*
Sweden	1.7	1.1	0.5	0.4	0.3	0.2	**0.3**	**0.4**	**0.3**	*0.2*	*0.1*	*0.2*
EU	2.8	2.8	2.0	1.5	1.4	1.4	**1.5**	**1.7**	**1.9**	*1.4*	*1.3*	*1.3*
United Kingdom	2.0	2.7	2.5	2.1	1.9	2.7	**3.3**	**3.2**	**3.2**	*2.7*	*3.0*	*3.0*
Japan	1.9	1.9	1.7	1.5	1.5	1.4	**1.4**	**1.4**	**1.4**	*1.5*	*1.4*	*1.3*
United States	3.9	4.2	3.9	4.1	3.9	3.6	**3.5**	**3.8**	**4.2**	*3.5*	*3.2*	*3.1*

Table 37: Primary balance, general government [1] (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	3.5	-0.7	0.8	0.0	-7.0	-3.9	**-3.7**	**-4.2**	**-3.4**	*-3.9*	*-3.5*	*-3.1*
Germany	1.1	0.7	2.4	2.3	-3.7	-3.2	**-1.7**	**-2.4**	**-1.8**	*-3.1*	*-2.0*	*-0.5*
Estonia	1.5	-0.1	-0.1	0.1	-5.4	-2.4	**-2.2**	**-3.4**	**-2.9**	*-2.3*	*-4.3*	*-3.5*
Ireland	0.9	-11.5	1.2	1.8	-4.0	-0.9	**0.9**	**1.5**	**1.9**	*-1.1*	*0.3*	*1.1*
Greece	-2.9	-6.3	1.9	4.1	-6.9	-5.0	**-1.6**	**1.1**	**2.2**	*-5.0*	*-1.9*	*1.3*
Spain	1.8	-7.4	-1.4	-0.8	-7.9	-4.7	**-2.4**	**-2.0**	**-1.4**	*-4.7*	*-2.8*	*-2.4*
France	-0.3	-3.1	-1.4	-1.6	-7.7	-5.1	**-3.2**	**-2.8**	**-2.1**	*-5.1*	*-3.2*	*-1.7*
Croatia	-1.3	-3.8	1.1	2.4	-5.3	-1.0	**-0.3**	**-1.2**	**-1.6**	*-1.3*	*-0.9*	*-0.5*
Italy	1.6	0.9	1.5	1.9	-6.0	-3.7	**-1.1**	**0.4**	**-0.1**	*-3.7*	*-2.0*	*-1.1*
Cyprus	2.3	-2.8	0.5	3.5	-3.7	0.1	**2.6**	**2.5**	**2.9**	*0.2*	*1.3*	*1.1*
Latvia	-0.9	-3.3	0.1	0.1	-3.7	-6.5	**-6.6**	**-2.8**	**-0.8**	*-6.8*	*-6.7*	*-2.4*
Lithuania	-0.4	-4.4	1.3	1.3	-6.4	-0.5	**-1.6**	**-4.0**	**-1.2**	*-0.6*	*-4.2*	*-2.0*
Luxembourg	1.9	0.7	2.2	2.6	-3.2	1.0	**0.1**	**-1.5**	**-0.3**	*1.0*	*0.0*	*0.2*
Malta	0.5	0.2	2.9	1.9	-8.1	-6.6	**-4.9**	**-4.4**	**-3.1**	*-6.8*	*-4.4*	*-3.5*
Netherlands	1.6	-2.6	0.9	2.6	-3.0	-2.0	**-0.5**	**-3.4**	**-2.5**	*-2.0*	*-2.3*	*-1.7*
Austria	0.5	-0.5	0.9	2.0	-6.7	-4.8	**-2.3**	**-1.7**	**-0.7**	*-4.8*	*-2.1*	*-0.5*
Portugal	-1.8	-4.1	0.7	3.1	-2.9	-0.5	**0.2**	**1.4**	**1.7**	*-0.4*	*0.3*	*1.2*
Slovakia	-1.0	-3.8	-0.4	0.0	-4.2	-4.4	**-3.2**	**-4.8**	**-3.6**	*-5.0*	*-2.6*	*-1.5*
Slovenia	0.2	-5.4	0.9	2.3	-6.1	-3.4	**-2.5**	**-4.1**	**-1.6**	*-3.9*	*-3.2*	*-2.3*
Finland	5.1	-0.8	-0.6	-0.1	-4.8	-2.2	**-0.8**	**-1.6**	**-1.4**	*-2.1*	*-1.7*	*-1.2*
Euro area (20)	1.0	-1.8	0.7	1.0	-5.5	-3.6	**-1.9**	**-1.9**	**-1.4**	*-3.6*	*-2.3*	*-1.1*
Bulgaria	2.8	-1.5	0.1	2.7	-3.3	-3.4	**-2.9**	**-2.3**	**-2.0**	*-3.6*	*-3.1*	*-1.9*
Czechia	-1.0	-2.2	1.0	1.0	-5.0	-4.3	**-3.3**	**-2.9**	**-1.8**	*-5.1*	*-3.4*	*-3.0*
Denmark	5.9	-0.6	1.6	4.9	0.8	4.2	**2.3**	**1.0**	**0.9**	*2.9*	*1.5*	*1.1*
Hungary	-2.4	0.5	0.9	0.2	-5.2	-4.9	**-3.2**	**-1.3**	**-1.9**	*-4.4*	*-3.3*	*-1.9*
Poland	-1.2	-3.0	-0.4	0.6	-5.6	-0.7	**-3.1**	**-2.8**	**-2.3**	*-0.8*	*-2.5*	*-2.6*
Romania	-1.4	-3.6	-0.6	-3.3	-8.0	-5.8	**-4.7**	**-3.1**	**-2.6**	*-5.7*	*-6.0*	*-4.7*
Sweden	3.6	0.3	0.8	1.0	-2.5	0.1	**0.6**	**0.6**	**0.3**	*0.0*	*-0.3*	*0.7*
EU	1.0	-1.8	0.7	1.0	-5.3	-3.3	**-1.8**	**-1.8**	**-1.4**	*-3.3*	*-2.2*	*-1.2*
United Kingdom	-1.3	-5.4	-1.1	-0.1	-10.9	-5.3	**-3.1**	**-1.2**	**-0.6**	*-5.6*	*-0.8*	*0.7*
Japan	-2.1	-6.8	-2.0	-1.6	-7.5	-5.6	**-5.5**	**-3.3**	**-2.1**	*-6.2*	*-5.1*	*-2.8*
United States	-1.0	-6.1	-1.2	-2.3	-11.3	-8.2	**-2.4**	**-2.8**	**-2.9**	*-8.2*	*-2.5*	*-1.8*

[1] Net lending/borrowing excluding interest expenditure.

Table 38: Cyclically-adjusted net lending (+) or net borrowing (-), general government[1] (as a percentage of potential GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	-1.5	-3.7	-2.0	-3.0	-6.0	-5.3	-5.6	-5.3	-4.5	-4.9	-4.7	-4.2
Germany	-1.7	-1.1	0.9	0.8	-2.9	-3.3	-2.3	-2.4	-2.2	-2.7	-1.8	-1.0
Estonia	-1.6	2.1	-0.3	-0.4	-4.0	-3.1	-1.6	-2.5	-2.3	-2.3	-3.7	-3.0
Ireland	-0.8	-13.8	-2.3	2.7	-2.2	-2.9	-2.4	-0.8	0.3	-3.2	-2.0	-0.9
Greece	-7.8	-5.0	5.6	4.8	-2.3	-3.8	-3.1	-1.1	-0.5	-4.6	-3.0	-0.9
Spain	-1.8	-6.0	-2.3	-4.2	-4.4	-4.0	-3.8	-3.5	-3.4	-3.9	-3.5	-4.3
France	-4.1	-4.5	-2.8	-4.4	-4.9	-5.8	-5.1	-5.0	-5.0	-5.4	-4.6	-3.4
Croatia	-4.8	-5.4	-1.2	-0.9	-3.8	-3.0	-3.1	-3.1	-3.1	-3.0	-2.6	-2.2
Italy	-4.1	-2.4	-1.3	-1.9	-5.0	-6.2	-5.5	-3.9	-4.5	-5.9	-5.3	-4.5
Cyprus	-2.6	-4.1	-1.0	-1.3	-4.5	-2.1	-0.7	0.2	1.1	-2.0	-0.4	-0.7
Latvia	-3.6	-2.7	-1.5	-1.4	-3.5	-6.7	-6.9	-2.5	-0.8	-6.7	-6.6	-2.7
Lithuania	-3.2	-3.9	-0.6	-1.0	-6.9	-1.4	-1.8	-3.5	-0.9	-0.9	-4.0	-1.5
Luxembourg	0.9	1.4	2.1	2.4	-2.1	0.8	0.2	-0.8	0.3	0.9	0.1	0.4
Malta	-3.1	-2.0	-0.7	-1.4	-5.7	-7.1	-6.0	-5.2	-3.8	-7.4	-5.2	-4.3
Netherlands	-0.5	-3.0	0.1	0.9	-1.3	-2.0	-2.1	-4.3	-3.1	-2.1	-3.2	-2.5
Austria	-2.9	-2.7	-1.1	-0.6	-5.0	-4.6	-4.1	-2.9	-1.8	-4.4	-3.0	-1.6
Portugal	-4.3	-6.7	-3.1	-1.7	-2.4	-1.3	-2.8	-1.4	-1.0	-1.1	-2.1	-1.5
Slovakia	-3.6	-4.7	-2.0	-2.1	-4.5	-5.3	-4.3	-5.5	-4.4	-5.7	-3.3	-2.6
Slovenia	-3.5	-5.3	-0.9	-1.0	-6.1	-5.5	-5.8	-6.4	-3.4	-6.1	-5.5	-4.5
Finland	2.6	-0.8	-1.0	-1.2	-3.9	-2.1	-1.1	-1.5	-1.6	-2.0	-1.7	-1.4
Euro area (20)	-2.7	-3.3	-0.9	-1.4	-3.9	-4.2	-3.7	-3.4	-3.2	-4.0	-3.3	-2.6
Bulgaria	0.9	-2.3	-0.5	1.7	-2.3	-3.9	-3.8	-2.9	-2.8	-3.8	-3.5	-2.7
Czechia	-3.5	-2.9	0.0	-0.9	-4.3	-4.6	-4.0	-3.1	-2.1	-4.9	-3.4	-3.5
Denmark	2.3	-0.5	1.3	4.4	2.5	4.2	1.6	1.2	1.2	3.5	1.9	1.7
Hungary	-7.7	-2.1	-2.8	-3.8	-5.6	-6.7	-6.7	-3.7	-4.5	-6.7	-5.8	-4.4
Poland	-3.8	-5.8	-2.0	-2.3	-5.7	-2.3	-5.2	-4.7	-4.2	-1.6	-3.7	-4.0
Romania	-4.2	-4.8	-1.8	-4.8	-7.5	-6.0	-6.3	-4.6	-4.3	-6.3	-6.5	-5.4
Sweden	1.1	0.5	0.3	0.5	-0.7	0.3	-0.1	1.0	1.1	0.5	0.0	1.2
EU	-2.6	-3.2	-0.9	-1.3	-3.7	-3.9	-3.6	-3.2	-3.0	-3.6	-3.2	-2.5

[1] Cyclically-adjusted variables for Croatia are based on provisional values for fiscal semi-elasticities and subject to further revisions

Table 39: Cyclically-adjusted primary balance, general government[1] (as a percentage of potential GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	2.8	-0.1	0.7	-1.0	-4.0	-3.6	-4.1	-3.7	-2.8	-3.2	-3.2	-2.9
Germany	1.1	1.3	2.2	1.6	-2.3	-2.7	-1.6	-1.7	-1.4	-2.1	-1.2	-0.4
Estonia	-1.4	2.2	-0.3	-0.4	-3.9	-3.1	-1.6	-2.2	-1.9	-2.3	-3.6	-2.8
Ireland	0.3	-10.5	0.2	4.0	-1.2	-2.1	-1.7	-0.1	1.0	-2.4	-1.2	-0.2
Greece	-3.2	0.6	9.1	7.8	0.7	-1.3	-0.7	1.9	2.5	-2.2	-0.7	1.4
Spain	-0.1	-3.5	0.5	-2.0	-2.2	-1.9	-1.6	-1.2	-1.2	-1.8	-1.5	-2.3
France	-1.4	-2.0	-1.0	-3.0	-3.6	-4.4	-3.3	-2.5	-2.1	-4.0	-3.2	-1.9
Croatia	-3.1	-2.7	1.8	1.3	-1.8	-1.5	-1.8	-2.0	-2.0	-1.5	-1.2	-1.0
Italy	0.5	2.3	2.7	1.5	-1.5	-2.6	-1.6	0.1	-0.4	-2.4	-1.8	-1.3
Cyprus	0.3	-1.6	1.7	0.9	-2.4	-0.3	0.8	1.6	2.4	-0.1	1.1	0.6
Latvia	-3.0	-1.1	-0.4	-0.7	-2.8	-6.2	-6.4	-1.9	-0.3	-6.2	-6.0	-2.1
Lithuania	-2.4	-2.1	0.7	-0.1	-6.2	-0.9	-1.5	-3.0	-0.3	-0.4	-3.7	-1.2
Luxembourg	1.2	1.8	2.4	2.8	-1.9	0.9	0.4	-0.6	0.6	1.1	0.2	0.6
Malta	0.5	1.1	1.4	-0.1	-4.3	-6.0	-4.9	-3.9	-2.5	-6.2	-4.0	-3.2
Netherlands	1.6	-1.2	1.3	1.7	-0.6	-1.4	-1.5	-3.7	-2.5	-1.6	-2.8	-2.2
Austria	0.2	0.1	1.0	0.8	-3.7	-3.5	-3.0	-1.8	-0.6	-3.3	-2.0	-0.6
Portugal	-1.5	-2.8	1.1	1.3	0.5	1.1	-0.7	1.1	1.4	1.4	0.2	0.7
Slovakia	-2.0	-3.2	-0.4	-0.9	-3.3	-4.3	-3.2	-4.5	-3.3	-4.6	-2.3	-1.5
Slovenia	-2.1	-3.4	1.9	0.7	-4.5	-4.3	-4.7	-5.4	-2.2	-4.8	-4.3	-3.4
Finland	4.1	0.6	0.1	-0.3	-3.2	-1.5	-0.6	-0.8	-0.8	-1.5	-1.2	-0.9
Euro area (20)	0.2	-0.4	1.3	0.2	-2.3	-2.8	-2.1	-1.6	-1.3	-2.5	-2.0	-1.2
Bulgaria	2.2	-1.5	0.3	2.3	-1.8	-3.4	-3.3	-2.5	-2.3	-3.3	-3.0	-2.2
Czechia	-2.4	-1.6	0.9	-0.2	-3.5	-3.8	-2.9	-1.9	-0.9	-4.2	-2.5	-2.5
Denmark	4.2	1.4	2.5	5.1	3.0	4.7	2.2	1.8	1.7	4.1	2.4	2.2
Hungary	-3.7	2.3	0.3	-1.6	-3.3	-4.5	-3.7	-0.6	-1.1	-4.4	-3.1	-1.4
Poland	-1.5	-3.2	-0.3	-0.9	-4.4	-1.2	-3.5	-2.0	-1.4	-0.5	-2.2	-2.2
Romania	-3.2	-2.8	-0.4	-3.8	-6.3	-4.7	-4.5	-2.7	-2.2	-4.9	-5.0	-3.8
Sweden	2.8	1.6	0.8	0.9	-0.4	0.5	0.3	1.4	1.5	0.8	0.1	1.3
EU	0.3	-0.4	1.2	0.2	-2.3	-2.5	-2.0	-1.5	-1.1	-2.2	-1.9	-1.2

[1] Cyclically-adjusted variables for Croatia are based on provisional values for fiscal semi-elasticities and subject to further revisions

