Economic and financial developments

1. The global economy

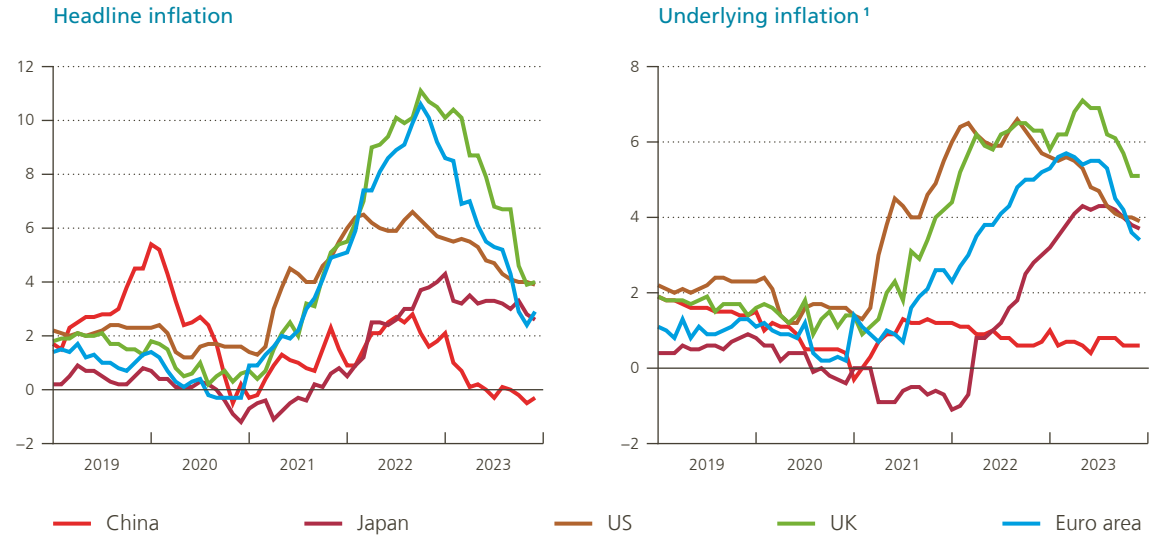
1.1 Headline inflation continued to decline in 2023, while underlying inflation only peaked this year, and both remained high by historical standards

After three very turbulent years, punctuated by sizeable shocks which drew differing responses from governments, the major economies entered calmer waters in 2023. While the Covid-19 pandemic is of course not entirely over, the disease is now endemic and scarcely impacting economic activity. Russia's invasion of Ukraine and the war in Gaza have unquestionably caused tragic human losses but, from an economic standpoint, the world did not suffer a major shock in 2023. Nevertheless, there is still a great deal of uncertainty, due in part to the policy choices that need to be made. How will authorities deal with structural challenges such as digitalisation (and artificial intelligence), climate policy and the energy transition, and what upheavals could these challenges cause in the balance of economic power?

Figure 1.1

Headline inflation fell steadily this year, while underlying inflation only peaked in the course of the year

(percentage, annual growth)



Sources: Eurostat, LSEG.

1 Underlying inflation is defined as follows: Japan: all components excluding fresh food and energy; US and China: all components excluding food and energy; UK and the euro area: all components excluding food, energy, alcohol and tobacco.

In all major advanced economies, headline inflation slowed considerably this year, but remained high by historical standards. Aside from Japan, where the headline inflation rate did not peak until January 2023, inflation rates in the major economies continued the downward trajectory that had already begun at the end of 2022. In the euro area, the annualised inflation rate was 5.4 % in 2023, while in the US it was 4.1 %. In Japan, inflation rates remained much lower than in other advanced economies, with a year-on-year headline inflation rate of 3.2 % for 2023. Nevertheless, even in Japan, price rises hit their highest level in 32 years at the start of the year, or since the early 1980s if periods in which VAT rates were raised are disregarded. In historical terms, inflation also remained high in other major economies. Annual rates remained well above the targets set by the central banks of the United States, the euro area and the United Kingdom, despite unprecedented monetary policy tightening (see section 1.2). The exception was China, where a property sector crisis and other structural economic problems eroded consumer confidence after the economy reopened at the end of 2022 (see section 1.5). Inflation plummeted there, averaging just 0.2 % year-on-year in 2023, well below the target of around 3 % set by China's State Council.

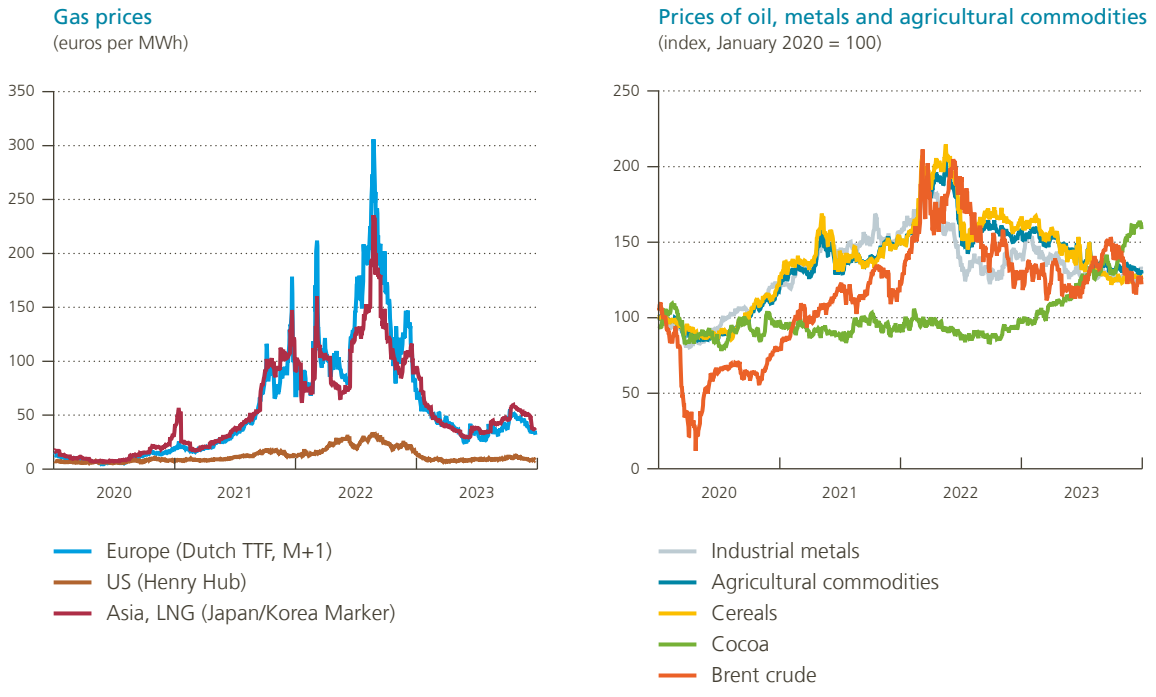
Inflation rates in euro area countries continued to diverge, albeit less markedly than the year before, while remaining much higher overall than before the pandemic. There were a number of reasons for these inflation differences : administrative factors (e.g. differences in the scale and timing of the phase-out of support measures adopted in response to the 2022 energy crisis) ; spillover and base effects ; differences in the composition of reference baskets of goods and services (causing food inflation, for example, to have a greater weight in some countries) ; differences in how each country's economy is structured ; and divergences between business cycles and income growth.

In 2023, while internal factors and food inflation fed price growth, headline inflation was reined in by the fall in energy prices, the tightening of monetary policy and less robust demand. Russia's invasion of Ukraine triggered an acute crisis on the energy and commodities markets as from February 2022. In addition to the substantial reduction in gas supplies from Russia, the race to build up European gas stocks sufficiently before

the winter also played a role in the huge jump in gas prices and, subsequently, electricity prices. However, robust policy responses from the EU and several heavily affected countries, together with a slight decline in energy consumption, significantly scaled back the higher energy prices towards the beginning of 2023 (see Figure 1.2). Nevertheless, oil and gas prices remained significantly higher than before the pandemic. Structurally higher gas prices in Europe, especially compared with the US, risk undermining Europe's cost-competitiveness, particularly in energy-intensive industries (see chapter 6). The sharp fall in energy prices after the peak in mid-2022 led to strongly negative annual growth in energy prices which exerted downward pressure on headline inflation rates for much of the year. Following the attacks carried out by Hamas on 7 October and the subsequent Israeli response in the Gaza Strip, nervousness briefly intensified on the oil markets. Overall, the impact remained limited in 2023, and oil prices quickly stabilised, ending the year at around the same level as at the start of 2023. The pandemic-related disruptions to global value chains, which affected supply and hence prices until 2022, largely dissipated in 2023. This explains why the United States, which had suffered heavily from these logistics problems but had been less impacted by the hike in energy prices, was the first major economy to see headline inflation reach an inflection point once these supply disruptions had been resolved and the post-pandemic rebound in demand had peaked. Towards the end of the year, the conflict in the Middle East was having repercussions for commercial shipping and trade: as of mid-December, most of the major shipping companies decided not to transit through the Red Sea after several attacks by Houthi rebels. Given that 12 % of overseas trade in goods (and around 30 % of global container volume) is normally transported via this route, and that shipping costs are rising sharply due to higher insurance premiums and/or the rerouting of vessels around the southern tip of Africa (not to mention delivery delays), consumer prices could be affected.

Figure 1.2

Energy and commodity prices are falling, but structural factors are keeping them above pre-pandemic levels



Sources: ECB, Bloomberg, LSEG.

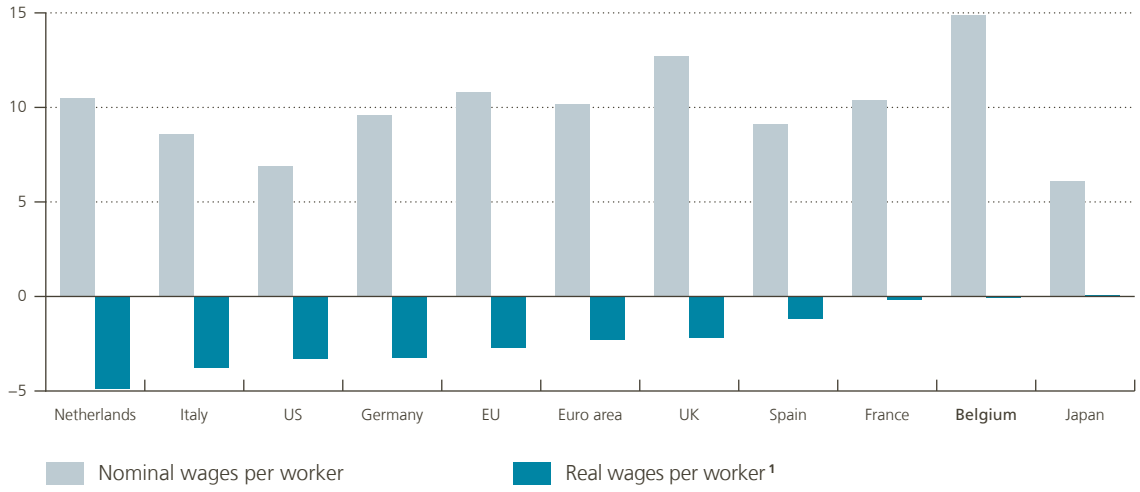
The continuing rise in food prices, although much less pronounced than last year, is due to a number of factors, mainly extreme and unusual weather conditions, which have had a major impact on harvests in several locations, but also wage growth and the fallout from Russia's invasion of Ukraine. The most oft-cited example during the year was the global price of olive oil, which hit an all-time high in December. The main cause of this surge was a severe drought brought on by heat waves in Spain, the world's leading olive oil producer, while a bacterium affected millions of trees already weakened by heat in Italy. In 2023, cocoa prices also reached a global peak due to exceptionally wet weather conditions that damaged crops in West Africa. In contrast, the prices of other agricultural commodities and several cereals fell over the course of the year. Shrinking demand, the resolution of supply issues and a slowdown in the manufacturing and construction sectors (see section 1.4) also caused the prices of industrial metals to weaken slightly. However, they remained structurally higher than prior to the pandemic, partly due to increased demand for metals as a result of more ambitious climate and industrial policies (see Box 1).

Nominal wage growth per worker tracked the rise in the cost of living, albeit with somewhat of a lag. However, the robust growth witnessed so far does not appear to have triggered a wage-price spiral. Such a phenomenon occurs when wage costs ramp up as a result of a surge in inflation and are then reflected in prices, with this price rise leading in turn to higher wage demands, and so on. Based on current figures, this does not appear to be the case at present: in most countries, real wages have fallen or stabilised since the start of 2021. Nominal wages did admittedly make up ground this year, but they still trail inflation. This took place against the backdrop of very resilient labour markets, both within and outside the euro area. In Belgium, real wage growth in 2023 almost entirely offset the decline in 2022, mainly due to the country's automatic wage indexation mechanisms, pursuant to which nominal wage growth quickly and almost fully reflects a rise in the cost of living. The rise in nominal wages did not translate into sustained inflation or higher inflation expectations. On the contrary, as previously indicated, the growth rates of both headline and underlying inflation fell over the course of the year.

Figure 1.3

Real wages declined in most countries between 2021 and 2023

(cumulative percentage growth, 2021-2023)



Source: EC.

1 Real wages per worker were deflated by the private consumption deflator.

Underlying inflation, which excludes the generally more volatile prices of energy and food, also began to slow in 2023, in the aftermath of the deceleration in headline inflation, albeit at a gentler and less pronounced pace. In the United States, headline and underlying inflation did peak simultaneously. US producers experienced much less price pressure from higher production costs as a result of high energy prices. Labour market tensions eased somewhat in the United States in 2023, although labour demand remained high. In the UK, the euro area and Japan, the transmission of higher food and energy prices to other prices in the economy, on the one hand, and a continually tight labour market, on the other, were the main reasons for the persistence of high underlying inflation. Inflation in the services sector, in particular, remained relatively persistent and put upward pressure on underlying inflation. However, a turning point appears to have been reached in all major economic blocs, even with respect to underlying inflation. The significant tightening of monetary policy (see section 1.2 and chapter 2), the pass-through of the fall in energy prices to consumer prices, the easing of supply constraints and the general slump in demand for goods and services are all explanatory factors.

1.2 Central banks stopped raising interest rates

With inflation remaining well above target in advanced economies, the central banks of most of these countries continued to tighten their monetary policy in 2023. After more than ten years of accommodative monetary policy, central banks kept up the momentum of accelerated normalisation which began in 2022. The post-Covid-19 economic recovery and Russia's invasion of Ukraine led to persistently high inflation rates. Faced with this situation, central banks stepped up monetary policy tightening to prevent second-round effects and avoid a de-anchoring of inflation expectations, capable of unleashing a self-fulfilling prophecy.

Although not all central banks in advanced economies began to tighten their monetary policy at the same time, most stopped raising interest rates around mid-2023. Differences in the origin, severity and persistence of inflation between countries led to variations in when this process was set in motion and its pace. From mid-2023, as inflation continued to decline and inflation forecasts gradually aligned with targets, the ending of the cycle of monetary policy tightening was begun, with easing envisaged in 2024.

The Bank of England, alone among central banks, adopted a particularly proactive approach to the sale of bonds purchased during the era of quantitative easing to support the economy. At its meeting in September 2022, the Bank of England agreed to reduce its stock of gilts by £80 billion over the next twelve months. The reduction was subsequently postponed for one month following the delivery of a "mini-budget" by the UK government and the ensuing high volatility on the markets. The sell-off continued into 2023, with the announcement in September of a further round to reduce the balance sheet by £100 billion over the period running from October 2023 to September 2024, with the aim of reaching a balance sheet total of £658 billion. At the same time, the Bank of England raised its key rate five times during the year, taking it from 3.5 % to 5.25 % in August 2023. It remained at this level up to the time of writing.

The Federal Reserve maintained its policy of monetary tightening. Assets on the Federal Reserve's balance sheet reached an all-time high of $ 8.96 trillion in the spring of 2022, equivalent to 36 % of GDP. In June 2022, the US central bank began to reduce the size of its balance sheet by ceasing the full reinvestment of maturing Treasury securities and agency mortgage-backed securities (MBS). At the end of December 2023, its balance sheet stood at around $ 7.7 trillion (29 % of GDP). Several Federal Reserve governors have suggested that it is unlikely that this process of shrinking the balance sheet will end soon. Over the course of 2023, the Federal Reserve raised its key rate by 25 basis points four times, bringing the federal funds target range to 5.25 %-5.5 % in July 2023. With price pressures steadily easing in the United States, the central bank has probably reached the end of its cycle of interest rate hikes.

Although the ECB continued its process of monetary policy tightening, it is steadily reducing its balance sheet in a more passive manner. In December 2022, the ECB announced that, starting in March 2023, the asset purchase programme (APP) portfolio would be reduced at a measured and predictable pace by not reinvesting principal repayments on maturing securities in full. In July 2023, it put an end to such reinvestment altogether. However, the central bank did not fundamentally alter its approach to the Pandemic Emergency Purchase Programme (PEPP) in 2023, with repayments to be at least partially reinvested until the end of 2024 at the earliest. Given

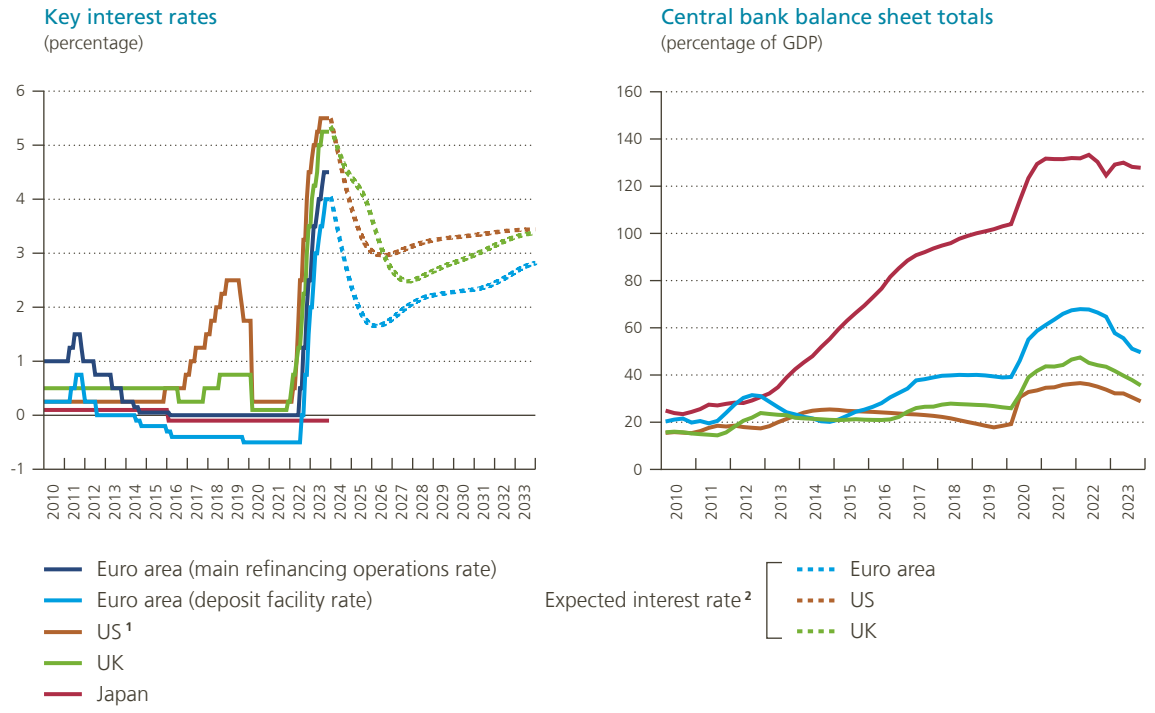
that it had begun raising its key rates slightly later than other central banks, the ECB increased them more sharply in 2023, raising the deposit facility rate from 1.5 % to 4 % (for more information, see chapter 2).

The Bank of Japan endeavoured to keep its policy as accommodative as possible, while allowing for adjustments in response to market pressures. Given the more moderate inflationary pressures in Japan, the Bank of Japan kept its key rate negative, at –0.1 %. After surprising the markets in December 2022 by allowing yields on ten-year Japanese government bonds to fluctuate, the central bank once again made a significant change in October 2023. It modified its 1 % limit on these yields, abandoning a strict ceiling in favour of a "benchmark" around which it will purchase long-term assets in a more flexible and reactive manner. The central bank said it was taking a slow and cautious approach to the normalisation of its ultra-accommodative monetary policy.

The majority of emerging market economies halted their cycle of monetary policy tightening, with the exception of China, Turkey and Russia. The Bank of Mexico and the Central Bank of Brazil were among the first to begin the process of tightening, in March 2021, and ended it in May 2022 and September 2022, respectively. In August 2023, the Central Bank of Brazil began a process of monetary easing, a decision based on the progress it had made with respect to inflation and monetary reforms. The People's Bank of China, in the meantime, cut its key rates in June and August 2023 in order to stimulate the economic recovery and in view of the fact that its average inflation rate was well below target. However, with economic indicators pointing to a stabilisation, it kept its key rates unchanged up to the time of writing. After maintaining its stance against monetary policy tightening in 2022, despite double-digit inflation, the Central Bank of the Republic of Turkey finally began an "aggressive" tightening cycle in July 2023, raising its key rate to 42.5 % in

Figure 1.4

Central banks in most advanced economies continued to tighten monetary policy to counter stubbornly high inflation



Sources: Eurostat, LSEG, OECD.

1 Upper bound of the target range.

2 Rate expectations at the end of December.

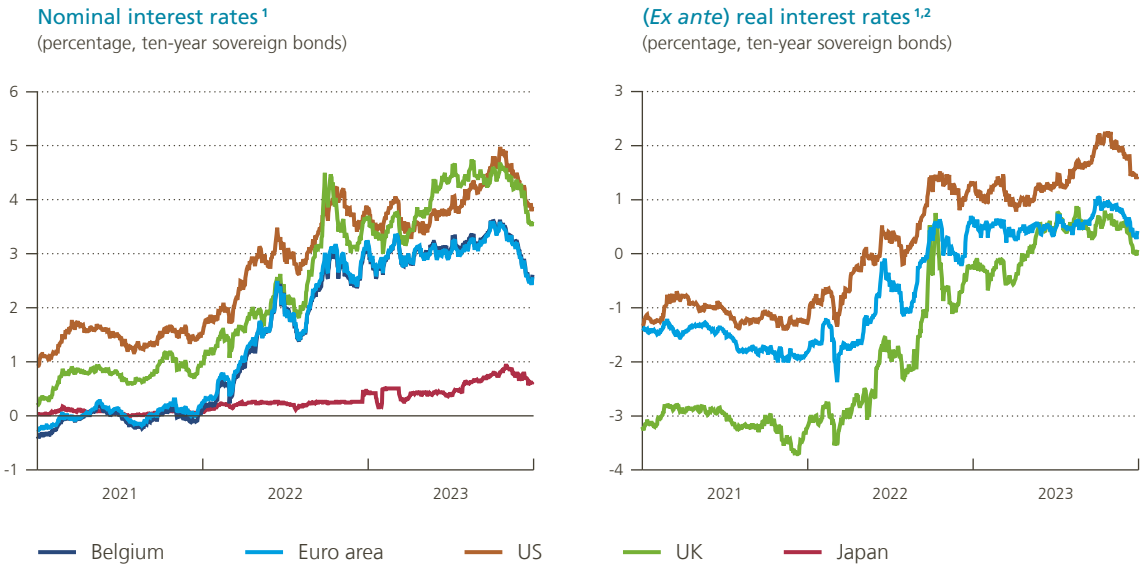
December. In Russia, the central bank hiked rates several times in a bid to combat inflation and stem the decline in the rouble.

Ongoing monetary policy tightening in advanced economies pushed up sovereign bond yields in the first three quarters of the year, but the slowdown in inflation and inflation expectations reversed the trend towards the end of the year. Continued key rate hikes by central banks in advanced economies led to a rise in sovereign bond yields. During the first two quarters of 2023, the rise in long-term interest rates stagnated. However, from May onwards, they began to creep up, accelerating over the summer, particularly in the United States and the United Kingdom. This was due to the bond market's expectation of no imminent monetary easing by either the Federal Reserve or the Bank of England. However, this uptick reversed in the fourth quarter as inflation expectations converged towards target rates. Sovereign bond yield volatility nevertheless remained high throughout the year, reflecting the uncertainty surrounding inflation – despite the latter dipping towards the end of the year – growth forecasts and the implications of monetary policy. In the euro area, interest rate differentials between the southern member countries and Germany remained limited in 2023, despite turbulence in the banking sector. The Transmission Protection Instrument (TPI) and the flexibility offered by the PEPP could explain this limited fragmentation. The anchoring of long-term inflation expectations led to an *ex ante* rise in real interest rates in the US, the euro area and the UK. However, they remained only slightly above zero in advanced economies, with the exception of the United States where the real interest rate was close to 1.5 % at the end of the year.

Bond yields fell in several emerging markets, while corporate bond spreads tightened globally. Sovereign bond yields in emerging markets, particularly Brazil, fell, mirroring expectations of lower rates. Differences in monetary policy between the United States and China, as well as the sharp appreciation of the dollar, continued to lead to significant capital flight by non-residents from the Chinese bond market. Corporate bonds, meanwhile, saw a worldwide rise in yields from April 2023, in line with risk-free rates. However, spreads narrowed, especially in high-yield segments such as technology and consumer cyclicals.

Figure 1.5

Tighter monetary policy pushed up sovereign bond yields



Sources: Eurostat, LSEG.

1 The aggregate for the euro area is the GDP-weighted average.

2 Ten-year nominal interest rates less expected inflation, derived from swap contracts hedging inflation risk for a ten-year period.

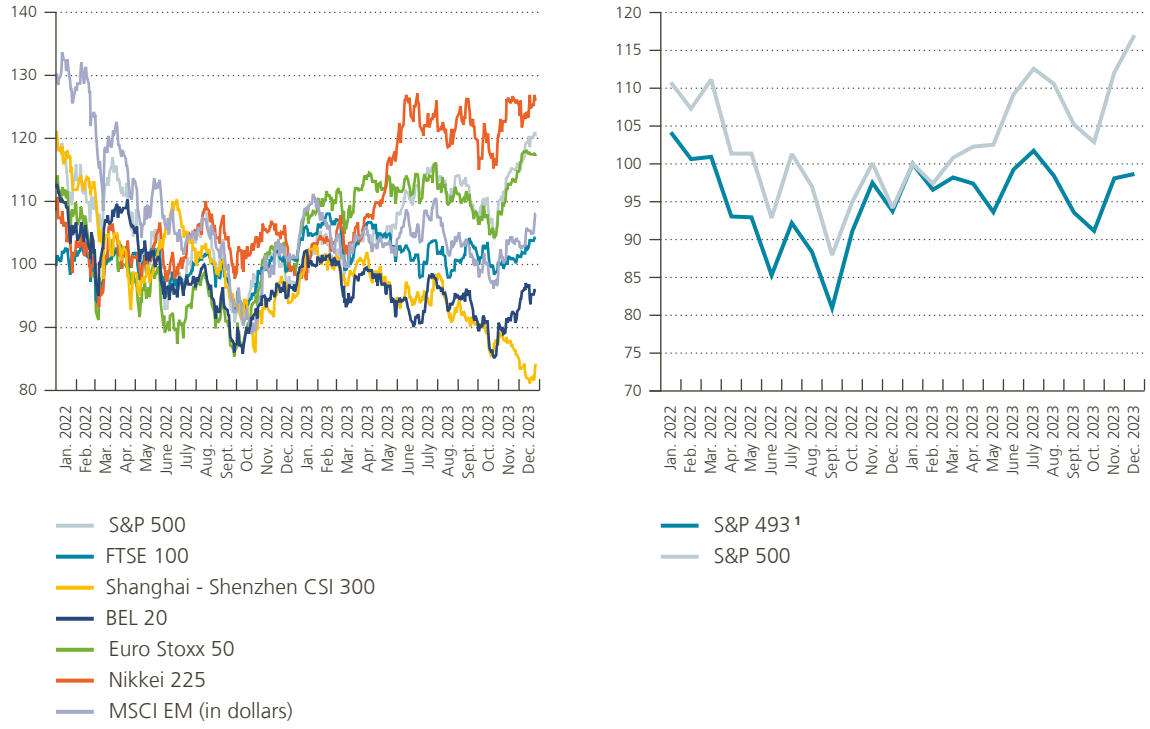
As a result of rising mortgage rates, borrowers faced higher repayment costs, leading to a slowdown in housing activity and falls in house prices. Mortgage rates in advanced countries continued to rise in the wake of tighter monetary policy, from 2.9 % to 4.1 % between December 2022 and November 2023 in the euro area and to around 6.8 % in the US in December 2023, leading to a decline in nominal house prices in some regions. In the third quarter of 2023, house prices in the euro area fell by 2.1 % year-on-year. However, the picture varied between and within regions, reflecting differences in the degree of monetary policy tightening and housing market sensitivity to interest rate hikes. It is also important to note that although higher mortgage rates and reduced affordability hampered demand, supply-side constraints helped to keep house prices above pre-pandemic levels in several countries. In the wake of the Covid-19 pandemic and the subsequent increase in remote working, the commercial property sector continued to face considerable challenges. Vulnerabilities in the commercial property sector are a major source of credit risk for the financial sector. At the beginning of 2023, transaction volumes in commercial real estate fell by 55 % worldwide, year-on-year.

Foreign exchange markets were marked by the persistent strength of the dollar and less volatility than in 2022. The US dollar remained decidedly robust against almost all other currencies throughout the year. The currencies of several countries enjoyed a relative recovery following the tightening of monetary policy and the resulting narrowing of interest rate differentials. Thus, the euro and the pound sterling rebounded slightly. Nevertheless, the dollar remained strong, thanks not only to monetary policy but also to its safe-haven status in the face of escalating geopolitical tensions and armed conflicts. For its part, the Japanese yen continued to fall against the dollar.

Figure 1.6

Equity markets in the euro area, Japan and the United States maintained their upward trajectory

(price indices, January 2023 = 100)



Sources: Bloomberg, LSEG.