Table 40: Structural budget balance, general government[1] (as a percentage of potential GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	:	:	-2.2	-3.2	-6.1	-5.1	-5.6	-5.2	-4.4	-4.6	-4.5	-4.2
Germany	:	:	1.1	0.8	-2.9	-3.1	-2.0	-2.4	-2.2	-2.6	-1.8	-1.0
Estonia	:	:	-0.2	-0.4	-4.0	-4.1	-1.8	-2.5	-2.3	-3.3	-3.8	-3.0
Ireland	:	:	-2.1	2.7	-2.2	-2.9	-2.4	-0.8	0.3	-3.2	-2.0	-0.9
Greece	:	:	6.1	3.8	-2.9	-4.6	-3.4	-1.1	-0.5	-5.5	-3.0	-0.9
Spain	:	:	-2.0	-3.8	-3.9	-3.9	-3.7	-3.5	-3.4	-3.8	-3.5	-4.3
France	:	:	-2.8	-3.5	-4.8	-5.7	-5.0	-4.9	-4.9	-5.3	-4.5	-3.3
Croatia	:	:	-1.3	-0.9	-3.8	-3.0	-3.1	-3.1	-3.1	-3.1	-2.7	-2.3
Italy	:	:	-1.4	-1.9	-5.1	-6.6	-6.0	-4.1	-4.6	-6.3	-5.8	-4.8
Cyprus	:	:	2.5	-0.1	-4.5	-2.2	-0.7	0.2	1.1	-2.1	-0.4	-0.7
Latvia	:	:	-1.4	-1.4	-3.6	-6.8	-6.9	-2.5	-0.8	-6.9	-6.6	-2.7
Lithuania	:	:	-0.7	-1.1	-6.9	-1.4	-1.8	-3.5	-0.9	-0.9	-4.0	-1.5
Luxembourg	:	:	2.0	2.4	-2.1	0.8	0.2	-0.8	0.3	0.9	0.1	0.4
Malta	:	:	-0.7	-1.5	-5.7	-7.1	-6.0	-5.2	-3.8	-7.4	-5.2	-4.3
Netherlands	:	:	0.0	0.8	-1.3	-1.9	-2.1	-4.3	-3.1	-2.0	-3.2	-2.5
Austria	:	:	-0.7	-0.6	-5.0	-4.6	-4.1	-2.9	-1.8	-4.4	-3.0	-1.6
Portugal	:	:	:	-1.0	-1.7	-1.6	-2.6	-1.2	-1.0	-1.3	-1.9	-1.5
Slovakia	:	:	-2.0	-2.1	-4.5	-5.3	-4.3	-5.5	-4.4	-5.7	-3.3	-2.6
Slovenia	-3.5	-5.3	-0.5	-1.0	-6.0	-5.5	-5.8	-6.4	-3.4	-6.1	-5.5	-4.5
Finland	:	:	:	-1.3	-3.9	-2.1	-1.1	-1.5	-1.6	-2.0	-1.7	-1.4
Euro area (20)	-0.7	1.4	-0.8	-1.2	-3.8	-4.2	-3.6	-3.4	-3.2	-4.0	-3.4	-2.6
Bulgaria	:	:	0.1	1.7	-2.3	-3.9	-3.8	-2.9	-2.8	-3.8	-3.5	-2.7
Czechia	:	:	0.1	-0.9	-4.3	-4.6	-3.8	-3.1	-2.1	-4.9	-3.1	-3.5
Denmark	:	:	0.4	4.4	2.5	4.2	1.6	1.7	1.2	3.5	1.9	2.2
Hungary	:	:	-2.9	-3.6	-5.7	-6.6	-6.7	-3.7	-4.5	-6.6	-5.8	-4.4
Poland	:	:	-2.0	-2.3	-6.0	-2.5	-5.5	-4.7	-4.2	-1.8	-4.0	-4.0
Romania	:	:	-1.7	-4.7	-7.5	-6.0	-6.3	-4.6	-4.3	-6.3	-6.5	-5.4
Sweden	:	:	0.3	0.5	-0.7	0.3	-0.1	1.0	1.1	0.5	0.0	1.2
EU	:	:	:	-1.1	-3.7	-3.9	-3.6	-3.2	-3.0	-3.6	-3.3	-2.5

Table 41: Gross debt, general government (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	92.9	102.9	103.8	97.6	112.0	109.2	106.2	107.9	108.6	108.2	107.5	107.6
Germany	65.9	78.7	68.4	58.9	68.0	68.6	67.4	66.3	65.4	69.3	66.4	64.5
Estonia	4.5	8.0	9.6	8.5	18.5	17.6	18.7	19.3	21.9	18.1	20.9	23.5
Ireland	28.8	99.6	77.2	57.0	58.4	55.4	44.7	41.2	39.3	56.0	50.3	45.5
Greece	105.3	157.9	180.7	180.6	206.3	194.5	171.1	161.9	156.9	193.3	185.7	180.4
Spain	40.5	74.8	102.7	98.2	120.4	118.3	114.0	112.5	112.1	118.4	115.1	113.7
France	66.2	88.0	96.9	97.4	115.0	112.8	111.7	110.8	110.2	112.9	111.2	109.1
Croatia	39.1	63.8	79.4	71.0	87.0	78.4	70.0	67.2	68.0	79.8	75.3	73.1
Italy	105.7	122.9	134.8	134.1	154.9	150.3	144.6	143.6	142.6	150.8	147.9	146.8
Cyprus	57.4	72.0	101.8	90.4	113.5	101.0	89.6	84.0	77.7	103.6	93.9	88.8
Latvia	12.7	42.5	39.0	36.5	42.0	43.6	42.4	44.0	43.6	44.8	47.0	46.5
Lithuania	16.8	35.9	39.1	35.8	46.3	43.7	38.0	41.0	39.9	44.3	42.7	43.1
Luxembourg	9.3	19.2	21.1	22.4	24.5	24.5	24.3	26.0	26.3	24.4	24.7	25.1
Malta	65.8	67.0	52.9	40.7	53.3	56.3	57.4	59.9	60.6	57.0	58.5	59.5
Netherlands	48.6	62.3	60.8	48.5	54.7	52.4	50.3	52.4	53.2	52.1	51.4	50.9
Austria	67.0	81.6	80.9	70.6	82.9	82.3	78.5	76.6	74.9	82.8	80.0	77.5
Portugal	72.3	112.6	128.7	116.6	134.9	125.5	115.9	109.1	105.3	127.4	119.9	115.3
Slovakia	33.4	45.3	51.7	48.0	58.9	62.2	59.6	57.4	57.4	63.1	61.7	58.3
Slovenia	24.8	48.6	77.2	65.4	79.6	74.5	69.9	69.6	68.8	74.7	74.1	72.7
Finland	37.4	49.3	62.5	64.9	74.8	72.4	70.7	72.0	73.3	65.8	65.9	66.6
Euro area (20)	68.7	88.4	91.8	85.7	99.0	97.1	93.6	92.3	91.4	97.3	94.6	92.6
Bulgaria	22.5	15.5	25.8	20.0	24.5	23.9	22.5	23.6	25.6	25.1	25.3	25.6
Czechia	27.8	39.7	36.9	30.0	37.7	42.0	42.9	44.2	44.5	41.9	42.8	44.0
Denmark	34.8	43.6	38.2	33.7	42.2	36.6	33.7	32.8	32.1	36.7	34.9	33.9
Hungary	64.2	78.7	73.7	65.3	79.3	76.8	76.4	75.2	75.1	76.8	76.4	76.1
Poland	46.0	54.2	51.3	45.7	57.2	53.8	51.3	52.9	54.2	53.8	50.8	49.8
Romania	14.3	31.3	36.9	35.1	46.9	48.9	47.9	47.3	47.6	48.8	50.9	52.6
Sweden	43.4	38.8	42.2	35.2	39.5	36.3	32.1	29.4	28.5	36.7	33.8	30.5
EU	65.2	82.8	85.3	79.2	91.5	89.4	86.0	84.9	84.1	89.7	87.1	85.2

Table 42: Gross national saving (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	28.0	24.6	24.8	25.1	25.5	26.5	25.6	24.4	24.7	26.8	24.9	25.3
Germany	26.1	26.4	28.8	29.8	29.2	30.7	28.5	29.2	29.5	29.9	28.6	28.9
Estonia	24.5	25.8	27.8	28.7	28.5	30.6	28.0	27.1	27.5	30.3	28.4	29.8
Ireland	23.9	16.3	31.0	35.3	37.3	38.9	41.8	41.8	41.0	37.7	36.8	37.3
Greece	12.7	7.3	10.3	10.1	6.9	9.9	12.5	13.6	14.0	9.6	11.3	13.5
Spain	21.4	18.7	21.4	22.9	21.0	21.8	21.9	22.2	22.9	22.5	24.0	24.6
France	23.2	21.4	22.3	23.7	21.2	24.3	23.7	24.0	25.3	22.9	22.5	23.0
Croatia	20.6	18.1	23.1	25.8	23.7	25.0	23.2	22.5	22.6	23.4	22.7	22.8
Italy	20.3	17.6	19.9	21.5	21.5	23.1	22.2	21.5	22.4	22.5	21.9	22.9
Cyprus	6.4	14.0	13.5	14.3	10.1	11.4	10.1	12.4	13.5	9.6	9.7	11.3
Latvia	21.5	24.1	22.8	22.3	22.0	23.6	19.3	19.4	21.7	26.7	24.9	26.1
Lithuania	16.0	18.1	20.1	21.3	21.2	20.8	21.0	21.4	21.7	20.6	15.7	15.2
Luxembourg	29.2	20.4	21.0	16.9	20.3	22.9	21.3	20.6	21.3	25.7	24.0	23.4
Malta	18.8	15.3	27.9	28.8	23.2	27.9	26.4	27.1	27.5	27.3	25.1	25.5
Netherlands	25.9	25.8	28.3	29.0	26.9	28.6	27.6	27.1	28.2	30.6	30.1	30.4
Austria	27.1	25.6	26.4	27.8	28.7	28.3	27.3	27.0	26.9	27.2	27.0	27.2
Portugal	13.4	13.0	16.9	18.6	17.9	19.5	19.4	20.0	20.4	18.6	18.4	19.6
Slovakia	22.8	21.8	22.9	20.8	19.7	18.9	15.4	16.5	17.2	19.0	18.7	20.1
Slovenia	27.2	21.1	24.9	26.7	27.8	25.9	24.1	24.8	25.3	26.5	24.6	26.2
Finland	28.8	22.4	21.9	23.8	25.2	25.0	24.9	24.8	25.0	25.9	25.4	25.9
Euro area (20)	23.4	21.8	24.3	25.6	24.8	26.4	25.5	25.7	26.3	25.9	25.3	25.9
Bulgaria	14.1	21.2	22.6	22.9	20.4	20.6	21.5	20.1	20.0	18.5	17.3	17.6
Czechia	26.7	23.0	26.1	26.7	26.8	27.5	26.5	24.8	25.1	27.8	27.0	27.2
Denmark	26.5	25.2	29.5	30.3	30.5	32.0	31.7	31.7	31.6	31.6	31.3	31.5
Hungary	17.1	21.4	25.4	27.5	26.3	26.5	24.9	23.8	24.8	27.7	25.3	26.5
Poland	16.7	17.8	19.5	20.5	20.5	21.4	21.3	19.5	20.0	21.9	20.9	20.9
Romania	17.2	20.5	22.8	19.1	19.0	19.1	19.5	20.7	22.4	18.9	20.2	21.2
Sweden	30.3	28.1	27.9	30.3	31.0	31.2	30.7	30.3	31.0	31.1	30.6	31.7
EU	23.4	22.0	24.3	25.6	24.9	26.4	25.5	25.5	26.2	26.0	25.4	26.0
United Kingdom	14.9	12.7	13.3	15.4	14.1	15.9	14.7	12.9	12.8	15.1	12.3	12.1
Japan	29.6	25.5	28.3	29.2	28.3	28.0	26.2	26.4	26.8	28.6	27.9	28.0
United States	17.4	16.5	19.7	19.7	19.3	18.0	17.7	17.6	18.3	17.8	18.4	18.6

Table 43: Gross saving, private sector (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	25.7	25.1	24.0	24.4	31.4	29.0	27.7	27.2	26.7	29.4	26.9	26.9
Germany	24.7	24.7	24.7	25.1	29.9	30.5	26.5	27.9	27.9	29.6	27.2	26.0
Estonia	18.1	21.8	23.0	24.2	28.3	27.8	24.9	25.3	25.3	27.4	26.4	27.2
Ireland	20.2	22.5	30.0	32.5	39.9	38.3	39.0	38.8	37.5	37.5	34.9	34.4
Greece	16.0	13.7	8.9	6.7	11.2	13.0	13.2	12.0	11.6	12.7	12.4	10.7
Spain	16.5	23.7	23.6	23.8	28.2	25.3	23.4	23.6	23.7	26.0	26.0	26.3
France	21.5	21.9	21.2	22.5	25.3	26.3	24.2	24.9	25.9	25.0	22.6	22.0
Croatia	16.3	18.2	20.4	20.2	24.8	23.3	20.7	20.4	20.2	21.8	20.3	19.9
Italy	19.0	17.8	19.1	19.9	26.0	24.7	23.8	21.5	22.9	24.1	23.0	23.0
Cyprus	3.8	15.2	9.8	9.1	12.8	11.0	6.4	8.9	10.0	9.1	7.4	9.0
Latvia	18.2	24.5	20.0	19.2	21.0	26.3	21.6	19.8	19.8	28.0	27.1	25.6
Lithuania	13.1	20.7	17.3	18.3	23.7	18.8	19.9	22.2	19.9	18.6	16.9	14.6
Luxembourg	22.2	15.1	14.6	9.7	17.9	16.8	16.0	16.6	16.4	19.6	18.9	18.1
Malta	19.8	16.0	24.5	25.0	29.0	32.1	28.8	29.6	29.1	31.6	27.5	27.1
Netherlands	22.6	25.8	25.3	24.0	27.1	27.7	24.8	26.1	26.1	29.8	28.8	28.0
Austria	24.9	24.6	23.5	23.6	32.6	30.1	25.8	25.4	24.8	29.1	25.4	24.3
Portugal	14.5	17.4	16.9	16.0	19.8	19.7	17.9	18.5	18.5	18.8	17.0	17.4
Slovakia	21.5	24.0	21.3	18.8	21.4	21.3	16.3	19.2	18.4	22.3	18.9	19.4
Slovenia	23.6	21.6	22.8	22.5	31.4	26.2	22.5	24.4	22.9	27.3	23.8	24.2
Finland	21.8	20.6	19.7	20.5	26.0	23.4	21.8	22.5	22.7	24.2	23.0	23.1
Euro area (20)	21.3	22.3	22.4	22.9	27.8	27.4	25.0	25.4	25.7	27.0	25.1	24.6
Bulgaria	8.2	20.5	19.6	17.1	20.7	22.3	22.4	20.3	19.9	19.7	17.4	16.0
Czechia	22.3	21.7	22.3	22.1	27.4	28.0	26.5	24.9	24.6	29.1	27.1	27.2
Denmark	19.6	23.6	24.8	23.1	26.3	24.9	26.0	26.9	26.6	25.7	26.8	26.9
Hungary	18.5	21.9	22.3	23.2	24.5	26.2	22.9	22.2	23.4	26.9	23.3	23.6
Poland	16.2	18.7	17.8	17.6	22.9	19.0	21.2	20.3	20.4	19.6	20.0	20.8
Romania	13.8	21.0	21.5	20.0	24.0	22.6	23.6	22.6	23.8	22.4	22.7	22.4
Sweden	24.3	24.6	23.1	24.9	28.6	26.6	25.8	25.4	26.2	26.6	26.3	26.5
EU	21.1	22.3	22.3	22.7	27.4	26.9	24.9	25.1	25.4	26.6	25.0	24.5
United Kingdom	15.1	16.9	13.5	14.1	21.9	19.8	17.2	13.6	12.8	19.3	12.1	10.4
Japan	29.8	29.6	28.3	28.1	32.5	30.2	28.4	26.6	25.8	31.5	29.7	27.7
United States	18.4	22.6	21.8	22.7	30.9	26.4	20.5	21.1	22.2	25.9	20.9	20.3

Table 44: Saving rate of households (2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	17.0	15.4	12.3	12.3	20.5	17.0	**12.7**	**13.2**	**12.4**	*16.1*	*12.4*	*12.6*
Germany	17.1	17.0	17.8	18.3	23.6	22.9	**19.6**	**19.5**	**19.0**	*22.6*	*18.2*	*15.8*
Estonia	0.0	9.1	10.8	11.8	14.3	10.5	**4.2**	**6.0**	**6.2**	*11.9*	*9.0*	*10.0*
Ireland	9.4	12.5	9.4	10.2	25.2	23.9	**17.7**	**16.4**	**13.1**	*21.6*	*14.6*	*12.4*
Greece	6.3	0.1	-3.8	-2.5	2.4	3.6	1.8	1.9	1.4	*1.0*	*1.1*	*0.7*
Spain	7.6	9.1	6.4	8.2	17.7	13.8	**8.5**	**8.3**	**8.1**	*11.4*	*9.7*	*8.8*
France	14.2	15.2	13.9	14.7	20.5	18.3	**16.4**	**15.5**	**15.0**	*19.1*	*16.4*	*15.3*
Croatia	4.7	5.9	7.7	8.5	11.9	10.7	:	:	:	:	:	:
Italy	14.4	11.1	10.5	10.0	17.4	14.9	**10.9**	**9.5**	**10.3**	*14.8*	*11.6*	*10.4*
Cyprus	6.2	4.3	0.9	5.7	12.5	10.9	**7.1**	**6.5**	**7.8**	*5.3*	*2.1*	*3.3*
Latvia	4.0	3.5	4.9	8.9	17.0	14.8	**5.2**	**4.8**	**7.5**	*15.8*	*13.9*	*10.7*
Lithuania	2.6	4.5	0.6	3.8	12.4	5.8	4.2	3.6	4.6	7.3	2.9	2.6
Luxembourg	11.0	13.0	13.4	14.2	24.2	18.2	14.5	14.6	13.6	16.6	13.8	11.6
Malta	-13.1	-10.5	3.1	9.4	18.4	:	:	:	:	:	:	:
Netherlands	10.3	15.0	16.5	18.3	24.9	23.9	**16.4**	**16.4**	**16.2**	*23.4*	*19.3*	*18.3*
Austria	16.3	14.3	12.9	14.0	18.7	17.6	**12.2**	**12.8**	**14.0**	*15.6*	*11.6*	*10.7*
Portugal	8.8	9.7	6.8	7.2	11.9	9.8	**6.0**	**6.5**	**6.8**	*10.9*	*7.7*	*7.2*
Slovakia	6.6	7.4	8.5	9.7	11.6	10.3	**4.3**	**5.9**	**5.8**	*8.8*	*6.7*	*6.2*
Slovenia	16.2	11.5	12.3	13.4	22.7	18.7	**8.3**	**9.9**	**11.6**	*15.9*	*9.2*	*9.4*
Finland	7.3	8.8	7.0	8.5	12.7	10.3	**5.7**	**5.8**	**5.9**	*9.2*	*7.1*	*7.0*
Euro area (20)	12.9	12.8	12.4	13.2	19.7	17.9	14.5	14.1	13.9	17.3	14.4	13.0
Bulgaria	-9.5	0.1	0.0	:	:	:	:	:	:	:	:	:
Czechia	11.8	12.2	12.0	13.1	19.2	19.4	**13.6**	**10.9**	**9.4**	*20.8*	*15.2*	*13.9*
Denmark	5.0	7.9	9.8	10.2	11.7	9.3	10.6	10.4	10.5	*10.6*	*10.1*	*9.4*
Hungary	10.7	11.3	12.9	14.8	15.6	17.4	**11.9**	**10.1**	**10.4**	*17.5*	*14.7*	*14.4*
Poland	4.7	3.7	2.9	2.9	8.8	4.1	**3.9**	**2.4**	**3.5**	*4.4*	*3.9*	*4.0*
Romania	:	:	:	:	:	:	:	:	:	:	:	:
Sweden	8.7	14.0	15.6	18.1	19.6	18.1	**13.3**	**11.4**	**12.8**	*19.3*	*16.5*	*15.2*
EU	12.1	12.3	11.5	12.3	18.4	16.7	**13.4**	**12.7**	**12.6**	*17.0*	*13.8*	*12.5*
United Kingdom	7.5	9.8	6.7	5.3	15.8	12.5	**7.2**	**5.3**	**6.5**	*10.4*	*3.9*	*4.4*
Japan	11.3	10.6	8.8	10.7	18.6	16.8	**13.7**	**10.2**	**9.8**	*17.5*	*13.7*	*10.9*
United States	9.8	12.2	12.8	13.3	21.7	18.3	**14.2**	**14.0**	**13.9**	*18.2*	*13.8*	*13.4*

Table 45: Gross saving, general government (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.3	-0.5	0.9	0.8	-5.9	-2.5	**-2.2**	**-2.8**	**-2.0**	*-2.6*	*-2.0*	*-1.6*
Germany	1.4	1.7	4.1	4.8	-0.7	0.2	**2.0**	**1.2**	**1.6**	*0.2*	*1.4*	*2.9*
Estonia	6.5	4.0	4.7	4.4	0.1	2.8	**3.1**	**1.7**	**2.2**	*2.9*	*2.0*	*2.5*
Ireland	3.7	-6.2	1.0	2.9	-2.5	0.5	**2.8**	**3.0**	**3.4**	*0.3*	*2.0*	*2.9*
Greece	-3.4	-6.4	1.4	3.4	-4.3	-3.1	**-0.6**	**1.6**	**2.3**	*-3.1*	*-1.0*	*2.8*
Spain	4.9	-5.0	-2.2	-0.9	-7.2	-3.5	**-1.5**	**-1.4**	**-0.8**	*-3.5*	*-2.0*	*-1.6*
France	1.7	-0.5	1.1	1.2	-4.1	-2.1	**-0.5**	**-0.9**	**-0.6**	*-2.1*	*-0.2*	*1.0*
Croatia	4.2	-0.2	2.7	5.6	-1.1	1.8	**2.4**	**2.2**	**2.4**	*1.6*	*2.5*	*2.9*
Italy	1.3	-0.2	0.7	1.7	-4.5	-1.6	**-1.6**	**0.0**	**-0.5**	*-1.6*	*-1.1*	*-0.1*
Cyprus	2.6	-1.2	3.7	5.2	-2.8	0.4	**3.7**	**3.5**	**3.5**	*0.4*	*2.3*	*2.3*
Latvia	3.3	-0.4	2.8	3.1	1.0	-2.8	**-2.2**	**-0.4**	**1.8**	*-1.3*	*-2.2*	*0.5*
Lithuania	2.9	-2.6	2.8	3.0	-2.4	2.0	**1.1**	**-0.8**	**1.7**	*2.0*	*-1.2*	*0.6*
Luxembourg	7.0	5.3	6.4	7.2	2.4	6.1	**5.3**	**4.0**	**4.9**	*6.1*	*5.2*	*5.3*
Malta	-1.0	-0.7	3.4	3.8	-5.8	-4.2	**-2.5**	**-2.5**	**-1.6**	*-4.2*	*-2.5*	*-1.6*
Netherlands	3.3	0.0	3.1	5.0	-0.2	1.0	**2.8**	**1.0**	**2.1**	*0.8*	*1.3*	*2.4*
Austria	2.2	1.0	2.9	4.2	-3.9	-1.9	**1.5**	**1.6**	**2.1**	*-1.8*	*1.6*	*2.9*
Portugal	-1.1	-4.4	0.0	2.6	-1.8	-0.3	**1.4**	**1.5**	**1.8**	*-0.2*	*1.3*	*2.2*
Slovakia	1.3	-2.1	1.5	2.0	-1.7	-2.5	**-0.9**	**-2.7**	**-1.2**	*-3.3*	*-0.2*	*0.8*
Slovenia	3.6	-0.5	2.1	4.2	-3.6	-0.4	**1.6**	**0.5**	**2.4**	*-0.9*	*0.8*	*2.0*
Finland	7.1	1.8	2.2	3.2	-0.9	1.6	**3.1**	**2.3**	**2.3**	*1.7*	*2.4*	*2.8*
Euro area (20)	2.0	-0.5	1.8	2.7	-3.0	-1.0	**0.5**	**0.3**	**0.7**	*-1.0*	*0.2*	*1.4*
Bulgaria	6.0	0.7	3.0	5.8	-0.3	-1.8	**-1.0**	**-0.3**	**0.1**	*-1.2*	*-0.1*	*1.6*
Czechia	4.4	1.3	3.9	4.5	-0.6	-0.5	**0.0**	**-0.1**	**0.4**	*-1.3*	*-0.2*	*-0.1*
Denmark	6.9	1.6	4.7	7.3	4.2	7.1	**5.7**	**4.8**	**5.0**	*5.9*	*4.5*	*4.6*
Hungary	-1.5	-0.5	3.1	4.3	1.9	0.3	**2.0**	**1.6**	**1.4**	*0.9*	*2.0*	*2.9*
Poland	0.5	-0.9	1.7	2.9	-2.4	2.4	**0.1**	**-0.7**	**-0.4**	*2.4*	*0.9*	*0.1*
Romania	3.3	-0.5	1.3	-0.9	-5.0	-3.5	**-4.1**	**-1.8**	**-1.4**	*-3.5*	*-2.4*	*-1.3*
Sweden	5.9	3.5	4.8	5.4	2.3	4.5	**4.9**	**5.0**	**4.8**	*4.5*	*4.3*	*5.2*
EU	2.3	-0.3	2.0	2.9	-2.5	-0.5	**0.7**	**0.5**	**0.8**	*-0.5*	*0.5*	*1.5*
United Kingdom	-0.2	-4.2	-0.2	1.3	-7.8	-3.9	**-2.5**	**-0.7**	**0.0**	*-4.2*	*0.2*	*1.7*
Japan	-0.2	-4.1	-0.1	1.1	-4.3	-2.2	**-2.2**	**-0.2**	**1.1**	*-2.9*	*-1.8*	*0.3*
United States	-1.0	-6.1	-2.2	-3.0	-11.7	-8.5	**-2.8**	**-3.5**	**-3.9**	*-8.2*	*-2.5*	*-1.7*

Table 46: Exports of goods and services, volume (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	4.9	0.5	4.3	2.4	-5.0	11.3	**4.0**	**1.3**	**3.2**	*9.6*	*3.3*	*3.9*
Germany	8.2	2.0	4.0	1.3	-9.3	9.7	**1.4**	**0.9**	**3.0**	*9.9*	*2.4*	*4.2*
Estonia	11.9	5.8	2.7	6.1	-5.3	19.9	**5.1**	**1.6**	**3.6**	*19.8*	*3.0*	*4.9*
Ireland	4.5	3.2	15.0	11.8	11.2	14.1	**10.9**	**4.6**	**4.1**	*16.6*	*6.0*	*4.9*
Greece	8.1	-2.3	6.0	4.9	-21.5	24.1	**12.7**	**3.9**	**4.4**	*21.9*	*11.6*	*9.5*
Spain	3.5	2.1	4.3	2.2	-19.9	14.4	**17.2**	**2.7**	**5.0**	*14.7*	*13.6*	*4.6*
France	3.7	1.6	3.7	1.6	-16.8	8.8	**7.7**	**3.0**	**4.8**	*9.3*	*8.3*	*7.5*
Croatia	4.5	-0.8	7.0	6.8	-23.3	36.4	**25.9**	**1.8**	**3.1**	*33.3*	*8.4*	*5.5*
Italy	4.1	-0.2	3.3	1.6	-13.5	13.4	**10.9**	**2.2**	**3.9**	*13.3*	*4.9*	*4.3*
Cyprus	2.7	1.8	8.1	8.7	2.2	13.6	**8.0**	**1.4**	**2.1**	*14.0*	*1.7*	*4.6*
Latvia	12.0	4.2	4.8	2.1	-0.3	5.9	**7.7**	**0.5**	**2.8**	*6.2*	*1.3*	*4.1*
Lithuania	10.8	6.5	5.0	10.1	0.4	17.0	**7.3**	**0.9**	**5.6**	*15.9*	*-2.1*	*3.1*
Luxembourg	6.5	2.9	4.0	4.5	0.2	9.7	**2.7**	**1.3**	**3.7**	*9.7*	*3.8*	*3.1*
Malta	9.9	3.8	6.7	7.0	-3.8	9.0	**7.2**	**3.1**	**3.8**	*8.2*	*5.5*	*4.7*
Netherlands	5.6	2.2	4.9	2.0	-4.3	5.2	**4.6**	**1.4**	**1.7**	*6.6*	*3.9*	*3.5*
Austria	6.5	0.9	3.8	4.0	-10.7	9.6	**10.5**	**1.4**	**1.0**	*12.7*	*6.3*	*3.8*
Portugal	4.4	3.0	5.5	4.1	-18.6	13.5	**16.6**	**2.3**	**2.4**	*13.1*	*12.3*	*4.1*
Slovakia	14.6	4.7	4.8	0.8	-6.4	10.6	**-1.7**	**1.8**	**3.1**	*10.2*	*2.9*	*7.4*
Slovenia	11.3	0.3	6.8	4.5	-8.6	14.5	**7.1**	**3.3**	**3.6**	*13.2*	*4.9*	*6.0*
Finland	8.2	-2.7	2.5	6.7	-6.8	5.4	**1.4**	**2.2**	**3.9**	*4.7*	*2.1*	*4.3*
Euro area (20)	5.9	1.6	4.7	2.8	-9.0	10.6	**6.6**	**2.0**	**3.4**	*11.1*	*5.2*	*4.7*
Bulgaria	12.4	4.3	5.1	4.0	-10.4	11.0	**7.1**	**1.5**	**3.3**	*9.9*	*4.5*	*4.2*
Czechia	15.2	3.4	6.0	1.5	-8.0	6.9	**4.6**	**2.7**	**3.9**	*5.1*	*1.2*	*3.5*
Denmark	5.7	0.6	3.8	4.5	-6.3	8.0	**5.4**	**3.7**	**4.8**	*7.8*	*5.4*	*4.5*
Hungary	14.5	1.6	6.3	5.4	-6.1	10.3	**6.5**	**3.5**	**4.8**	*10.3*	*4.9*	*5.9*
Poland	9.4	4.5	7.4	5.3	-1.1	12.5	**4.2**	**2.8**	**4.6**	*11.8*	*5.5*	*3.9*
Romania	13.9	8.3	8.4	5.4	-9.5	12.5	**8.2**	**3.5**	**4.8**	*12.5*	*4.5*	*5.2*
Sweden	6.5	0.2	4.2	6.0	-5.5	7.9	**4.3**	**0.1**	**2.9**	*7.5*	*4.1*	*3.1*
EU	6.3	1.7	4.8	3.1	-8.4	10.5	**6.3**	**2.1**	**3.6**	*10.7*	*5.0*	*4.6*
United Kingdom	4.9	1.0	3.6	1.7	-12.1	-0.3	**7.3**	**1.7**	**1.9**	*-1.3*	*5.3*	*1.2*
Japan	8.3	-0.7	4.9	-1.5	-11.6	11.8	**3.7**	**3.3**	**3.0**	*11.7*	*3.6*	*3.4*
United States	8.1	3.5	2.3	0.5	-13.2	6.1	**7.2**	**2.9**	**4.8**	*4.6*	*5.7*	*5.4*

Table 47: Imports of goods and services, volume (percentage change on preceding year, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	5.4	0.5	4.8	2.0	-5.6	10.7	**3.5**	**1.6**	**3.5**	*9.1*	*3.6*	*4.1*
Germany	6.7	2.4	4.7	2.9	-8.5	9.0	**5.0**	**0.8**	**3.4**	*9.3*	*4.1*	*5.1*
Estonia	11.6	3.8	3.5	3.8	0.4	21.0	**3.3**	**1.4**	**3.4**	*20.6*	*-0.6*	*4.3*
Ireland	5.9	0.3	13.4	42.3	-2.1	-8.3	**9.4**	**4.3**	**4.1**	*-3.7*	*6.2*	*5.0*
Greece	6.9	-8.7	6.4	2.9	-7.3	17.7	**9.9**	**3.1**	**3.3**	*16.1*	*7.9*	*5.3*
Spain	5.4	-4.1	5.0	1.3	-14.9	13.9	**8.8**	**2.8**	**4.5**	*13.9*	*8.3*	*4.8*
France	5.0	1.4	4.3	2.3	-12.8	8.0	**8.1**	**2.5**	**4.8**	*8.0*	*6.7*	*6.0*
Croatia	5.7	-4.4	7.0	6.6	-12.4	17.6	**23.7**	**2.2**	**3.2**	*14.7*	*8.1*	*8.0*
Italy	3.4	-2.6	4.7	-0.7	-12.1	14.7	**13.5**	**2.2**	**3.4**	*14.2*	*6.1*	*4.2*
Cyprus	7.3	-3.4	8.9	9.5	3.2	9.0	**5.9**	**0.9**	**1.6**	*9.2*	*2.5*	*3.7*
Latvia	12.4	0.1	4.6	3.1	-0.3	15.3	**10.2**	**0.2**	**2.2**	*13.5*	*3.2*	*4.0*
Lithuania	14.7	1.2	5.7	6.0	-4.5	19.9	**6.6**	**0.0**	**5.4**	*18.7*	*-0.9*	*3.6*
Luxembourg	6.2	3.7	4.4	5.7	-0.4	11.8	**3.1**	**1.8**	**4.0**	*10.4*	*4.3*	*3.1*
Malta	9.6	2.6	5.9	7.9	-0.2	8.0	**6.2**	**2.8**	**3.6**	*7.6*	*6.0*	*4.3*
Netherlands	5.3	1.7	5.2	3.2	-4.8	4.0	**3.7**	**1.9**	**1.6**	*5.1*	*4.1*	*4.3*
Austria	5.1	1.2	4.2	2.1	-9.2	13.7	**6.7**	**1.2**	**1.1**	*14.5*	*4.6*	*3.8*
Portugal	5.0	-2.1	6.8	4.9	-11.8	13.3	**10.9**	**3.4**	**3.0**	*12.9*	*8.6*	*4.1*
Slovakia	13.9	1.9	5.3	2.2	-8.2	12.1	**-0.9**	**1.7**	**3.0**	*11.2*	*3.4*	*7.6*
Slovenia	10.9	-2.0	6.5	4.7	-9.6	17.6	**8.7**	**2.4**	**3.5**	*17.4*	*4.3*	*5.7*
Finland	8.2	-1.0	3.3	2.4	-6.0	6.0	**2.1**	**2.4**	**3.2**	*5.3*	*2.9*	*3.7*
Euro area (20)	5.7	0.3	5.2	4.8	-8.5	8.4	**6.8**	**1.9**	**3.5**	*8.8*	*5.2*	*4.8*
Bulgaria	16.6	-1.2	5.6	5.2	-4.3	10.9	**11.8**	**2.6**	**3.4**	*12.2*	*5.0*	*4.5*
Czechia	12.9	2.3	6.3	1.5	-8.2	13.3	**4.8**	**2.6**	**3.7**	*11.5*	*1.2*	*3.6*
Denmark	8.6	-0.2	4.3	3.0	-3.6	8.0	**2.9**	**2.3**	**4.8**	*8.2*	*5.0*	*4.6*
Hungary	12.1	-0.2	7.1	8.2	-3.9	9.1	**7.4**	**2.0**	**3.9**	*8.7*	*3.8*	*4.6*
Poland	11.5	1.2	8.0	3.2	-2.4	16.1	**6.4**	**1.5**	**4.2**	*15.9*	*5.7*	*3.8*
Romania	24.4	0.9	10.8	8.6	-5.2	14.6	**9.0**	**3.4**	**5.0**	*14.6*	*5.0*	*5.3*
Sweden	6.6	0.6	5.1	2.1	-6.0	9.6	**7.8**	**-0.9**	**1.3**	*9.4*	*4.5*	*1.8*
EU	6.4	0.4	5.4	4.6	-7.9	9.0	**6.7**	**1.9**	**3.5**	*9.3*	*5.0*	*4.7*
United Kingdom	4.0	1.7	4.1	2.6	-16.0	2.8	**12.9**	**-1.2**	**1.3**	*3.8*	*5.8*	*2.3*
Japan	4.4	1.6	2.9	1.0	-6.7	5.1	**5.0**	**2.2**	**1.4**	*5.2*	*2.3*	*2.7*
United States	4.8	1.5	4.1	1.1	-9.0	14.1	**8.5**	**-1.1**	**1.9**	*14.0*	*8.7*	*2.7*