1 S&P 493: S&P 500 without the "Magnificent Seven" (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla).

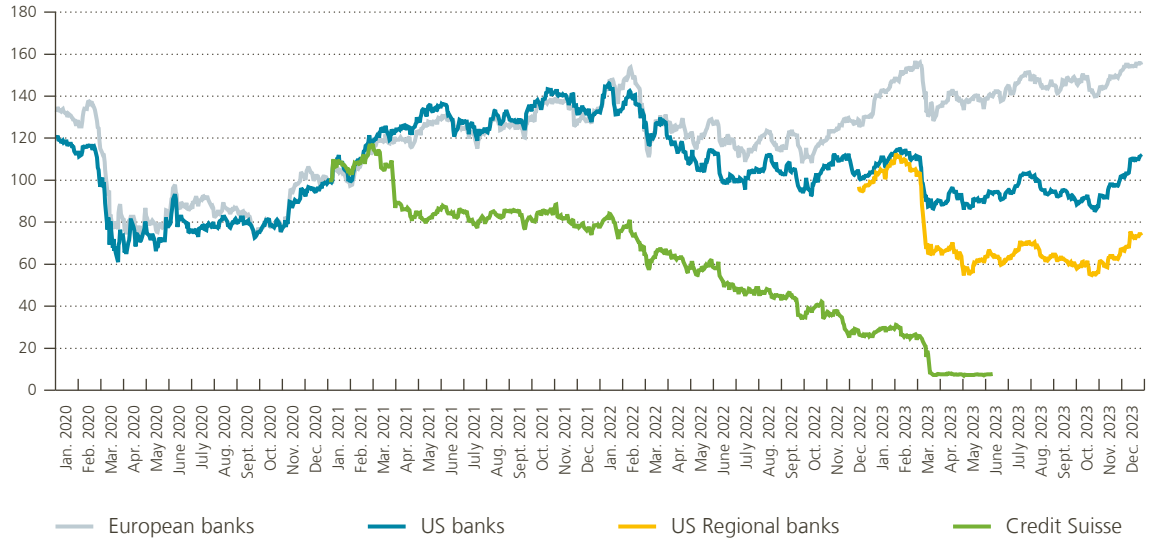
In the euro area, Japan and the United States, equity markets remained on the upward trajectory that had begun at the end of 2022. This trend was the result of expectations that central banks could soon begin easing monetary policy. Equity valuations returned to their pre-pandemic levels. The performance of technology stocks (the "Magnificent Seven"), fuelled by the boom in artificial intelligence, continued to drive up stock markets, particularly in the United States. In Japan, equities performed better than in other advanced economies. Emerging markets such as Chile, India and Mexico also saw significant increases in share prices. Investor optimism about the economic outlook helped to dampen market volatility, particularly on the US stock markets.

Despite the turbulence observed in March following bank failures in the US and Switzerland, bank share prices proved resilient. In March 2023, bank share prices in the US and Europe came under pressure following bank failures in the US (Silicon Valley Bank, Silvergate Bank and Signature Bank) and Switzerland (Credit Suisse), as well as more general concerns about the financial situation of US regional banks. More particularly, the problems at Silicon Valley Bank (SVB) highlighted the risks associated with interest rate management and asset concentration. During the Covid-19 pandemic, SVB saw a significant increase in deposits, primarily from technology companies and start-ups. These funds were subsequently invested in long-term bonds. However, as interest rates rose, the value of these bonds plummeted, resulting in considerable financial losses for the bank. With its technology customers experiencing financial difficulties, SVB was affected by massive withdrawals of funds which forced it to sell off its bond holdings at a loss, raising concerns as to its financial health. Faced with the bank's worsening financial situation and fears of a systemic banking crisis, US regulators stepped in and took control of the bank in March 2023. In addition, in order to mitigate the risk of contagion in the United States banking system, the authorities intervened to cover all deposits at Silicon Valley Bank and at Signature Bank, which had failed shortly after, and to introduce a new liquidity programme, particularly for regional banks such as First Republic Bank. Despite this intervention, market sentiment remained fragile, leading the regulator to take over First Republic Bank at the end of April, with the bank subsequently being sold to JP Morgan. In Europe, following a loss of

Figure 1.7

Despite the turbulence seen in March in the United States and Switzerland, bank share prices proved resilient

(price indices, 1 January 2021 = 100)



Source: LSEG.

confidence as a result of a number of scandals and poor risk management, Credit Suisse initially tried to bolster its liquidity by borrowing heavily from the Swiss central bank. However, these measures were insufficient, leading to its subsequent acquisition by a rival, UBS, to stave off bankruptcy.

Several factors softened the impact of this turbulence on banks in the euro area and the United States. Firstly, investors recognised that institution-specific rather than generalised vulnerabilities were at the root of the problems experienced by these US and Swiss banks. Secondly, significant differences in certain aspects of the respective regulatory and supervisory frameworks of the jurisdictions concerned were also identified. Overall, the banking sector has demonstrated its resilience since the pandemic, having faced trying conditions marked by economic uncertainty, high inflation, rising interest rates and a crisis of confidence in the spring of 2023.

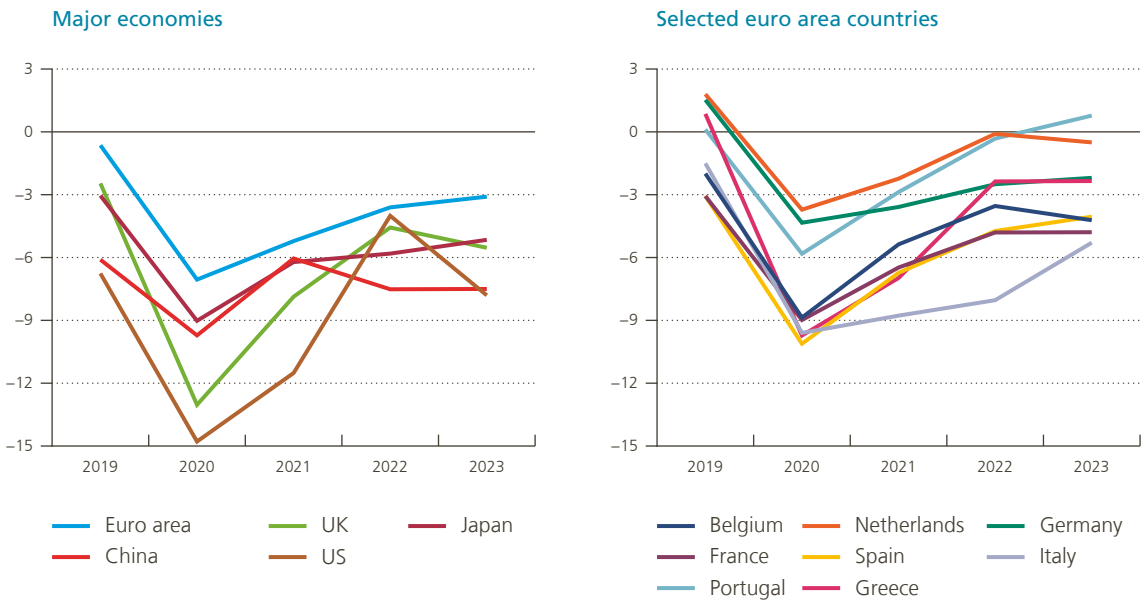
1.3 Government deficits remained at high levels in the major economies

Fiscal policy varied across the major economies but didn't help to curb inflation in most countries. After swelling considerably in 2020 as a result of the Covid-19 pandemic, public deficits in certain advanced countries continued to shrink in 2023, after having begun to do so from 2021 onwards. In 2021, this improvement was due to the mechanical effect of the economic recovery. In addition, pandemic-related support measures could already be partially or fully relaxed, depending on the sector concerned. By 2022, in most economies, GDP was continuing to grow and any remaining Covid-19-related measures could be lifted. However, deficit reduction in net energy importers, such as the EU and Japan, was limited by measures introduced to contain the effects of rising inflation on households and businesses. By 2023, these measures were of a sufficiently smaller scale, helping to narrow general government deficits further in these economies. In most cases, this more than offset increases in

Figure 1.8

The US deficit is the only one that increased significantly in 2023

(percentage of GDP)



Sources: EC (autumn) for euro area countries; Eurosystem (December) for the euro area as a whole; IMF (2023 Article IV report) for China; NAI-NBB for Belgium; OECD (December) for other advanced economies.

interest expenses as well as, in the EU, a less buoyant business climate that has been putting a strain on corporate revenue. In other advanced countries, such as the United States, fiscal policy was expansionary and public deficits deteriorated once again. In the major economies, deficit levels were still higher than in 2019.

In general, and in the euro area in particular, government deficits shifted less in 2023 than in the years since 2019. General government budget balances improved in less than half of euro area countries, which now number twenty since Croatia joined on 1 January 2023. Among the larger economies, borrowing requirements fell in Germany, Italy and Spain, but stagnated in France. Italy's deficit, for example, was less impacted by government subsidies to households for home renovations. In the other euro area economies, including Belgium, a rise in current primary expenditure and higher interest expenses contributed to a widening of deficits, as described in chapter 8. Overall, public investment increased as a result of the Recovery and Resilience Facility and cohesion policy funding.

In 2023, eight European Union countries, including Italy, France, Belgium and Spain, were yet to bring their deficits below the reference value of 3 % of GDP enshrined in the protocol to the Maastricht Treaty. In 2019, most EU member states had a deficit below this level. In the spring of 2023, EU authorities decided that the general derogation applied since the start of the first wave of the Covid-19 pandemic would no longer be in force in 2024, meaning the Stability and Growth Pact rules would apply once again as from 2024. In December 2023, the Ecofin Council reached an agreement to substantially modify these rules. The revision of the European fiscal framework is the subject of a box in chapter 8.

In both Japan and China, deficits shrunk somewhat thanks to an increase in economic activity. In Japan, to help households cope with the energy crisis, subsidies for electricity, gas and oil were extended in an election year, while financial aid was granted to families with children. In the autumn, the extension of support measures went hand in hand with help for SMEs. In November, a new package of measures was introduced providing for, among other things, lower taxes on earned income and property, which however will not enter into force until 2024. In China, a more expansionary monetary policy stance was somewhat reinforced by fiscal policy. October saw the country's central government adopt a mid-year budget revision. The measures mainly consisted of financial aid for reconstruction work after summer flooding in the north of the country and investment to improve resilience to climate change. At the local level, public finances remained precarious.

In the United States, restrictive monetary policy was accompanied by a large fiscal stimulus. Several factors contributed to the substantial widening of the US deficit: lower tax revenue, particularly on capital gains, increased spending on mandatory social programmes, higher interest expenses, higher military spending, and the costs of industrial policies (the Infrastructure Investment and Jobs Act and the Inflation Reduction Act).

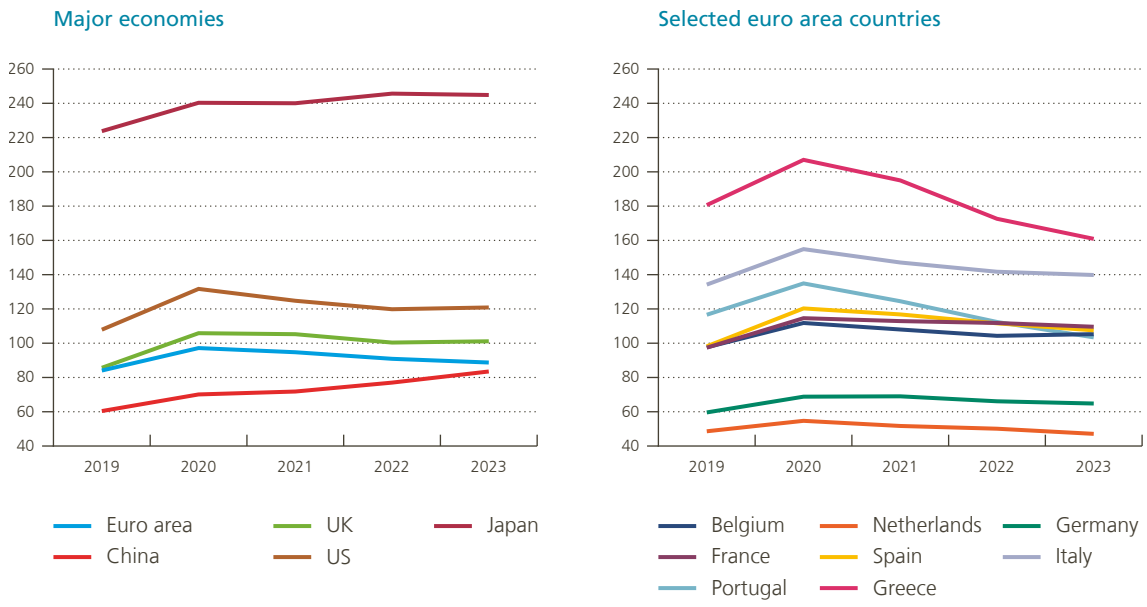
In the UK, fiscal policy was somewhat expansionary and the public deficit grew further. Income tax brackets were frozen by the government, while corporation tax was raised. In addition, the cap on energy prices was removed and other support measures were phased out or eliminated. However, military spending rose, national insurance contributions were cut, and businesses benefited from increased investment deductions. Moreover, a sharp slowdown in economic activity weighed on the general government budget balance.

As was the case for government deficits, shifts in public debt were less pronounced in the major economies than in previous years. Overall, nominal GDP fell in 2020, mechanically pushing up

Figure 1.9

With few exceptions, public debt has fallen since 2020, but remains higher than before the pandemic

(percentage of GDP)



Sources: EC (autumn) for euro area countries; Eurosystem (December) for the euro area as a whole; IMF (2023 Article IV report) for China; NAI-NBB for Belgium; OECD (December) for other advanced economies.

debt ratios. In 2021 and 2022, the denominator effect worked in the opposite direction to a large extent. In 2023, more modest changes in nominal GDP limited its impact. The rebound in interest rates also contributed to a snowball effect less favourable to the endogenous change in the debt ratio. The strength of economic growth in the US limited the increase in its debt ratio in 2023, despite the size of its deficit, which led Fitch to downgrade the country's credit rating in May and August. China is the only major economy whose debt rose substantially this year.

Public debt fell in most euro area countries in 2023, with the notable exception of Belgium, yet generally remains above pre-pandemic levels and high by historical standards. Mediterranean countries, whose particularly substantial debt levels had already dropped significantly since 2021, recorded the most notable reductions. In Portugal and Greece, public debt dropped below its pre-pandemic levels in 2023, and sovereign bonds benefited from rating upgrades.

1.4 Governments seek to support strategic sectors through industrial policy and protectionism

In addition to fiscal policy in the strict sense, other economic policies were mobilised. These include energy, environmental and industrial policies, with structural reforms also introduced in some countries – the latter notably carried out in the EU through the Recovery and Resilience Facility. Box 1 provides an overview of the increasing role played by industrial policy. More specifically, climate and energy policies have increased in importance given the more tangible manifestations of climate change (droughts, floods, extreme heat events etc.) and the fact that fossil fuels and certain raw materials critical to the energy transition are concentrated in countries with which relations have become strained or on which excessive dependence could prove dangerous. The major economies, which are also the biggest polluters on the planet, are moving at different speeds towards the objectives of reducing greenhouse gas emissions and decarbonising the economy.[1] The EU demonstrated great ambition in this regard by adopting the European Climate Law in 2021, through which it aims to achieve net zero emissions by 2050. This ambitious target and its realisation are discussed in more detail in chapter 6.

1 See De Sloover F., D. Essers and T. Stoerk (2023), "Do all roads lead to Paris? Climate change mitigation policies in the world's largest greenhouse gas emitters", NBB, *Economic Review*.

BOX 1

The resurgence of industrial policy to achieve greater strategic autonomy, improve competitiveness and accelerate the green transition

In recent years, there has been an intensification of geopolitical tensions and a reshuffling of the competitive balance between the world's various economic blocs. The continued technological and trade conflict between the United States and China, the Covid-19 pandemic, Russia's invasion of Ukraine and, more recently, the conflict in the Middle East have put international political and economic relations under severe strain. The rapid rise in energy prices affected the cost-competitiveness of European companies, particularly in energy-intensive sectors. Although gas and electricity prices in Europe have fallen significantly from their peaks in the summer of 2022, they remain well above those in the United States (see chapter 6). Competitiveness between economic blocs is also influenced by differences in productivity and the capacity for innovation. Although productivity growth has been slowing for some time in most advanced economies, it seems to be declining more sharply in Europe. This is believed to be the result of a combination of investment restraint and a relative slowdown in technological development, particularly in the electronics manufacturing and ICT services sectors. While Europe is performing well in sectors such as machine building, biotechnology, pharmaceuticals and new materials, it lags behind the US and Japan in terms of innovation in several strategically critical areas, including artificial intelligence, robotics and microelectronics. On these fronts, China is also gaining more and more ground.

The necessary transition to a net-zero economy will also put European competitiveness to the test. Internationally, there are still major differences in climate policy. The EU is currently the world's fourth largest emitter of greenhouse gases (responsible for just under 7 % of the global volume) and has the most ambitious climate change mitigation targets. The European policy approach is based primarily on carbon pricing, through the EU Emissions Trading Scheme, as well as regulations and standards for sectors falling outside the scheme. The European Climate Law provides a legal anchor for European climate objectives, which have also recently been confirmed or reinforced by judicial decisions in several countries (notably Belgium and Germany). Conversely, the current climate ambitions of China and India – the largest and third largest global greenhouse gas emitters (29 % and 7 %), respectively – are incompatible with the Paris Agreement objective of limiting the rise in average global temperature to well below 2°C. However, China's hegemony over green value chains, from the production of solar panels to batteries and electric cars, and its impressive deployment of renewables should enable a more rapid reduction in Chinese emissions. The United States remains the second biggest emitter of greenhouse gases (11 %) and has recently made welcome progress in terms of climate ambition and policy. However, the country has refrained from setting a federal carbon price and relies mainly on subsidies to stimulate investment in clean energy and related supply chains, with the result that it is still not meeting its climate targets under the Paris Agreement. Such differences in ambition and policy risk putting Europe at a competitive disadvantage. The European Carbon Border Adjustment Mechanism (CBAM), which will be introduced gradually, protects European producers of emission-intensive components (cement, iron and steel, aluminium, fertilisers, electricity and hydrogen) from

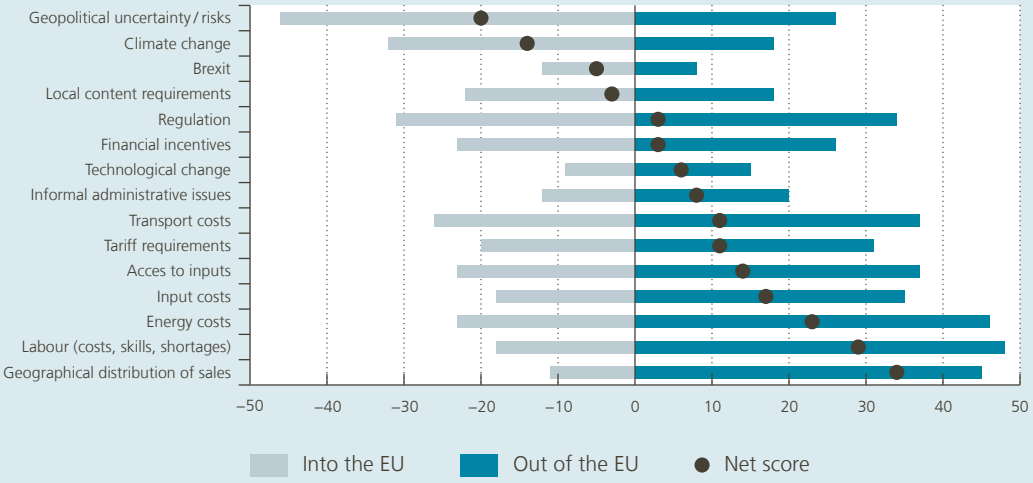
▶

competing imports from regions with less stringent emission rules. However, unlike the allocation of free allowances, which is being phased out, the CBAM does not involve support for European exports of emission-intensive products, a choice that was made to ensure the mechanism's compatibility with World Trade Organisation (WTO) rules.

Where companies decide to produce and the sourcing strategies they adopt are determined by the availability and cost of inputs, as well as by geopolitical risks. To date, aggregate trade statistics at EU level have not yet revealed clear patterns of fragmentation along geopolitical lines. Influenced by bilateral tariff measures, however, China's share of US imports has fallen significantly since 2018. Still, the countries that have taken China's place, in particular Mexico and Vietnam, are largely integrated into Chinese supply chains, meaning a real decoupling between the US and China does not yet seem to be taking shape. Making significant adjustments to corporate supply chains is a lengthy process, however, and it may take a long time for these adjustments to become visible. Several recent surveys of European firms point to their greater willingness to relocate production in the near future. Among a group of large firms surveyed by the ECB, those planning to relocate production outside the EU outnumber those planning to do the opposite. Multinational companies relocating production outside the EU, or planning to do so, are mainly driven by energy costs, the cost and availability of certain worker profiles and other inputs, as well as shifts in the geographical distribution of sales. Conversely, geopolitical risks are cited as an important determinant in companies' decisions to (re)locate more production to the EU. As far as sourcing strategies are concerned, firms are planning to further diversify their supplier network and/or to engage in more "nearshoring" or "friendshoring" in the years ahead.

Differences in the cost of energy and other inputs help determine the relative attractiveness of economic regions

Importance of different factors taken into account when moving busines operations into or out of the EU [1]
(percentage of responses)



Source: ECB.

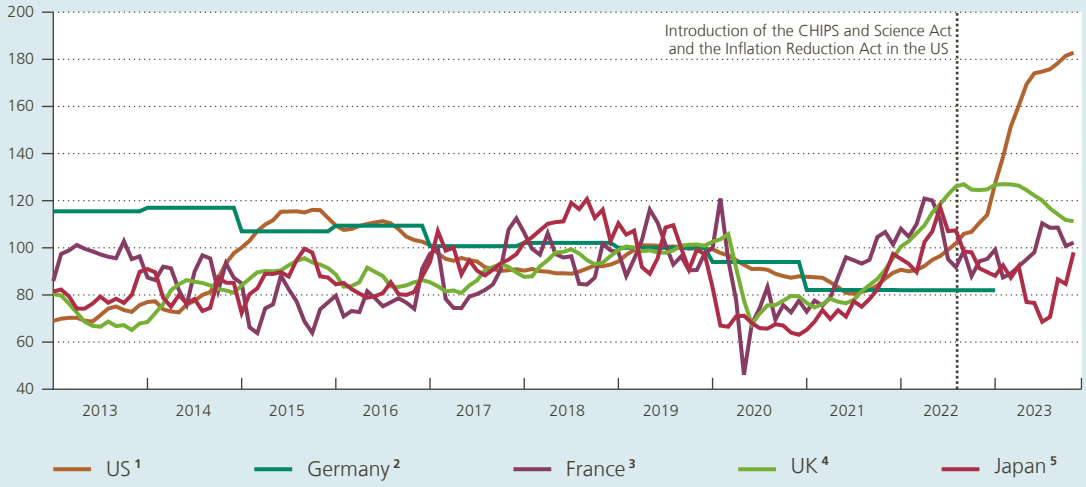
1 Responses from 62 leading companies operating in the euro area to the question "Which of the following factors do you consider particularly important in relation to recent or planned future moves of production/operations into or out of the EU?". See Attinasi M.G., D. Ioannu, L. Lebastard and R. Morris (2023), "Global production and supply chain risks: evidence from a survey of large firms", ECB, *Economic Bulletin*, 7/2023, 33-41.

Advanced countries, particularly the United States, are increasingly turning to "industrial policy", i.e. targeted public support aimed at stimulating strategic sectors. The world's various economic blocs are each trying to strengthen their competitiveness and resilience. Industrial policy, through which governments support specific sectors – notably by means of subsidies, tax breaks, concessional lending, state guarantees and equity stakes – is no longer taboo in this respect. Today, the focus is mainly on sectors deemed strategic based on considerations of national security, security of supply, and/or the climate transition. In the US, industrial policy is seen as necessary to achieve greater autonomy from China and to protect existing jobs or create new ones in the manufacturing sector. The two main US policy packages are the CHIPS and Science Act, intended to support the semiconductor industry, and the Inflation Reduction Act (IRA), the centrepiece of US climate policy, both of which entered into force in August 2022. In particular, the IRA provides tax credits for investment in clean energy and for clean energy production (and related technologies), as well as for the purchase of electric and hybrid vehicles. Various support measures in the IRA are linked to requirements in terms of locally produced value added.

Europe, too, has begun to roll out its industrial policy, largely inspired by that of the United States. Europe's response to the CHIPS and Science Act and the IRA includes, respectively,

Supportive industrial policies have contributed to an exceptional increase in the construction of production facilities in the United States

(manufacturing construction, 2019 indices = 100, three-month moving average)



Sources: US Bureau of Labour Statistics, Destatis, INSEE, Japanese Ministry of Land, Infrastructure, Transport and Tourism, UK Office of National Statistics, US Treasury, US Census Bureau.

1 Value of private construction works in the manufacturing industry, seasonally adjusted monthly figures, deflated by the producer price index for construction materials and components.

2 Number of newly completed factories and workshops, annual figures.

3 Floor space of newly started industrial premises, seasonally adjusted monthly figures.

4 Output of new private industrial construction, seasonally adjusted monthly figures, deflated by the producer price index for construction.

5 Floor space of newly started manufacturing buildings, seasonally adjusted monthly figures.

the European Chips Act, in force since September 2023, and the Green Deal Industrial Plan, parts of which have yet to be formally adopted. Like the United States, Europe is aiming for greater self-sufficiency. For example, the European Chips Act sets the objective of doubling the EU's share of global semiconductor production to 20 % by 2030. The Net Zero Industry Act and the Critical Raw Materials Act, both part of the Green Deal Industrial Plan, contain similar targets for the local production of green technologies such as solar and wind energy, batteries, carbon capture and storage, as well as for the extraction, processing and recycling of the necessary critical raw materials.[1] A number of major European countries, including Germany, France and Italy, have drawn up their own industrial policy plans for the digital and green transitions. At present, the financial resources available from the EU budget to pursue industrial policies are limited. The Commission's plans to raise more common resources are encountering resistance from several Member States.

1 See Essers D. (2023), "The US Inflation Reduction Act and Europe's response", Belgian Financial Forum, *Revue bancaire et financière*.

While industrial policy can help to remedy certain forms of market failure, it is not a silver bullet. The debate on the effectiveness of industrial policy is far from settled. It remains very difficult to establish causal links, and the results appear to depend largely on the specific context in which the policy is pursued. Industrial policy is generally justified by positive and/or negative externalities and coordination failures. Individual companies may well underinvest in innovations and technologies that would make an entire sector or the economy more competitive and less strategically dependent. Where it is politically impossible to put a fair price on greenhouse gas emissions, public subsidies or other incentives for the production and consumption of clean energy can make a difference. There is also a certain complementarity between these two approaches. The increased availability and affordability of green energy alternatives make higher carbon prices or stricter regulation more acceptable and also strengthen the response of emissions. The support provided by the CHIPS and Science Act and the IRA already seems to have given a major boost to the construction of new production facilities in the United States. The IRA is expected to significantly reduce the cost of solar, wind and other clean energy sources and to lower US emissions by around 10 percentage points compared to a scenario without the IRA. On the other hand, the IRA's subsidies, particularly as they are not capped, could absorb a large portion of the United States' fiscal space and have so far led to only limited job creation. Protectionist provisions such as local production requirements associated with US subsidies for the purchase of electric vehicles are contrary to WTO rules and risk provoking retaliatory measures from other blocs and countries, which would affect the speed and cost of the global climate transition. Another real risk is an international escalation of subsidies, fuelled by corporate lobbies and at taxpayer expense. Within the EU, a long-term relaxation of state aid rules for industrial policy may lead to economic fragmentation between Member States and undermine the single market.

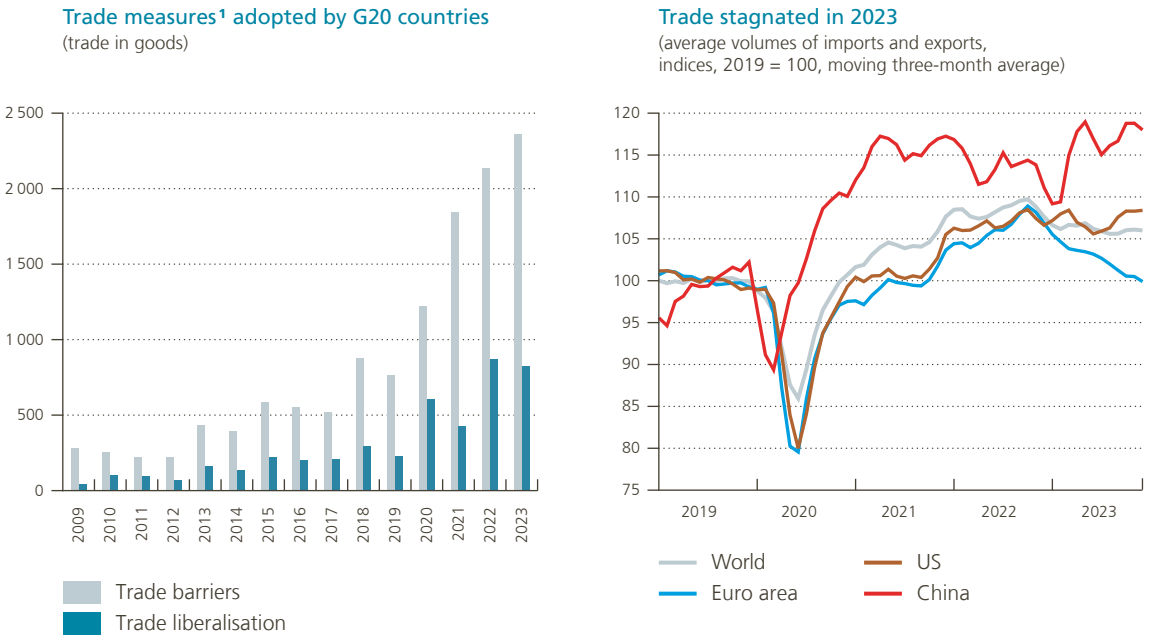
Geopolitical tensions and concerns about security of supply have also led to more protectionist trade policies. After the global financial crisis, the era of trade liberalisation and WTO enlargement came to an end. Tensions between China and its trading partners, which accuse it of unfair trade practices, culminated in the Sino-American trade war during the Trump administration. The outbreak of the Covid-19 pandemic, which was accompanied by numerous (temporary) restrictions on the export of medical and pharmaceutical products, followed by Russia's invasion of Ukraine, to which Western countries reacted by imposing trade sanctions, in turn pushed up the number of new trade barriers implemented each year to unprecedented levels. At the same time, growing tensions between the superpowers, China and the United States, are increasingly affecting strategic sectors. For example, the United States has steadily tightened controls on exports to China of high-tech electronic chips used in artificial intelligence applications, as well as on the machines used to manufacture them. China has retaliated by restricting exports of raw materials essential to the production of, among other things, chips and batteries for electric vehicles.

The increase in protectionism is not yet clearly visible in total trade flows. The trade war between the United States and China mainly led to a reorientation of trade, while many of the trade barriers imposed during the pandemic were temporary in nature. On the other hand, trade interventions prompted by geopolitical tensions and rivalries between the major powers, which most often target high-tech goods and critical raw materials, are a new phenomenon. Their impact on trade is therefore not yet clear. However, the EU's high degree of openness makes it vulnerable to these protectionist measures, with particular regard to export quotas for goods for which there are no other suppliers and which are essential to the green and digital transitions.

The weakening of trade in 2023, apparent mainly in the euro area, reflects above all the slowdown in industrial activity worldwide. When

Figure 1.10

Rising trade barriers are (for the moment) not leading to deglobalisation



Sources: Central Planning Bureau (the Netherlands), Global Trade Alert, LSEG.
1 New trade barriers adopted during the course of a year and made public before the end of that same year.

economies were partially reopening in 2021, trade was unexpectedly supported by a strong increase in demand for consumer durables, particularly in the United States. In 2023, a reverse shift took place in favour of the consumption of services, while purchases of consumer durables lagged behind. Faced with weak demand for goods, companies reduced their inventories. The rise in interest rates also weighed on more interest rate-sensitive sectors, such as capital goods and construction, which are also highly trade-intensive. The rise in the cost of trade credit also contributed to the decline in trade. However, the proliferation of new trade barriers, as mentioned above, could possibly, in the long term, further constrict trend growth in trade.

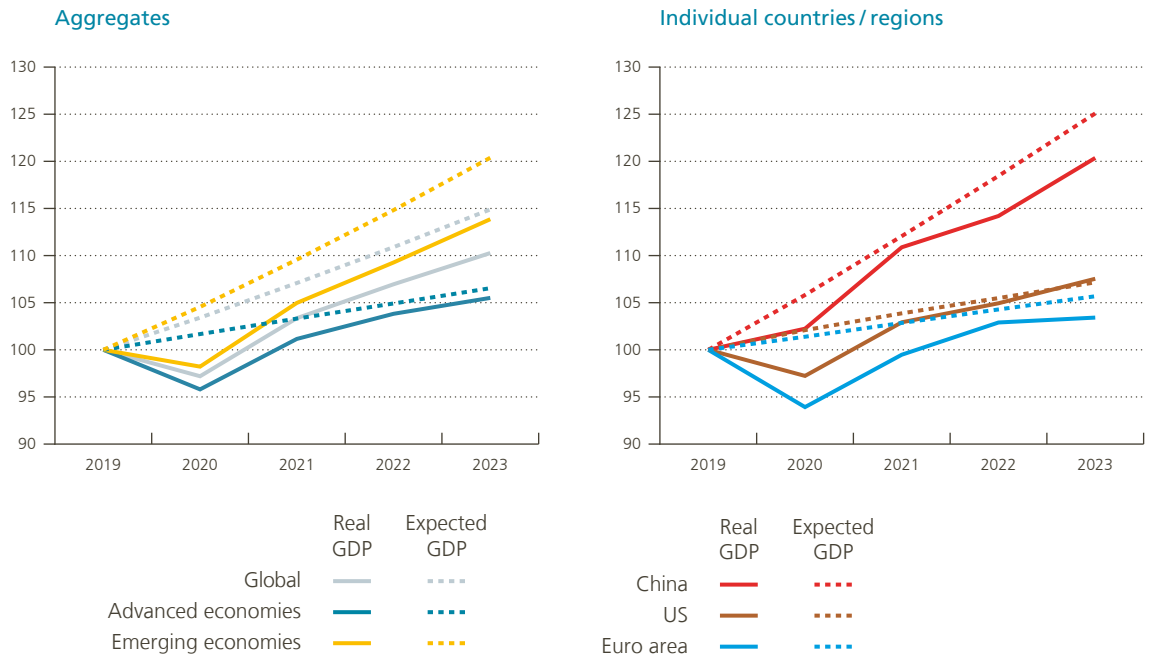
1.5 Although the global economy has not yet fully recovered from successive shocks, growth held up better than expected in 2023

The economic recovery following the Covid-19 pandemic and Russia's invasion of Ukraine is incomplete almost everywhere. Had the projections made in the autumn of 2019 materialised, global GDP would currently be 5 % higher. The loss is greater for emerging market and developing economies than for advanced economies. The former had less fiscal space to support their economies during the pandemic, while their economic fabric was vulnerable to the onslaught of the virus. They also reopened later than advanced economies. These factors slowed the recovery of consumption in these countries, which was further thwarted by subsequent shocks, including the rise in food and energy prices, which account for a larger share of consumption in emerging market and developing economies,

Figure 1.11

GDP growth was less favourable than expected prior to the outbreak of the pandemic

(indices, 2019 = 100)



Source : IMF.

following Russia's invasion of Ukraine, as well as an increase in financing costs due to the tightening of US monetary policy from 2022 onwards. Finally, the marked deceleration in Chinese growth in 2022 also adversely affected the expansion of other emerging market economies. As a result, the rate of convergence of GDP per capita between emerging market and advanced economies slowed.

The US was the only major economy to recover fully from both shocks. The US economy benefited from, among other things, a large stimulus during the pandemic and a positive terms-of-trade shock following Russia's invasion of Ukraine. In the euro area, on the other hand, high dependence on energy imports (from Russia) led to a negative terms-of-trade shock in 2022. At first, China also seemed well placed to make up the losses caused by the pandemic and, like the US, was not very exposed to the fallout from Russia's war in Ukraine. However, its strict zero-Covid policy and recent property market troubles have hampered its recovery.

After rebounding more strongly than expected in the first half of the year, the global economy gradually lost momentum towards the end of 2023. In the first few months of the year, global economic activity was shored up by the reopening of the Chinese economy, the normalisation of supply chains, and fairly resilient consumer spending characterised by a further uptick in demand for services. The problems encountered by Swiss and US banks were quickly brought under control, without any significant impact on the real economy. However, the global economy had to contend with powerful headwinds in the final quarter of the year, such as tighter financial conditions, which curbed investment, sluggish international trade, and renewed geopolitical uncertainty caused by the conflict in the Middle East. Overall, the world economy grew by 3.1 % in 2023, exceeding the forecasts made at the start of the year. This is, nevertheless, a substantial slowdown compared to the 3.5 % recorded in 2022 and, above all, compared to the average growth rate of 3.8 % over the 2000-2019 period.

Table 1.1

GDP of the major economies

(annual rate of change)

				p.m. Average growth	*p.m. Contribution to world growth*	*p.m. Share of world GDP*[1]
	2021	**2022**	**2023**	***2000-2019***	***2023***	***2022***
Advanced economies	5.6	2.6	1.6	*1.9*	*0.7*	*41.7*
of which:						
United States	5.8	1.9	2.5	*2.1*	*0.4*	*15.4*
Japan	2.2	1.0	1.9	*0.8*	*0.1*	*3.7*
Euro area	5.9	3.4	0.6	*1.4*	*0.1*	*12.0*
United Kingdom	8.7	4.3	0.5	*1.8*	*0.0*	*2.2*
Emerging market and developing economies	6.9	4.1	4.1	*5.5*	*2.4*	*58.3*
of which:						
China	8.4	3.0	5.2	*9.0*	*1.0*	*18.8*
India[2]	9.1	7.2	6.7	*6.9*	*0.5*	*7.5*
Russia	5.6	–1.2	3.0	*3.7*	*0.1*	*2.3*
Brazil	5.3	3.0	3.1	*2.4*	*0.1*	*2.9*
World	6.3	3.5	3.1	*3.8*	*3.1*	*100.0*
p.m. World trade	10.9	5.2	0.4	*4.9*		

Sources: ECB, IMF.

1 As defined by the IMF and calculated on the basis of purchasing power parities (2017 version).

2 For India, the growth figures cover the financial year, which begins in the second quarter of the current year.

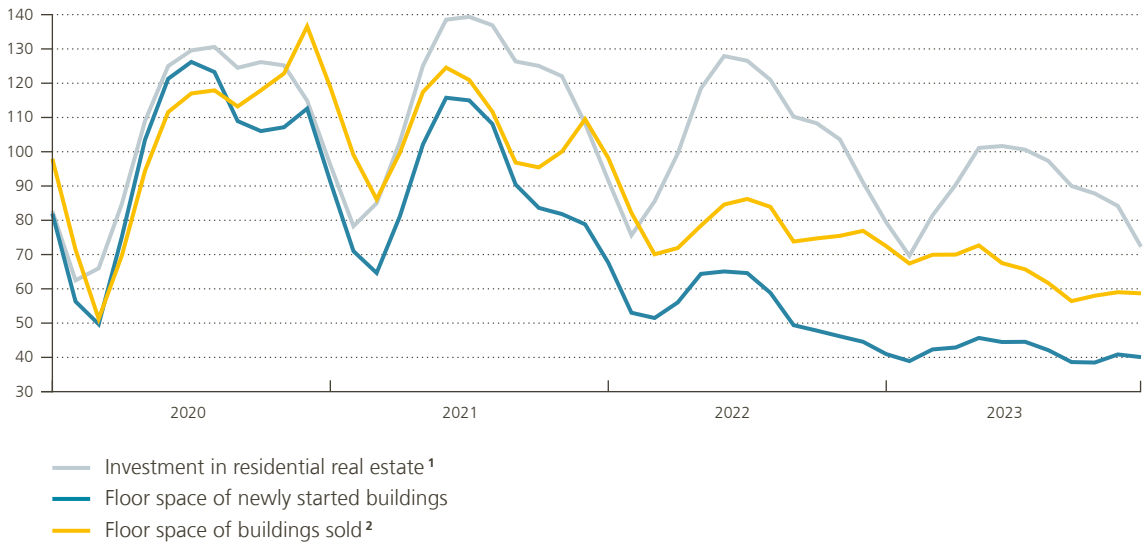
Emerging market and developing economies showed stable growth compared with the previous year. They were the engines of the world economy, contributing just over 75 % of global growth. Emerging Asian economies, in particular, posted solid growth. As Covid-19 containment measures were maintained for longer in this region, the economic recovery from the pandemic began later than elsewhere. As a result of this lag in the economic cycle, demand was less of a trigger for inflation in these countries, so that a more modest tightening of monetary policy was sufficient to maintain price stability. The continued normalisation of international tourism in Asia and strong demand for services in general also lent support in several countries, including India. Conversely, many economies in South America, the Middle East and North Africa lost steam under the effect of much tighter monetary policy and the fall in commodity prices caused by the collapse in global industrial production. Finally, extreme weather events caused considerable economic damage in parts of India and China, among other countries.

China's economic recovery was less robust than expected. At the end of 2022, China announced the end of its zero-Covid policy, thereby igniting lofty expectations. The euphoria lasted only a few months, however, before well-known structural weaknesses, notably heavy reliance on debt-financed investment in property and infrastructure, resurfaced. In the summer of 2023, Country Garden, a private property company with a good reputation, reported financial difficulties. Confidence in the sector deteriorated again, dragging down sales and rendering companies ever more reluctant to launch new housing projects. Despite new government measures, the property market has not yet regained full stability. On top of this, consumer confidence remains at a low ebb, with households favouring precautionary savings over consumption. Consumption did grow by 5 %-6 % but given the modest weight of private consumption in the Chinese economy, this was not sufficient to offset the fall in housing investment. Given its specialisation in the production of electronic goods and other

Figure 1.12

China's residential construction sector weakened further

(indices, 2019 = 100, moving three-month average)



Source : CEIC.

1 Investments expressed by value (renminbis).

2 90 % of sales on the property market involve the off-plan purchase of a new home.

consumer durables for export, China has also had to contend with sluggish foreign demand and trade in these goods.

The resilience of the US economy came as a surprise, while most advanced economies made a soft landing. In the US, consumption and investment held up better than expected. A tight labour market with rising employment, healthier household financial balances, a high proportion of (mortgage) loans with (low) fixed interest rates, high house prices and strong equity markets offset the tightening of monetary policy and sustained consumption. New investment in industry, including in clean energy and semiconductors, picked up strongly, encouraged by the CHIPS and Science Act and the Inflation Reduction Act (see Box 1). The overall fiscal policy stance also remained very accommodative. By contrast, these factors had little or no influence in the euro area and the UK.

After starting the year well, the Japanese economy ran out of steam in the second half, while the British economy remained sluggish throughout the year. In the first quarter, domestic demand shored up Japanese growth, but accelerating inflation and rising uncertainty then caused private consumption and investment to fall back. The slowdown in domestic demand weighed on imports, while car exports rose, enabling net exports to return a positive balance. Although the UK avoided a recession, its economy remained sluggish, due to more persistent inflation, high financing costs and a gradual slowdown in the labour market, which weighed on domestic demand, as well as a continuing trade deficit.

At the euro area level, most drivers of demand had receded by 2023, above all consumption – both private and public – but also exports. ECB studies[1] have shown that households in the euro area largely held on to the excess savings they had accumulated during the pandemic (due to purchases being rendered impossible by partial or general business closures or fear of contamination or to precautionary saving). Business and consumer confidence indicators show that their behaviour was influenced by the climate of great uncertainty. Consumption was also curbed by tighter financing conditions and falling real wages. Rising interest rates and the need for governments to reduce deficits in a context of

1 See in particular Battistini N. and J. Gareis (2023*), Excess savings: To spend or not to spend*, ECB blog, 2 November.

high indebtedness weighed on public consumption in the euro area. Consumption was the main difference between the United States and the euro area in 2023. Investment was somewhat more resilient, thanks in particular to the implementation of recovery plans. However, housing investment, and hence construction activity, was affected by the abrupt rise in the cost of credit and by labour shortages. Growth in the euro area was also modestly boosted by net exports in 2023, but this was mainly due to a fall in imports: exports virtually stagnated, against a backdrop of sluggish foreign demand. The negative impact of the energy price shock on production costs also affected the competitiveness of European industry, leading to a loss of external market share in 2023. According to recent surveys of business leaders conducted by the European Commission, respondents believe that their firms' competitiveness on foreign markets is deteriorating. The EC has asked Mario Draghi to conduct a more in-depth study of the EU's competitiveness, particularly in relation to the United States and China, the results of which are forthcoming.

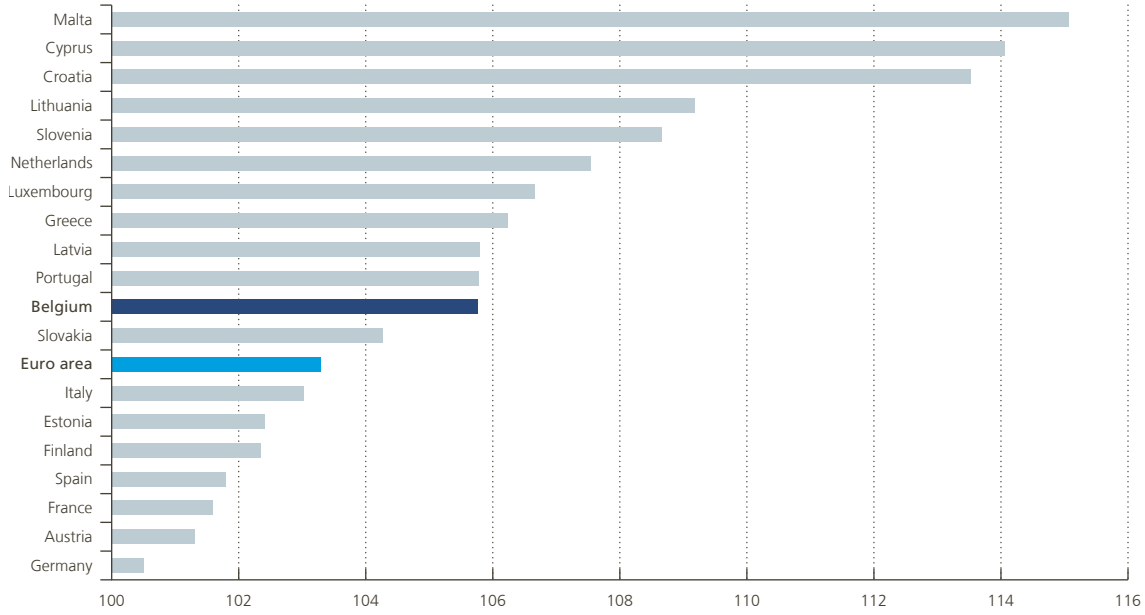
The slowdown in economic growth in the euro area in 2023 is delaying the prospect of returning to the pre-Covid-19 trend. Thanks to the mechanical effects of the resumption of activities that had been halted or interrupted during the successive waves of the pandemic and to the highly expansionary policies adopted in response, GDP in the euro area rebounded in 2021 and 2022. By 2022, the drop seen in 2020 was all but erased and it looked like this upward trend was set to continue. However, the rise in energy prices, the impact of which spread across the region's economies and was amplified by Russia's invasion of Ukraine, put the brakes on activity in the euro area. Industry, especially energy-intensive sectors, bore the brunt. Services were more resilient, but also saw their activity eventually slow. In 2023, the slowdown affected every country in the European monetary union, with GDP even falling in Germany, Austria, Luxembourg, Ireland, Finland and the three Baltic States.

Germany posted the lowest GDP growth in the euro area since 2019. Firstly, this large, very open

Figure 1.13

Since 2019, real GDP has virtually stagnated in Germany, while it has grown more briskly in many smaller euro area countries [1]

(cumulative change between 2019 and 2023; index, 2019 = 100)



Source: ECB.

1 Ireland is not included here for reasons of readability. Its real GDP rose by more than 30 % between 2019 and 2023 due to the operations of certain large multinationals.

and export-oriented economy suffered greatly from the logistical bottlenecks and supply chain problems that arose in 2020 and 2021. Secondly, energy-intensive industry, which plays an important role in the country's economy, suffered from soaring energy prices in 2022. Thirdly, the German economy was also more exposed to the slowdown of growth in China, of which it is a very important trading partner, and to the general weakening of world trade in 2023. Having been slow to switch to the production of electric vehicles, the German automotive industry currently remains highly dependent on inputs from China, particularly batteries. Finally, Germany also lags behind in terms of investment in infrastructure and digitalisation.

The French economy was not an outstanding performer during this period either. France has yet to fully recover from the dive that its exports took in 2020, registering the largest decline in the euro area after Spain and Greece, both of which rely strongly on tourism. Aside from the temporary collapse of its export markets, France also lost market share. In 2022, the shutdown of several nuclear reactors reduced energy production and forced France to become a net importer of electricity, further deteriorating its trade balance. As discussed in Box 4 (chapter 4), public consumption and housing investment also contributed to France's failure to return to its pre-crisis growth path.

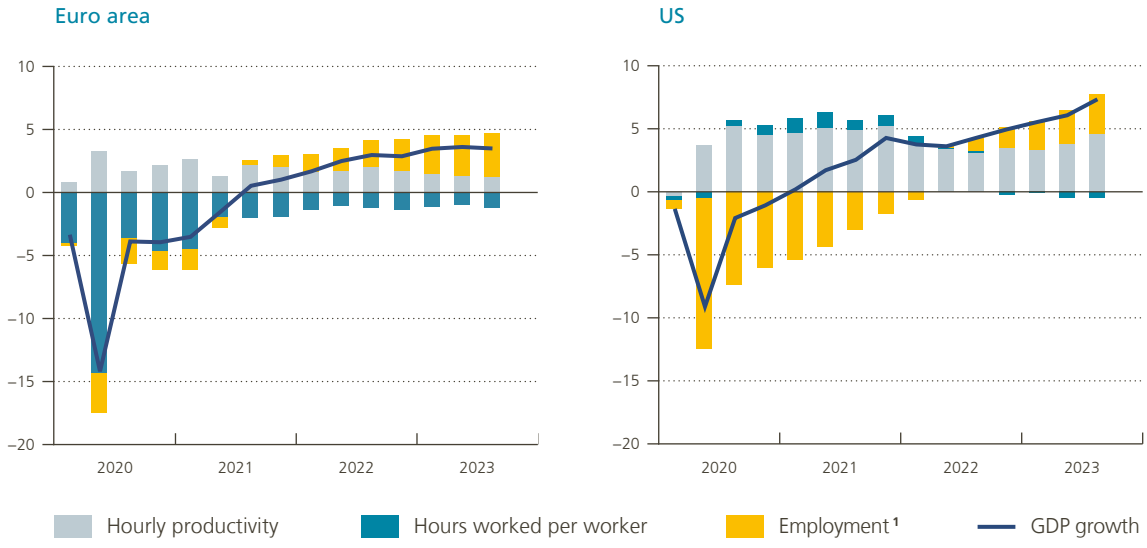
Countries more strongly affected by the pandemic, such as Italy and Spain, were able to benefit from European funds to finance their recovery. To do so, they had to put in place milestones for structural reforms aimed at boosting their potential long-term growth. In 2022 and 2023, tourists also returned *en masse* to these two countries. Overall, however, their GDP grew less quickly than that of the euro area as a whole. In contrast, smaller countries, including Belgium, fared better.

Generally speaking, post-pandemic growth in the euro area turned out to be employment-intensive, with labour market resilience a significant explanatory factor for the higher growth observed in 2023 than forecast at the start of the year. Indeed, at the height of the pandemic, furlough schemes enabled companies to lay off fewer staff. With the strong post-Covid-19 recovery,

Figure 1.14

The recovery was supported by a rise in employment

(cumulative percentage change since Q4 2019)



Sources: ECB, US Bureau of Economic Affairs, US Bureau of Labor Statistics, LSEG.
1 Employment in persons.

labour shortages intensified in a growing number of sectors. This also encouraged companies to retain existing staff despite the recent slowdown in activity. In the US, employers resorted to more large-scale redundancies during the pandemic and only recently began recruiting substantially. Labour markets in the US and the euro area remained tight throughout the year, but the latest figures suggest that a turning point may have been reached in both economies.

Conversely, the economic recovery has been characterised, particularly in the euro area, by weak gains in labour productivity, measured by output per hour. The latter has even fallen in recent quarters in the euro area. As indicated in Box 1, a number of structural factors may explain the weakness in productivity trend growth in the euro area. Another explanation could be labour hoarding, which has been more pronounced in the euro area. Industry, the economic importance of which is greater in the euro area than in the United States, has seen output shrink in recent years, caused by disruptions in international supply chains in 2021 and 2022, the energy crisis in 2022 (which mainly affected energy-intensive sectors in Europe), and, in 2023, the slowdown in global industrial output resulting from weak demand. Yet industrial firms have been reluctant to lay off workers for fear of facing recruitment problems down the road in a tight labour market, exacerbated by population ageing. As a result, labour productivity in industry has fallen. New jobs were mainly created in services sectors, which are generally less productive.

2. Monetary policy in the euro area

2.1 The tightening of monetary policy continued

Interest rates were the main instrument used to tighten monetary policy

In 2023, inflation stood at 5.4 % in the euro area, well above the ECB's medium-term target of 2 %. As inflation had reached 8.4 % in 2022, this was a decline, which was mainly due to the drop in energy prices. At the same time, economic growth clearly slowed again in 2023, from 3.4 % to 0.6 %. Coupled with the fading of the effects of the post-pandemic economic recovery, tighter monetary policy helped curb the growth of aggregate demand. This slowdown did not, however, cause the euro area to slip into a recession.

The ECB continued to raise its key rates, with hikes totalling 450 basis points since July 2022. However, the Governing Council decided to leave policy rates unchanged in October and December 2023, taking the view that they "are at levels that, maintained for a sufficiently long duration, will make a substantial contribution to th[e] goal" of ensuring that inflation returns to its 2 % medium-term target. At year's end, the deposit facility rate thus stood at 4 %, the main refinancing operations rate at 4.5 % and the marginal lending facility rate at 4.75 %.

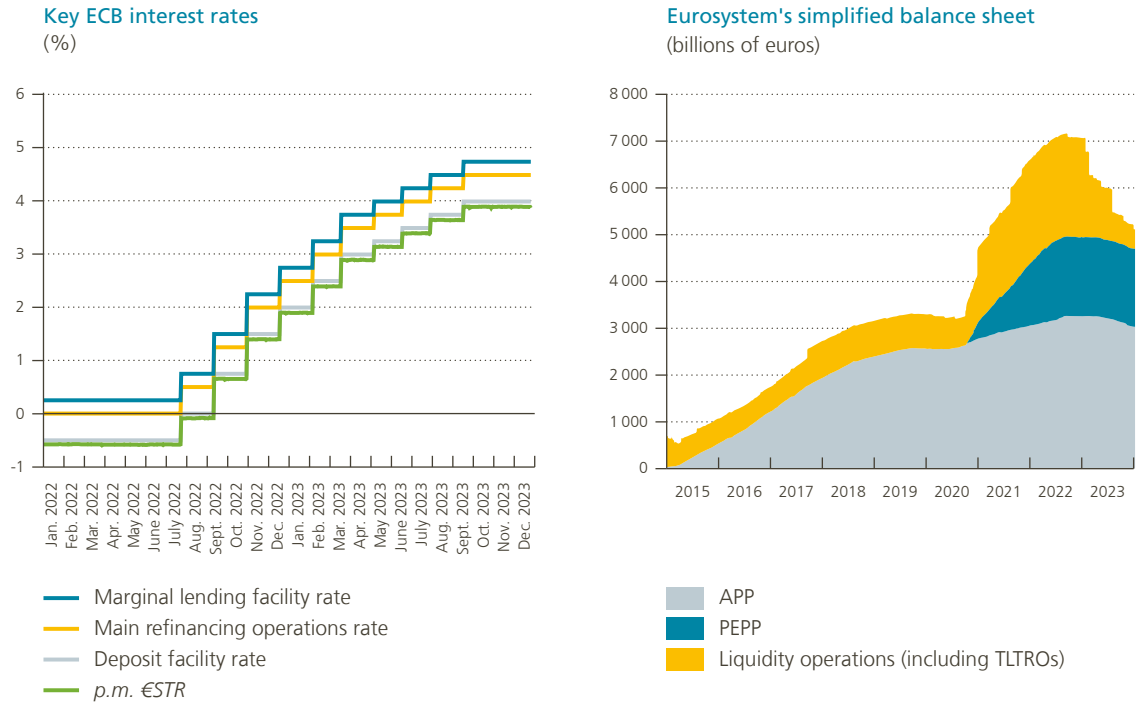
The euro short-term rate (€STR) – the implicit objective of the ECB's interest rate policy – remained close to the deposit facility rate. As liquidity remained abundant in the banking system, there was virtually no recourse to main refinancing operations and the marginal lending facility, and the deposit facility rate was *de facto* the ECB's main policy rate. The deposit facility rate sets the threshold below which it is unattractive for banks in the euro area to lend funds overnight. That being said, the €STR was slightly lower than the deposit facility rate as it corresponds to the average rate at which banks can obtain financing without collateral on the overnight money market, including from financial institutions that do not have access to the deposit facility (and which therefore accept lower rates).

The Eurosystem (made up of the national central banks of the euro area and the ECB) continued the gradual and relatively passive reduction of its securities holdings, which forms an integral part of its process of monetary policy tightening. In December 2022, the Governing Council decided that starting in March 2023, the asset purchase programmes (APP) portfolio would be reduced at a measured and predictable pace by not reinvesting in full the principal payments from maturing securities. In July 2023, all reinvestment was discontinued. As for the Pandemic Emergency Purchase Programme (PEPP), the Governing Council decided in December 2023 not to reinvest the full proceeds from maturing securities as from July 2024, but to reduce this portfolio by €7.5 billion per month on average in the second half of the year and to cease reinvestment at the end of 2024.

The size of the Eurosystem's balance sheet decreased significantly, mainly due to the repayment of targeted longer-term refinancing operations (TLTROs). One of the most important TLTRO repayment dates fell in June 2023, i.e. three years after the June 2020 lending operation, at the height of the Covid-19 crisis, for an amount of around €1 300 billion. A number of early repayments had already been received, notably following the tightening of TLTRO conditions at the end of 2022. The June 2023 redemption amounted to €477 billion. The last TLTRO redemption date falls in December 2024.

Figure 2.1

Key interest rates were raised again and the Eurosystem's balance sheet continued to shrink



Sources: ECB, LSEG.

The ECB also made some changes to how it implements monetary policy

In July 2023, the ECB decided to stop remunerating the minimum reserves held by commercial banks with national central banks. Credit institutions are required to hold minimum reserves, equivalent to 1 % of the value of specific liabilities, mainly short-term customer deposits. Given the current conditions of ample liquidity, banks tend to hold significant "excess" reserves, i.e. amounts above the required level.

Nevertheless, the interest paid by the Eurosystem national central banks on the deposit facility increased in 2023, reinforcing their expectation of losses. Excess reserves, which remained substantial this year, continued to be placed on the deposit facility and therefore to be remunerated at the deposit facility rate, which was raised sharply. At the same time, the income from the assets held by central banks did not benefit from the same increase. Many of these assets (particularly sovereign bonds) are low yield, as the vast majority were purchased when interest rates were low (lowering long-term rates further was a means used by the ECB to rekindle inflation). The National Bank of Belgium (the "Bank") announced a loss of €580 million on the closing date of its 2022 annual accounts.

The volume of reserves held at national level determines the amount of interest paid by national central banks to commercial banks, but these interest expenses are pooled in full at the Eurosystem level. In Belgium, attention focused on Euroclear in view of the frozen Russian assets that it had ended up holding after the imposition of financial sanctions on Russia for its invasion of Ukraine. It began depositing the proceeds from these assets (generated from coupon payments or maturing securities) with the Bank. The Bank remunerates these deposits at the deposit facility rate but, in fact, bears only a small portion of this expense, which is pooled at Eurosystem

level.[1] More specifically, each central bank pays a share of the Eurosystem's aggregate expenses, which is proportionate to its share in the capital key (3.61 % for the Bank).

Public authorities can also make deposits with the Eurosystem: the ceiling on the remuneration paid on government deposits was lowered in 2023. Until the end of April 2023, the ceiling was set at the deposit facility rate or the €STR, whichever was lower. It was subsequently set at the €STR minus 20 basis points. This decision reflected the desire to encourage a gradual and orderly reduction in such deposits held with the Eurosystem, in order to minimise the risk of adverse effects on the functioning of the money market and to ensure the smooth transmission of monetary policy.

In addition, a decision on the future operational framework for monetary policy is on the horizon for 2024, which will shed light on the end of the balance sheet normalisation process.

1 See J. Willequet, (2023), "A problem shared is a problem halved: how the NBB shares risk within the Eurosystem | nbb.be", NBB blog, 22 September.

The operational framework mainly concerns the method used to steer short-term money market interest rates, particularly the €STR. Prior to 2008, a so-called "corridor system" was used in the euro area, whereby the €STR (or its equivalent at the time, the euro overnight index average or EONIA) was set between the deposit facility rate and the marginal lending facility rate. This short-term rate thus fluctuated around the main refinancing operations rate. Today, the ECB applies a *de facto* "floor system". This transition took place a few years ago, as the ECB injected liquidity into the banking system through its purchase programmes and lending operations. As the ECB has now begun to reduce the size of its balance sheet, a "corridor system" will be reintroduced should all excess liquidity disappear from the banking system. That being said, the reintroduction of a corridor system with a smaller balance sheet could be accompanied by a return of €STR volatility within the corridor. Alternatively, the ECB could decide to keep a certain amount of excess liquidity in the banking system in order to maintain the floor framework and retain a high degree of control over short-term money market rates. A floor system can essentially be implemented in two ways. In a supply-driven floor system, the central bank

ensures a certain level of excess reserves through a structural portfolio of assets. This is the system currently used in the euro area and the option chosen by the Federal Reserve for the United States going forward. In a demand-driven floor system, currently favoured by the Bank of England, the central bank holds a smaller structural portfolio of assets than in the supply-driven option but conducts a larger volume of credit operations with banks. A disadvantage of floor systems is that they entail risks associated with a larger central bank balance sheet and a larger financial market footprint. These aspects, as well as many other parameters such as the width of the corridor, form the object of studies and discussion within the Eurosystem committees and the Governing Council.