Table 48: Merchandise trade balance[1] (fob-fob, as a percentage of GDP, 2004-2024) — 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	1.9	-0.8	0.1	0.8	1.3	0.8	**-2.2**	**-2.4**	**-2.0**	*0.9*	*-0.6*	*-0.2*
Germany	7.1	6.6	7.6	6.2	5.6	5.3	**2.5**	**3.2**	**3.7**	*5.1*	*4.7*	*5.2*
Estonia	-15.5	-4.4	-4.3	-3.3	-0.9	-4.1	**-7.0**	**-7.2**	**-7.0**	*-4.4*	*-5.9*	*-5.2*
Ireland	17.5	22.4	34.7	33.1	38.1	39.2	**42.0**	**42.3**	**42.1**	*41.0*	*40.7*	*40.1*
Greece	-16.8	-12.3	-11.2	-12.9	-11.9	-14.8	**-19.4**	**-20.6**	**-20.5**	*-14.9*	*-17.4*	*-17.0*
Spain	-7.9	-3.3	-1.9	-2.1	-0.8	-1.6	**-5.9**	**-5.9**	**-5.6**	*-1.7*	*-4.4*	*-4.1*
France	-1.2	-2.2	-1.5	-1.4	-2.1	-3.0	**-5.5**	**-4.8**	**-4.5**	*-3.0*	*-4.5*	*-3.2*
Croatia	-21.2	-14.5	-16.4	-18.8	-17.5	-18.3	**-26.3**	**-25.7**	**-25.8**	*-17.7*	*-20.7*	*-22.5*
Italy	0.0	0.3	3.1	3.4	4.1	3.0	**-0.4**	**-1.0**	**0.0**	*2.9*	*0.8*	*1.3*
Cyprus	-26.1	-20.8	-20.8	-20.0	-19.2	-18.0	**-23.8**	**-24.4**	**-24.5**	*-18.3*	*-20.4*	*-21.4*
Latvia	-21.4	-11.2	-9.4	-8.6	-5.1	-8.2	**-13.5**	**-14.5**	**-11.9**	*-7.4*	*-10.9*	*-9.9*
Lithuania	-13.1	-4.4	-4.9	-4.8	-0.8	-5.2	**-8.1**	**-7.1**	**-7.2**	*-5.2*	*-7.8*	*-8.3*
Luxembourg	-5.8	2.5	3.5	3.3	3.0	2.3	**1.0**	**0.8**	**0.9**	*4.3*	*2.9*	*3.1*
Malta	-19.6	-18.3	-15.9	-11.9	-10.8	-16.7	**-17.7**	**-18.0**	**-17.7**	*-16.6*	*-18.9*	*-19.5*
Netherlands	8.4	8.6	9.5	7.4	7.7	7.3	**5.1**	**4.7**	**6.1**	*8.1*	*6.0*	*5.8*
Austria	0.4	-0.5	0.5	1.1	0.9	-0.1	**0.1**	**-0.1**	**-0.2**	*0.1*	*-1.4*	*-1.1*
Portugal	-11.8	-8.2	-6.3	-7.8	-6.5	-7.7	**-11.2**	**-10.5**	**-10.4**	*-7.4*	*-9.9*	*-9.1*
Slovakia	-3.1	2.1	2.3	-0.6	0.9	-0.5	**-4.0**	**-3.5**	**-3.3**	*-1.2*	*-3.1*	*-3.5*
Slovenia	-4.1	-0.8	3.4	2.7	5.0	1.7	**-4.4**	**-4.2**	**-3.1**	*0.8*	*-0.7*	*-0.3*
Finland	7.7	2.6	0.5	1.0	1.3	1.1	**0.1**	**0.0**	**0.4**	*1.2*	*0.6*	*0.8*
Euro area (20)	1.0	1.4	3.3	2.8	3.2	2.6	**0.0**	**0.3**	**0.8**	*2.7*	*1.3*	*1.8*
Euro area (19), adjusted [2]	0.3	0.9	2.9	2.6	3.0	2.4	**0.2**	**0.4**	**0.9**	*2.4*	*1.4*	*1.9*
Bulgaria	-23.2	-9.1	-4.2	-4.7	-3.1	-4.1	**-5.3**	**-7.7**	**-7.8**	*-5.1*	*-5.7*	*-5.9*
Czechia	-0.1	2.4	4.7	4.1	4.9	1.2	**-2.9**	**-4.1**	**-3.7**	*1.2*	*-0.3*	*-0.3*
Denmark	2.3	4.5	4.6	5.0	5.3	4.0	**1.5**	**2.6**	**3.5**	*3.8*	*2.6*	*2.9*
Hungary	-2.6	2.3	1.5	-2.5	-1.0	-3.0	**-8.5**	**-7.3**	**-5.2**	*-2.5*	*-5.5*	*-4.3*
Poland	-4.4	-2.7	-1.2	-0.8	1.3	-1.3	**-4.7**	**-5.1**	**-4.6**	*-0.1*	*-2.4*	*-2.1*
Romania	-15.5	-6.6	-5.9	-8.0	-8.6	-9.6	**-11.2**	**-11.3**	**-11.2**	*-9.6*	*-10.4*	*-10.8*
Sweden	6.4	4.3	2.6	3.9	4.0	3.9	**3.2**	**2.9**	**3.7**	*4.5*	*4.2*	*4.9*
EU	0.8	1.3	3.0	2.6	3.0	2.2	**-0.4**	**-0.2**	**0.3**	*2.3*	*0.9*	*1.4*
EU, adjusted [2]	0.0	0.7	2.3	2.0	2.4	1.6	**-0.4**	**-0.2**	**0.3**	*1.7*	*0.9*	*1.4*
United Kingdom	-5.6	-6.4	-6.8	-6.6	-6.3	-6.8	**-10.3**	**-10.7**	**-10.7**	*-6.7*	*-8.6*	*-8.8*
Japan	2.1	0.1	0.0	0.0	0.5	0.3	**-2.1**	**-2.0**	**-1.6**	*0.3*	*-0.5*	*-0.4*
United States	-5.9	-4.4	-4.3	-4.1	-4.2	-4.7	**-4.8**	**-4.4**	**-4.2**	*-4.8*	*-5.3*	*-5.0*

[1] See note 7 on concepts and sources.
[2] See note 8 on concepts and sources.

Table 49: Current-account balance[1] (as a percentage of GDP, 2004-2024) — 31.10.2022

	5-year averages						Autumn 2022 forecast			*Spring 2022 forecast*		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	3.8	1.4	0.6	0.1	1.1	0.4	**-2.7**	**-2.9**	**-2.6**	*0.6*	*-1.1*	*-0.6*
Germany	5.5	6.4	8.2	7.7	7.1	7.4	**3.7**	**4.7**	**5.0**	*7.2*	*6.1*	*6.5*
Estonia	-11.8	0.8	1.4	2.4	-1.0	-1.8	**0.4**	**0.7**	**1.1**	*-0.7*	*1.3*	*2.3*
Ireland	-4.4	-1.9	1.3	-19.8	-2.7	14.2	**18.1**	**18.2**	**17.8**	*14.3*	*12.8*	*13.1*
Greece	-12.4	-7.6	-2.1	-2.3	-8.0	-8.2	**-8.6**	**-8.6**	**-8.1**	*-8.3*	*-8.4*	*-6.4*
Spain	-8.0	-1.7	2.3	2.1	0.6	1.0	**0.9**	**0.8**	**1.2**	*1.0*	*1.8*	*2.1*
France	0.0	-0.9	-0.7	-0.7	-2.5	-0.8	**-2.5**	**-1.3**	**-0.8**	*-2.4*	*-3.0*	*-2.0*
Croatia	-7.8	-2.5	2.1	2.9	-0.4	3.2	**0.2**	**-0.6**	**-0.8**	*3.3*	*1.7*	*0.3*
Italy	-1.4	-1.4	2.2	3.3	3.9	3.1	**0.8**	**-0.2**	**0.5**	*2.5*	*1.2*	*1.6*
Cyprus	-18.1	-5.0	-3.4	-5.5	-10.0	-6.8	**-9.6**	**-7.3**	**-6.2**	*-7.2*	*-8.8*	*-7.2*
Latvia	-15.4	0.0	0.1	-0.7	2.8	-2.2	**-6.4**	**-6.8**	**-4.0**	*-0.5*	*-3.9*	*-3.2*
Lithuania	-10.9	-0.3	0.2	3.5	7.3	1.1	**-3.9**	**-2.8**	**-2.6**	*2.0*	*-1.8*	*-2.1*
Luxembourg	8.8	2.3	2.6	-1.4	3.1	5.3	**3.5**	**3.0**	**3.9**	*7.5*	*5.9*	*5.5*
Malta	-5.4	-3.3	6.7	7.6	1.4	4.9	**5.1**	**5.5**	**6.0**	*4.1*	*1.9*	*1.9*
Netherlands	4.4	6.2	7.9	6.9	5.1	7.2	**5.7**	**5.3**	**6.9**	*9.5*	*8.7*	*8.7*
Austria	2.9	2.3	1.9	2.5	3.0	0.4	**0.2**	**0.0**	**-0.1**	*-0.5*	*-1.0*	*-0.8*
Portugal	-10.0	-5.2	0.3	0.1	-1.2	-1.2	**-1.5**	**-0.9**	**-0.8**	*-1.1*	*-1.7*	*-0.7*
Slovakia	-5.5	-0.7	-0.4	-2.9	-0.2	-2.6	**-6.5**	**-5.6**	**-5.3**	*-2.4*	*-4.3*	*-4.1*
Slovenia	-3.5	-0.1	5.3	6.1	7.7	4.0	**-0.6**	**-0.5**	**-0.3**	*4.4*	*1.7*	*2.6*
Finland	4.0	-0.4	-1.4	-0.3	0.7	0.6	**-0.2**	**-0.3**	**0.1**	*0.7*	*0.2*	*0.4*
Euro area (19)	0.2	1.3	3.4	2.7	2.6	3.5	**1.5**	**1.9**	**2.4**	*3.2*	*2.4*	*2.9*
Euro area (19), adjusted [2]	-0.2	0.4	2.8	2.3	1.6	2.3	**1.5**	**1.9**	**2.4**	2.4	2.4	2.9
Bulgaria	-16.1	-1.3	2.6	1.9	0.0	-0.5	**-1.2**	**-3.0**	**-3.2**	*-1.1*	*-1.8*	*-1.8*
Czechia	-4.1	-3.6	-0.6	-0.9	0.7	-2.6	**-5.8**	**-6.9**	**-5.9**	*-2.3*	*-3.7*	*-3.8*
Denmark	3.0	6.1	8.0	8.5	7.9	9.0	**6.7**	**7.4**	**7.8**	*8.3*	*7.8*	*7.7*
Hungary	-8.8	0.4	1.6	-0.9	-0.9	-4.0	**-7.6**	**-6.3**	**-4.3**	*-2.9*	*-5.5*	*-3.5*
Poland	-5.6	-3.7	-0.7	0.8	3.3	-0.1	**-2.9**	**-2.5**	**-1.6**	*1.6*	*-0.5*	*-0.2*
Romania	-14.6	-5.8	-2.9	-6.0	-6.3	-7.5	**-9.1**	**-8.8**	**-8.4**	*-7.0*	*-7.5*	*-7.3*
Sweden	6.9	5.5	3.0	5.2	5.9	5.3	**3.3**	**3.3**	**4.2**	*5.5*	*4.8*	*5.8*
EU	0.0	1.2	3.2	2.6	2.6	3.1	**1.1**	**1.4**	**1.9**	*3.0*	*2.1*	*2.6*
EU, adjusted [2]	-0.3	1.1	2.8	2.4	2.1	2.4	**1.1**	**1.4**	**1.9**	*2.4*	*2.1*	*2.6*
United Kingdom	-3.1	-3.2	-4.7	-2.8	-3.2	-2.0	**-5.6**	**-6.0**	**-5.8**	*-2.6*	*-4.6*	*-4.9*
Japan	3.7	2.1	3.1	3.4	3.0	2.8	**0.7**	**1.2**	**1.7**	*3.4*	*2.5*	*2.6*
United States	-5.4	-2.6	-2.1	-2.1	-2.8	-3.7	**-3.8**	**-3.2**	**-2.8**	*-3.6*	*-3.9*	*-3.4*

[1] See note 7 on concepts and sources.
[2] See note 8 on concepts and sources.

Table 50: Net lending (+) or net borrowing (-) of the nation[1] (as a percentage of GDP, 2004-2024) 31.10.2022

	5-year averages						Autumn 2022 forecast			Spring 2022 forecast		
	2004 - 08	2009 - 13	2014 - 18	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	3.7	1.5	0.7	0.2	1.1	0.6	**-2.5**	**-2.8**	**-2.5**	*0.7*	*-0.9*	*-0.5*
Germany	5.5	6.3	8.0	7.5	6.7	7.2	**3.5**	**4.4**	**4.8**	*6.9*	*5.8*	*6.2*
Estonia	-10.6	4.2	2.7	4.1	0.8	7.1	**1.5**	**1.7**	**2.0**	*1.1*	*3.0*	*4.0*
Ireland	-4.2	-1.9	-4.7	-29.7	-6.8	13.4	**17.3**	**17.4**	**17.0**	*14.1*	*12.6*	*12.9*
Greece	-10.6	-5.7	-0.5	-1.0	-6.0	-5.5	**-5.9**	**-5.8**	**-5.2**	*-6.2*	*-6.3*	*-4.1*
Spain	-7.5	-1.2	2.7	2.4	1.1	1.9	**1.9**	**1.9**	**2.4**	*1.9*	*2.9*	*3.2*
France	0.0	-0.9	-0.8	-0.7	-2.5	-0.4	**-2.3**	**-1.4**	**-0.8**	*-1.7*	*-2.4*	*-1.6*
Croatia	-7.7	-2.2	3.1	4.5	1.8	5.7	**2.6**	**2.1**	**2.2**	*5.7*	*6.2*	*4.8*
Italy	-1.3	-1.4	2.3	3.2	3.9	3.0	**0.7**	**-0.3**	**0.4**	*2.4*	*1.1*	*1.5*
Cyprus	-17.6	-4.6	-3.0	-5.6	-10.1	-6.4	**-8.9**	**-6.5**	**-5.5**	*-7.2*	*-8.8*	*-7.2*
Latvia	-14.1	2.4	2.0	0.8	4.5	-0.6	**-4.6**	**-4.1**	**-1.2**	*1.6*	*-1.3*	*-0.4*
Lithuania	-9.5	3.2	2.1	5.2	9.0	2.6	**-2.4**	**-1.3**	**-1.2**	*3.6*	*-0.3*	*-0.7*
Luxembourg	7.8	1.0	1.6	-2.4	2.2	4.5	**2.7**	**2.3**	**3.1**	*6.7*	*5.2*	*4.8*
Malta	-3.6	-1.8	8.0	8.9	2.8	5.9	**6.1**	**6.5**	**7.0**	*5.1*	*2.9*	*2.9*
Netherlands	4.4	5.7	7.7	6.9	5.1	7.3	**5.8**	**5.4**	**7.0**	*9.5*	*8.8*	*8.7*
Austria	2.8	2.3	1.7	2.5	2.9	0.4	**0.3**	**0.0**	**-0.1**	*-0.6*	*-1.1*	*-0.9*
Portugal	-8.7	-3.7	1.4	1.0	-0.2	0.5	**0.5**	**1.3**	**1.3**	*0.7*	*0.3*	*1.6*
Slovakia	-5.2	0.7	0.2	-2.4	0.4	-2.6	**-6.2**	**-4.7**	**-3.3**	*-1.9*	*-3.5*	*-2.2*
Slovenia	-3.5	0.5	5.1	5.6	7.2	4.1	**-0.4**	**-0.4**	**-0.2**	*4.0*	*1.3*	*2.1*
Finland	4.1	-0.3	-1.3	-0.2	0.8	0.7	**-0.1**	**-0.2**	**0.2**	*0.8*	*0.3*	*0.5*
Euro area (20)	0.3	1.4	3.3	2.5	2.4	3.6	**1.7**	**2.0**	**2.5**	*3.4*	*2.6*	*3.1*
Euro area (19), adjusted 2)	-0.1	0.5	2.7	2.0	1.5	2.5	**1.7**	**2.0**	**2.5**	*2.6*	*2.6*	*3.1*
Bulgaria	-15.9	0.1	4.6	3.3	1.5	0.2	**1.3**	**-0.7**	**-0.9**	*-0.4*	*0.7*	*0.5*
Czechia	-3.7	-1.8	0.7	-0.4	1.8	-1.2	**-3.8**	**-4.6**	**-4.2**	*-1.1*	*-1.9*	*-1.8*
Denmark	3.0	6.2	7.9	8.5	7.8	9.1	**6.8**	**7.5**	**8.0**	*8.4*	*7.9*	*7.9*
Hungary	-8.2	2.9	3.9	1.0	0.8	-1.4	**-4.6**	**-3.3**	**-2.0**	*-0.3*	*-3.4*	*-0.8*
Poland	-5.1	-2.0	0.7	2.1	4.5	1.2	**-1.5**	**-1.0**	**0.1**	*2.9*	*1.0*	*1.3*
Romania	-13.8	-4.6	-0.7	-4.6	-4.2	-5.4	**-7.2**	**-6.9**	**-6.5**	*-5.4*	*-5.9*	*-5.7*
Sweden	6.7	5.4	2.9	5.2	5.9	5.4	**3.4**	**3.4**	**4.3**	*5.6*	*5.0*	*5.9*
EU	0.1	1.4	3.2	2.5	2.6	3.4	**1.4**	**1.7**	**2.2**	*3.3*	*2.4*	*2.9*
EU, adjusted 2)	-0.1	1.3	2.9	2.2	2.1	2.7	**1.4**	**1.7**	**2.2**	*2.7*	*2.4*	*2.9*
United Kingdom	-3.1	-3.2	-4.8	-2.9	-3.3	-2.1	**-5.7**	**-6.1**	**-5.9**	*-2.7*	*-4.8*	*-5.0*
Japan	3.6	2.0	3.0	3.4	2.9	2.8	**0.7**	**1.1**	**1.7**	*3.4*	*2.5*	*2.6*
United States	-5.4	-2.7	-2.2	-2.1	-2.8	-3.7	**-3.8**	**-3.2**	**-2.9**	*-3.6*	*-3.9*	*-3.5*

[1] See note 7 on concepts and sources.
[2] See note 8 on concepts and sources.

Table 51: Current-account balance[1] (in billions of euro, 2016-2024) 31.10.2022

							Autumn 2022 forecast			Spring 2022 forecast		
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2021	2022	2023
Belgium	2.4	3.1	-4.2	0.5	5.1	2.2	**-14.7**	**-16.8**	**-16.0**	*2.8*	*-5.8*	*-3.5*
Germany	272.1	262.7	272.3	267.6	241.9	266.6	**144.1**	**191.0**	**214.3**	*257.7*	*233.1*	*262.0*
Estonia	0.3	0.5	0.2	0.7	-0.3	-0.6	**0.1**	**0.3**	**0.5**	*-0.2*	*0.4*	*0.8*
Ireland	-11.4	1.5	16.0	-70.8	-9.9	60.4	**91.4**	**99.9**	**105.1**	*60.3*	*59.8*	*66.5*
Greece	-3.9	-3.7	-6.3	-4.2	-13.3	-14.9	**-18.0**	**-19.2**	**-19.0**	*-15.1*	*-16.7*	*-13.3*
Spain	35.4	32.2	22.6	26.2	6.8	11.5	**11.2**	**11.5**	**17.9**	*11.5*	*23.5*	*28.5*
France	-13.5	-16.3	-16.1	-17.1	-58.6	-19.4	**-67.1**	**-37.3**	**-22.9**	*-59.9*	*-78.1*	*-53.5*
Croatia	1.1	1.7	0.9	1.6	-0.2	1.9	**0.1**	**-0.4**	**-0.6**	*1.9*	*1.1*	*0.2*
Italy	44.0	44.3	46.1	59.4	64.0	54.6	**15.0**	**-3.5**	**9.3**	*44.8*	*22.8*	*31.9*
Cyprus	-0.7	-1.0	-0.8	-1.3	-2.2	-1.6	**-2.6**	**-2.0**	**-1.8**	*-1.7*	*-2.2*	*-1.9*
Latvia	0.4	0.3	-0.1	-0.2	0.8	-0.7	**-2.4**	**-2.7**	**-1.7**	*-0.2*	*-1.4*	*-1.2*
Lithuania	-0.4	0.2	0.1	1.7	3.6	0.6	**-2.6**	**-2.0**	**-2.0**	*1.1*	*-1.1*	*-1.3*
Luxembourg	1.0	1.7	2.3	-0.9	2.0	3.8	**2.7**	**2.5**	**3.3**	*5.5*	*4.6*	*4.5*
Malta	0.4	1.3	1.4	1.1	0.2	0.7	**0.8**	**1.0**	**1.1**	*0.6*	*0.3*	*0.3*
Netherlands	50.4	65.8	72.1	56.3	41.0	61.5	**53.1**	**52.1**	**71.8**	*81.4*	*80.6*	*83.9*
Austria	10.2	5.5	4.0	9.9	11.3	1.7	**1.0**	**-0.2**	**-0.7**	*-2.1*	*-4.2*	*-3.5*
Portugal	1.2	2.0	0.5	0.3	-2.4	-2.5	**-3.5**	**-2.3**	**-2.1**	*-2.3*	*-3.8*	*-1.6*
Slovakia	-1.7	-0.8	-0.6	-2.7	-0.2	-2.6	**-7.0**	**-6.9**	**-6.9**	*-2.3*	*-4.5*	*-4.7*
Slovenia	2.0	2.7	2.8	3.0	3.6	2.1	**-0.3**	**-0.3**	**-0.2**	*2.3*	*0.9*	*1.5*
Finland	-4.3	-1.8	-4.3	-0.8	1.7	1.6	**-0.5**	**-0.8**	**0.3**	*1.8*	*0.6*	*1.1*
Euro area (20)	384.8	402.0	409.0	330.1	295.0	426.8	**200.8**	**263.7**	**349.7**	*387.9*	*309.9*	*396.6*
Euro area (19), adjusted 2)	328.9	356.0	326.4	274.1	188.7	288.7	**200.7**	**264.2**	**350.3**	*291.6*	*308.9*	*396.4*
Bulgaria	2.6	3.2	0.5	1.1	0.0	-0.4	**-1.0**	**-2.6**	**-2.9**	*-0.7*	*-1.4*	*-1.5*
Czechia	-0.4	1.6	-1.3	-2.1	1.4	-6.3	**-16.0**	**-20.9**	**-19.0**	*-5.4*	*-10.1*	*-11.1*
Denmark	22.0	23.6	22.0	26.2	24.6	30.4	**23.9**	**27.6**	**30.5**	*27.7*	*27.6*	*28.6*
Hungary	4.9	2.0	0.0	-1.3	-1.3	-6.1	**-12.2**	**-10.6**	**-7.8**	*-4.4*	*-8.9*	*-6.1*
Poland	-1.2	-1.4	-4.8	4.4	17.6	-0.8	**-19.2**	**-17.9**	**-12.6**	*9.2*	*-2.8*	*-1.5*
Romania	-4.1	-7.4	-10.9	-13.5	-13.9	-18.0	**-25.7**	**-28.1**	**-29.5**	*-16.9*	*-20.1*	*-21.4*
Sweden	11.2	13.5	12.3	24.9	28.2	28.3	**18.6**	**18.7**	**24.3**	*29.0*	*26.7*	*33.9*
EU	419.6	437.0	426.8	369.9	351.7	454.0	**169.2**	**230.0**	**332.6**	*426.4*	*321.0*	*417.5*
EU, adjusted 2)	402.5	393.4	366.7	331.3	278.0	349.6	**169.2**	**230.0**	**332.6**	*350.4*	*321.0*	*417.5*
United Kingdom	-133.9	-85.8	-99.3	-72.1	-75.9	-53.1	**-164.8**	**-182.8**	**-181.6**	*-69.7*	*-138.1*	*-151.3*
Japan	178.0	179.8	149.6	157.5	130.3	117.5	**28.5**	**46.4**	**69.7**	*141.8*	*103.8*	*108.6*
United States	-364.7	-328.8	-373.6	-404.3	-518.7	-728.5	**-933.4**	**-862.7**	**-788.8**	*-702.6*	*-898.1*	*-845.6*

[1] See note 7 on concepts and sources.
[2] See note 8 on concepts and sources.

Table 52: Export markets (a) (percentage change on preceding year, 2016-2024) 31.10.2022

							Autumn 2022 forecast			Spring 2022 forecast		
	2016	2017	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	2.5	5.3	4.0	2.8	-8.8	8.7	**6.6**	**1.8**	**3.4**	*9.1*	*5.2*	*4.5*
Germany	3.0	5.9	4.4	1.9	-7.9	10.5	**6.0**	**2.0**	**3.5**	*10.4*	*4.7*	*4.3*
Estonia	3.3	6.2	4.6	2.7	-6.9	10.0	**5.0**	**1.4**	**3.3**	*9.9*	*2.5*	*4.1*
Ireland	2.4	5.4	4.2	1.3	-8.7	10.0	**6.6**	**1.4**	**3.1**	*10.2*	*5.4*	*4.1*
Greece	2.9	6.3	4.0	2.1	-8.5	10.1	**7.0**	**2.3**	**3.7**	*10.2*	*4.8*	*4.5*
Spain	2.9	5.4	3.8	2.4	-9.6	9.5	**7.3**	**2.0**	**3.5**	*9.4*	*5.2*	*4.4*
France	2.9	5.5	4.0	2.0	-8.6	9.8	**6.3**	**2.0**	**3.5**	*9.8*	*5.1*	*4.3*
Croatia	4.1	6.6	4.9	3.1	-8.6	11.5	**7.1**	**2.1**	**3.6**	*10.3*	*4.8*	*4.6*
Italy	3.0	5.6	4.0	2.2	-8.7	10.0	**6.2**	**1.9**	**3.6**	*10.1*	*4.8*	*4.5*
Cyprus	1.1	8.3	4.0	2.8	-10.1	11.3	**0.9**	**1.5**	**3.7**	*12.1*	*-4.6*	*4.6*
Latvia	3.1	6.9	4.5	3.6	-7.4	11.6	**3.9**	**1.4**	**4.0**	*12.1*	*0.5*	*4.1*
Lithuania	2.5	6.5	4.6	3.3	-7.8	10.1	**3.4**	**2.1**	**4.4**	*11.0*	*1.1*	*4.2*
Luxembourg	3.5	5.1	3.7	2.6	-9.2	9.2	**7.2**	**1.7**	**3.4**	*9.6*	*5.0*	*4.6*
Malta	2.1	4.6	3.3	2.3	-9.7	8.3	**6.9**	**2.5**	**3.6**	*6.1*	*5.5*	*4.6*
Netherlands	4.4	5.3	3.8	4.0	-8.4	9.1	**6.5**	**1.8**	**3.5**	*9.3*	*4.8*	*4.4*
Austria	3.8	5.8	4.3	2.5	-8.1	10.2	**5.9**	**1.7**	**3.6**	*10.1*	*4.3*	*4.7*
Portugal	2.4	5.3	3.9	2.6	-10.6	9.6	**7.3**	**2.0**	**3.7**	*9.7*	*5.7*	*4.5*
Slovakia	3.9	6.4	4.9	2.6	-7.8	10.9	**5.9**	**1.8**	**3.6**	*10.6*	*3.8*	*4.4*
Slovenia	4.2	6.0	4.6	2.7	-8.5	11.5	**7.7**	**2.0**	**3.6**	*11.3*	*4.2*	*4.9*
Finland	2.8	6.1	4.2	2.1	-7.5	10.2	**4.8**	**1.7**	**3.4**	*10.1*	*3.4*	*4.2*
Euro area (19) (b)	3.2	5.6	4.1	2.4	-8.5	9.9	**6.3**	**1.9**	**3.5**	*9.9*	*4.8*	*4.4*
Bulgaria	4.5	7.0	4.5	2.7	-7.6	11.1	**6.3**	**2.3**	**4.1**	*10.9*	*3.6*	*4.7*
Czechia	4.0	5.9	4.4	2.8	-8.1	10.2	**5.2**	**1.6**	**3.5**	*10.3*	*3.9*	*4.8*
Denmark	2.7	5.4	4.1	1.9	-8.3	9.4	**6.3**	**1.7**	**3.2**	*9.3*	*5.2*	*4.2*
Hungary	4.3	6.2	4.7	2.7	-8.3	10.8	**6.0**	**1.8**	**3.6**	*10.8*	*4.0*	*4.7*
Poland	3.5	5.8	4.3	2.9	-8.7	9.7	**5.4**	**1.7**	**3.7**	*9.9*	*3.3*	*4.5*
Romania	3.3	6.0	4.1	2.4	-8.4	10.1	**6.7**	**1.9**	**3.7**	*10.3*	*4.3*	*4.6*
Sweden	3.1	5.2	4.1	2.5	-8.1	8.8	**5.7**	**1.9**	**3.5**	*8.6*	*5.0*	*4.4*
EU (b)	3.2	5.6	4.1	2.5	-8.5	9.9	**6.2**	**1.9**	**3.5**	*9.9*	*4.7*	*4.4*
United Kingdom	3.0	5.0	3.8	3.9	-7.8	8.8	**6.3**	**2.1**	**3.4**	*9.5*	*5.6*	*4.4*
Japan	2.2	6.9	5.1	-0.8	-6.6	12.3	**4.1**	**2.8**	**3.8**	*12.0*	*5.5*	*4.6*
United States	1.6	5.6	4.4	1.4	-8.8	10.0	**5.9**	**3.0**	**3.6**	*9.6*	*4.9*	*4.5*

(a) Imports of goods and services to the various markets (incl. EU-markets) weighted according to their share in country's exports of goods and services.

(b) Intra- and extra-EU trade.

Table 53: Export performance (a) (percentage change on preceding year, 2016-2024) 31.10.2022

							Autumn 2022 forecast			Spring 2022 forecast		
	2016	2017	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Belgium	3.7	0.1	-2.8	-0.4	4.2	2.4	**-2.5**	**-0.5**	**-0.1**	*0.5*	*-1.8*	*-0.6*
Germany	-0.6	-1.0	-2.1	-0.6	-1.4	-0.7	**-4.5**	**-1.1**	**-0.5**	*-0.4*	*-2.4*	*-0.1*
Estonia	1.5	-1.3	-1.6	3.3	1.7	9.0	**0.1**	**0.2**	**0.3**	*8.9*	*0.5*	*0.7*
Ireland	2.2	3.9	5.4	10.0	22.2	4.2	**5.0**	**3.2**	**0.9**	*6.2*	*0.3*	*0.5*
Greece	-3.2	2.0	4.9	2.8	-14.6	12.3	**5.0**	**1.6**	**0.7**	*10.2*	*6.4*	*4.9*
Spain	2.4	0.1	-2.0	-0.2	-11.5	4.5	**10.3**	**0.6**	**1.4**	*4.9*	*8.7*	*0.3*
France	-1.1	-1.1	0.5	-0.4	-9.0	-1.0	**1.2**	**1.0**	**1.3**	*-0.4*	*3.0*	*3.0*
Croatia	2.8	0.3	-1.1	3.5	-14.9	21.0	**17.2**	**-0.3**	**-0.5**	*19.7*	*3.2*	*0.9*
Italy	-1.1	-0.1	-1.8	-0.6	-5.3	3.1	**4.5**	**0.4**	**0.3**	*2.9*	*0.1*	*-0.2*
Cyprus	6.1	2.5	3.1	5.7	13.7	2.0	**7.0**	**-0.1**	**-1.5**	*1.7*	*6.6*	*0.0*
Latvia	0.9	-0.5	-0.1	-1.4	7.7	-5.1	**3.9**	**-0.9**	**-1.1**	*-5.3*	*0.9*	*0.0*
Lithuania	2.4	6.6	2.1	6.6	8.9	6.3	**3.8**	**-1.2**	**1.2**	*4.4*	*-3.2*	*-1.0*
Luxembourg	1.7	-5.1	-0.1	1.9	10.3	0.4	**-4.2**	**-0.4**	**0.4**	*0.2*	*-1.2*	*-1.4*
Malta	4.8	4.0	-3.6	4.6	6.6	0.6	**0.3**	**0.6**	**0.2**	*1.8*	*0.1*	*0.1*
Netherlands	-2.6	1.2	0.5	-1.9	4.5	-3.4	**-1.8**	**-0.3**	**-1.8**	*-2.3*	*-0.9*	*-0.9*
Austria	-0.8	-0.8	0.8	1.5	-2.7	-0.5	**4.2**	**-0.2**	**-2.5**	*2.5*	*1.8*	*-0.9*
Portugal	2.0	2.8	0.2	1.4	-8.6	3.4	**8.4**	**0.3**	**-1.2**	*3.0*	*6.1*	*-0.5*
Slovakia	1.1	-2.6	0.2	-1.8	1.7	-0.2	**-7.3**	**0.0**	**-0.5**	*-0.3*	*-0.9*	*2.9*
Slovenia	1.9	4.8	1.5	1.7	0.0	2.7	**-0.7**	**1.4**	**0.0**	*1.6*	*0.6*	*1.1*
Finland	1.1	2.6	-2.5	4.5	0.8	-4.3	**-3.2**	**0.5**	**0.5**	*-4.9*	*-1.3*	*0.1*
Euro area (19) (b)	-0.1	0.0	-0.6	0.4	-0.4	0.7	**0.3**	**0.1**	**-0.1**	*1.0*	*0.3*	*0.3*
Bulgaria	3.9	-1.1	-2.7	1.2	-2.9	-0.1	**0.7**	**-0.7**	**-0.7**	*-1.0*	*0.9*	*-0.5*
Czechia	0.3	1.2	-0.7	-1.3	0.2	-3.0	**-0.6**	**1.1**	**0.4**	*-4.7*	*-2.6*	*-1.2*
Denmark	1.4	-0.5	-0.7	2.5	2.3	-1.1	**-1.0**	**1.9**	**1.6**	*-1.1*	*0.0*	*0.2*
Hungary	-0.5	0.2	0.3	2.6	2.0	-0.5	**0.7**	**1.7**	**1.2**	*-0.5*	*1.1*	*1.2*
Poland	5.3	3.1	2.4	2.3	8.3	2.5	**-1.1**	**1.1**	**0.9**	*1.7*	*2.1*	*-0.6*
Romania	12.7	1.7	1.1	2.5	-1.0	2.1	**1.2**	**1.6**	**1.1**	*1.9*	*0.0*	*0.6*
Sweden	-0.7	-1.0	0.1	3.5	2.9	-0.9	**-1.2**	**-1.7**	**-0.6**	*-1.1*	*-0.7*	*-1.3*
EU (b)	0.3	0.1	-0.4	0.6	0.1	0.6	**0.2**	**0.2**	**0.1**	*0.8*	*0.3*	*0.2*
United Kingdom	0.2	1.8	-0.6	-2.1	-4.6	-8.4	**1.0**	**-0.4**	**-1.5**	*-9.8*	*-0.3*	*-3.0*
Japan	-0.6	-0.2	-1.3	-0.7	-5.2	-0.4	**-0.4**	**0.5**	**-0.8**	*-0.2*	*-1.8*	*-1.1*
United States	-1.2	-1.3	-1.5	-0.9	-4.7	-3.5	**1.2**	**-0.1**	**1.2**	*-4.3*	*0.7*	*0.9*