2.2 The tightening of monetary policy was quickly transmitted to financing conditions

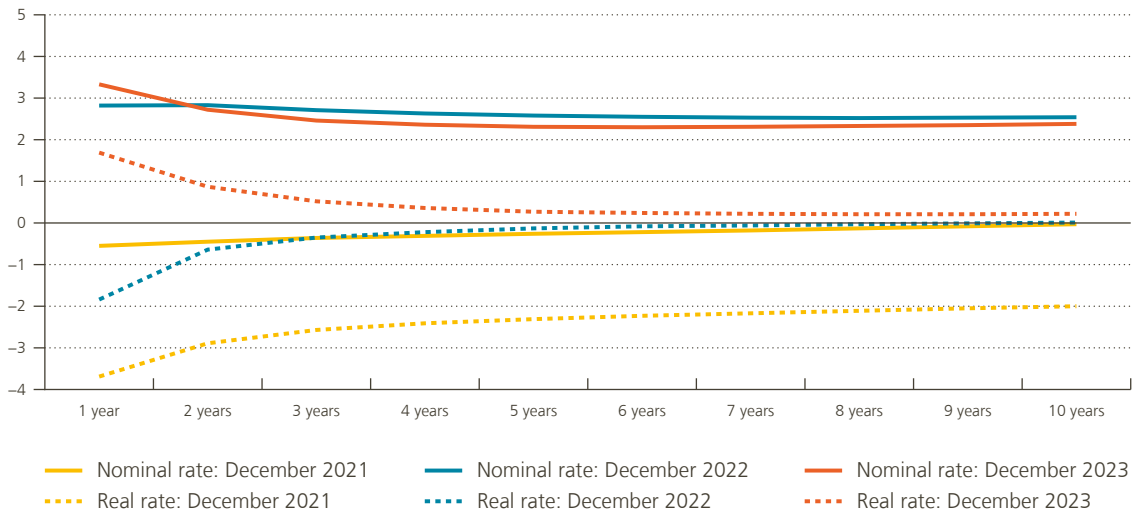
Changes in financial market rates reflected the tightening of monetary policy

The risk-free yield curve remained high for all maturities in 2023. The ECB controls short-term money market rates and indirectly influences longer-term rates through market participants' expectations of future rate decisions. The euro area's benchmark curve, the so-called risk-free yield curve, reflects these market expectations. This curve inverted in 2023, meaning short-term rates were higher than long-term rates due to the sustained rise in the former (directly linked to the rise in the deposit facility rate), while longer-term rates remained relatively stable. The latter had indeed already risen significantly prior to 2023, in anticipation of the tightening of monetary policy.

Figure 2.2

Trends in nominal and real risk-free rates reflected the tightening of monetary policy[1]

(percentage)



Sources: Bloomberg, LSEG.

1 Risk-free rates are approximated by the rates on overnight indexed swaps. Inflation compensation is measured by the rates on inflation-linked swaps. Real rates are obtained by subtracting inflation compensation from risk-free rates. Average of December observations.

In real terms, risk-free rates are relatively low, which puts the degree of monetary policy tightening into perspective. Real rates are approximated by subtracting the inflation component from nominal rates. Although the increase in nominal rates initiated in mid-2022 seems fairly aggressive from a historical perspective, it only partly reflected the rise in inflation. Real risk-free rates did nevertheless rise (thanks to stable inflation expectations). At the end of 2023, while nominal rates were at a relatively high level, suggesting a fairly restrictive monetary policy stance, real rates were barely above zero.

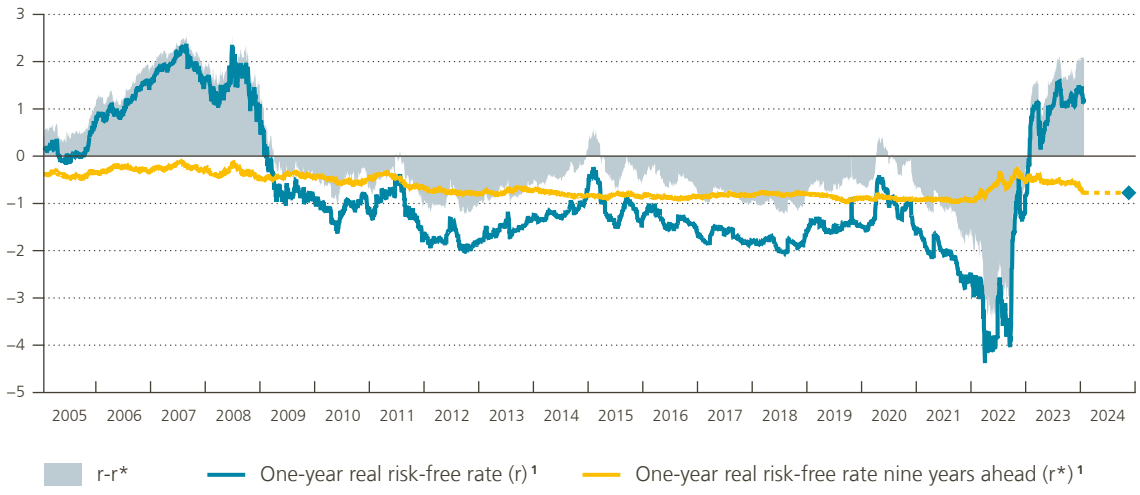
Several measures indicate that the monetary policy stance only recently became restrictive and that the degree of restriction is not particularly pronounced. The difference between the observed real monetary policy rate, r, and the equilibrium real rate, r* ("r-star"), determines in principle the monetary policy stance. r* represents the monetary policy rate which, if maintained over the long term, would imply a return of the economy to its equilibrium level, i.e. economic activity in line with potential output and a stable inflation rate of 2 %. This rate is not directly observable and is therefore often estimated using economic models which are subject to a significant degree of uncertainty. One approach is to approximate r* by a very long-term real forward rate, such as the one-year rate nine years ahead (i.e. the prevailing rate for a one-year period starting nine years from now). This rate can be compared with the one-year rate – which incorporates the recent increase in the deposit facility rate and short-term expectations – after adjusting these two rates for the various risk premia they contain. This measure suggests that monetary policy only became restrictive (meaning, r is greater than r*) from the end of 2022 and that the degree of restriction is less pronounced than in 2005-2008. Furthermore, forward rates indicate that the financial markets expect the monetary policy stance to become more or less neutral (r close to r*) by the end of 2024.

Sovereign yields followed movements in risk-free rates, and fragmentation between countries remained limited, even during the banking turbulence seen at the start of the year. The transmission from risk-free rates to sovereign

Figure 2.3

Monetary policy recently became somewhat restrictive

(percentage)

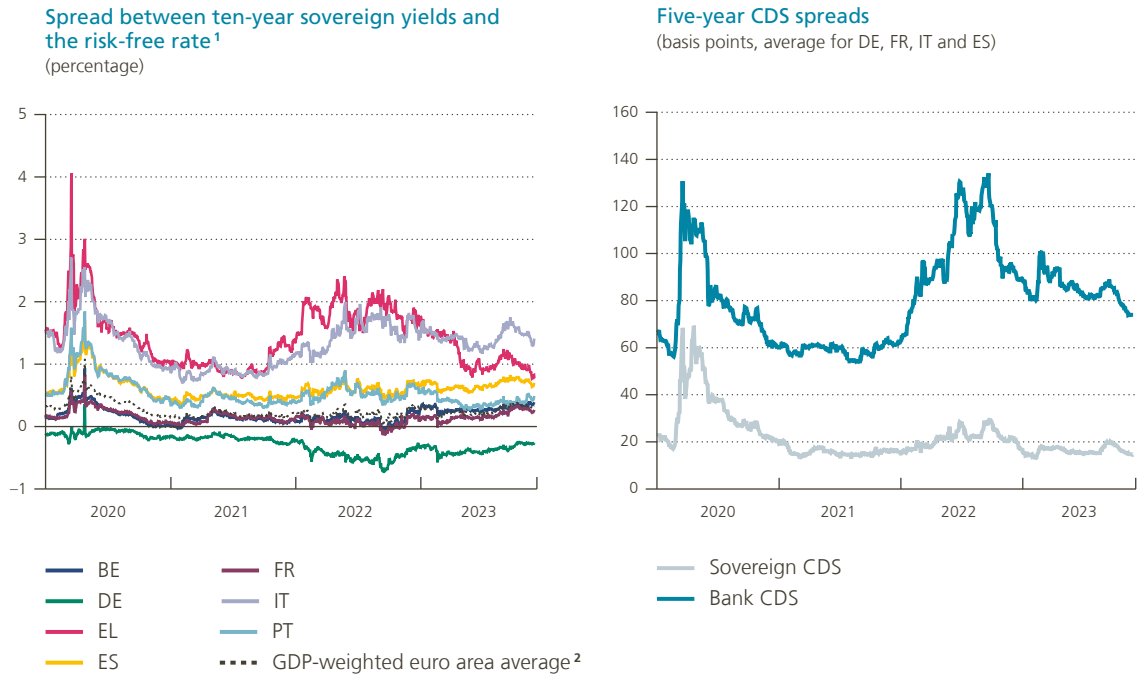


Sources: Bloomberg, LSEG, own calculations.

1 The one-year real risk-free rate and one-year real risk-free rate nine years ahead are approximated by the rates on overnight indexed swaps adjusted for inflation and real term premia estimated using a yield curve model. Prior to October 2019, EONIA-indexed swap rates are used, reduced by 8.5 basis points. The blue diamond represents the one-year forward rate adjusted in the same way. The yellow dotted line keeps the adjusted one-year rate constant nine years from now.

Figure 2.4

Fragmentation remained limited despite turbulence in the banking sector



Sources: LSEG, own calculations.

1 The risk-free rate is approximated by the ten-year rate on overnight indexed swaps.

2 The GDP-weighted average includes the following countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal and Spain.

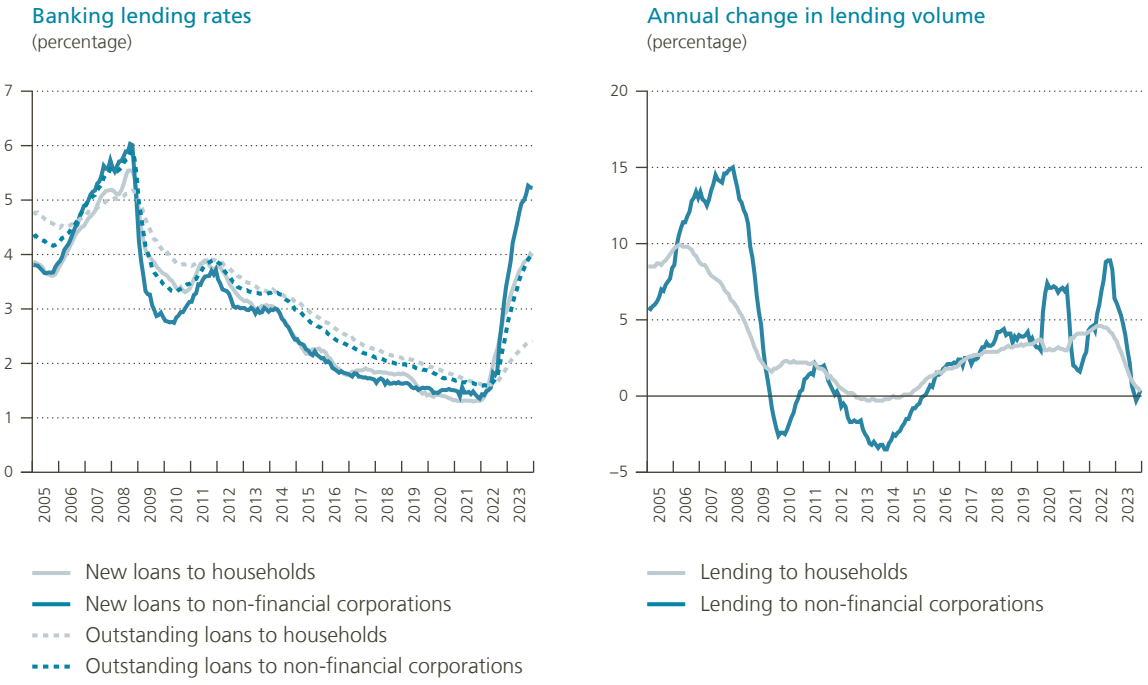
yields was almost perfect, as sovereign yield spreads remained stable overall, although displayed diverging dynamics in some countries. From 2020 until early 2023, Italian and Greek spreads were broadly similar, as were Portuguese and Spanish spreads. These two pairs have since separated against the backdrop of a more mixed fiscal outlook. According to European Commission projections, Portugal, unlike Spain, should post a large primary budget surplus in 2023 and 2024. Similarly, Greece managed to reduce its public debt ratio, which led to an improvement in its sovereign debt rating. In contrast, Italy's path to healthier public finances seems more uncertain, due to an upward revision of its projected budget deficit in September 2023. That being said, sovereign spreads did not exhibit undue volatility during the banking sector turbulence in March 2023, when the US banks Silicon Valley Bank and Signature Bank failed, followed shortly thereafter by the faltering of Credit Suisse, which was eventually taken over by UBS. In the euro area, no banks failed during this period, but spreads on bank credit default swaps (CDS) rose rapidly, while those on sovereign CDS remained relatively stable. The existence of the Transmission Protection Instrument (TPI), adopted in 2022, could explain the absence of the spread of tensions to the sovereign bond market in the euro area.

The tightening of monetary policy was largely transmitted to bank lending rates

Bank lending rates continued to rise significantly. Rates on new loans to businesses and households reached levels not seen since the global financial crisis of 2008, rising from around 3 % at the end of 2022 to 5.2 % and 4 %, respectively, in December 2023. Interest rates on outstanding loans rose less than on

Figure 2.5

Bank lending rates continued to rise and credit growth weakened significantly



Sources: ECB, LSEG.

new loans, as the former often benefited from fixed rates or a relatively long initial rate fixation period, which was particularly the case for household mortgage loans.

The results of the Eurosystem's bank lending survey show that banks tightened their lending conditions and that demand for credit fell. The tightening of lending conditions was mainly attributable to a greater perception of the level of risk and lower risk tolerance. Tightening went beyond the cost of credit: collateral requirements were also beefed up and maturities and loan amounts reduced. In addition, the rejection rate for loan applications rose for both businesses and consumers. At the same time, demand for credit fell, mainly due to higher interest rates (implying a drop in the number of profitable investment opportunities) and past growth in corporate profit margins (increasing internal financing capacity).

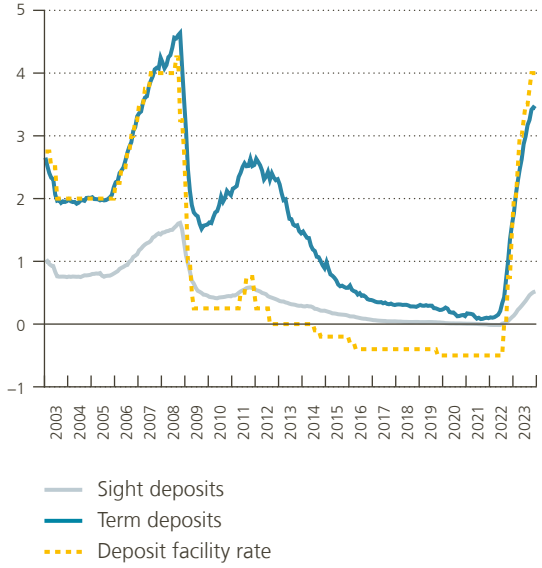
As a result, the annual growth rate of lending slowed significantly. The weakening of both demand for and supply of credit explain the slowdown in the lending growth rate seen from the end of 2022. The rate fell significantly in December 2023, to values close to zero for both non-financial corporations and households. At the same time, debt ratios (the ratio of outstanding debt to GDP) contracted for both households and non-financial corporations, partly as a result of domestic inflation.

In contrast to bank lending rates, sight deposit rates rose only very slightly. However, this trend did not extend to all types of deposits, since the yield on term deposits rebounded significantly, in line with the increase in the ECB's deposit facility rate. This difference in dynamics also triggered a transfer of assets from sight accounts to term accounts. In addition to these transfers, the current reduction in the ECB's balance sheet could intensify competition between banks to attract deposits, which are their main sources of funding, and exert upward pressure on bank deposit rates.

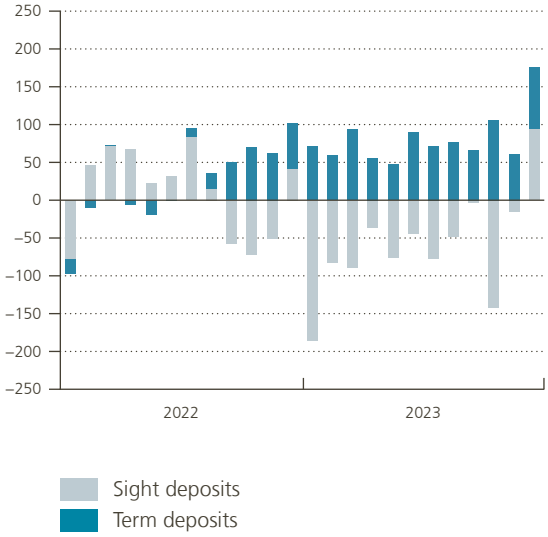
Figure 2.6

Sight deposit rates remained relatively low, leading to a shift from sight accounts to term accounts

Bank deposit rates
(percentage)



Flows from sight and term accounts
(millions of euros)



Source: ECB.

2.3 Monetary policy in the light of risks to price stability

The pandemic highlighted how supply shocks can have more significant and persistent inflationary effects than expected. Until the post-pandemic economic recovery, the prevailing view in monetary policy discussions was that it was theoretically preferable for central banks to look through the temporary effects of supply shocks and, therefore, tolerate transitory inflation so as not to exert a heavier burden on economic growth. However, persistent bottlenecks in supply chains and historically high commodity prices – especially for energy, following Russia's invasion of Ukraine – pushed inflation up further, leading to fears that inflation expectations could become de-anchored. In addition, the vigorous recovery of demand – allowing corporate profit margins and wages to rise – pushed the euro area towards inflation that was more domestic in nature. Fears of a de-anchoring of inflation expectations coupled with robust aggregate demand called for a more vigorous monetary policy response, especially against the backdrop of a strong labour market.

Given the high level of macroeconomic uncertainty, the ECB clarified the criteria on which it would base its key rate decisions: (1) the inflation outlook in the light of new economic and financial data, (2) the underlying inflation dynamics, and (3) the strength of monetary policy transmission.

Underlying inflation turned a corner, lending credence to the belief that inflation is returning to target

The rapid decline in inflation seen throughout the year mainly reflected the smaller contribution from energy products, but underlying inflation also fell. After peaking at 10.6 % in October 2022, inflation in the euro area fell steadily to 2.9 % by year's end. Similarly, underlying inflation also appears to have started on a downward path. It fell from a peak of 5.7 % in March 2023 to 3.4 % in December 2023.

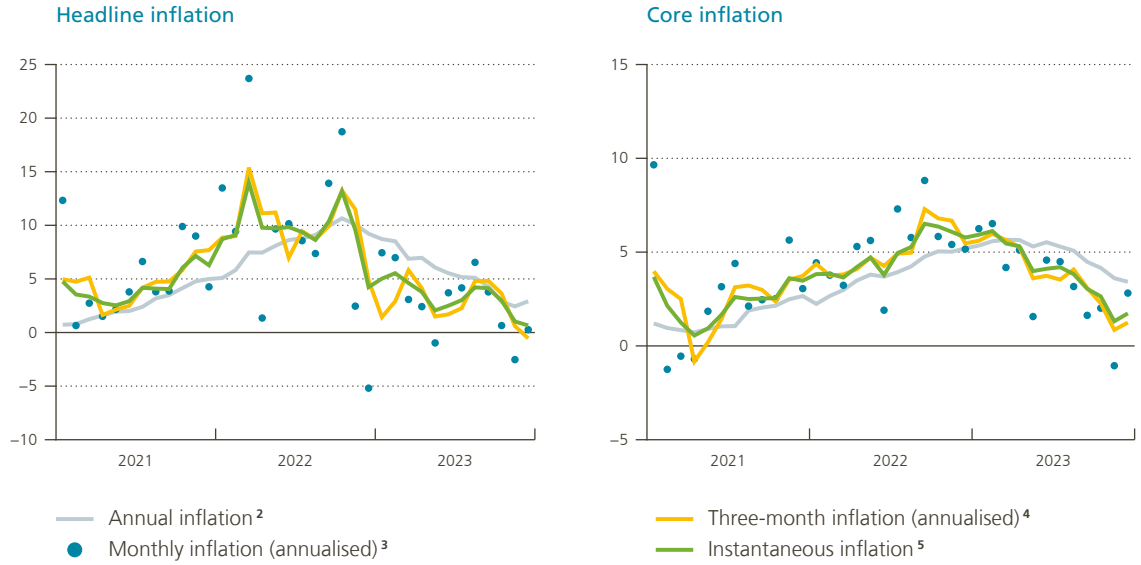
Alternative measures of inflation support the conclusion that a turning point was reached at the end of 2022. The year-on-year inflation rate is an average of monthly inflation rates over the past year.[1] Once abnormally high monthly price rises from the previous year start to disappear from annual inflation rates, the inflation rate slows significantly: these are known as base effects. Due to base effects, year-on-year inflation reflects not only current price dynamics but also price changes a year ago. Consequently, inflation measures that focus on the most recent monthly data are also used. However, given its high degree of volatility, monthly inflation alone is of little help when it comes to making monetary policy decisions. The three-month inflation rate is an alternative. This rate weights the inflation rates for the current month and the previous two months by one-third each. Instantaneous inflation, on the other hand, upweights the most recent observation and assigns progressively decreasing weights to earlier months. These alternative measures indicate that headline inflation reached a turning point at the end of 2022. More in line with recent trends, they were lower than the annual inflation rate in 2023, as they were no longer influenced to the same extent by the spikes in energy prices that occurred at the end of 2022. As for core inflation rates, these are much less volatile from month to month, since energy and food prices are excluded.

1 For more information, see J. Wauters (2023), "The perils of tracking year-on-year inflation | nbb.be", NBB blog, 21 April.

Figure 2.7

Alternative measures of inflation in the euro area [1]

(percentage)



Sources: ECB, own calculations.

1 Seasonally adjusted price indices.

2 Year-on-year inflation is the average of the last twelve monthly inflation rates (annualised).

3 Monthly inflation takes into account only the last observation of the monthly inflation rate.

4 Three-month inflation weights the inflation rates for the current month and the previous two months by one-third and ignores other months.

5 Instantaneous inflation assigns the greatest weight to the most recent observation and progressively decreasing weights to previous months.

While an inflection point was reached in mid-2023 based on year-on-year inflation rates, the alternative measures point to a turnaround towards the end of 2022. Instantaneous core inflation was slightly below 2 % at the end of 2023.

According to the December 2023 ECB staff macroeconomic projections for the euro area, inflation is expected to return to 2 % in the course of 2025. The fall in inflation will mainly be due to mitigation of the effects of past energy price shocks and of tensions upstream of supply chains, coupled with tighter monetary policy. More specifically, the projections assume average inflation of 2.7 % in 2024, 2.1 % in 2025 and 1.9 % in 2026. The projections were constantly revised upwards in 2022, in particular in response to inflation surprises. In 2023, however, forecast revisions between the start and the end of the year were fairly minor. Core inflation is also expected to fall: the Eurosystem projections put it at 2.7 % in 2024, 2.3 % in 2025 and 2.1 % in 2026. Growth in labour costs is expected to be the main driver of core inflation. After rising significantly in 2022, corporate profit margins are expected to weaken over the projection horizon, providing a buffer for rising labour costs.

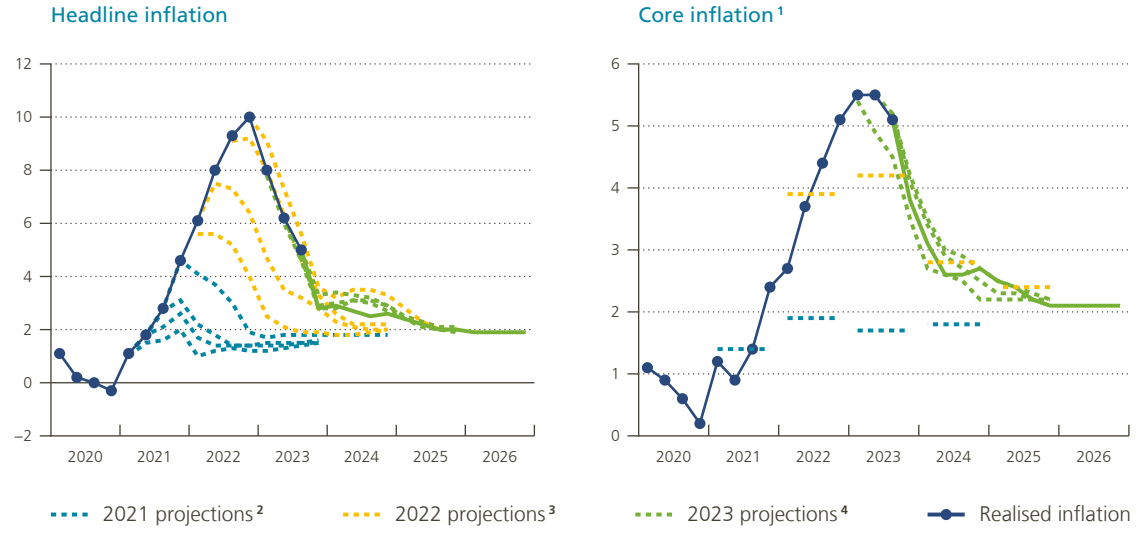
Risks surround inflation forecasts and are reflected in uncertainty over the future path of interest rates

A number of upside risks could reignite inflation despite the tightening of monetary policy. These include domestic factors, such as the growing scale of wage increases against the backdrop of a resilient labour market (with unemployment averaging 6.5 % in 2023), which shored up economic activity, and

Figure 2.8

Euro area inflation forecasts

(percentage)



Source: ECB.

1 Quarterly forecasts for core inflation have only been published since March 2023.

2 December 2021 annual forecast for core inflation.

3 December 2022 annual forecast for core inflation.

4 Solid green line: December 2023 annual forecast.

fiscal policy. In addition, external factors could push up prices, such as the rising cost of raw materials (Russia's invasion of Ukraine and the Middle East conflict, demand for materials needed for the greening of the economy, [1] etc.).

Nevertheless, inflation expectations remain anchored at the 2 % target, helping to contain upside risks. Although inflation rose to historic levels, measures of medium- and long-term inflation expectations sent out fairly reassuring signals. The results of the Survey of Professional Forecasters (SPF) for the fourth quarter of 2023 point to a long-term inflation rate of 2.1 %. However, several issues emerged during the recent episode of high inflation that merit attention. Whereas respondents' long-term expectations were clearly concentrated below 2 % during the period of low inflation in the euro area, they refocused around 2 % from 2022 onwards, as a result of growing inflationary pressures. The range of survey responses reveals that by 2023, a growing share of forecasters (over 10 %) expected inflation to be at or above 2.5 % in the long term. In addition, financial market data pointed to medium-term inflation expectations above 2.6 % at the end of the summer, although these had fallen back to 2.3 % by the end of the year. Finally, the medium-term inflation expectations of consumers (from the Consumer Expectations Survey) rose at the beginning of 2022 and remained at a median level of around 2.5 % for most of 2023.

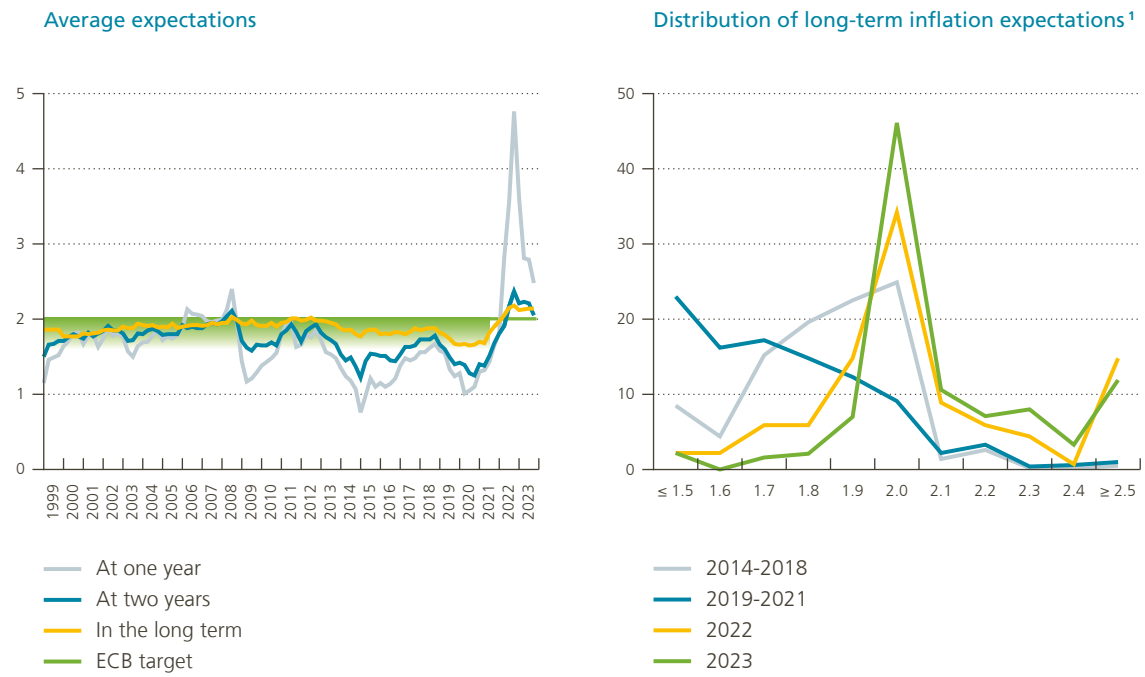
Although inflation expectations remain fairly well anchored at the 2 % target, the longer inflation remains above this level, the greater the risk of a loss of confidence in the target. The danger is that economic agents will stop anticipating a low and stable inflation rate and will start to rely more on the latest inflation figures to form their inflation expectations (in other words, they will become

1 See K. Buysse and D. Essers (2023), "Critical raw materials: from dependence to open strategic autonomy", NBB, *Economic Review*.

Figure 2.9

Inflation expectations of professional forecasters

(percentage)



Source: ECB.

1 The y-axis indicates the percentage of respondents and the x-axis the expected inflation rate.

backward-looking rather than forward-looking). Such a shift could lead to persistent price rises, with inflation and inflation expectations feeding off one another. This would require a more forceful monetary policy response, which could lead to a recession. This scenario is less favourable than one in which the central bank ensures that inflation expectations remain anchored by sticking to its current course of tightening, in order to bring inflation back to target as soon as possible.

While the tightening of monetary policy was rapidly passed on to financing conditions, doubts persist as to how it will affect the real economy and thus bring inflation back to target. The speed of the tightening was unprecedented, given the lengthy period of accommodative policy that preceded it – characterised by historically high balance sheets – and the combination of economic shocks that affected the euro area from 2020 onwards. For example, the impact of recent shocks on the economy's supply capacity and, therefore, on the level of spare capacity is not yet known. These unknowns amplify calibration uncertainty, i.e. the choice of the appropriate level of interest rates and the length of time they should be maintained at that level.