(a) Index for exports of goods and services divided by an index for growth of markets.

(b) Intra- and extra-EU trade.

Table 54: **World GDP, volume (percentage change on preceding year, 2018-2024)** **31.10.2022**

						Autumn 2022 forecast			Spring 2022 forecast		
	(a)	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
EU	14.8	2.1	1.8	-5.7	5.4	**3.3**	**0.3**	**1.6**	*5.4*	*2.7*	*2.3*
Euro area (20)	12.0	1.8	1.6	-6.1	5.3	**3.2**	**0.3**	**1.5**	*5.4*	*2.7*	*2.3*
Belgium	0.5	1.8	2.2	-5.4	6.1	**2.8**	**0.2**	**1.5**	*6.2*	*2.0*	*1.8*
Bulgaria	0.1	2.7	4.0	-4.0	7.6	**3.1**	**1.1**	**2.4**	*4.2*	*2.1*	*3.1*
Czechia	0.3	3.2	3.0	-5.5	3.5	**2.5**	**0.1**	**1.8**	*3.3*	*1.9*	*2.7*
Denmark	0.3	2.0	1.5	-2.0	4.9	**3.0**	**0.0**	**1.3**	*4.7*	*2.6*	*1.8*
Germany	3.3	1.0	1.1	-3.7	2.6	**1.6**	**-0.6**	**1.4**	*2.9*	*1.6*	*2.4*
Estonia	0.0	3.8	3.7	-0.6	8.0	**-0.1**	**0.7**	**2.1**	*8.3*	*1.0*	*2.4*
Ireland	0.4	8.5	5.4	6.2	13.6	**7.9**	**3.2**	**3.1**	*13.5*	*5.4*	*4.4*
Greece	0.2	1.7	1.9	-9.0	8.4	**6.0**	**1.0**	**2.0**	*8.3*	*3.5*	*3.1*
Spain	1.4	2.3	2.0	-11.3	5.5	**4.5**	**1.0**	**2.0**	*5.1*	*4.0*	*3.4*
France	2.3	1.9	1.8	-7.8	6.8	**2.6**	**0.4**	**1.5**	*7.0*	*3.1*	*1.8*
Croatia	0.1	2.8	3.4	-8.6	13.1	**6.0**	**1.0**	**1.7**	*10.2*	*3.4*	*3.0*
Italy	1.9	0.9	0.5	-9.0	6.7	**3.8**	**0.3**	**1.1**	*6.6*	*2.4*	*1.9*
Cyprus	0.0	5.6	5.5	-4.4	6.6	**5.6**	**1.0**	**1.9**	*5.5*	*2.3*	*3.5*
Latvia	0.0	4.0	2.6	-2.2	4.1	**1.9**	**-0.3**	**2.6**	*4.5*	*2.0*	*2.9*
Lithuania	0.1	4.0	4.6	0.0	6.0	**2.5**	**0.5**	**2.4**	*5.0*	*1.7*	*2.6*
Luxembourg	0.1	1.2	2.3	-0.8	5.1	**1.5**	**1.0**	**2.4**	*6.9*	*2.2*	*2.7*
Hungary	0.2	5.4	4.9	-4.5	7.1	**5.5**	**0.1**	**2.6**	*7.1*	*3.6*	*2.6*
Malta	0.0	6.2	5.9	-8.3	10.3	**5.7**	**2.8**	**3.7**	*9.4*	*4.2*	*4.0*
Netherlands	0.7	2.4	2.0	-3.9	4.9	**4.6**	**0.6**	**1.3**	*5.0*	*3.3*	*1.6*
Austria	0.4	2.4	1.5	-6.5	4.6	**4.6**	**0.3**	**1.1**	*4.5*	*3.9*	*1.9*
Poland	1.0	5.9	4.5	-2.0	6.8	**4.0**	**0.7**	**2.6**	*5.9*	*3.7*	*3.0*
Portugal	0.3	2.8	2.7	-8.3	5.5	**6.6**	**0.7**	**1.7**	*4.9*	*5.8*	*2.7*
Romania	0.4	6.0	3.9	-3.7	5.1	**5.8**	**1.8**	**2.2**	*5.9*	*2.6*	*3.6*
Slovenia	0.1	4.5	3.5	-4.3	8.2	**6.2**	**0.8**	**1.7**	*8.1*	*3.7*	*3.1*
Slovakia	0.1	4.0	2.5	-3.4	3.0	**1.9**	**0.5**	**1.9**	*3.0*	*2.3*	*3.6*
Finland	0.2	1.1	1.2	-2.2	3.0	**2.3**	**0.2**	**1.4**	*3.5*	*1.6*	*1.7*
Sweden	0.4	2.0	2.0	-2.2	5.1	**2.9**	**-0.6**	**0.8**	*4.8*	*2.3*	*1.4*
Candidate Countries (ex. MD, UA)	2.2	3.1	1.0	1.5	10.5	**4.8**	**3.4**	**3.0**	*10.2*	*2.1*	*3.1*
- Albania	0.0	4.0	2.1	-3.5	8.5	**3.2**	**2.6**	**3.4**	*8.4*	*2.7*	*3.1*
- Montenegro	0.0	5.1	4.1	-15.3	13.0	**7.0**	**2.9**	**3.2**	*12.4*	*3.8*	*3.4*
- North Macedonia	0.0	2.9	3.2	-4.5	4.0	**2.3**	**2.5**	**2.8**	*4.0*	*3.0*	*3.1*
- Serbia	0.1	4.5	4.3	-0.9	7.5	**2.7**	**2.4**	**3.0**	*7.4*	*3.4*	*3.8*
- Türkiye	2.0	3.0	0.8	1.9	11.4	**5.0**	**3.5**	**3.0**	*11.0*	*2.0*	*3.0*
Potential Candidate Countries	0.1	3.8	3.5	-3.8	8.5	**2.6**	**2.1**	**2.8**	*8.1*	*2.3*	*2.4*
Iceland	0.0	4.9	2.4	-7.1	4.3	**5.0**	**2.4**	**2.1**	*4.3*	*3.4*	*3.3*
Norway	0.3	1.1	0.7	-0.7	3.9	**2.5**	**1.8**	**1.9**	*3.9*	*3.4*	*2.6*
Switzerland	0.5	2.9	1.2	-2.4	3.7	**2.2**	**1.2**	**2.0**	*3.7*	*2.2*	*2.0*
Australia	1.0	2.8	2.0	-2.2	4.9	**3.8**	**2.5**	**2.4**	*4.7*	*3.8*	*2.5*
Canada	1.4	3.2	1.9	-4.8	4.5	**3.4**	**1.6**	**2.4**	*4.6*	*3.8*	*2.5*
Japan	3.8	0.6	-0.4	-4.6	1.7	**1.7**	**1.6**	**1.2**	*1.7*	*1.9*	*1.8*
Korea	1.7	2.9	2.2	-0.7	4.1	**2.2**	**1.6**	**2.0**	*4.0*	*2.6*	*2.4*
United Kingdom	2.3	1.7	1.6	-11.0	7.5	**4.2**	**-0.9**	**0.9**	*7.4*	*3.4*	*1.6*
United States	15.7	2.9	2.3	-2.8	5.9	**1.8**	**0.7**	**1.7**	*5.7*	*2.9*	*2.3*
Advanced economies	45.6	2.5	1.8	-4.1	5.6	**2.7**	**0.9**	**1.8**	*5.5*	*2.8*	*2.4*
Emerging and Developing Asia	33.4	6.3	5.2	-1.2	6.9	**4.4**	**4.8**	**5.0**	*6.9*	*5.2*	*5.3*
- China	18.6	6.7	6.0	2.2	8.1	**3.4**	**4.5**	**4.7**	*8.1*	*4.6*	*5.0*
- India	7.0	7.3	4.5	-6.6	8.3	**6.9**	**6.0**	**6.3**	*8.3*	*7.4*	*6.5*
- Indonesia	2.4	5.2	5.0	-2.1	3.7	**5.0**	**5.0**	**5.0**	*3.7*	*5.0*	*5.5*
Eastern Neighbourhood and Central Asia	1.4	3.7	3.5	-2.6	4.7	**-7.7**	**4.9**	**9.1**	*4.7*	*-8.2*	*2.6*
Russia	3.1	2.8	2.2	-2.7	4.7	**-5.1**	**-3.2**	**0.9**	*4.7*	*-10.4*	*1.5*
Latin America	7.4	1.0	-0.1	-7.3	6.8	**3.0**	**1.7**	**2.2**	*6.1*	*2.3*	*2.4*
- Argentina	0.7	-2.6	-2.0	-9.9	10.4	**3.9**	**0.3**	**1.9**	*10.3*	*3.0*	*2.3*
- Brazil	2.3	1.8	1.2	-3.9	4.6	**2.5**	**0.8**	**1.0**	*4.6*	*0.7*	*1.5*
- Mexico	1.8	2.2	-0.2	-8.1	4.8	**2.2**	**1.4**	**2.1**	*4.8*	*2.2*	*2.6*
MENA	5.7	1.7	1.2	-3.3	4.0	**5.4**	**3.5**	**3.3**	*3.4*	*5.4*	*3.8*
- Saudi Arabia	1.2	2.5	0.3	-4.1	3.2	**7.6**	**3.7**	**2.9**	*2.7*	*9.0*	*6.0*
Sub-Saharan	3.3	2.6	2.7	-2.0	4.3	**3.3**	**3.4**	**3.7**	*4.3*	*3.6*	*3.7*
- South Africa	0.6	1.5	0.3	-6.3	4.9	**2.0**	**1.4**	**1.6**	*4.9*	*2.0*	*1.7*
Emerging and Developing Economies	54.3	4.5	3.6	-2.5	6.3	**3.4**	**3.8**	**4.3**	*6.1*	*3.6*	*4.5*
World	100.0	3.6	2.8	-3.2	6.0	**3.1**	**2.5**	**3.1**	*5.8*	*3.2*	*3.5*
World excluding EU	85.0	3.8	2.9	-2.7	6.0	**3.1**	**2.9**	**3.4**	*5.9*	*3.3*	*3.7*
World excluding euro area	87.9	3.8	3.0	-2.7	6.0	**3.1**	**2.8**	**3.4**	*5.9*	*3.3*	*3.7*

(a) Relative weights in %, based on GDP (at constant prices and PPS) in 2021.

Table 55: World exports of goods and services, volume (percentage change on preceding year, 2018-2024) 31.10.2022

						Autumn 2022 forecast			*Spring 2022 forecast*		
	(a)	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
EU (b)	31.6	3.7	3.1	-8.4	10.5	**6.3**	**2.1**	**3.6**	*10.7*	*5.0*	*4.6*
Euro area (20) (b)	26.4	3.5	2.8	-9.0	10.6	**6.6**	**2.0**	**3.4**	*11.1*	*5.2*	*4.7*
Candidate Countries	1.3	8.7	4.6	-13.8	24.5	**11.0**	**3.4**	**7.1**	*24.5*	*7.1*	*7.4*
- Albania	0.0	4.0	2.7	-27.7	46.6	**7.5**	**3.7**	**4.2**	*46.6*	*4.8*	*5.4*
- Montenegro	0.0	7.0	5.8	-46.2	81.9	**21.9**	**2.2**	**4.2**	*81.1*	*3.8*	*6.3*
- North Macedonia	0.0	12.8	7.2	-10.9	12.3	**8.7**	**9.6**	**8.3**	*12.3*	*5.8*	*7.2*
- Serbia	0.1	7.5	7.6	-4.1	19.5	**9.0**	**5.4**	**6.1**	*19.3*	*8.6*	*8.5*
- Türkiye	1.1	8.8	4.2	-14.4	24.9	**11.3**	**3.0**	**7.2**	*24.9*	*7.0*	*7.3*
Iceland	0.0	1.7	-4.7	-30.2	12.3	**17.1**	**5.7**	**3.6**	*12.3*	*14.3*	*7.9*
Norway	0.7	-1.2	1.1	-1.2	4.7	**3.3**	**3.5**	**3.0**	*4.8*	*5.0*	*3.5*
Switzerland	2.1	3.3	-0.8	-6.0	12.5	**5.8**	**2.5**	**3.7**	*12.5*	*4.8*	*4.7*
Australia	1.4	5.1	3.4	-9.8	-1.8	**7.0**	**6.0**	**5.1**	*8.0*	*5.3*	*4.7*
Canada	2.2	3.8	2.3	-9.7	1.4	**3.3**	**1.8**	**2.4**	*1.5*	*6.3*	*4.5*
Japan	3.3	3.8	-1.5	-11.6	11.8	**3.7**	**3.3**	**3.0**	*11.7*	*3.6*	*3.4*
Korea	2.8	4.0	0.2	-1.7	10.8	**3.1**	**2.7**	**2.2**	*9.6*	*5.8*	*4.7*
United Kingdom	3.2	3.1	1.7	-12.1	-0.3	**7.3**	**1.7**	**1.9**	*-1.3*	*5.3*	*1.2*
United States	9.3	2.8	0.5	-13.2	6.1	**7.2**	**2.9**	**4.8**	*4.6*	*5.7*	*5.4*
Advanced economies	65.5	3.7	1.6	-8.7	9.3	**5.8**	**2.6**	**3.7**	*9.1*	*5.2*	*4.5*
Emerging and developing Asia	19.9	4.5	0.3	-1.4	16.0	**2.8**	**2.5**	**2.8**	*16.9*	*3.3*	*4.2*
- China	13.0	4.0	0.4	2.6	17.4	**1.3**	**1.1**	**1.8**	*18.2*	*2.1*	*3.1*
- India	2.4	5.1	-2.1	-6.3	20.3	**4.9**	**5.6**	**4.9**	*20.1*	*4.9*	*6.0*
- Indonesia	0.9	4.5	0.1	-8.0	0.4	**4.1**	**1.0**	**1.0**	*15.6*	*5.5*	*5.0*
Eastern Neighbourhood and Central Asia	1.0	6.3	3.5	-4.2	7.7	**-5.6**	**6.2**	**11.2**	*16.0*	*-18.5*	*3.4*
Russia	2.0	5.6	0.7	-4.1	3.5	**-7.5**	**-5.0**	**2.6**	*3.2*	*-16.1*	*3.9*
Latin America	5.0	3.5	0.7	-9.3	7.4	**6.0**	**4.4**	**4.6**	*6.9*	*5.2*	*5.4*
- Argentina	0.3	-0.4	12.3	-12.9	12.6	**5.5**	**2.7**	**3.3**	*9.0*	*5.1*	*4.1*
- Brazil	1.2	3.4	-1.7	-1.4	2.4	**3.6**	**4.4**	**3.1**	*3.5*	*2.0*	*6.6*
- Mexico	1.9	6.0	1.5	-7.3	6.9	**7.2**	**2.7**	**3.8**	*6.9*	*5.8*	*4.0*
MENA	5.3	4.1	-1.6	-10.4	4.9	**8.7**	**4.3**	**4.0**	*10.6*	*6.4*	*4.9*
- Saudi Arabia	1.0	9.3	-3.6	-14.4	4.8	**7.9**	**6.0**	**4.2**	*0.6*	*8.9*	*3.9*
Sub-Saharan Africa	1.4	2.1	1.6	-9.4	-0.4	**3.4**	**4.2**	**4.9**	*3.6*	*5.1*	*4.4*
- South Africa	0.5	2.7	-3.4	-11.9	10.0	**5.9**	**3.7**	**4.0**	*10.0*	*6.3*	*3.9*
Emerging and developing economies	34.5	4.3	0.2	-4.7	11.6	**3.4**	**2.8**	**3.5**	*13.3*	*2.3*	*4.5*
World	100.0	3.9	1.1	-7.4	10.0	**5.0**	**2.7**	**3.6**	*10.4*	*4.2*	*4.5*
World excluding EU	68.4	3.9	0.2	-6.9	9.8	**4.3**	**2.9**	**3.7**	*10.3*	*3.8*	*4.5*
World excluding euro area (20)	73.6	4.0	0.5	-6.8	9.8	**4.4**	**2.9**	**3.7**	*0.8*	*-0.8*	*0.4*

(a) Relative weights in %, based on exports of goods and services (at current prices and current exchange rates) in 2021.

(b) Intra- and extra-EU trade.

Table 56: Export shares in EU trade (goods only - 2021) 31.10.2022

	EU	Euro Area (19)	Candidate Countries	USA	United Kingdom	Japan	Other Advanced Economies	China	Rest of Asia	Russia	MENA	Latin America	Sub-Saharan Africa
EU	61.0	48.4	1.8	7.3	4.9	1.2	7.5	4.4	1.0	1.5	2.9	2.2	1.2
Euro area (19)	59.2	47.2	1.7	7.9	5.1	1.3	7.9	4.7	1.1	1.5	3.1	2.4	1.3
Belgium	67.7	60.0	1.4	5.2	6.1	1.5	4.6	1.8	0.9	0.8	2.7	1.7	2.3
Bulgaria	66.0	46.3	9.6	2.6	1.7	0.2	2.9	3.8	1.0	1.3	3.6	0.8	1.0
Czechia	79.0	64.5	1.6	2.6	3.3	0.7	3.5	2.0	0.4	1.8	1.4	1.0	0.4
Denmark	53.9	37.3	1.2	9.7	5.2	2.0	10.7	5.7	1.6	1.0	2.5	2.9	0.8
Germany	55.1	38.3	1.9	8.7	4.8	1.4	9.6	7.6	1.3	1.8	2.2	2.6	0.9
Estonia	67.2	50.1	1.2	9.6	2.8	0.8	6.7	1.3	0.4	3.4	1.4	1.0	0.6
Ireland	37.5	34.2	0.5	30.2	9.2	2.3	5.4	7.0	2.1	0.6	1.3	1.6	0.6
Greece	52.9	38.8	10.1	4.0	3.0	1.0	5.7	2.0	1.2	0.6	11.5	1.3	1.2
Spain	61.2	54.6	1.9	4.8	5.6	1.2	5.4	3.0	0.8	0.8	5.7	4.6	1.4
France	53.2	46.2	1.6	7.6	5.4	1.6	9.2	5.6	1.3	1.6	5.0	2.4	1.9
Croatia	68.7	52.0	8.0	3.5	1.0	0.3	2.8	1.0	1.4	1.2	2.1	0.4	0.3
Italy	51.3	41.5	2.7	9.7	4.2	1.7	10.2	4.0	1.3	1.7	5.0	3.0	1.1
Cyprus	36.6	27.7	0.4	1.9	5.6	0.0	5.2	1.1	9.6	1.4	17.9	4.6	4.7
Latvia	65.7	49.7	1.4	2.9	7.7	0.5	4.1	1.1	0.3	7.1	1.3	0.7	2.5
Lithuania	61.0	42.8	1.8	6.1	3.8	0.3	5.9	0.9	0.6	6.7	1.3	1.1	1.5
Luxembourg	78.8	71.3	1.0	2.7	2.2	0.5	5.4	2.3	0.7	1.0	1.6	1.6	0.7
Hungary	75.8	56.6	3.2	3.8	2.4	0.6	3.2	2.7	0.5	1.5	1.2	1.6	0.3
Malta	43.9	34.6	1.8	4.2	2.7	3.8	13.4	7.0	3.6	0.4	9.3	2.0	2.5
Netherlands	71.8	61.3	0.9	4.5	5.7	0.5	6.3	2.1	0.6	0.9	1.7	1.7	1.4
Austria	68.5	52.3	1.4	6.7	2.4	1.0	8.7	3.4	0.8	1.2	1.4	1.8	0.5
Poland	75.2	59.1	1.5	2.9	4.8	0.3	3.6	1.4	0.6	2.3	1.4	1.3	0.6
Portugal	67.1	61.7	1.4	6.1	5.0	0.5	4.0	2.8	0.4	0.6	3.3	2.7	3.8
Romania	70.0	52.4	5.3	2.7	2.9	0.8	3.1	2.6	0.5	1.6	4.7	1.0	0.7
Slovenia	70.6	47.5	4.8	2.4	1.3	0.2	10.0	1.1	0.4	1.9	1.7	0.6	0.3
Slovakia	77.1	44.9	1.5	4.0	3.2	0.3	3.1	4.8	0.1	1.7	1.3	0.8	0.3
Finland	55.3	39.2	1.7	7.5	3.7	2.3	8.9	5.8	1.5	4.8	2.1	2.7	1.2
Sweden	55.3	41.6	1.1	8.2	5.1	1.6	13.4	4.7	1.0	1.4	2.5	2.2	0.9

Table 57: World imports of goods and services, volume (percentage change on preceding year, 2018-2024) 31.10.2022

						Autumn 2022 forecast			Spring 2022 forecast		
	(a)	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
EU (b)	30.5	4.2	4.6	-7.9	9.0	**6.7**	**1.9**	**3.5**	*9.3*	*5.0*	*4.7*
Euro area (20) (b)	25.3	3.8	4.8	-8.5	8.4	**6.8**	**1.9**	**3.5**	*8.8*	*5.2*	*4.8*
Candidate Countries	1.4	-4.0	-2.7	4.0	5.1	**6.6**	**2.3**	**5.7**	*4.9*	*1.8*	*4.8*
- Albania	0.0	2.4	2.3	-19.2	31.6	**6.9**	**2.0**	**2.7**	*31.6*	*2.9*	*3.2*
- Montenegro	0.0	9.2	2.7	-20.1	13.7	**13.8**	**-0.3**	**3.9**	*13.7*	*1.4*	*4.8*
- North Macedonia	0.0	10.7	8.9	-10.9	13.9	**13.6**	**7.9**	**6.7**	*13.9*	*4.6*	*6.0*
- Serbia	0.1	10.8	10.7	-3.6	17.7	**9.1**	**4.6**	**5.0**	*19.3*	*8.1*	*7.3*
- Türkiye	1.1	-6.2	-5.0	6.7	2.4	**5.9**	**1.9**	**5.8**	*2.0*	*0.9*	*4.5*
Iceland	0.0	0.9	-8.5	-21.6	20.3	**13.3**	**4.7**	**3.1**	*20.3*	*12.6*	*7.5*
Norway	0.5	1.4	5.1	-11.9	2.3	**8.0**	**3.0**	**3.3**	*2.0*	*8.5*	*4.1*
Switzerland	1.7	0.7	-0.2	-4.5	5.3	**6.9**	**2.7**	**4.2**	*5.3*	*5.6*	*5.1*
Australia	1.1	4.3	-1.4	-13.0	6.3	**8.9**	**4.9**	**3.6**	*4.9*	*8.9*	*5.8*
Canada	2.3	3.3	0.4	-10.8	7.7	**9.6**	**3.0**	**2.5**	*6.4*	*7.1*	*4.6*
Japan	3.6	3.8	1.0	-6.7	5.1	**5.0**	**2.2**	**1.4**	*5.2*	*2.3*	*2.7*
Korea	2.7	1.7	-1.9	-3.1	10.1	**7.1**	**3.4**	**2.8**	*8.7*	*4.5*	*3.4*
United Kingdom	3.4	3.3	2.6	-16.0	2.8	**12.9**	**-1.2**	**1.3**	*3.8*	*5.8*	*2.3*
United States	13.0	4.2	1.1	-9.0	14.1	**8.5**	**-1.1**	**1.9**	*14.0*	*8.7*	*2.7*
Advanced economies	67.1	3.8	2.1	-8.0	9.6	**7.3**	**1.5**	**3.0**	*9.4*	*5.7*	*4.0*
Emerging and developing Asia	19.2	7.2	-3.4	-5.1	13.1	**0.2**	**4.4**	**5.2**	*14.8*	*4.9*	*5.9*
- China	11.8	7.3	-3.7	-0.4	10.0	**-2.9**	**4.0**	**4.9**	*11.0*	*3.6*	*5.8*
- India	2.7	4.7	-4.4	-14.0	20.5	**6.1**	**4.8**	**5.7**	*33.8*	*5.3*	*6.0*
- Indonesia	0.8	15.2	-9.7	-14.9	15.9	**3.0**	**3.6**	**5.0**	*12.4*	*11.2*	*5.0*
Eastern Neighbourhood and Central Asia	1.0	6.5	8.1	-13.4	3.8	**-8.6**	**6.8**	**12.0**	*14.2*	*-14.3*	*2.8*
Russia	1.4	2.7	3.1	-11.9	16.9	**-18.4**	**1.0**	**5.0**	*16.7*	*-25.8*	*5.4*
Latin America	5.3	4.7	-1.0	-12.9	17.4	**5.3**	**3.1**	**3.9**	*15.2*	*3.0*	*3.7*
- Argentina	0.3	-6.1	-21.0	-10.5	29.8	**11.9**	**1.1**	**3.9**	*21.5*	*5.7*	*4.3*
- Brazil	1.1	7.5	4.6	-8.6	15.6	**0.5**	**2.7**	**4.6**	*16.1*	*-0.7*	*3.1*
- Mexico	2.1	6.4	-0.7	-13.8	13.6	**9.3**	**3.6**	**3.9**	*13.7*	*5.0*	*4.6*
MENA	4.5	1.3	-0.4	-15.1	6.6	**9.6**	**3.8**	**3.8**	*5.3*	*7.8*	*4.8*
- Saudi Arabia	0.8	2.2	3.0	-16.1	5.0	**8.1**	**8.5**	**9.1**	*6.8*	*15.2*	*7.3*
Sub-Saharan Africa	1.5	6.5	8.0	-13.1	-0.3	**7.6**	**4.8**	**4.8**	*0.0*	*8.4*	*4.4*
- South Africa	0.4	3.2	0.4	-17.4	9.5	**13.0**	**4.7**	**5.0**	*9.5*	*12.8*	*4.7*
Emerging and developing economies	32.9	5.5	-1.4	-8.9	12.1	**1.5**	**4.1**	**4.9**	*12.7*	*3.2*	*5.3*
World	100.0	4.3	1.0	-8.3	10.4	**5.4**	**2.3**	**3.6**	*10.4*	*4.9*	*4.4*
World excluding EU	69.5	4.4	-0.6	-8.5	11.0	**4.8**	**2.5**	**3.7**	*10.9*	*4.9*	*4.3*
World excluding euro area (20)	74.7	4.5	-0.3	-8.2	11.1	**4.9**	**2.5**	**3.7**	*11.0*	*4.9*	*4.2*

(a) Relative weights in %, based on imports of goods and services (at current prices and current exchange rates) in 2021.

(b) Intra- and extra-EU trade.

Table 58: Import shares in EU trade (goods only - 2021) 31.10.2022

	EU	Euro Area (19)	Candidate Countries	USA	United Kingdom	Japan	Other Advanced Economies	China	Rest of Asia	Russia	MENA	Latin America	Sub-Saharan Africa
EU	47.2	48.4	1.8	7.3	4.9	1.2	7.5	4.4	1.0	1.5	2.9	2.2	1.2
Euro area (19)	59.2	47.2	1.7	7.9	5.1	1.3	7.9	4.7	1.1	1.5	3.1	2.4	1.3
Belgium	67.7	60.0	1.4	5.2	6.1	1.5	4.6	1.8	0.9	0.8	2.7	1.7	2.3
Bulgaria	66.0	46.3	9.6	2.6	1.7	0.2	2.9	3.8	1.0	1.3	3.6	0.8	1.0
Czechia	79.0	64.5	1.6	2.6	3.3	0.7	3.5	2.0	0.4	1.8	1.4	1.0	0.4
Denmark	53.9	37.3	1.2	9.7	5.2	2.0	10.7	5.7	1.6	1.0	2.5	2.9	0.8
Germany	55.1	38.3	1.9	8.7	4.8	1.4	9.6	7.6	1.3	1.8	2.2	2.6	0.9
Estonia	67.2	50.1	1.2	9.6	2.8	0.8	6.7	1.3	0.4	3.4	1.4	1.0	0.6
Ireland	37.5	34.2	0.5	30.2	9.2	2.3	5.4	7.0	2.1	0.6	1.3	1.6	0.6
Greece	52.9	38.8	10.1	4.0	3.0	1.0	5.7	2.0	1.2	0.6	11.5	1.3	1.2
Spain	61.2	54.6	1.9	4.8	5.6	1.2	5.4	3.0	0.8	0.8	5.7	4.6	1.4
France	53.2	46.2	1.6	7.6	5.4	1.6	9.2	5.6	1.3	1.6	5.0	2.4	1.9
Croatia	68.7	52.0	8.0	3.5	1.0	0.3	2.8	1.0	1.4	1.2	2.1	0.4	0.3
Italy	51.3	41.5	2.7	9.7	4.2	1.7	10.2	4.0	1.3	1.7	5.0	3.0	1.1
Cyprus	36.6	27.7	0.4	1.9	5.6	0.0	5.2	1.1	9.6	1.4	17.9	4.6	4.7
Latvia	65.7	49.7	1.4	2.9	7.7	0.5	4.1	1.1	0.3	7.1	1.3	0.7	2.5
Lithuania	61.0	42.8	1.8	6.1	3.8	0.3	5.9	0.9	0.6	6.7	1.3	1.1	1.5
Luxembourg	78.8	71.3	1.0	2.7	2.2	0.5	5.4	2.3	0.7	1.0	1.6	1.6	0.7
Hungary	75.8	56.6	3.2	3.8	2.4	0.6	3.2	2.7	0.5	1.5	1.2	1.6	0.3
Malta	43.9	34.6	1.8	4.2	2.7	3.8	13.4	7.0	3.6	0.4	9.3	2.0	2.5
Netherlands	71.8	61.3	0.9	4.5	5.7	0.5	6.3	2.1	0.6	0.9	1.7	1.7	1.4
Austria	68.5	52.3	1.4	6.7	2.4	1.0	8.7	3.4	0.8	1.2	1.4	1.8	0.5
Poland	75.2	59.1	1.5	2.9	4.8	0.3	3.6	1.4	0.6	2.3	1.4	1.3	0.6
Portugal	67.1	61.7	1.4	6.1	5.0	0.5	4.0	2.8	0.4	0.6	3.3	2.7	3.8
Romania	70.0	52.4	5.3	2.7	2.9	0.8	3.1	2.6	0.5	1.6	4.7	1.0	0.7
Slovenia	70.6	47.5	4.8	2.4	1.3	0.2	10.0	1.1	0.4	1.9	1.7	0.6	0.3
Slovakia	77.1	44.9	1.5	4.0	3.2	0.3	3.1	4.8	0.1	1.7	1.3	0.8	0.3
Finland	55.3	39.2	1.7	7.5	3.7	2.3	8.9	5.8	1.5	4.8	2.1	2.7	1.2
Sweden	55.3	41.6	1.1	8.2	5.1	1.6	13.4	4.7	1.0	1.4	2.5	2.2	0.9

Table 59: World merchandise trade balances (fob-fob, in billions of US dollar, 2017-2024) 31.10.2022