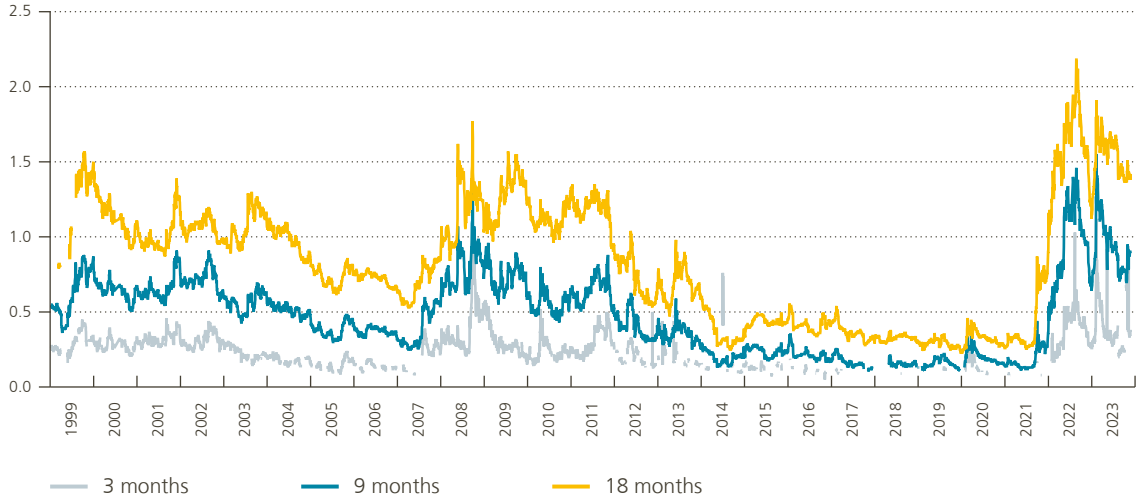
At the end of 2023, the financial markets seemed to think that the ECB had finished raising rates and would start cutting them in 2024, but the wide distribution of potential scenarios reveals substantial uncertainty.[1] The baseline scenario shows expectations for the deposit facility rate at around 2 % by the end of 2025 (see the previous chapter on the global economy). That being said, the distribution of the interest rate expectations of financial market participants is historically wide. The standard deviation of the distribution (a measure of uncertainty) at various anticipation horizons has never been so high, except in the aftermath of

1 See B. De Backer (2023), "Are interest rates set to fall?" NBB blog, 16 November.

Figure 2.10

Standard deviation of the distribution of expected rates at different forecasting horizons[1]

(percentage)



Source: ECB.

1 Forward distributions are derived from options on the three-month EURIBOR rate. Forward rates contain risk premia.

the 2008 global financial crisis. More recently, this uncertainty was further exacerbated by the banking market turbulence seen in March 2023. Uncertainty over the short-term (three months) has since fallen but remains high over the longer term (18 months).

Could monetary policy in the euro area be constrained by other policies?

The ECB's independence is intended to prevent the political sphere from influencing its monetary policy decisions and its objective of maintaining price stability. When the ECB takes monetary policy decisions, it should not have to worry about whether its actions – such as raising interest rates – could jeopardise the sustainability of public finances or create risks to financial stability.

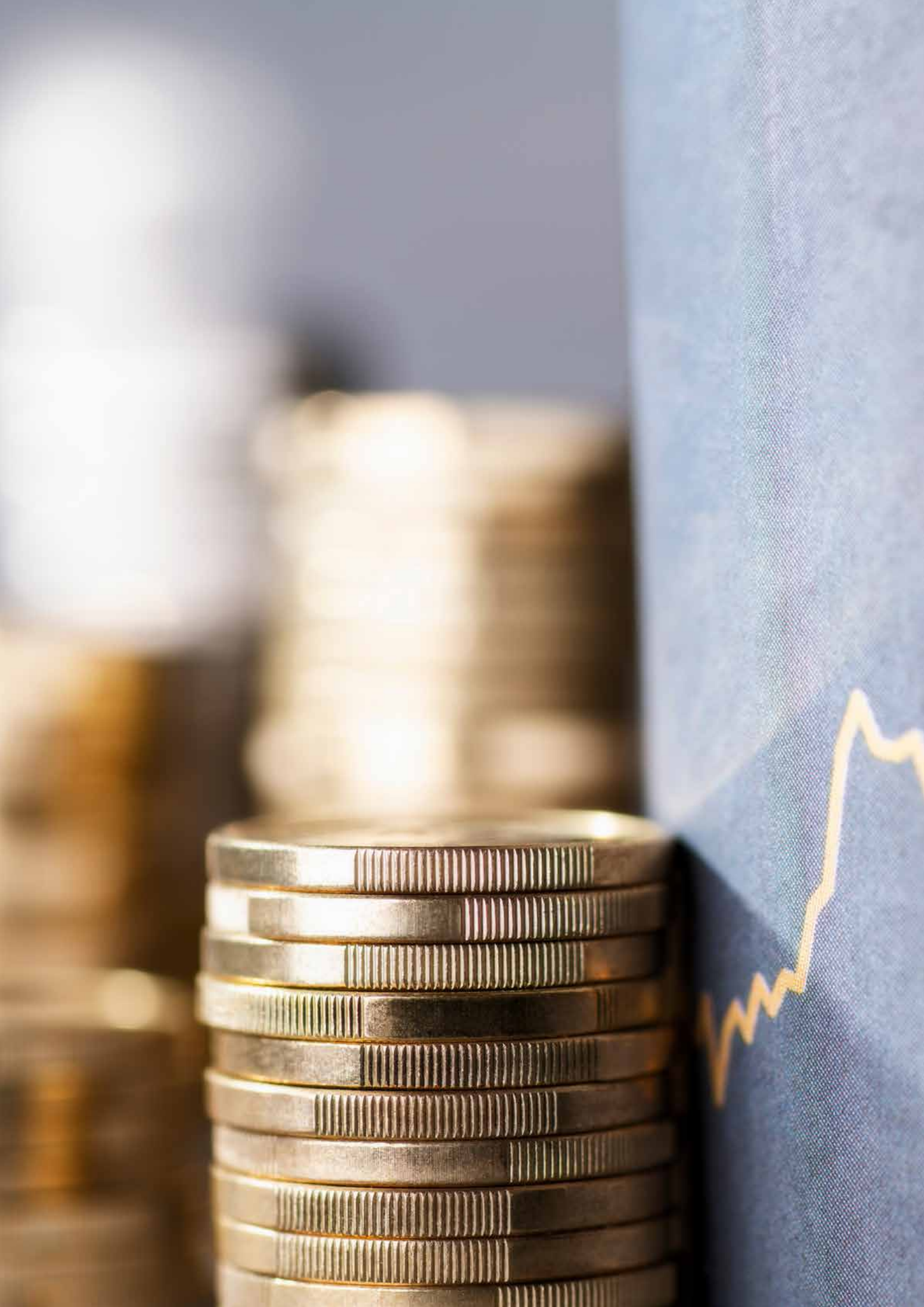
However, overly flexible fiscal policy can be at odds with restrictive monetary policy. Overly flexible fiscal policy fuels demand and inflation, forcing the central bank to raise interest rates further. Moreover, a rise in interest rates weighs on public finances, all other things being equal. Governments must therefore pay particular attention to the sustainability of public finances when interest rates are rising. If they do not reduce public deficits or do not reduce them sufficiently, the central bank could come under pressure not to raise interest rates (and thereby allow inflation to rise). In the extreme case of the central bank yielding to this pressure, a situation of "fiscal dominance" would arise. Although the fiscal and monetary authorities managed, by working together, to prevent an economic collapse during the health crisis and to pull the economy out of the deep recession into which it had fallen, the risk of fiscal dominance could emerge in a context of rising interest rates that increases the burden of public debt.

Moreover, financial stability is a prerequisite for price stability. In this respect, the ECB, as the lender of last resort, plays an important role in managing liquidity crises and stabilising the financial markets. The separation of monetary and financial stability considerations can be ensured when financial disturbances are caused by market failures or liquidity problems rather than solvency issues. In

other words, monetary policymakers cannot solve solvency problems, which are the responsibility of other authorities.[1]

In terms of financial stability, macroprudential and microprudential policies form the first line of defence, allowing monetary policy to focus on its primary objective of price stability. The aim of macroprudential policy, in particular, is to increase the resilience of the financial system and limit the build-up of vulnerabilities in order to mitigate systemic risk – which can arise from macroeconomic shocks, financial imbalances and contagion effects – and to ensure that financial services continue to be provided efficiently to the real economy even in times of crisis. The macroprudential authorities in the euro area therefore increased capital requirements in 2023, for example by raising countercyclical capital buffers. Insofar as these buffers help to curb credit growth, they may also play an indirect role in the fight against inflation. In general, these prudential measures help to ensure that financial stability concerns do not impede monetary policy decision-making by the ECB Governing Council which is aimed at ensuring price stability in line with the primary objective of the central bank's mandate.

1 See I. Schnabel (2023), *Monetary and financial stability – can they be separated?*, speech at the Conference on Financial Stability and Monetary Policy in the honour of Charles Goodhart, London, 19 May.



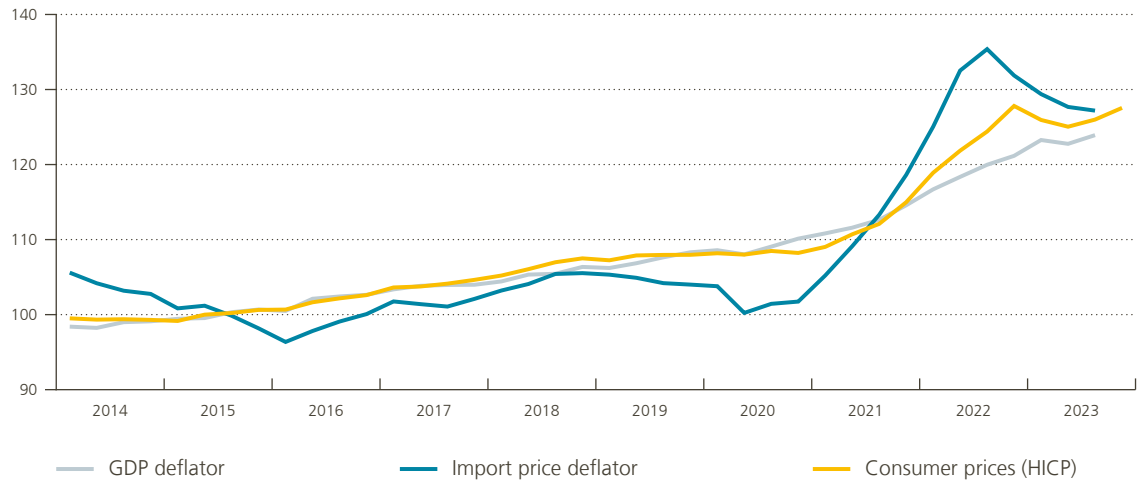
3. Prices and costs

After the enormous price shocks of 2021 and 2022, external price pressures eased in 2023, along with domestic inflationary pressures. The price of gas on the international markets peaked at over € 300/MWh in August 2022. A year later, in August 2023, the price was around € 35, and thus still higher than before the pandemic (at which time the price was around € 10/MWh). These fluctuations were clearly reflected in the import price deflator. While the prices of imported goods and services fell, labour costs, a key contributor to domestic price pressures, rose sharply in 2023. This historic rise was due to the automatic indexation of wages, as the indexation mechanisms reacted with some delay to the 2022 surge in inflation. The increase in domestic costs, a second-round effect of imported inflation, was partially absorbed by firms, whose unit profit growth slowed in 2022 and even fell into negative territory in 2023. Higher past profit margins helped cushion rising labour costs in 2022 and 2023. As a result, domestic cost and income inflation, as measured by the GDP deflator, eased. This combination of internal and external factors led to a sharp fall in overall consumer price inflation, which stood at 2.3 % in 2023, compared with a 10.3 % rise in the cost of living in 2022. However, strongly negative energy inflation, which explains the low headline figure for 2023, masked a continuing high inflation rate for services, food and non-energy industrial goods.

Figure 3.1

Import prices fell sharply, while domestic pressures also eased

(price index, 2015 = 100)



Source : EC.

3.1 Rising wage costs weighed on competitiveness

In Belgium, wage growth is governed by a strict statutory framework. The Act of 26 July 1996 on the promotion of employment and the preventive safeguarding of competitiveness, revised in 2017, aims primarily to prevent persistent wage drift in Belgium compared with its largest neighbours (Germany, France and the Netherlands). To do so, it sets an upper limit for collectively negotiated real wage increases, i.e. beyond the guaranteed increases resulting from indexation and the adjustment of salary scales. This limit is assessed every two years by the Central Economic Council (CEC). The CEC compares wage cost projections in the three largest neighbouring countries with indexation forecasts in Belgium, taking into account the cumulative wage premium, or gap, built up since 1996. The maximum available margin is calculated based on this figure. The legislation was revised in 2017 to compensate for forecasting errors that were causing Belgian labour costs to drift. Since then, the CEC's estimate has also included a correction factor and a safety margin of at least 0.5 %. The margin determined by the CEC is then used as a basis by the social partners to negotiate the wage growth ceiling (called the "wage norm" in Belgium). If an agreement cannot be reached, the federal government sets the ceiling. Since 2011, the social partners have reached agreement only once, during the 2017-2018 negotiations.

In addition to safeguarding the competitiveness of Belgian companies, the law also explicitly provides for the principle of wage indexation. Wages are automatically indexed based on the health index, which reflects the national consumer price index (CPI) excluding alcoholic beverages, tobacco and fuel. The law aims to strike a balance between safeguarding business competitiveness and preserving employee purchasing power. These two objectives are sometimes difficult to reconcile.

In the current context of high imported inflation, indexation has enabled purchasing power to be protected, but has also led to a deterioration in the cost competitiveness of companies. At the start of the energy crisis, the main concern was the preservation of purchasing power. Indeed, 2022 was characterised by an overall loss of purchasing power, which nevertheless remained limited from a macroeconomic point of view, thanks in particular to support measures adopted by the government. Nonetheless, some workers were more affected than others. One-third of private-sector employees, for example, had to wait until January 2023 to see their pay indexed (see below). The variable impact of the energy crisis on household purchasing power was described in detail in the Bank's 2022 report. The loss suffered in 2022 was offset by automatic indexation in 2023 (see chapter 4). In 2023, it was rather the cost-competitiveness of firms that came under pressure. In accordance with the Competitiveness Act, the elimination of the wage gap entails a period of wage moderation which notably depends on wage growth in neighbouring countries.

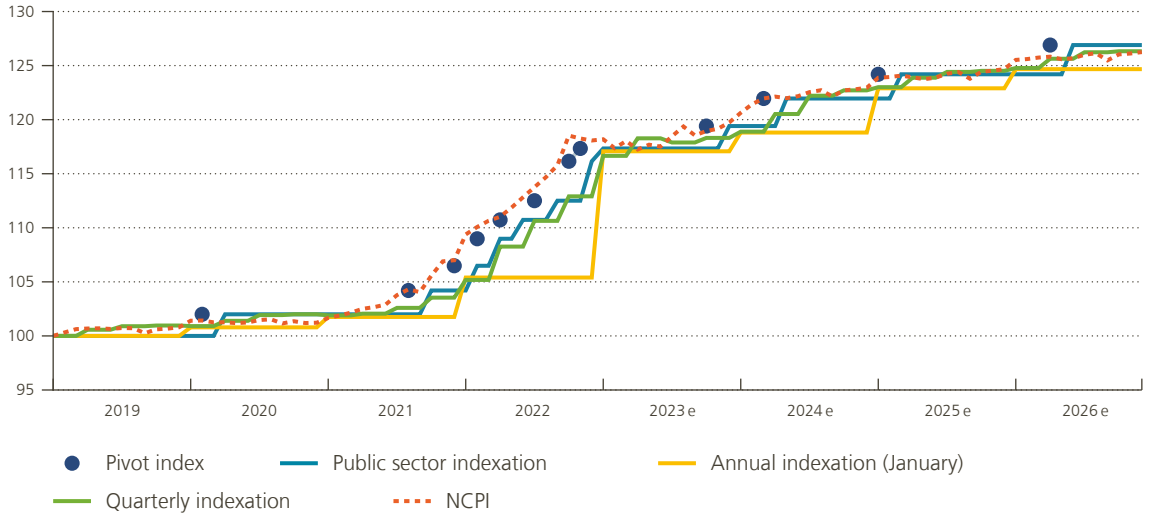
Growth in labour costs was historically high

Gross salaries in the private sector rose by a record 8.1 % in 2023. As in 2022, this increase was mainly due to indexation, despite the slowdown in inflation in 2023. Owing to the time lags involved in the various indexation mechanisms, a large portion of the rise in the health index in 2022 was not passed on to salaries until 2023.

Figure 3.2

Indexation compensated employees for soaring prices more or less quickly

Consumer price index and wage indexation
(index, January 2019 = 100)



Share of different indexation mechanisms in the private sector
(in %)

Indexation mechanism	% of employees [1]	Number of workers [1]
Pivot index	48.2	1 462 279
Periodic indexation		
Annual	40.3	1 222 182
Of which: in January	*33.3*	*1 000 030*
Half-yearly	2.5	74 301
Four-monthly	0.3	8 603
Quarterly	5.6	169 904
Bimonthly	1.6	47 210
Monthly	0.6	19 327

Sources: FPS Employment, Labour and Social Dialogue, Statbel, NBB.
1 Employment in the private sector covered by joint committees; situation in the first quarter of 2022.

There is no single indexation mechanism; the mechanism varies from sector to sector and from one joint committee to another. In the private sector, around half of workers see their pay rise when the health index increases by a certain percentage, which is not necessarily the same as that applied in the public sector (2 %). Others benefit from indexation at specific points in time, e.g. annually, half-yearly, quarterly or even monthly or bimonthly. The pay of a large proportion of private sector workers (40 %) is adjusted for the cost of living only once a year. For the majority of these workers, indexation takes place in January. In January 2023, just over one million employees

Table 3.1

Labour costs in the private sector

(data adjusted for calendar effects; annual rate of change, unless otherwise stated)

	2019	2020	2021	2022	2023 e
Hourly wage costs [1]	2.1	5.2	0.2	4.6	7.5
Gross hourly wages	2.3	4.8	0.7	4.8	8.1
Collectively negotiated real adjustments [2]	0.7	0.6	0.4	0.4	0.0
Indexation	1.8	1.0	1.1	5.4	8.0
Wage drift [3]	–0.2	3.0	–0.7	–0.9	0.1
Employer social security contributions [4]	–0.2	0.48	–0.5	–0.2	–0.6
p.m. Hourly labour costs, economic defintion [5]	*2.0*	*4.3*	*0.1*	*5.0*	*7.6*
Hourly productivity [6]	1.0	4.6	–1.5	–1.8	0.5
Unit labour costs	1.1	0.6	1.7	6.6	7.0

Sources: NAI, NSSO, FPS Employment, Labour & Social Dialogue, NBB.

1 As per the national accounts definition.

2 Wage increases determined by joint committees.

3 Increases and bonuses granted by employers over and above collective agreements at inter-professional and sector level; wage drift resulting from changes in the structure of employment and measurement errors; contribution to the change in labour costs, in percentage points.

4 Contribution to the change in labour costs resulting from changes in implicit social security contribution rates, in percentage points.

5 Labour costs according to this definition also include reductions in social security contributions for target groups and wage subsidies, meaning it better reflects the real cost of labour for employers.

6 Real value added per hour worked for employees and self-employed workers.

saw their pay jump by 12 %. In the civil service, salaries are indexed when the smoothed health index crosses the pivot index (which corresponds to growth of 2 %); this occurred no fewer than five times in 2022, meaning public sector wages closely followed the health index. In 2023, the pivot index was exceeded only once (in October).

No room for real wage growth

There was no possibility to grant collectively negotiated real wage increases in 2023-2024. For the 2023-2024 negotiation period, the upper limit set by the CEC for collectively negotiated real wage increases based on the rise in wage costs in neighbouring countries and inflation in Belgium was zero, as wage costs had risen faster in Belgium than in those countries since the price surge began in 2022. In the absence of an agreement between the social partners on this issue, the wage growth ceiling was set by the federal government at zero for this period.

To make up for this lack of leeway, the government decided to offer a purchasing power bonus. As part of the 2023-2024 wage negotiations, the government allowed companies that performed well during the energy crisis to offer a purchasing power bonus of up to € 750 per employee. This bonus, which benefits from advantageous tax and social security treatment, explicitly falls outside the scope of the Competitiveness Act. In other words, it is not taken into consideration when determining the wage growth ceiling; it is, however, taken into account to calculate wage drift. Thanks to this bonus in particular, wage drift is expected to turn positive again in 2023, after two years of negative contribution to overall wage growth. In 2021 and 2022, strong creation of low-paid jobs (flexi-jobs and student jobs) reduced wage drift. The gradual ending of furlough schemes in 2021 and 2022, which mainly concerned low-paid jobs, also contributed to this. On a more general level, structural trends affecting the composition of the workforce, such as an increase in the level of employee education and age, are reinforcing wage drift, with highly educated and

older employees being paid relatively more than the average wage.

The government also granted a reduction in employer social security contributions to soften the blow of soaring labour and input costs. An exceptional 7.07 % reduction in employer social security contributions was agreed by the federal government for the first two quarters of 2023. However, the impact of this measure on the rise in labour costs borne by firms was modest compared with that of indexation.

Slightly positive productivity growth in 2023 did little to mitigate the sharp rise in unit labour costs. An increase in labour costs is not necessarily detrimental to competitiveness, as long as it is accompanied by an equivalent increase in productivity. Although labour productivity posted slightly positive growth in 2023, this uptick followed two years of marked decline, which contributed to a sharp rise in unit labour costs in the private sector.

Automatic wage indexation caused the wage gap to reappear

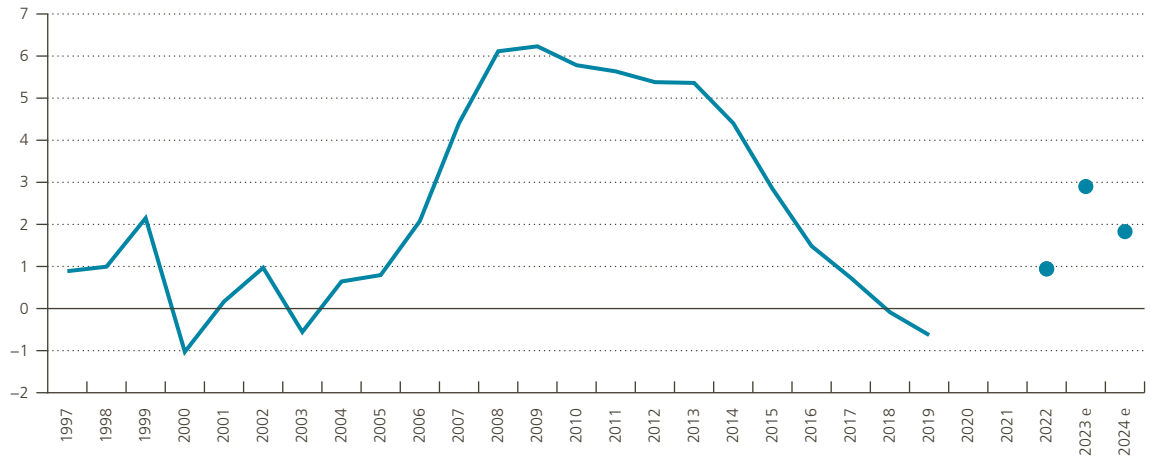
Wages have risen faster in Belgium than in neighbouring countries, which has affected competitiveness. While the purchasing power of Belgian workers was protected during the inflationary surge of 2022, firms (and in part the government) bore the brunt. Their costs have soared, eroding profit margins (see below) and their competitive position. The extent of this deterioration depends on the firm's degree of exposure to external demand. Indeed, starting in 2022, the very sharp rise in inflation caused a divergence in the wage growth borne by employers in Belgium and in neighbouring countries, where wage increases are negotiated and take longer to take effect.

As a result, a wage gap has reappeared. In 2019, the wage gap built up between Belgium and its three main trading partners since 1996 was reabsorbed. In its February 2024 report, the CEC estimated that the cumulative wage gap would reach 1.8 % by 2024. However, this is a far cry from the 2022 assessment of 5.7 %, which came close to the record levels seen in 2007-2008. This substantial improvement was closely linked to the faster-than-expected fall in energy prices, which caused wage indexation to be lower than expected. It also illustrates the uncertainty surrounding estimates of the wage gap (or premium), which are based on both revised statistics and projected labour costs in Belgium and neighbouring countries.

Figure 3.3

Belgium's wage gap has widened since 2022

(gap [1] built up since 1996 in the private sector, percentage)



Source: CEC.

1 Compared with its three largest neighbours (Germany, France and the Netherlands); weighted averages based on the relative size of the respective country's GDP. The CEC did not publish information on the wage gap for 2020 and 2021.

Limited possibilities for differentiation at firm level

The lack of margin for collectively negotiated real wage growth limits the possibilities for differentiation at firm level. In principle, the maximum margin available for real wage growth can be allocated differently from sector to sector. Sectors that are performing well can opt to apply the maximum, while those that are experiencing more difficulty can decide to use only a portion of it. In the current context, however, since the margin has been set at zero and collectively negotiated negative adjustments are impossible, this possibility of differentiation is severely limited. The best-performing sectors cannot grant collectively negotiated real wage increases. Likewise, this rigidity works to the disadvantage of struggling firms, which cannot introduce a reduction in collectively negotiated real wages, apart from those in the process of negotiating a restructuring plan.

There is, however, some flexibility for firms to differ when it comes to increasing wages, which can be achieved via a range of benefits in kind that fall outside the scope of the legislation. Specifically, the following forms of remuneration are not covered by the wage growth ceiling: profit shares, payments in cash or shares or employee stock option plans, contributions to supplementary pension schemes, one-off innovation bonuses, consumption vouchers and purchasing power premiums (the most recently introduced). Although not expressly provided for in the amended Competitiveness Act, the bonus that may be granted to employees under Collective Bargaining Agreement No 90 (non-recurring performance-related benefits) does not fall under the scope of the wage growth ceiling either. Such a bonus depends on the achievement of a target set in a company-level collective bargaining agreement (CBA) and is exempt from personal income tax, provided it remains below the cap (set at € 3 434 gross for 2022). Despite its binding nature, the wage growth ceiling does not, therefore, completely prevent additional financial benefits from being negotiated at sector or company level.

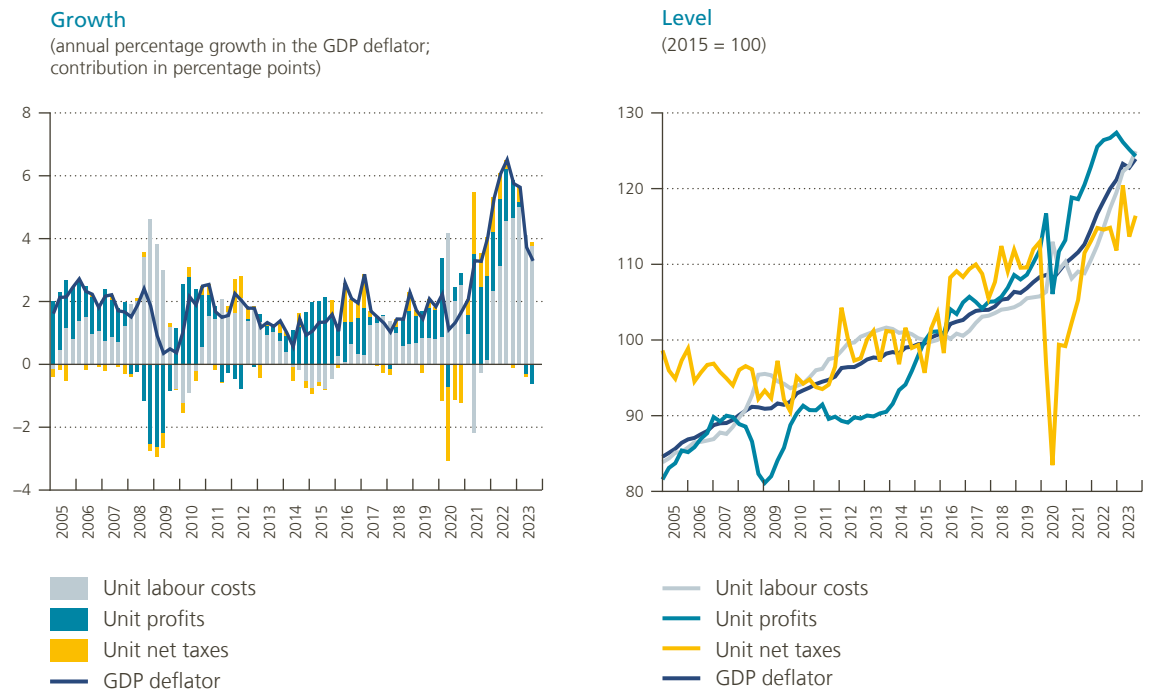
There is an opt-out for companies in difficulty, but it is a complex and burdensome procedure. The system as it is currently designed leaves little room for struggling firms to adjust wages to the specifics of their situation, for example based on their exposure to the energy price shock or the share of personnel costs in their cost structure. Under these circumstances, an opt-out clause can be used if one has been provided for in sector-level collective bargaining agreements. Such a clause makes it possible to stipulate certain conditions which, if fulfilled, authorise the employer not to apply the CBA (in whole or in part) in order to protect employment.

3.2 Rising labour costs exerted domestic pressure on prices, which was partially absorbed by corporate profit margins

Rising unit labour costs were the source of the vigorous domestic inflation seen in 2023. This was clearly reflected in the change in the GDP deflator, an indicator of purely domestic price pressures since it is not directly influenced by changes in foreign prices. Domestic inflation began to speed up in 2021 and continued to climb until the third quarter of 2022. The rise was initially driven by higher unit profits and net taxes (due to the gradual ending of support measures related to Covid-19). By 2022, the contribution of unit profits had declined, while that of labour costs had increased. Annual growth in the GDP deflator slowed from the fourth quarter of 2022 onwards, despite increased pressure from wages.

Figure 3.4

Domestic inflation fell but remained high



Source: EC.

Note: Unit profits are defined as the sum of gross operating surplus and mixed income, divided by real GDP. Mixed income is adjusted for the labour costs of the self-employed.

Unit labour cost growth peaked in the first quarter of 2023, as indexation mechanisms responded with some delay to the cost shock for a third of private sector employees (see section 3.1). It then eased, but remained high.

In Belgium, the rise in costs was partially offset by weaker growth in unit profits from mid-2022, which curbed domestic inflation. In addition to labour and input costs, profits also play a decisive role in price and inflation trends. They can either contribute to price rises or act as a buffer against rising costs. Belgian firms passed on their higher costs to customers to a lesser degree in 2022 and 2023 than in 2021. In the past, profit margins have often been used to cushion higher costs. For example, unit profits declined sharply after the oil price surge in 2007-2008 and following the shock to labour costs during the Global Recession of 2008-2009, when production slowed but firms did not shed workers.

Between 2014 and 2021, Belgian firms built up profit margins that enabled them to absorb the rise in costs in 2022 and 2023. A study by De Keyser et al. (2023),[1] analysing profit margins over a longer period, shows that the corporate profit share increased significantly between 2014 and 2021. This share, also known as the margin rate, is defined as gross operating surplus divided by value added, i.e. the proportion of domestic income devoted to the capital factor of production (see also Box 2). The fact that labour costs rose less rapidly than productivity, thanks in particular to a series of wage moderation measures adopted in 2014-2015, partly explains this trend. In 2023, these profit margins acted as a shock absorber, especially as unit profits in the total economy had continued to rise during the post-Covid-19 recovery (see Figure 3.4, right-hand graph), and therefore rather served to amplify inflation. There are a number of reasons why firms were able to set their own prices: dynamic demand for goods and services due, among other things, to the effects of the reopening and the savings accumulated during the pandemic; numerous government support measures; and a general inflationary environment that made price rises more acceptable, etc.

While firms generally absorbed the shocks well, this was not necessarily the case for each individual company. In particular, aggregate data provide a picture only of the economy as a whole. A study based on microdata (Bijnens and Duprez, 2023),[2] analysing information supplied by individual firms, suggests that caution should be exercised: macroeconomic profit margins are largely influenced by large firms (or "top performers"), meaning the figures are not necessarily representative of medium-sized or smaller businesses.

1 See T. De Keyser, G. Langenus and L. Walravens (2023), "Inflation and the evolution of corporate profit margins | nbb.be", NBB, *Economic Review.*

2 See G. Bijnens and C. Duprez (2023), *Firms, prices and margins*, NBB.

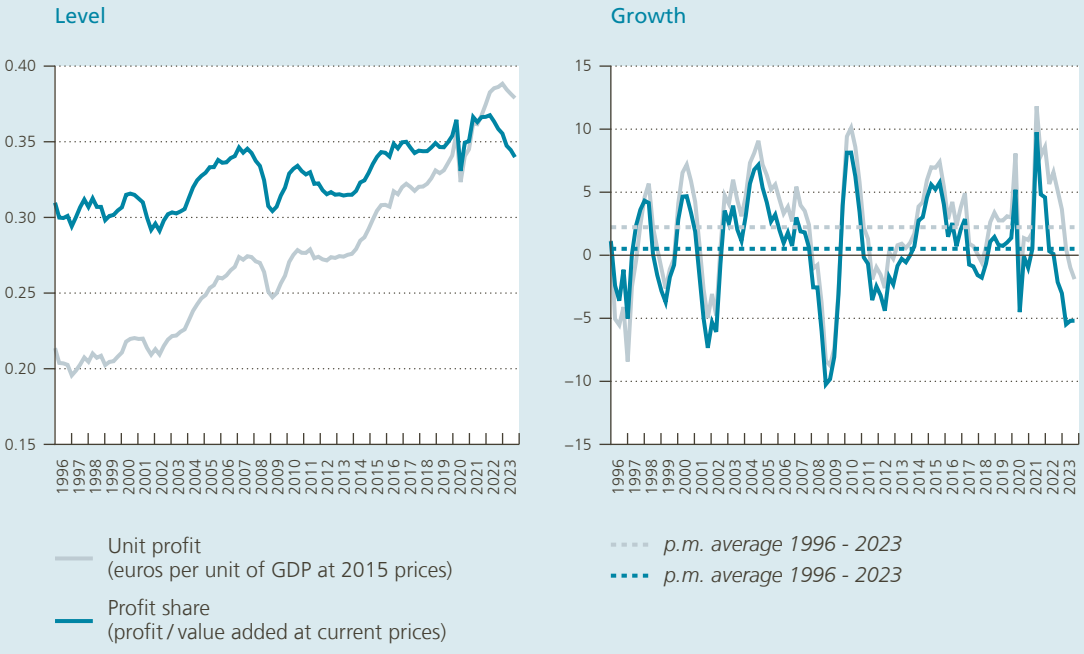
BOX 2

Cost price increases and different definitions of profit margin

The concept of profit margin or profit can be defined in several ways. Thus, a distinction should be drawn between macroeconomic and firm-related indicators. The former are taken from the national accounts. Gross operating surplus, i.e. value added less the cost of labour and net taxes on production and imports, represents the portion of income derived from the capital factor of production. Since it also includes company tax and the depreciation of investments, this macroeconomic concept is far removed from that of profit at firm level. Firms often define their sales price by adding a percentage, called a mark-up or profit margin, to their cost price.

A further distinction can be drawn between nominal and percentage indicators. Nominal indicators move in line with the general price level in the economy and as such reveal a trend. The same is not true of percentage indicators. The microeconomic profit margin is typically a percentage indicator. Indeed, as a fraction of two nominal variables (sales price and cost), the profit margin does not necessarily follow a trend. The macroeconomic profit share, sometimes also called the

The concept of profit in the national accounts: profit share and unit profit



Source: NAI.
Profit corresponds to gross operating surplus and mixed income adjusted for the salary component of self-employed workers.

margin rate, is also a percentage indicator. Since it is obtained by dividing profit[1] by nominal value added (both at current prices), it provides an indication of the distribution within the economy of value added between capital (profits) and labour (wages). Its counterpart is the wage share (obtained by dividing wages by value added). The macroeconomic concept of unit profit, on the other hand, is a nominal indicator obtained by dividing profit at current prices by real GDP. Together with the change in unit labour costs and that of net taxes on production and imports, this indicator determines domestic price growth in the economy (the GDP deflator).

Since 2022, the share of profits in the total economy has been declining, while unit profits have been posting positive growth for a longer period. The decoupling of these two indicators can be explained by the combination of high inflation and surging wage costs: the nominal indicator continues to grow while a greater proportion of value added is devoted to (significantly higher) wages. Value added (the profit share denominator) has risen sharply as a result of higher prices, leading to a contraction in the profit share, while unit profits have continued to climb.

Cost increases do not affect profit in the same way, depending on how this concept is defined. An example involving rising input costs can help illustrate this point. In the starting situation (T0), a firm produces at a unit cost of € 120 (€ 60 of input costs and € 60 of labour costs). The firm determines its sales price by adding a percentage (20 %) to its total cost. In the next period (T1), input costs rise by € 40. In the first scenario, the firm continues to systematically set the sales price by applying the same 20 % mark-up: the sales price rises by € 48, i.e. more than the rise in costs. The increase in costs has thus been reinforced. Despite a constant margin, unit profits rise. The share of profits in the economy also increases. In the second scenario, the firm applies the same unit profits but passes on to the sales price only the € 40 increase in costs. In this case, the profit margin falls to 15 % and the share of profits in the economy remains unchanged. The rise in imported costs has no effect on domestic variables. Finally, in the third scenario, the margin narrows more markedly. The higher costs are not passed on in full to the sales price (+€ 32). The firm still makes a profit, but unit profits fall as does the profit share. In this scenario, the profit margin acts as a buffer to partially absorb the higher costs.

This example shows that an increase in unit profits, which contributes to domestic inflationary pressures, can go hand in hand with unchanged pricing behaviour by firms, which seek to maintain a constant margin when faced with an increase in costs. In 2021, unit profits and

1 Profit is obtained here by approximation, by adding gross operating surplus and mixed income adjusted for the salary component of self-employed workers.

Response of firm profit margin indicators to an increase in costs

(in units, unless otherwise stated)

	T0 Initial period	T1 Scenario 1: fixed margin	*Difference compared with T0*	T1 Scenario 2: constant profit / unit	*Difference compared with T0*	T1 Scenario 3: fall in profit / unit	*Difference compared with T0*
Margin on total costs	20 %	20 %	*0.0 %*	15 %	*–25.0 %*	10 %	*–50.0 %*
Number of units	100	100		100		100	
Unit input cost	60	(€ +40) 100	*66.7 %*	(€ +40) 100	*66.7 %*	(€ +40) 100	*66.7 %*
Unit labour cost	60	60	*0.0 %*	60	*0.0 %*	60	*0.0 %*
Total cost per unit	120	160	*33.3 %*	160	*33.3 %*	160	*33.3 %*
Sales price	144	(€ +48) 192	*33.3 %*	(€ +40) 184	*27.8 %*	(€ +32) 176	*22.2 %*
Unit profit	24	32	*33.3 %*	24	*0.0 %*	16	*–33.3 %*
Turnover	14 400	19 200	*33.3 %*	18 400	*27.8 %*	17 600	*22.2 %*
Profit (= turnover – total costs)	2 400	3 200	*33.3 %*	2 400	*0.0 %*	1 600	*–33.3 %*
Value added (= turnover – input costs)	8 400	9 200	*9.5 %*	8 400	*0.0 %*	7 600	*–9.5 %*
Profit share (= profits ÷ value added)	28.6 %	34.8 %	*21.7 %*	28.6 %	*0.0 %*	21.1 %	*–26.3 %*

Source: E. Hahn (2023), "How have unit profits contributed to the recent strengthening of euro area domestic price pressures?", table A, ECB, *Economic Bulletin*, Issue 4/2023.

the share of profits in the economy increased, consistent with pricing based on constant or increasing margins. In 2022, although unit profits rose, they accounted for a lower share of GDP deflator growth, as wages had risen sharply and become a more consequential component and these higher wage costs had not been fully passed on to sales prices. That year, according to a study based on microdata (Bijnens et al., 2023)[1] profit margins, as per the firm-related definition, fell in almost all sectors. The contraction in unit profits and in the profit share observed in 2023 indicates that firms continued to trim their margins.

1 G. Bijnens, C. Duprez and J. Jonckheere (2023), "Are price hikes in Belgium being driven by greed?", NBB blog, 26 June.

3.3 Significant fall in headline inflation despite higher core inflation on average in 2023

While headline inflation fell sharply from 10.3 % in 2022 to an average of 2.3 % in 2023, core inflation continued to rise until May 2023. Headline inflation is measured by the change in the consumer price index. The harmonised index of consumer prices (HICP) is used to compare inflation between European Union member states. Core inflation excludes certain volatile components of the index, such as food and energy. It is therefore defined as the change in prices of non-energy industrial goods (NEIG) and services. On average, core inflation was 6.0 %, compared with 4.0 % in 2022. This shows that it is mainly domestic factors that are continuing to push prices up; this rate is well above the average of 1.5 % recorded between 1997 and 2019. Figure 3.5 shows the relationship between headline inflation, core inflation and wage indexation in the private sector. The latter [1] is an index weighted according to various indexation mechanisms, which differ from one joint committee to another. The rise in headline inflation is passed on to wages through the health index. [2] These wage increases are in turn partly passed on to sales prices, which are mainly reflected in core inflation. External

1 This index is based on the FPS Employment, Labour & Social Dialogue's collectively negotiated wage index.
2 The national consumer price index (NCPI) excluding alcoholic beverages, fuel and tobacco.

Table 3.2

Inflation by component in Belgium

(annual rate of change in the HICP)

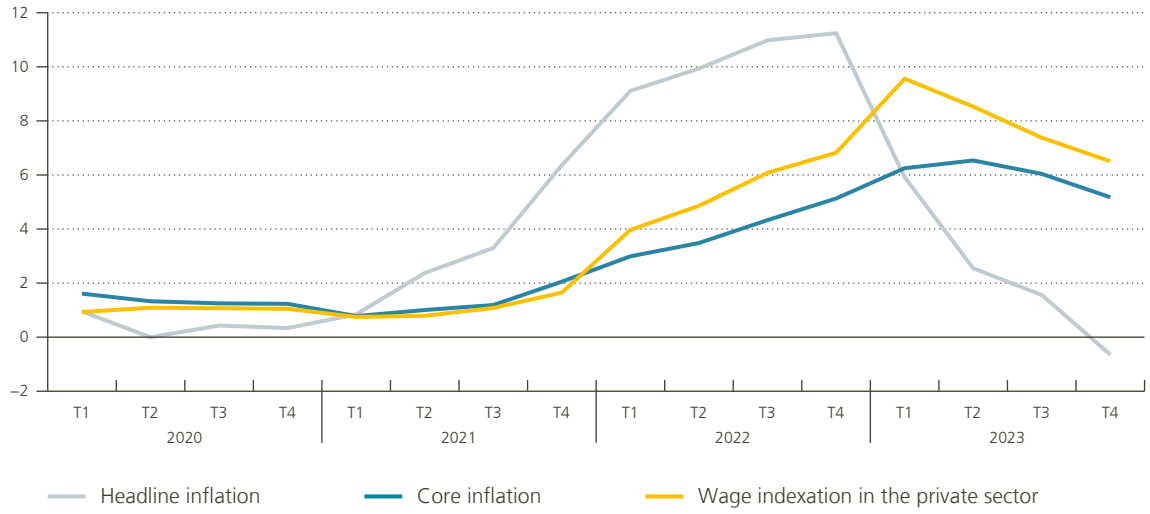
					Average for three neighbouring countries
	2020	2021	2022	2023	2023
Total (HICP)	**0.4**	**3.2**	**10.3**	**2.3**	**5.7**
Energy	–11.0	22.4	57.9	–28.4	2.2
Food	2.6	0.9	8.3	12.7	11.5
Core inflation	**1.4**	**1.3**	**4.0**	**6.0**	**4.8**
Services	1.8	1.6	3.8	6.3	4.6
Non-energy industrial goods	0.7	0.8	4.2	5.4	5.1
p.m. Total HICP excluding government measures	*0.4*	*3.3*	*12.1*	*3.5*	–
p.m. National consumer price index (NCPI)	*0.7*	*2.4*	*9.6*	*4.0*	–
Health index	*1.0*	*2.0*	*9.3*	*4.3*	–

Sources: Eurostat, Statbel, own calculations.

Figure 3.5

Headline and core inflation (HICP) and wage indexation in the private sector

(annual rate of change)



Sources: Eurostat, Statbel.

factors such as rising prices for imports and raw materials, as well as supply chain problems, which contributed to the initial rise in NEIG prices, have faded since mid-2022. Inflation in these goods thus peaked in the first quarter of 2023.

Wage pressures weighed more heavily on final prices for services and, to a lesser extent, non-energy industrial goods due to the labour-intensity of their production. In addition, the prices of many services, such as public transport tickets, certain insurance contracts, telecommunications contracts, and rents, are indexed. As these prices are directly tied to past inflation, they contribute to a certain persistence of inflation. In order to protect tenants from the high costs associated with energy-inefficient dwellings, a rent indexation freeze for properties with a low EPC (energy performance certificate) rating was introduced on 1 October 2022 for Flanders, 14 October 2022 for Brussels and 1 November 2022 for Wallonia. Rent could be indexed in full only for properties with an EPC rating of A, B or C (or D for Brussels), while rent indexation for other properties was capped at 75 %, 50 % or zero, depending on the EPC rating and the region. Exactly one year after the indexation freeze, the owners of these properties were once again allowed to index rent, but with a correction factor to avoid a catch-up effect. Although the return of rent indexation was effectively reflected in the price index, it did not halt the decline in services inflation, which began trending downwards in September 2023.

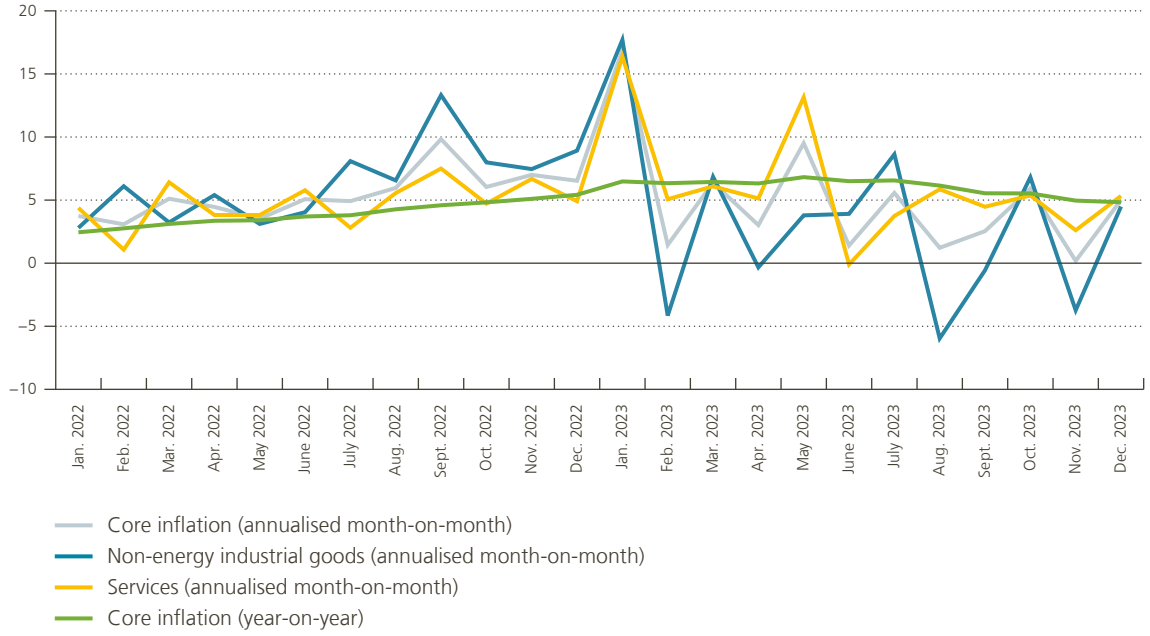
Core inflation remained high on average in 2023, mainly due to the sharp increases seen in January 2023. Price pressures eased significantly throughout the year. Inflation is measured year-on-year and corresponds to the percentage increase in the consumer price index for the current month compared with the same month a year earlier. It is in fact equivalent to the average of the annualised monthly inflation rates over the past year (for more information, see Wauters, 2023).[1] This means that figures from a year ago carry the same weight as those for the current month. It may therefore make sense to look at monthly growth in the price index to isolate recent trends. In general, monthly core inflation rates trended downwards in 2023. For example, average month-on-month core inflation growth was 0.3 % in the fourth quarter of 2023, corresponding to an annual rate of 3.7 %. This is lower than official year-on-year core inflation, which stood at 5.1 % in the fourth quarter of 2023. In the fourth quarter

1 See J. Wauters (2023), "The perils of tracking year-on-year inflation", NBB blog, 21 April.

Figure 3.6

Core inflation and its components: year-on-year versus month-on-month

(percentage)



Sources: Eurostat, NBB (own calculations).

Notes: These indices are seasonally adjusted and the effect of sales is neutralised. Neutralisation is not complete, however, as the sales vary from year to year.

Month-on-month observations have been annualised to facilitate comparison with year-on-year observations.

of 2022, average month-on-month growth was still 0.5 %, thus just under double. This suggests that the persistent price-wage spiral is weakening.

Food inflation continued to rise in 2023, reaching 12.7 %. Prices in supermarkets shift in line with negotiations between distributors and producers, during which these parties set prices for a predefined period. Thus, an increase in supplier costs is passed on to consumers with a delay. Although international food commodity prices have come down significantly since mid-2022, past rises duly continued to push final food prices up in 2023. In addition to these indirect effects, wage indexation also caused second-round effects in recent years. These various factors kept year-on-year increases in consumer food prices at a high level in 2023. As was the case with core inflation, monthly price pressures mainly peaked at the beginning of the year, before dampening. Furthermore, 2022 was characterised by periods of intense heat and drought, while 2023 was marked by a combination of long periods of heavy rainfall and drought. Such extreme weather events disrupt agricultural production and increase production costs, which has a direct effect on prices. An ECB study (2023)[1] revealed that heat waves in the summer of 2022 pushed up food inflation in the euro area by a total of 0.8 percentage points after one year. Continued climate disruption could lead to higher and more volatile food prices while putting global food security under pressure.

While core inflation and food inflation rose on average in 2023 compared with the previous year, energy inflation fell significantly, causing headline inflation to fall. Gas and electricity prices continued the sharp decline begun in mid-2022. The price of a barrel of Brent crude also fell during this period, before rebounding temporarily between July and September 2023. Despite this new rise, linked to a cut in production by oilexporters such as

1 See M. Kotz, F. Kuik, E. Lis and C. Nickel (2023), *The impact of global warming on inflation: averages, seasonality and extremes*, ECB Working Paper Series No 2821.

Russia and Saudi Arabia, the price of Brent crude is still below the peak it reached in June 2022. On average, in 2023, it was around 20 % lower than in 2022. Wholesale gas prices dropped by 67 % in 2023 compared with their 2022 levels. Overall, energy inflation fell from 57.9 % in 2022 to –28.4 % in 2023.

Energy inflation was strongly affected by the measures taken by the government to lower household energy bills. On average, the impact of these measures is estimated to have reduced headline inflation by 1.2 percentage points in 2023. [1] Such measures, which are by definition temporary, initially help to reduce inflation but lead to a rise in prices when they come to an end. This average of 1.2 percentage points is therefore the result of a combination of effects, both positive and negative. The end of the extension of the social tariff, in July 2023, [2] and of excise duty reductions on fuel prices, in April 2023, [3] pushed up inflation. In addition, the decision was taken not to restore the VAT rates on electricity and gas, which had been lowered to 6 % in March and April 2022, respectively. To make up for this, a special excise duty was introduced in April 2023. The new system offers more flexibility to stabilise prices, as the government can intervene immediately by adjusting the excise duty, whereas changing the VAT rate is more complicated. This new excise duty has exerted upward pressure on inflation. The manner in which energy credits, such as the "heating credit" or the "basic energy package", are taken into account in the calculation of the price index also impacts inflation. More specifically, each credit is spread over a twelve-month period, so, for example, the "heating credit" of € 100 was spread over the HICP from April 2022 to March 2023. From April 2023, the index therefore started to climb automatically. In total, the ending of these measures caused headline inflation to rise by around 0.6 percentage points in 2023. On the other hand, the "basic energy package", consisting of a monthly credit of € 135 for gas and € 61 for electricity for the winter months, i.e. from November 2022 to March 2023, [4] had the effect of reducing headline inflation by around 1.8 percentage points in 2023 compared with what it would have been without this measure. As mentioned above, each monthly transfer is in fact spread over twelve months, meaning the "basic energy package" is spread over the consumer price index until February 2024. More specifically, as the index only started to gradually increase in December 2023, the upward pressure will mainly be felt in 2024.

1 Own calculation of the impact of government measures.

2 The social tariff is defined by the FPS Economy as an advantageous tariff for electricity and natural gas. It is identical throughout Belgium, regardless of the energy supplier or network operator. Quarterly price increases are regulated and limited. In February 2021, this tariff was extended to approximately one million households, whereas previously only around 500 000 were eligible.

3 By the end of March 2022, the excise duty on diesel and petrol had been reduced by € 0.175 per litre. Since September 2022, however, the excise duty on petrol has been gradually ratcheted up, as prices have fallen back below the previously defined threshold of € 1.7 per litre. Similarly, the excise duty on diesel was gradually raised between February and April 2023.

4 However, the basic energy package was not available to everyone: for households with income above a certain level (around 20 %), a portion of this reduction was recovered through their tax return. Similarly, households who had taken out a fixed-price energy contract before October 2021 and those that were entitled to the social tariff did not qualify for this measure. It was therefore partially targeted. The ceiling corresponded to net taxable income of € 62 000 a year for a single person and € 125 000 for a couple. These amounts were increased by € 3 700 per dependent.

According to official statistics, inflation fell from 10.3 % in 2022 to 2.3 % in 2023, but the real price rises felt by households on average in 2022 were less pronounced than inflation rates would suggest. The consumer price index measures changes in the prices of goods and services purchased during the current month. In the case of gas and electricity, only new contracts taken out during the current month are therefore taken into account. In other words, the prices actually paid by consumers under fixed-rate contracts concluded in the past are not included in the current month's consumer price index. This means that growth in real household expenditure is overestimated in the event of a spike in energy prices, as was the case in 2022. A study by Peersman et al. (2023),[1] examining the banking data of around 930 000 households, revealed that headline inflation might have been overestimated by 2.8 percentage points on average in 2022. Nearly half of households paid less for their energy consumption in 2022 than in 2021. Conversely, when prices fall sharply, the methodology used may underestimate inflation. This means that the consumer price index might have slightly overestimated the actual fall in household energy prices in 2023. However, the impact is less than in the case of a price rise as, in the event of a fall in prices, consumers who had concluded a higher fixed-price contract in the past will be inclined to change their contract in order to benefit from the more favourable conditions. Moreover, the share of fixed-price contracts has fallen drastically, with almost none available to consumers in 2022, when prices were high and volatile. As a result, in 2023, few households were still bound by a contract deemed "too expensive".

The national consumer price index (NCPI) is less volatile than the HICP. In fact, inflation remained higher in 2023 as measured by the NCPI (4.0 %) than as measured by the HICP (2.3 %). In 2022, the NCPI inflation rate was 9.6 %, thus lower than the 10.3 % recorded by the HICP. This more moderate trend can largely be explained by methodological differences. On the one hand, the weighting scheme for the two indices is not the same, as the HICP is based mainly on the national accounts whereas the NCPI is derived primarily from the household budget survey. For example, highly volatile components, such as motor fuels, gas and electricity, are weighted more heavily in the HICP than in the NCPI. HICP movements are therefore more pronounced than those of the NCPI. On the other hand, in the case of heating oil, the HICP takes into account the current month's prices, whereas in the NCPI, this component is based on a weighted average of tariffs over the last twelve months, which is more reflective of the annual bills effectively paid by consumers. Heating oil is therefore a more volatile component in the HICP than in the NCPI. Given the fall in oil prices in 2023, energy inflation is lower according to the HICP than as measured by the NCPI.

In 2023, headline inflation in Belgium was 3.4 percentage points lower than the average for its three largest neighbours. This difference was due solely to energy inflation, which was clearly negative in Belgium, whereas it remained positive on average in neighbouring countries. There were several reasons for this. Firstly, wholesale energy prices are passed on more quickly to consumer prices in Belgium. This is due in particular to a relatively low excise duty on heating oil, lower levies on gas, and a relatively higher share of variable-price gas and electricity contracts in Belgium than in other countries. In addition, since the energy crisis, most gas and electricity suppliers in Belgium have switched from quarterly to monthly indexation of new contracts. Secondly, the "basic energy package" exerted a downward influence on headline inflation in Belgium in 2023. Thirdly, it should be noted that the average for neighbouring countries masks significant disparities. In the Netherlands, the fall in energy inflation was very similar to that seen in Belgium. In France and Germany, on the other hand, the fall was less pronounced. This was due in part to the fact that the market operates differently in those countries than in Belgium. In Germany, most consumers have fixed-term contracts, the price of which is set for a certain period of time (often a year); these contracts cannot be terminated as easily as in Belgium. The price remains the same over this period, regardless of the date of subscription. This system led to a less vigorous rise in inflation in 2022. Furthermore, since France introduced a tariff shield to limit increases in gas and electricity prices, the real fall in prices observed in that country was less pronounced.

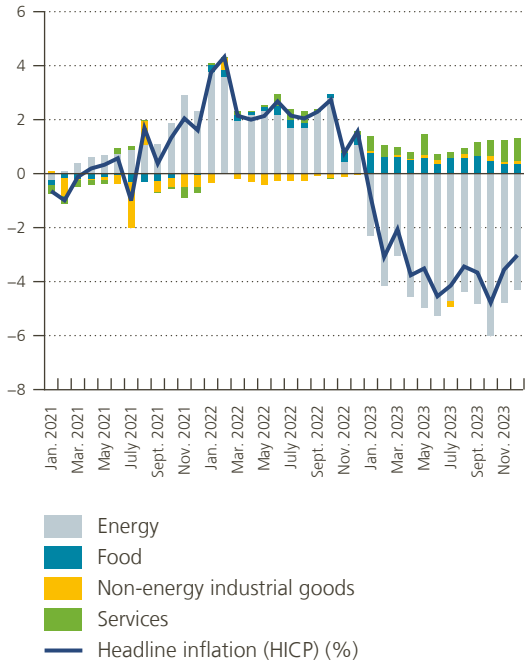
Unlike energy inflation, core inflation and food inflation are higher in Belgium than in

1 See G. Peersman, K. Schoors and M. van den Heuvel (2023), Hoezo energiecrisis? Analyse van de energiefactuur van 930 000 gezinnen, Gentse Economische Inzichten.

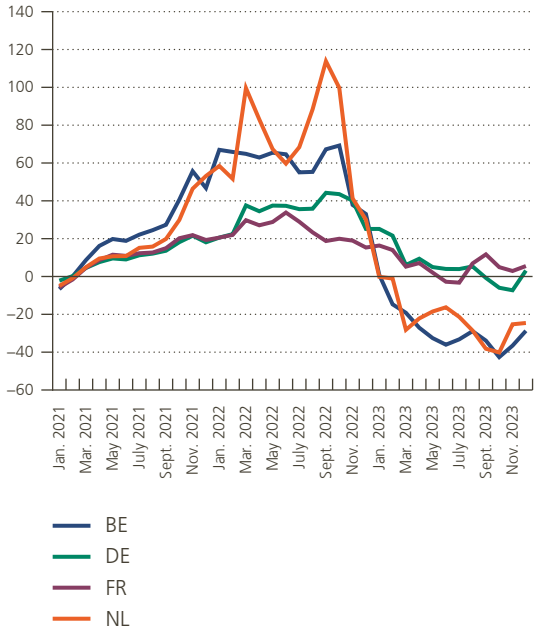
Figure 3.7

The inflation differential between Belgium and its largest neighbours is almost entirely energy related

Categories contributing to the inflation differential between Belgium and its neighbours
(percentage points)



Energy inflation in Belgium and its neighbours
(annual rate of change)



Source: Eurostat.

neighbouring countries. This is because these components are mainly driven by domestic factors. On the one hand, energy prices rose more in Belgium in 2022, with these price increases passed on to the other components. On the other hand, Belgium's system of automatic wage indexation hastens the emergence of a second-round effect, whereas in neighbouring countries, wage increases have to be negotiated. Overall, this situation could lead to more persistent inflationary pressures in Belgium.

4. Economic activity in Belgium

4.1 The Belgian economy proved robust, buoyed by services and domestic demand

In 2023, unlike in previous years, Belgian economic activity was not hampered by new large exogenous shocks. Since 2020, the Belgian economy had been affected by the outbreak of the Covid-19 pandemic, with successive waves up to 2021 ; disruptions to global supply chains following the health crisis ; and a surge in commodity prices, particularly energy, exacerbated by Russia's invasion of Ukraine, which caused gas and oil prices to soar to historically high levels in 2022.

In 2023, the situation gradually returned to normal. On the one hand, inflation declined rapidly thanks to falling energy prices, particularly gas prices, although they remained high in Europe by pre-crisis standards and compared with other regions of the world. On the other hand, the vast majority of Belgian companies no longer reported disruptions in their supply chains, such as shortages or extended delivery times. Health risks, for their part, had been contained by 2022.