						Autumn 2022 forecast			*Spring 2022 forecast*		
	2017	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
EU	458.3	381.1	400.4	461.1	380.9	**-64.2**	**-35.4**	**51.5**	*397.4*	*154.4*	*251.8*
EU, adjusted[1]	288.5	207.3	246.9	286.1	200.7	**-59.9**	**-36.6**	**53.2**	*205.1*	*129.9*	*216.0*
Euro area (20)	437.0	382.3	384.0	425.6	381.9	**3.0**	**40.3**	**118.6**	*387.6*	*180.4*	*272.8*
Euro area (19), adjusted[1]	306.8	241.3	275.8	299.5	245.5	**19.3**	**59.8**	**141.6**	*245.4*	*163.3*	*247.4*
Candidate Countries	-77.2	-56.3	-37.1	-58.3	-40.8	**-95.7**	**-102.7**	**-137.9**	*-40.9*	*-58.9*	*-73.0*
- Albania	-3.2	-3.4	-3.5	-3.4	-4.5	**-4.8**	**-4.9**	**-5.2**	*-4.5*	*-4.7*	*-5.0*
- Montenegro	-2.1	-2.4	-2.3	-1.9	-2.3	**-2.6**	**-2.6**	**-2.8**	*-2.3*	*-2.3*	*-2.5*
- North Macedonia	-2.0	-2.1	-2.2	-2.1	-2.4	**-3.2**	**-3.3**	**-3.4**	*-2.8*	*-2.9*	*-3.0*
- Serbia	-4.5	-6.0	-6.3	-5.9	-7.0	**-9.2**	**-9.5**	**-10.1**	*-7.0*	*-8.4*	*-9.0*
- Türkiye	-65.4	-42.4	-22.8	-45.0	-24.6	**-75.9**	**-82.4**	**-116.3**	*-24.3*	*-40.6*	*-53.4*
Iceland	-1.5	-1.5	-1.0	-0.6	-1.3	**-1.4**	**-1.5**	**-1.5**	*-1.3*	*-1.5*	*-1.9*
Norway	20.4	30.7	12.8	-3.2	56.5	**73.4**	**82.5**	**91.8**	*56.5*	*72.4*	*80.9*
Switzerland	63.9	71.6	70.6	61.4	110.2	**113.7**	**115.5**	**120.4**	*110.2*	*113.5*	*117.2*
Australia	10.5	20.8	48.1	40.5	87.7	**85.3**	**84.6**	**89.7**	*47.1*	*42.0*	*39.3*
Canada	-19.1	-16.8	-13.9	-29.7	3.6	**29.7**	**18.8**	**13.3**	*4.1*	*19.7*	*20.5*
Japan	43.8	10.2	1.4	26.0	15.2	**-87.7**	**-79.1**	**-64.3**	*16.2*	*-23.2*	*-19.9*
Korea	113.6	110.1	79.8	80.6	76.2	**-12.6**	**-12.9**	**-6.4**	*76.2*	*62.8*	*53.5*
United Kingdom	-182.0	-191.3	-189.0	-171.4	-211.6	**-316.5**	**-323.2**	**-332.5**	*-214.7*	*-279.7*	*-295.1*
United States	-823.2	-889.8	-871.9	-884.5	-1103.2	**-1226.1**	**-1155.5**	**-1141.6**	*-1109.4*	*-1327.3*	*-1313.9*
Advanced economies	-234.8	-395.8	-361.8	-302.7	-421.3	**-1309.3**	**-1195.9**	**-1089.3**	*-463.8*	*-1043.1*	*-955.9*
Emerging and developing Asia	367.5	199.2	259.9	508.6	469.0	**583.2**	**525.3**	**493.1**	*463.5*	*314.7*	*371.8*
- China	475.9	380.1	393.0	511.1	562.7	**767.3**	**668.2**	**653.0**	*568.5*	*498.5*	*503.7*
- India	-148.1	-186.7	-157.7	-95.4	-176.7	**-284.6**	**-249.4**	**-257.0**	*-179.3*	*-255.0*	*-216.4*
- Indonesia	18.8	-0.2	3.5	28.3	43.8	**54.6**	**45.5**	**35.2**	*43.8*	*47.6*	*55.3*
Eastern Neighbourhood and Central Asia	0.3	6.7	-4.9	-9.4	6.9	**27.4**	**14.1**	**8.9**	*9.4*	*12.1*	*12.7*
Russia	114.7	195.9	165.4	90.5	186.3	**304.2**	**310.0**	**321.1**	*176.0*	*286.9*	*254.6*
Latin America	33.8	10.7	19.7	72.3	17.9	**24.6**	**41.5**	**57.5**	*27.0*	*43.7*	*66.0*
- Argentina	-5.4	-0.7	18.2	14.6	18.7	**15.5**	**15.9**	**14.7**	*16.8*	*18.0*	*19.0*
- Brazil	57.3	43.4	26.5	32.4	36.4	**35.0**	**37.9**	**37.1**	*36.2*	*43.5*	*56.3*
- Mexico	-11.0	-13.8	5.2	34.2	-10.9	**-13.1**	**-13.5**	**-8.6**	*8.9*	*6.7*	*4.0*
MENA	169.4	326.3	238.4	73.8	287.5	**508.0**	**448.6**	**383.1**	*225.4*	*324.0*	*308.6*
- Saudi Arabia	98.5	168.7	121.3	47.9	136.5	**253.1**	**219.0**	**201.9**	*85.9*	*114.7*	*98.6*
Sub-Saharan Africa	15.4	27.2	2.5	-4.1	38.4	**39.1**	**34.8**	**33.4**	*7.9*	*10.2*	*8.0*
- South Africa	4.4	1.8	2.7	17.8	30.6	**27.6**	**23.6**	**22.6**	*28.5*	*25.8*	*22.3*
Emerging and developing economies	701.2	766.0	681.0	731.6	1006.0	**1486.5**	**1374.2**	**1297.1**	*909.2*	*991.6*	*1021.8*
World	466.4	370.2	319.2	429.0	584.7	**177.2**	**178.3**	**207.8**	*445.4*	*-51.5*	*65.9*
World excluding EU	8.1	-10.9	-81.2	-32.1	203.8	**241.4**	**213.7**	**156.2**	*48.0*	*-206.0*	*-185.9*
World excluding euro area (20)	29.4	-12.0	-64.8	3.3	202.8	**174.2**	**138.0**	**89.2**	*57.8*	*-231.9*	*-206.9*

[1] See note 8 on concepts and sources.

Table 60: World current-account balances (in billions of US dollar, 2017-2024) 31.10.2022

						Autumn 2022 forecast			*Spring 2022 forecast*		
	2017	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
EU	493.6	504.1	414.1	401.7	536.8	**175.2**	**226.2**	**327.2**	*504.4*	*350.0*	*450.8*
EU, adjusted[1]	348.2	310.5	296.0	243.4	295.7	**163.4**	**233.7**	**338.1**	*296.3*	*294.3*	*386.7*
Euro area (20)	454.1	483.0	369.6	337.0	504.7	**207.9**	**259.5**	**344.1**	*459.4*	*338.0*	*428.3*
Euro area (19), adjusted[1]	315.2	276.4	244.8	165.2	244.2	**193.8**	**268.5**	**356.1**	*246.5*	*283.2*	*367.1*
Candidate Countries	-45.1	-26.0	-0.8	-40.8	-19.2	**-55.7**	**-49.6**	**-58.7**	*-22.9*	*-38.3*	*-53.3*
- Albania	-1.0	-1.0	-1.2	-1.3	-1.4	**-1.5**	**-1.5**	**-1.5**	*-1.4*	*-1.5*	*-1.5*
- Montenegro	-0.8	-0.9	-0.8	-1.2	-0.5	**-0.6**	**-0.6**	**-0.7**	*-0.5*	*-0.7*	*-0.8*
- North Macedonia	-0.1	0.0	-0.4	-0.4	-0.5	**-1.1**	**-0.7**	**-0.5**	*-0.5*	*-0.6*	*-0.5*
- Serbia	-2.3	-2.4	-3.6	-2.2	-2.6	**-5.4**	**-5.2**	**-4.8**	*-2.8*	*-4.2*	*-4.4*
- Türkiye	-40.9	-21.7	5.3	-35.6	-14.1	**-47.1**	**-41.6**	**-51.1**	*-17.7*	*-31.3*	*-46.1*
Iceland	1.2	1.1	1.6	0.4	-0.5	**0.0**	**0.1**	**0.2**	*-0.1*	*0.0*	*0.0*
Norway	21.9	34.8	11.7	4.0	72.1	**87.8**	**96.7**	**107.2**	*74.0*	*89.1*	*98.1*
Switzerland	46.1	41.7	39.4	16.4	63.0	**67.5**	**69.4**	**72.3**	*73.0*	*74.2*	*77.1*
Australia	-36.1	-29.9	7.7	35.6	56.3	**68.1**	**62.6**	**68.3**	*48.3*	*33.3*	*31.6*
Canada	-46.2	-41.2	-35.4	-29.2	0.8	**12.8**	**-0.2**	**-4.5**	*1.2*	*10.8*	*11.4*
Japan	203.1	176.6	176.3	148.9	138.9	**29.5**	**45.6**	**68.6**	*167.7*	*113.2*	*117.3*
Korea	75.2	77.5	59.7	75.9	88.3	**-17.5**	**-14.3**	**-6.1**	*88.3*	*61.6*	*50.3*
United Kingdom	-97.0	-117.2	-80.8	-86.7	-62.8	**-170.7**	**-179.8**	**-178.7**	*-82.5*	*-150.5*	*-163.4*
United States	-371.4	-441.2	-452.6	-592.5	-861.4	**-966.5**	**-848.8**	**-776.0**	*-831.0*	*-979.4*	*-913.0*
Advanced economies	397.7	313.7	275.5	109.1	226.4	**-567.9**	**-370.6**	**-137.1**	*201.6*	*-258.3*	*-107.5*
Emerging and developing Asia	181.1	-41.4	101.9	337.1	277.6	**340.2**	**300.5**	**265.5**	*289.0*	*207.5*	*266.9*
- China	188.7	24.1	102.9	248.8	317.3	**452.5**	**372.7**	**336.6**	*333.1*	*315.1*	*302.9*
- India	-38.2	-65.6	-29.8	32.7	-33.4	**-123.5**	**-85.8**	**-84.7**	*-39.2*	*-105.5*	*-55.3*
- Indonesia	-16.2	-30.6	-30.3	-4.4	3.5	**8.2**	**-2.4**	**0.4**	*3.3*	*1.8*	*8.9*
Eastern Neighbourhood and Central Asia	-13.9	-6.3	-14.5	-9.1	-7.0	**24.8**	**14.0**	**-0.7**	*-7.3*	*-5.9*	*-9.0*
Russia	32.5	116.2	65.3	32.3	121.9	**237.5**	**220.2**	**226.9**	*118.7*	*246.7*	*204.1*
Latin America	-92.7	-138.1	-102.0	-6.0	-75.3	**-74.1**	**-64.3**	**-52.0**	*-79.1*	*-64.1*	*-64.0*
- Argentina	-31.2	-27.1	-3.5	3.1	6.7	**0.9**	**0.6**	**-1.5**	*6.5*	*2.6*	*1.3*
- Brazil	-22.0	-51.5	-65.0	-24.5	-27.9	**-37.1**	**-39.5**	**-42.0**	*-28.1*	*-27.1*	*-34.4*
- Mexico	-20.0	-24.3	-3.3	27.2	-5.0	**-14.5**	**-18.0**	**-15.5**	*-4.6*	*-8.8*	*-13.1*
MENA	31.8	177.6	94.8	-26.2	161.2	**465.8**	**436.2**	**320.6**	*37.9*	*200.4*	*127.8*
- Saudi Arabia	10.5	72.0	38.2	-22.8	44.3	**172.4**	**144.2**	**123.7**	*29.6*	*91.2*	*29.3*
Sub-Saharan Africa	-24.6	-25.8	-46.9	-34.1	-4.3	**-12.7**	**-26.0**	**-32.7**	*-11.4*	*-24.0*	*-46.3*
- South Africa	-9.1	-12.2	-10.0	6.8	15.6	**5.5**	**-1.9**	**-3.5**	*15.3*	*5.0*	*-3.6*
Emerging and developing economies	114.3	82.1	98.6	294.0	474.1	**981.4**	**880.7**	**727.7**	*347.7*	*560.7*	*479.5*
World	512.0	395.8	374.1	403.1	700.5	**413.5**	**510.2**	**590.6**	*549.3*	*302.4*	*371.9*
World excluding EU	18.3	-108.2	-40.0	1.4	163.7	**238.3**	**283.9**	**263.4**	*44.9*	*-47.7*	*-78.9*
World excluding euro area (20)	57.9	-87.1	4.5	66.1	195.8	**205.6**	**250.7**	**246.5**	*90.5*	*-35.6*	*-56.4*

[1] See note 8 on concepts and sources.

Table 61: Crude oil prices, 2017-2024 31.10.2022

							Autumn 2022 forecast		*Spring 2022 forecast*		
	2017	2018	2019	2020	2021	2022	2023	2024	*2021*	*2022*	*2023*
Annual percentage change (USD)	23.9	29.4	-9.3	-35.1	69.3	44.0	**-16.6**	**-8.2**	*44.0*	*46.5*	*-9.8*
Price per barrel											
- Brent (USD)	54.8	71.0	64.3	41.8	70.7	101.8	**85.0**	**78.0**	*70.7*	*103.6*	*93.5*
- Brent (EUR)	48.5	60.1	57.5	36.6	59.8	98.4	**86.4**	**79.3**	*59.8*	*95.0*	*86.6*

Note on concepts and sources

1. The directorate general for economic and financial affairs (DG ECFIN) produces, under its own responsibility, short-term fully-fledged economic forecasts in Spring and Autumn. These forecasts cover the principal macroeconomic aggregates for the Member States, the candidate countries, the European Union as a whole, the euro area and the international environment.

2. Data for 2022, 2023 and 2024 are forecasts. The source for all tables is the European Commission, unless otherwise stated. Historical data for the Member States are based on the European System of Accounts (ESA 2010). US national accounts are based on SNA 2008, whilst the Japanese accounts use SNA 1993. Due to differences in revision schedules of annual and quarterly national accounts, annual and quarterly figures may not be fully consistent for some Member States.

3. Tables 5 and 6 on domestic demand and final demand respectively, present data including inventories.

4. In Tables 17a and 18, the data are based on the national index for the United Kingdom, USA and Japan.

5. The potential output gap is calculated with reference to potential output as estimated via a production function, where the increase in the capital stock and the difference between actual unemployment and the NAWRU play a key role.

6. Employment data used in tables 24 and 26-30 are based on full-time-equivalents (FTEs), where available. Currently, Spain, France, Italy, the Netherlands and USA report FTE data. In the absence of FTE data, employment is based on numbers of persons. In the calculation of EU and euro-area aggregates, priority is given to FTE data, as this is regarded as more representative of diverse patterns of working time.

7. Source: National Accounts (ESA 2010), except for US current-account in tables 49, 51, and 60 (Balance of Payments). Discrepancies with balance of payments statistics may arise due to methodological differences and revision schedules.

8. EU and euro-area data are aggregated using exchange rates. World GDP is aggregated using Purchasing Power Standards (PPS). In the tables on world trade and international payments, the aggregation is carried out on the basis of current exchange rates. Tables 48 - 51, 59 and 60 show also EU and euro-area "adjusted" balances. Theoretically, balances of EU and euro area vis-à-vis third countries should be identical to the sum of the balances of the individual countries in the EU or the euro area. However, intra-EU or intra-euro-area balances are non-zero because of reporting errors. The creation of the internal market in 1993 reduced border controls and formalities, and accordingly the scope and precision of intra-EU trade coverage. Typically, intra-EU imports are underestimated compared to intra-EU exports, leading to an overestimation of the surplus. For the past the "adjusted" balances are Eurostat estimates for EU and ECB estimates for the euro area. For the future, they are ECFIN's forecasts based on the extrapolation of the discrepancies observed in 2021.

9. EU and euro area aggregates for general government debt are published on a non-consolidated basis (i.e. not corrected for intergovernmental loans, including those made through the European Financial Stability Facility).

10. Quarterly EU and euro-area GDP growth rates are aggregated using estimates for 25 Member States (excluding IE and HR), but including unpublished quarterly forecasts for CY, EL, and MT.

11. Geographical zones are defined as follows :

Euro area :

EA19 (BE, DE, EE, IE, EL, ES, FR, IT, CY, LV, LT, LU, MT, NL, AT, PT, SI, SK, and FI)

EA20 (EU19 and HR)

European Union :

EU (EA20, BG, CZ, DK, HU, PL, RO, and SE).

Candidate countries :

Albania, Montenegro, North Macedonia, Serbia and Türkiye.

Countries which were granted candidate status in 2022 (UA, MD) are not included yet.

Potential candidates :

Bosnia-Herzegovina and Kosovo.

Advanced economies :

EU, United Kingdom, candidate countries, Iceland, Norway, Switzerland, Australia, Canada, Hong Kong, Japan, Korea, New Zealand, Singapore, Taiwan and the United States.

Emerging and developing Asia:

All countries in that region except the ones included in the Advanced economies and the Asian MENA countries.

Latin America :

All countries in that region.

MENA (Middle East and Northern Africa) :

Algeria, Tunisia, Morocco, Egypt, Israel, Jordan, Lebanon, Lybia, Iraq, Iran, Yemen, Saudi Arabia, Bahrain, Oman, United Arab Emirates, Kuwait, and Qatar.

Sub-Saharan Africa :

All countries in that region except the African MENA countries.

Eastern Neighbourhood and Central Asia:

Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, Ukraine, Uzbekistan, Tajikistan, Turkmenistan.

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