GDP continued to rise in 2023

Quarterly GDP growth accelerated somewhat at the start of the year. It had lost momentum in the second half of 2022, following the sharp rise in energy prices. In 2023, it duly benefited from the fall in energy prices and the associated rise in confidence, which translated into GDP growth of 0.4 % in the first quarter. The automatic indexation of wages, which occurs in January for around one-third of private sector workers, also bolstered economic growth by considerably increasing the purchasing power of employees whose income had not yet been adjusted to reflect the significant rise in inflation seen in 2022.

Belgian economic growth subsequently proved surprisingly robust. Despite a gradual deterioration in the international environment and business confidence, quarterly GDP growth remained relatively stable, fluctuating between 0.3 % and 0.4 % over the next three quarters.

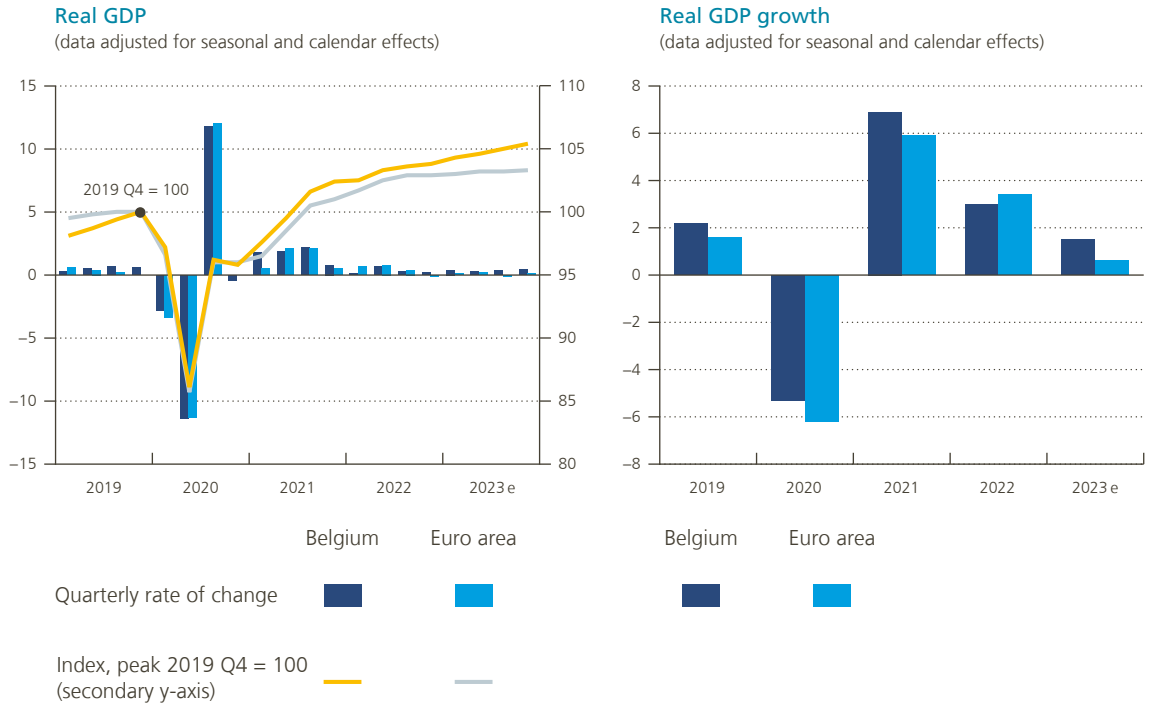
Overall, annual GDP growth came in at 1.5 % for 2023. Despite quarterly dynamics comparable to those of 2022, this represents a slowdown since annual growth was previously 3 %. The difference was mainly due to the fact that, in 2022, GDP growth continued to benefit substantially from the normalisation of activity following the Covid-19 pandemic.

Economic activity grew faster in Belgium than in the euro area. In the euro area, activity growth did not exceed 0.6 %. The growth differential in favour of the Belgian economy can be attributed to two main factors. First, automatic wage indexation in Belgium protects the purchasing power of households, even though this protection is not complete. Second, government support measures for businesses and households spared them the full impact of recent crises. At the end of 2023, Belgium's GDP was 5 % above its level in the fourth quarter of 2019, i.e. before the outbreak of the Covid-19 pandemic. For the euro area as a whole, GDP in Q4 2023 was 3 % above this reference level.

This chapter incorporates data available at the beginning of February and therefore does not take into account the statistics for the fourth quarter of 2023 published by the NAI at the end of February. Estimates for 2023 are, however, in line with the NAI statistics. It should be noted that the latter imply a shift from business investment to exports with no impact on GDP which is essentially attributable to temporary factors.

Figure 4.1

The pace of GDP growth remained stable in 2023, although annual growth slowed



Sources: ECB, NAI, NBB.

Market services remained the main driver of growth in 2023

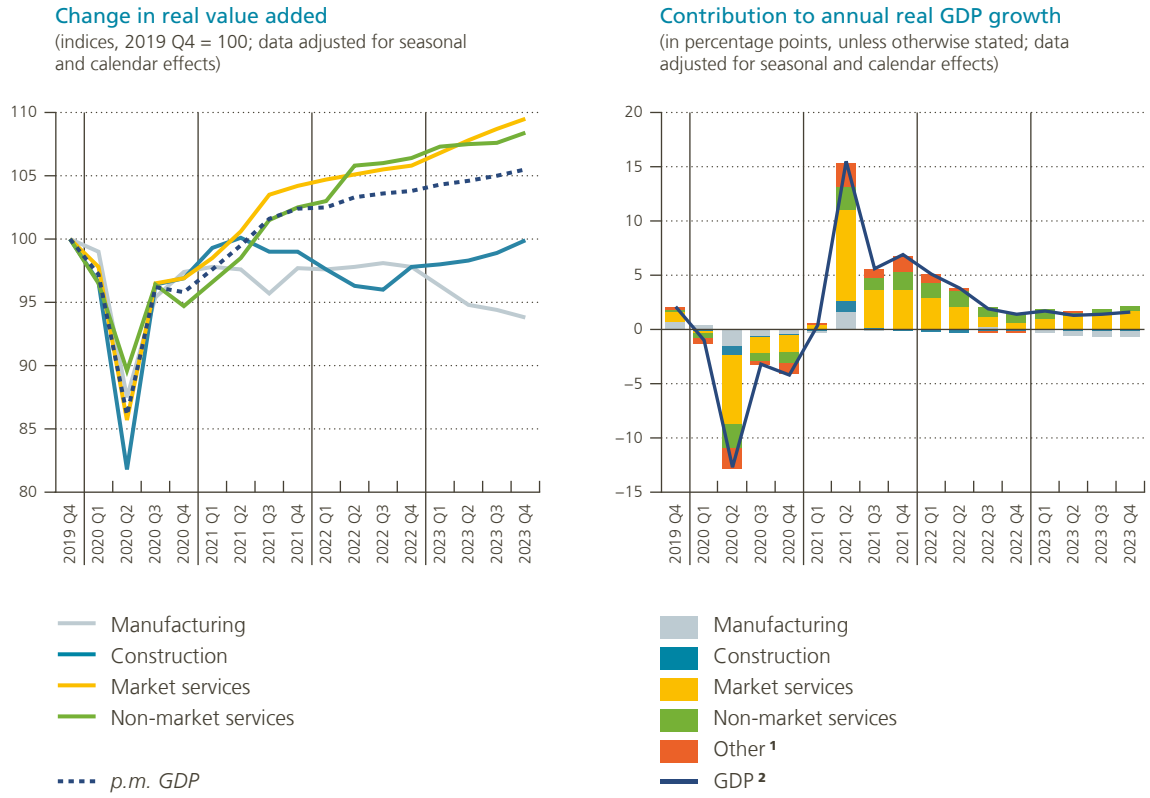
The different sectors of the Belgian economy were affected to varying degrees by the recent crises. While the Covid-19 pandemic hit the services and construction sectors somewhat harder in 2020, it was the manufacturing sector and – once again – construction that progressively fell victim to the supply shortages seen in 2021 as well as, and above all, to soaring costs in 2022.

In 2023, value added in manufacturing followed a clear downward trend. While rising wage costs clearly posed a challenge for labour-intensive sectors, manufacturing activity, which is usually more sensitive to cyclical variations, was particularly hard hit by the deterioration in the external environment and by energy prices. Although they have fallen significantly, energy prices remain high in Europe, both compared to the situation prior to the energy crisis and to the rest of the world. According to the results of a Bank survey published in December,[1] energy-intensive firms are concerned about the viability and structural competitiveness of some of their activities. In addition, some

1 See NBB (2023), *Economic activity may decelerate slightly with some tentative signs of an improvement early next year,* NBB Business Echo, December

Figure 4.2

The main sectors of economic activity once again performed differently in 2023



Source: NAI.

1 In particular the "agriculture, forestry and fishing" sector and taxes on production, excluding subsidies.

2 Annual rate of change.

manufacturers, particularly for non-food consumer goods, reported having to cope with more cost-conscious consumers who are spending a larger share of their household budget on services, to the detriment of durable goods. These factors were also reflected in the results of the Bank's business surveys, which showed a fall in confidence among business leaders in the manufacturing industry. Overall, real value added in manufacturing fell by 3.1 % in 2023.

Value added in the building industry rose in 2023. While residential building activity, on new constructions and renovation work, was hampered by rising interest rates and construction costs, the sector benefited from the electoral cycle. The latter generally leads to a particularly marked upsurge in investment by local authorities in the year prior to elections, which in turn results in an increase in public works. According to the Bank's business surveys, the confidence of business leaders active in the civil engineering sector improved over the year. Overall, real value added in the building industry climbed by almost 2 % in 2023.

Services continued to shore up growth in 2023. With a rise in value added of around 2.5 % compared with the previous year, services were the main driving force in the Belgian economy. Market services were boosted by strong domestic demand, from both households and businesses, while solid public sector employment consolidated the performance of non-market services. According to the Bank's above-mentioned survey, providers of business-to-business services were the most optimistic in 2023, particularly insofar as they benefited from the continued digitalisation and automation of the wider economy.

At the end of 2023, value added in certain sectors of the Belgian economy had yet to exceed its level from four years earlier. In particular, value added in the manufacturing industry, which was hard hit by recent crises, was almost 6 % below the peak reached in the fourth quarter of 2019. Activity in the building industry, in the meantime, returned to its pre-crisis level. However, it had already reached this level in the first half of 2021, before gradually feeling the effects of the aforementioned shocks. Finally, services, in particular market services, proved very resilient, with value added at the end of 2023 around 9 % higher than at the end of 2019.

Growth was mainly driven by business investment and household consumption expenditure

Overall, domestic demand shored up activity growth in 2023. Excluding changes in inventories, domestic demand contributed two percentage points to growth. Household consumption, which accounts for just over half of GDP in Belgium, continued to rise in 2023, albeit at a slower pace than in the previous two years, contributing 0.7 percentage points to the increase in activity. Nonetheless, the main driver of growth was gross fixed capital formation, more specifically corporate gross fixed capital formation. Thanks to a very strong rise, this factor contributed 1.5 percentage points to GDP growth. The decline in investment in housing (–5.4 %) and the rise in public investment (5.6 %), on the other hand, cancelled each other out, resulting in a virtually non-existent, albeit slightly negative, contribution to activity. The same applied to public consumption expenditure, which stabilised after two years of strong growth.

The contribution of net exports of goods and services to GDP growth turned negative in 2023. As a result of a decline in exports (–3.2 %), due in particular to a fall in exports of pharmaceutical products, more specifically vaccines and other treatments against Covid-19, which was more marked than the fall in imports (–2.3 %), the contribution was –0.8 percentage points. This was the first negative contribution since 2018. The change in inventories, on the other hand, made a positive contribution to GDP growth (0.2 percentage points).

Table 4.1

GDP and main expenditure categories

(real figures adjusted for calendar effects; annual rate of change, unless otherwise stated)

	2019	2020	2021	2022	2023 e
Private consumption	1.7	–8.2	6.3	3.2	1.5
Public consumption	2.2	–0.3	5.2	4.2	0.0
Gross fixed capital formation	5.1	–5.2	5.0	–0.2	5.6
Housing	5.1	–7.2	6.0	–3.2	–5.4
Businesses	5.6	–5.5	4.7	1.1	9.0
Government	1.9	1.1	4.7	–1.6	5.6
p.m. Final domestic expenditure[1]	*2.6*	*–5.6*	*5.7*	*2.6*	*2.0*
Change in inventories[2]	–0.7	–0.6	0.4	0.4	0.2
Net exports of goods and services[2]	0.4	0.9	0.9	0.1	–0.8
Exports of goods and services	2.4	–6.3	13.9	4.9	–3.2
Imports of goods and services	2.0	–7.4	13.0	4.9	–2.3
GDP	2.2	–5.3	6.9	3.0	1.5

Sources: NAI, NBB.

1 Excluding change in inventories.

2 Contribution to the change in GDP compared with the previous year, in percentage points.

BOX 3

The Belgian economy since the pandemic: a comparison with neighbouring countries and the euro area

The deep and swift recession triggered by the Covid-19 pandemic in 2020 and the associated shortages in goods and services quickly proved to be V-shaped. In the depths of the crisis, concerns were expressed about the scars that such a violent and sudden shock could leave on economies. This concern was heightened when the pandemic-related crisis gave way to energy price inflation in the second half of 2021, caused initially by the vigorous recovery and then Russia's invasion of Ukraine. Almost four years after the outbreak of the pandemic, the statistics available for GDP and its components allow us to assess the lasting traces left by these two major shocks on the economies of Belgium and its neighbours.

The graphs and descriptive analysis that follow cover several aspects. Firstly, they attempt to measure the aforementioned "scars" by comparing actual real GDP with real GDP in a counterfactual "no crisis" scenario for Belgium.[1] The latter is constructed on the basis of the last ESCB projections produced prior to the pandemic, i.e. those from December 2019. As these projections have a three-year horizon, the no-crisis scenario has been extended using the historical real GDP growth rate. This hypothetical trajectory is a simple approximation of the economy's equilibrium path. Secondly, comparison of the Belgian economy with that of its main trading partners, and with the euro area as a whole, shows that not all economies weathered the two recent consecutive storms with the same ease.[2] Thirdly, this analysis allows us to observe the rebalancing that has taken place within the demand components of GDP: (private and public) consumption, investment and the balance of trade.

The graph below shows that Belgium's real GDP had already caught up with the no-crisis counterfactual by the third quarter of 2021 and has since exceeded it, trending around one percentage point (p.p.) above this hypothetical level. This performance is quite remarkable compared with those of the country's main trading partners. The GDP of Germany, of France and of the euro area is still well below their own counterfactuals (not shown here for the sake of clarity), at 3.7, 3.1 and 2.0 p.p., respectively. The Netherlands clearly progressed from 2021 to 2022 but, hit by particularly severe inflation, entered recession in 2023. By the end of the year, cumulative growth in Belgian economic activity had caught up with that seen in the Netherlands.

The post-Covid recovery was characterised by a substantial rebalancing of the demand components of GDP. In Belgium, there was an increase in the contributions of public consumption and net exports to growth, while those of private consumption and residential investment declined. By the end of 2020, business investment had almost returned to the level expected before the pandemic; it then slowed, before picking up again very dynamically in the second half of 2022.

1 In the graph showing the change in real GDP, only the counterfactual scenario for Belgium is featured, for the sake of clarity. For most countries, the counterfactual scenario is not very different, with the notable exception of the Netherlands, for which it is characterised by more robust potential growth.

2 Figure 1.13 in the first chapter of this report provides a more global overview, showing a comparison of cumulative growth since 2019 for all euro area countries.

Belgium's net exports benefited considerably from a "Covid vaccine" effect in 2021, thanks to the establishment of a production line by a multinational pharmaceutical company, one of whose products helped reduce the mortality rate from infections to almost zero. Starting in 2022, the exceptional contribution of this component to growth began to fade away, until it eventually coincided with that of the euro area as a whole, which is still much higher than that of Germany or France.

The trends in public consumption illustrate the increase in healthcare spending in the five selected economies, as well as the use of substantial countercyclical policies during and after the pandemic. In all five economies, public consumption grew significantly faster than GDP between 2019 and 2021. Over the entire period under consideration, Belgium, along with the Netherlands, was one of the five economies with the most vigorous cumulative growth in public consumption. However, its cumulative growth differential in relation to GDP was the smallest, at 2.6 p.p., compared with 3.5 p.p. for the euro area, 3.8 p.p. for France, 5.4 p.p. for Germany and 6.1 p.p. for the Netherlands.

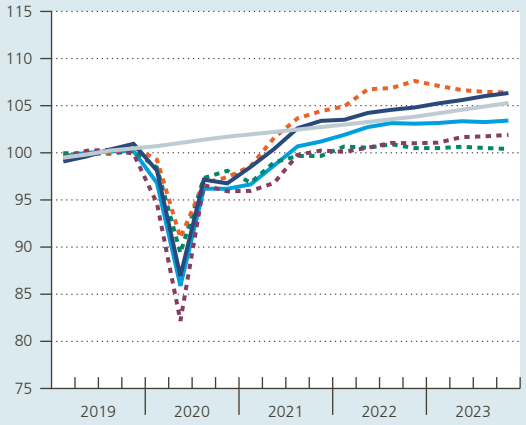
Cumulative growth in Belgian private consumption since 2019, at 2.7 %, was less than half that of domestic product, which stood at 6.3 %. Automatic wage indexation in Belgium certainly helped shore up real household disposable income in 2023 after the decline seen in 2022. However, intertemporal consumption smoothing, high uncertainty and rising interest rates encouraged households to save more, meaning that, since the start of the energy crisis, private consumption has not grown significantly more in Belgium than in neighbouring countries. This can also be explained by the fact that, at the height of the crisis, other countries also adopted measures to protect household purchasing power.

Residential investment was impacted, firstly, by disruptions to supply chains and a concomitant rise in the cost of building materials and, secondly, by an increase in the cost of borrowing. Of the five economies examined here, Belgium saw the sharpest drop in this component of GDP, which fell 10 % from its 2019 level.

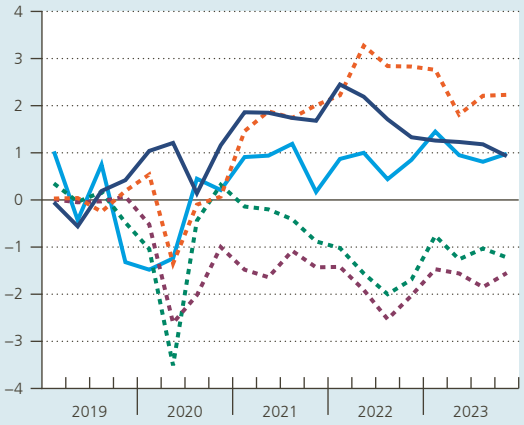
Even though net exports and public consumption have not sustained growth since 2022, Belgian economic activity weathered the recent energy crisis well, posting a growth rate close to its historical average. This good performance was due to the surprisingly dynamic growth in business investment seen since the second half of 2022. This is particularly remarkable in the context of rising interest rates. One possible explanation is the historically high share of gross operating surplus in GDP in 2021 and 2022, which would have made it easier for companies to finance their investment projects internally rather than through bank loans. This upturn in investment bodes well for future competitiveness and growth.

Change in the level of real GDP and its components – a comparison between Belgium and its main trading partners

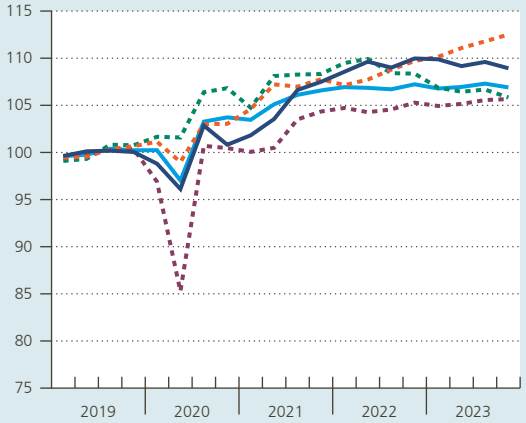
GDP
(index, 2019 = 100)



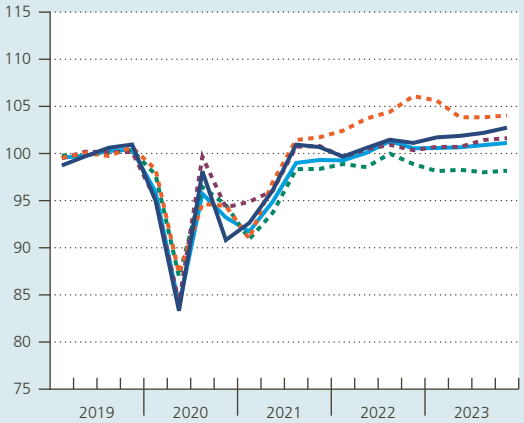
Cumulative contribution of net exports to GDP[1]
(percentage points)



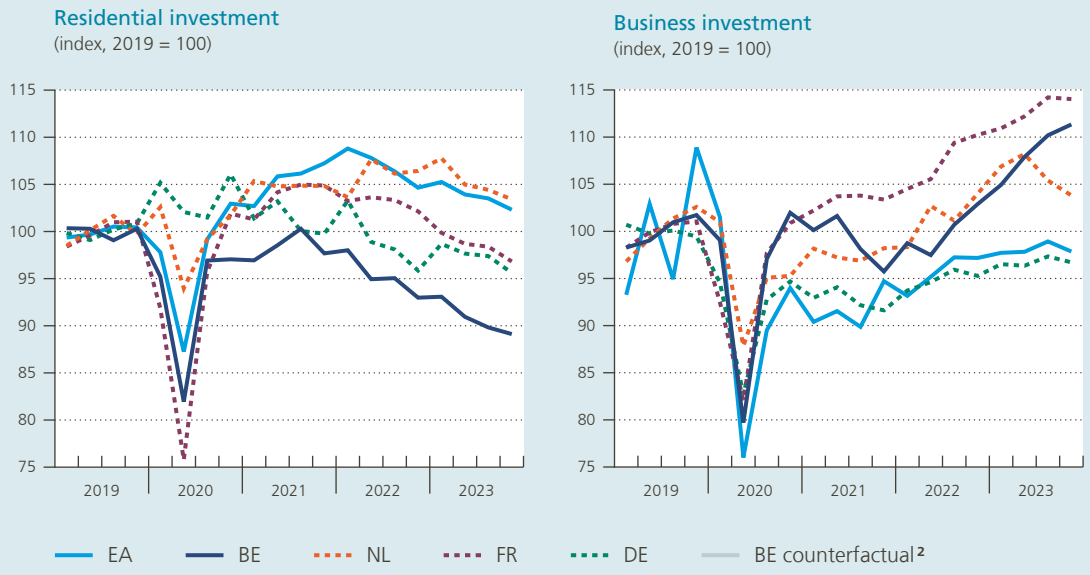
Public consumption
(index, 2019 = 100)



Private consumption
(index, 2019 = 100)



EA BE NL FR DE BE counterfactual[2]



Sources: Eurostat and own calculations.

1 For each economy, the contribution of net exports to GDP is calculated as the percentage difference between the level of GDP shown in the first figure and that obtained for the same economy but with the growth rate reduced by the contribution of the trade balance from 2019 onwards. It thus represents the cumulative contribution of net exports to GDP growth.

2 The "BE counterfactual" corresponds to the December 2019 projection of Belgium's real GDP, as explained in the second paragraph of this box.

4.2 Household purchasing power supported consumption, while household investment in housing fell sharply

Automatic wage indexation preserved household purchasing power

Despite the successive crises of recent years, the purchasing power of Belgian households has on the whole been well protected. Indeed, the introduction of support measures such as more widely available furlough schemes and the bridging allowance for the self-employed during the Covid-19 crisis and, more recently, energy aid, particularly for the lowest-income households, helped maintain growth in real household disposable income. Real disposable income, which is the macroeconomic indicator of household purchasing power, also benefited from indexation, rising by 4.4 % in total between 2019 and 2022. However, the exceptional surge in prices in 2022, coupled with the lag in indexation mechanisms, led to a temporary fall in real disposable income.

In 2023, household purchasing power rose by 3.4 %. This increase was essentially attributable to the deceleration of inflation and a sharp rise in household gross disposable income in nominal terms (9 %). The latter obviously benefited from growth in earned income, which was boosted mainly by the automatic indexation of wages and an increase in hours worked. It should be recalled that around one-third of private-sector workers benefit from automatic wage indexation only once a year, in January, meaning their income was only adjusted at the beginning of 2023 to take into account the sharp acceleration in inflation observed in 2022. Gross operating surplus and gross mixed income continued to rise in 2023, by a total of almost 8 %. The latter was due to the rapid growth in rent from which households benefitted. Moreover, other income from assets continued to increase against the backdrop of rising interest rates, albeit at a slightly slower pace than in 2022, in line with slower growth in dividends received. General government transfers, on the other hand, grew slightly less rapidly than household transfers (which consist mainly of taxes).

Purchasing power, defined in macroeconomic terms, can be sensitive to methodological aspects of national accounting and the measurement of changes in consumer prices. This is notably the case for the inclusion in the consumer price index of only new contracts for gas and electricity, to the exclusion of existing contracts, which led *de facto* to an underestimation of energy expenditure in 2023, since energy prices fell while households were bound by contracts concluded when prices were much higher. As a result, measured inflation might have been lower than the true rise in the cost of living, and the increase in purchasing power could have been somewhat overestimated. It should be noted that the exact opposite happened in 2022, for the same reasons, with inflation estimated to be higher than it was in reality.

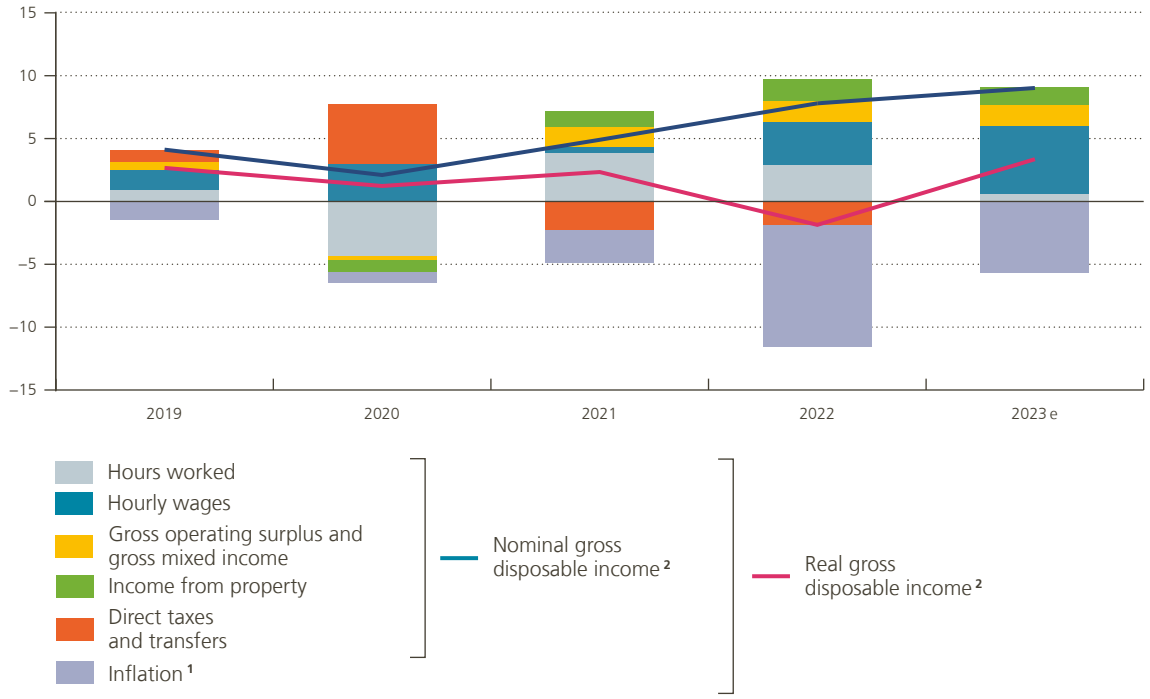
Households consumed more, while their investment in housing fell sharply

Private consumption continued to rise in 2023. However, with growth of 1.5 % over the year as a whole, it was only about 2 % higher than before the Covid-19 pandemic four years earlier. This component of demand was indeed severely affected

Figure 4.3

Automatic wage indexation boosted purchasing power

(contribution to annual growth in gross disposable income, unless otherwise stated)



Sources : NAI, NBB.

1 Final household consumption expenditure deflator, reversed in sign.

2 Annual rate of change.

by the exogenous shocks Belgium has experienced since 2020. In 2023, household consumption expenditure was notably boosted by an increase in household income and, consequently, purchasing power, due in part to the indexation of wages.

Although households continued to consume more in 2023, private consumption growth slowed markedly. In 2022, in order to offset – at least in part – the contraction of their purchasing power, households drew on their savings, which were particularly high after two years marked by the effects of the Covid-19 pandemic. The saving rate fell by just over four percentage points to 13 %, bringing it back to a level comparable to that recorded in the years prior to the health crisis. In 2023, private consumption grew less rapidly than the real gross disposable income of households, with the latter appearing somewhat reluctant to allocate this increase entirely to spending, preferring instead to save more. In fact, although the consumer confidence indicator gradually recovered over the course of the year, this increase was mainly attributable to more optimistic assessments by households of their financial situation and, above all, to higher anticipated saving. All in all, the saving rate rose by just under 1.5 p.p. in 2023, to almost 14.5 %. This level is still high, though, compared with the situation prior to the outbreak of the health crisis in 2020.

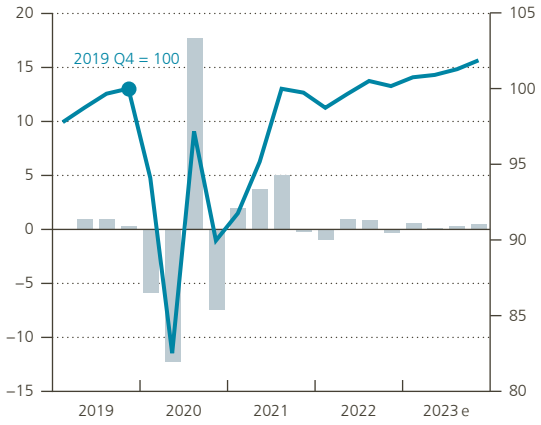
Investment in housing continued to fall in 2023. Down 5.4 % from the previous year, the decline has been accelerating since 2021. Compared with the level observed before the health crisis, investment in housing was 12 % lower at the end of 2023.

Higher mortgage interest rates and rising construction costs dampened residential

Figure 4.4

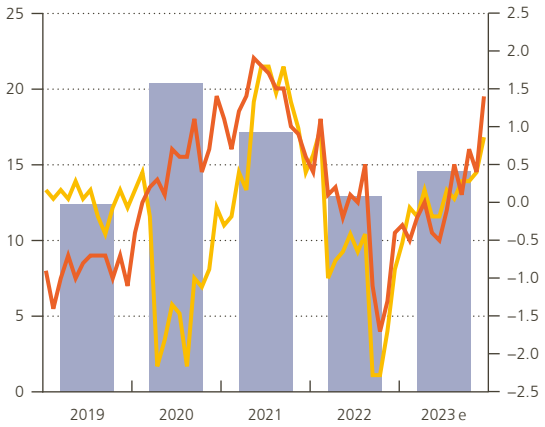
Household consumption and the household saving rate both rose in 2023

Private consumption
(data adjusted for seasonal and calendar effects)



Quarterly rate of change
Index, peak 2019 Q4 = 100 (secondary y-axis)

Household saving and consumer confidence
(percentage of household disposable income, unless otherwise stated)



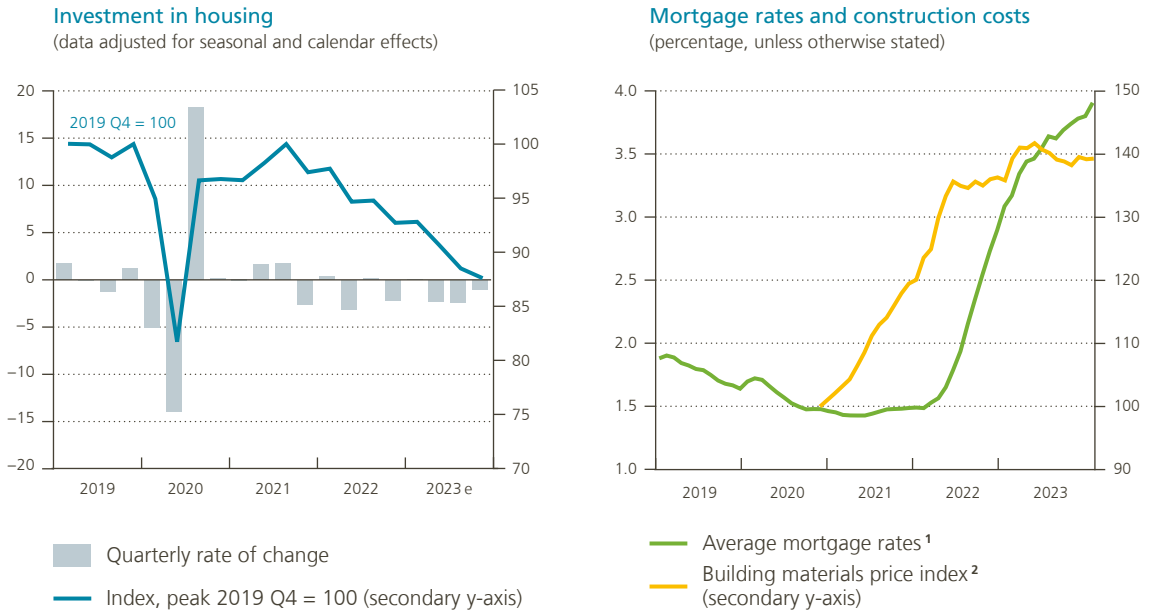
Household saving rate
Consumer confidence indicator [1] (secondary y-axis)
Household saving intentions [1] (secondary y-axis)

Sources: NAI, NBB.
1 Standardised net responses.

investment. In fact, both the number of transactions in existing homes – for which registration duties are recorded using the national accounts methodology – and the volume of building permits granted for new constructions and renovation work fell in 2023. On the one hand, due to the continued tightening of monetary policy in the euro area in 2023, the average interest rate for new mortgage loans rose from 3.2 % in January to 3.9 % in December. All other things being equal, this weakened the capacity of households to repay a new mortgage (see chapter 7 for more information on this subject). On the other hand, the cost of building materials, which rose by 5 % in 2023 from the previous year, remained at a particularly high level.

Figure 4.5

Investment in housing fell again



Sources : Arch-index, NAI, NBB.
1 For new mortgage loans.
2 Index, November 2020 = 100.

4.3 Despite pressures on profitability, firms continued to invest significantly

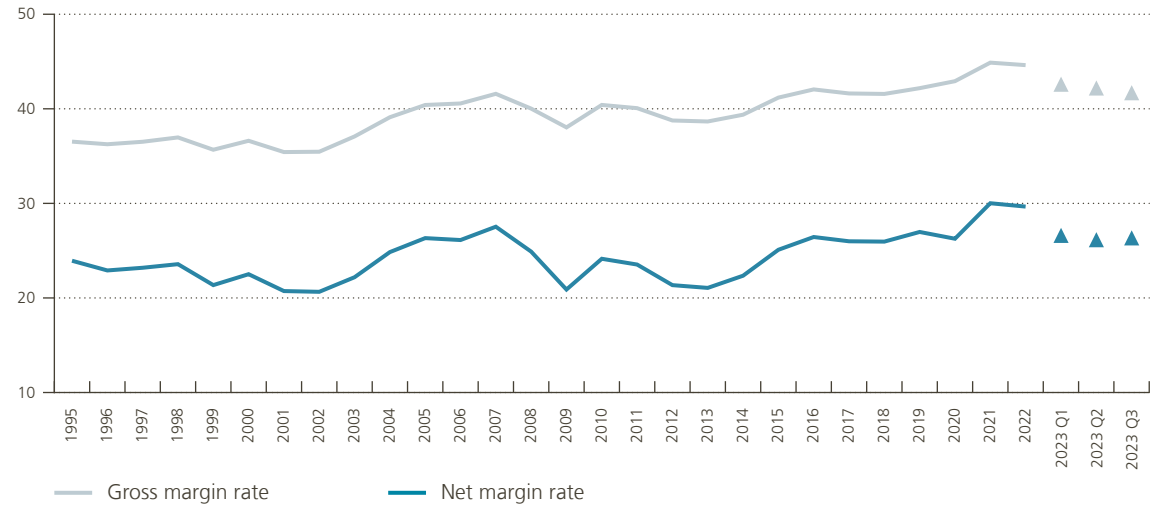
Rising costs squeezed margins for non-financial corporations

The profit margins of Belgian firms remain high, despite having fallen since 2022. The gross profit margin of Belgian firms represents the proportion of gross value added that remains available to make investments and remunerate capital after the deduction of the cost of labour but before corporate taxes. This share, which has grown since 2014, displays an upward trend over the long term, across all main sectors of economic activity. Part of this increase in the margin, calculated at macroeconomic level, can be attributed to higher capital depreciation over time. This has indeed increased as a result of a decline in the share of long-lived assets in the capital stock – to the detriment in particular of IT and transport equipment which has a shorter service life – which requires greater capital depreciation that must be financed by gross margins. However, the net margin rate, i.e. excluding capital depreciation, has also risen in recent years.

Figure 4.6

Corporate profit margins rose considerably in recent years but have since fallen back slightly, partly due to rising costs

(non-financial corporations, operating surplus as a percentage of value added)



Sources: NAI, NBB.

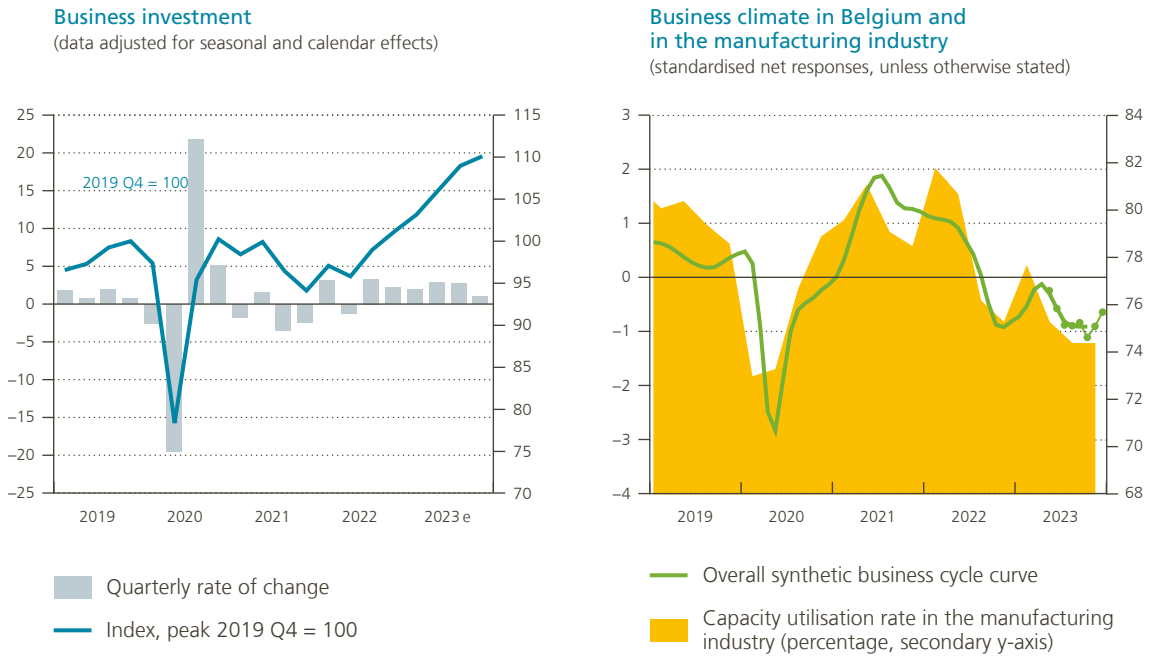
The rise in margin rates over the last decade is attributable in part to a composition effect but is also due to the fact that labour costs have risen much less than labour productivity further to the adoption of measures to improve firms' cost-competitiveness. As a result, industries with higher profit margins have seen their relative share of GDP gradually increase, which has raised the aggregate margin rate of firms in the Belgian economy. In addition, various measures aimed at improving the cost-competitiveness of Belgian firms, through both the wage growth ceiling (or "wage norm") and ad hoc measures introduced after 2014, such as the temporary suspension of indexation mechanisms and reductions in employer social security contributions, have resulted in labour costs growing significantly less than labour productivity. This has coincided with a decline in the wage share of national income. In fact, Belgian unit labour costs are now close to the level of the Netherlands, but well below those of France and Germany. This contrasts with the pre-2014 period, when unit labour costs in Belgium were significantly higher than in neighbouring countries. However, the gap widened again slightly in 2023, due to the still pronounced effect of automatic wage indexation.

Firms continued to invest significantly

Business investment jumped by 9 % in 2023, notwithstanding the tightening of financing conditions. This development cannot be entirely dissociated from the particularly robust level of corporate profit margins recorded in previous years, as mentioned above. According to Bank studies, many firms – especially larger ones, which account for the

Figure 4.7

Business investment became the main driver of growth



Sources: NAI, NBB.

bulk of fixed capital formation – have sufficient cash reserves and internal financing possibilities to mitigate the impact of tighter financing conditions, particularly higher interest rates. The increase in investment is moreover expected to be spread across the main sectors of the Belgian economy. Business leaders also indicated a marked trend towards investment in the automation and digitalisation of activities with a view to improving productivity. This is related to the structurally tight labour market and the deterioration in the competitiveness of Belgian firms due to significant increases in nominal wages. Investment in new products and the greening of production processes were also factors supporting fixed capital formation. However, growth in fixed capital formation moderated somewhat at the end of the year, in tandem with a slight deterioration in business confidence. At the same time, the capacity utilisation rate in the manufacturing industry fell back, suggesting no new expansion investment. Overall, at the end of 2023, business investment was 10 % higher than the level seen in the fourth quarter of 2019, i.e. before the outbreak of the Covid-19 pandemic. Moreover, it was the main driver of GDP growth in 2023.

4.4 Despite economic shocks, the Belgian economy proved robust in relation to the rest of the world

Net exports of goods and services shored up growth before gradually contracting

After three years characterised by strong swings yet a positive contribution to economic growth in Belgium, foreign trade contracted sharply and made a negative contribution to growth in 2023. Belgium's trade relations with the rest of the world mirrored the development of economic growth and world trade in recent years. Thus, after a fall in the volume of imports and exports of goods and services following the outbreak of the global pandemic in 2020 and the significant rebound observed the following year, the slowdown in activity, and hence in world trade, in 2022 weighed on the development and contribution of trade flows to economic growth in Belgium. Both exports and imports grew by only 4.9 % in volume terms in 2022, causing net exports of goods and services to have only a marginal effect on economic growth. In 2023, its contribution to activity growth in Belgium eroded

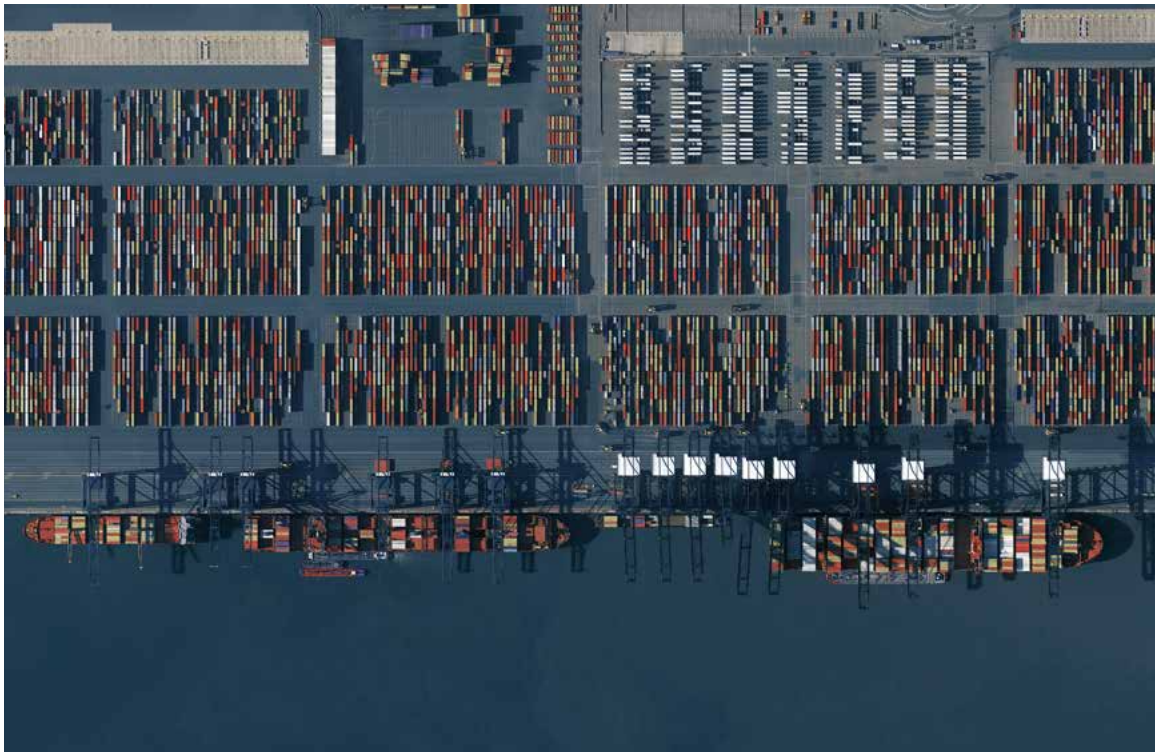
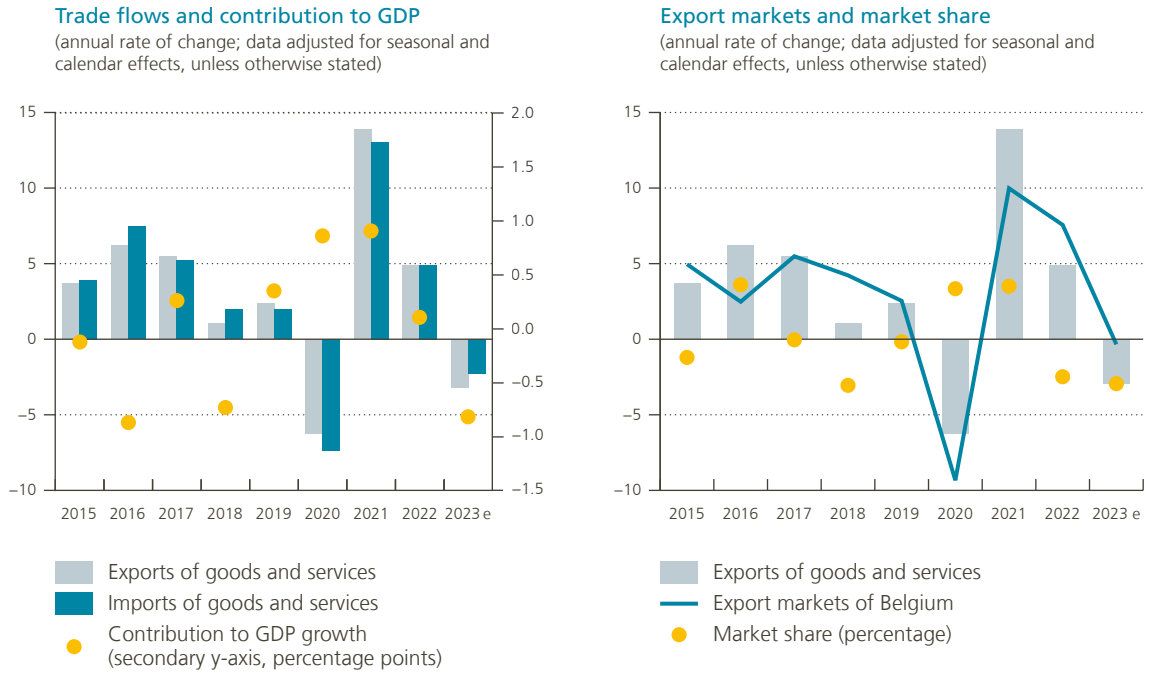


Figure 4.8

The contribution of net exports to economic growth fell and turned negative



Sources: ECB, NAI.

even further, turning negative, coming in at around –0.8 percentage points. On the one hand, Belgian export growth is largely determined by foreign demand, which turned out to be slightly negative over the last year. On the other hand, the deterioration in the cost competitiveness of Belgian firms, linked in particular to high growth in labour costs, contributed to losses of export market share, while gains could be made in 2020 and 2021 as a result of the massive export of pharmaceutical products, in particular vaccines, to combat the Covid-19 pandemic. Imports, for their part, also posted negative growth in 2023, due in part to less buoyant domestic demand.

The terms of trade gradually recovered and are less unfavourable than in previous years

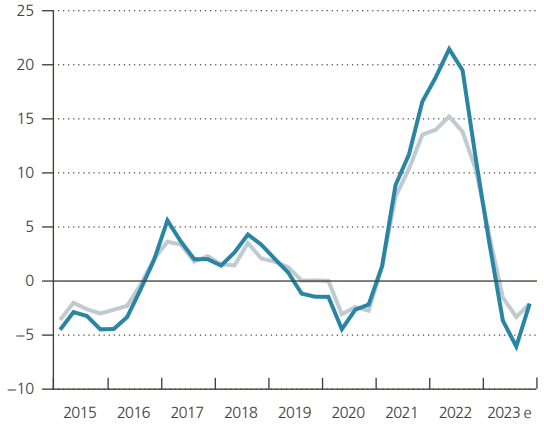
Following the sharp rise over the last two years which considerably impoverished the Belgian economy, import prices contracted in 2023, giving way to more favourable terms of trade with the rest of the world, although still less advantageous than before the outbreak of the war in Ukraine. Substantial rises in the prices of certain raw materials, including natural gas and oil, resulting initially from the robust economic recovery in 2021 and then from Russia's invasion of Ukraine at the end of February 2022, significantly impoverished the Belgian economy by sharply worsening its terms of trade with other countries. These price rises indeed pushed up import prices to record highs, and in a much more pronounced manner than export prices. In 2023, while this price pressure was still very much in evidence, import prices fell year-on-year, mainly due to lower energy prices. Thus, after the sharp decline recorded in 2021 and an even greater fall in 2022, Belgium's terms of trade recovered again, by around 1.4 %, in 2023.

Compared with neighbouring countries, Belgium had sustained a larger loss of income with respect to the rest of the world, but this loss was

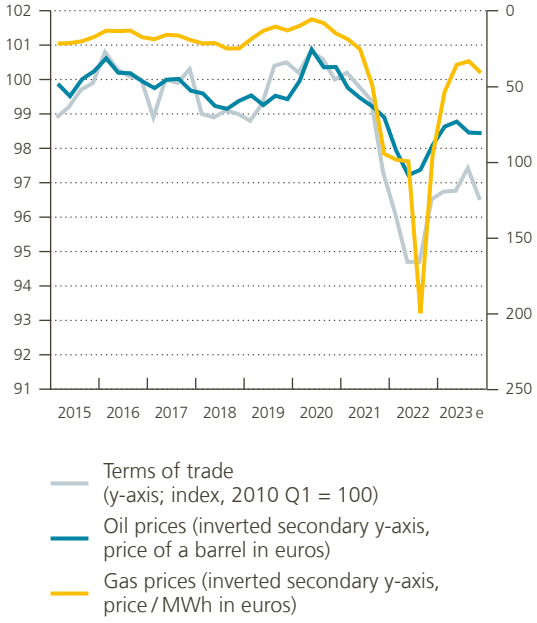
Figure 4.9

Following a substantial deterioration in previous years, the terms of trade turned less unfavourable

Trade deflators
(annual rate of change; data adjusted for seasonal and calendar effects)



Terms of trade and gas and oil prices



Sources: NAI, LSEG.

gradually absorbed in 2023. The year 2022 was marked by a negative income effect, i.e. a significant transfer of purchasing power from Belgium to the rest of the world, generated by the deterioration in its terms of trade. This phenomenon, which could also be observed in the euro area as a whole and among the country's main trading partners, affected all countries that import energy and do not produce it. However, the loss of wealth was greater in Belgium, mainly due to the higher energy content of its imports and higher average consumption of fossil fuels. However, this impoverishment of the Belgian economy gradually diminished as a result of the fall in energy prices on international markets as from the end of 2022 and disappeared in 2023, in line with the more favourable terms of trade.

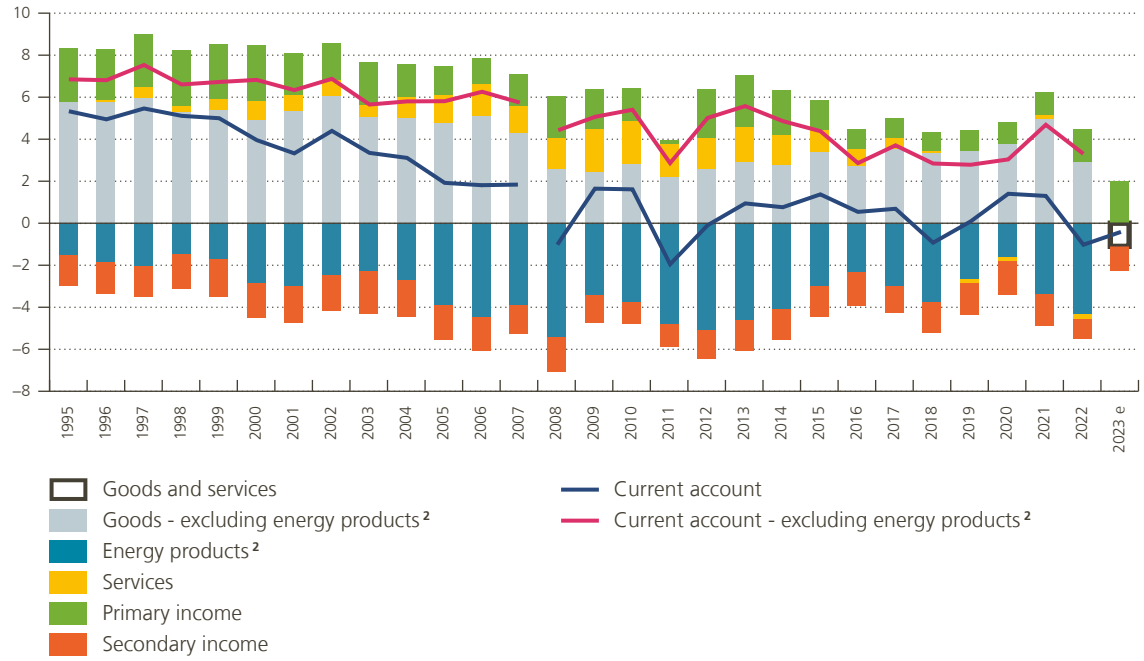
The current account balance only marginally contracted in recent years and shows a limited deficit, meaning the Belgian economy has a modest borrowing requirement

There has not been a sharp contraction in the Belgian current account since the 2008 financial crisis, thanks in particular to the efforts made to improve cost-competitiveness. Since 2008, the current account has almost been in balance, albeit at a lower level than before, despite the myriad exogenous shocks of late. On average, the trade balance, especially excluding energy products, helped to maintain a limited current account surplus in recent years. The policies pursued over the past decade to improve the cost-competitiveness of the Belgian economy appear to have contributed to the relative stability of the current account, notwithstanding the major economic disruptions of recent years.

Figure 4.10

Belgium's current account has recorded limited fluctuations, despite exogenous economic shocks, and has remained almost in balance

(percentage of GDP, according to balance of payments statistics)[1]



Sources: NAI, NBB.

1 According to the BPM5 methodology for the period 1995-2007; according to the BPM6 methodology for the period 2008-2023.

2 Data for energy goods based on foreign trade statistics, SITC-3, data as per national concepts.

Despite the pandemic and the energy price shock, the current account balance, excluding energy products, maintained a surplus. During 2019 and 2020, years marked by the Covid-19 pandemic which led to a significant slowdown in the global economy and international trade, Belgium's current account balance held steady and was even in surplus, due in particular to a growing trade surplus. Belgium benefited from the presence on its territory of a large pharmaceutical sector which, as from the end of 2020, exported medicinal products on a large scale, particularly Covid-19 vaccines. This trend continued, offsetting the significant rise in energy prices recorded from the second half of 2021 which led to a considerable increase in the net import bill for such goods. In 2022, however, Belgium recorded a trade deficit, mainly due to deterioration in net trade in "transport equipment", combined with an ever-growing net energy bill with foreign countries. The latter continued to rise as a result of ever-increasing prices on international markets, despite falling energy consumption in Belgium. The increase in the surplus generated by trade in chemical and pharmaceutical products was no longer sufficient to make up for developments in these two categories of goods. Net trade in services, with the exception of 2021, a year still marked by travel restrictions due to the global pandemic which had had the effect of reducing the deficit in travel-related and transport services, did not, moreover, support Belgium's trade balance. The latter remained in deficit in 2023. The surplus in trade in chemical and pharmaceutical products indeed fell slightly as a result of a drop in exports, particularly vaccines and other Covid-19 medications, thereby offsetting the smaller deficit in energy imports. The trade deficit in services continued to widen, influenced by, among other factors, higher spending on travel-related services, with foreign spending by Belgian residents returning to a level higher than that seen before the Covid-19 crisis.

Net primary and secondary income helped support Belgium's current account. While relatively stable in recent years, net primary and secondary income with the rest of the world saw, respectively, their surplus increase and deficit shrink from 2022 onwards. In fact, in 2022, net primary income with the rest of the world increased considerably, mainly driven by net investment income due to the rise in market rates. This trend continued in 2023. The net secondary income deficit narrowed in 2022, as a result of specific transactions carried out over the year, before increasing again somewhat in 2023, but at a lower average rate, expressed as a percentage of GDP, than that observed previously.

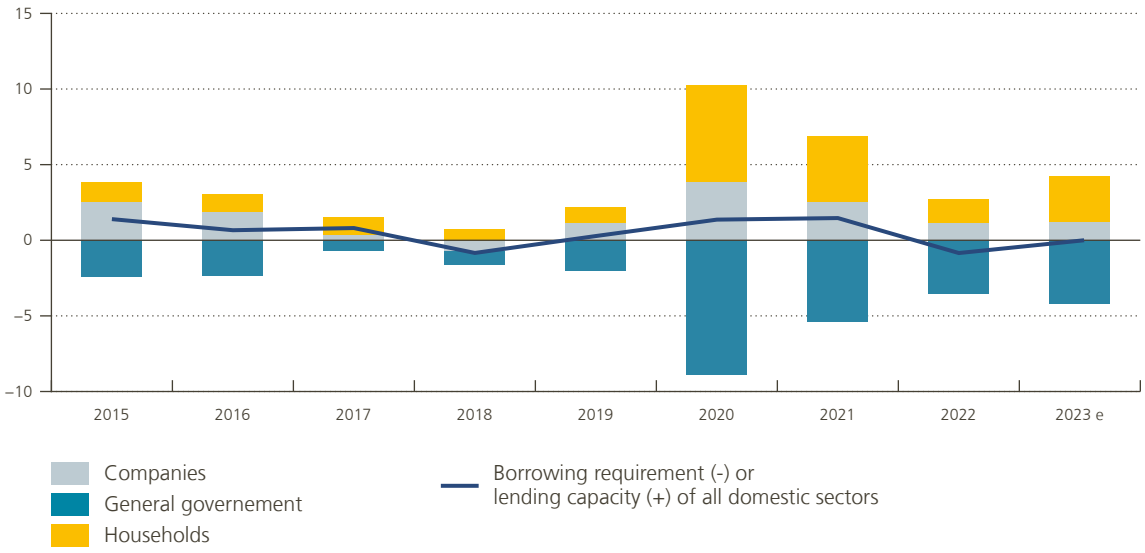
In line with the current account balance, Belgium's financing balance with the rest of the world remained relatively stable in recent years, despite significant fluctuations within its various components. Between 2020 and 2022, however, the lending capacity of the Belgian economy gradually shrank, resulting in a borrowing requirement of just under 1 % of GDP in 2022. Over this period, the financing capacity of firms gradually deteriorated due to the fact that investment spending, expressed in nominal terms, grew faster than income from their operations. The lending capacity of households also came under pressure as a result of a gradual decline in the household saving rate. In fact, household expenditure, boosted by high inflation, increased significantly more than household disposable income. This trend, combined with a further increase in investment (mainly in housing), gradually squeezed household financing capacity. Finally, the general government borrowing requirement, which had risen sharply in 2020 as a result of the fiscal measures adopted to help firms and households cope with the Covid-19 crisis and the contraction in economic activity, gradually fell over the period. It should be noted that 2020 was marked by large swings in income and expenditure between the different domestic sectors of the economy due to large transfers from general government to firms and households.

In 2023, the lending capacity of firms and households increased again somewhat, making it possible to reduce the borrowing requirement of the Belgian economy. While firms saw their investment expenses increase, their disposable income

Figure 4.11

A lower borrowing requirement with the rest of the world

(percentage of GDP)



Source : NAI.

remained substantial and they recorded a downward trend in change in inventories, which had reached a historically high level in 2022. Households, on the other hand, saw their level of savings rise again due to an increase in disposable income which was only partially consumed. General government, for its part, saw its borrowing requirements rise over the past year, due to a worsening primary deficit and higher interest expenses.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5. Labour supply and demand

The post-Covid-19 economic recovery rapidly brought the labour market back to its 2019 level and, in many segments, propelled it well beyond. In 2021 and 2022, net job creation reached unprecedented levels. In 2023, employment continued to grow, albeit at a slower pace. At the same time, recruitment difficulties skyrocketed in many sectors, curbing business growth. In addition to increased pressure caused by a tight labour market, a number of structural factors help to explain these recruitment difficulties.

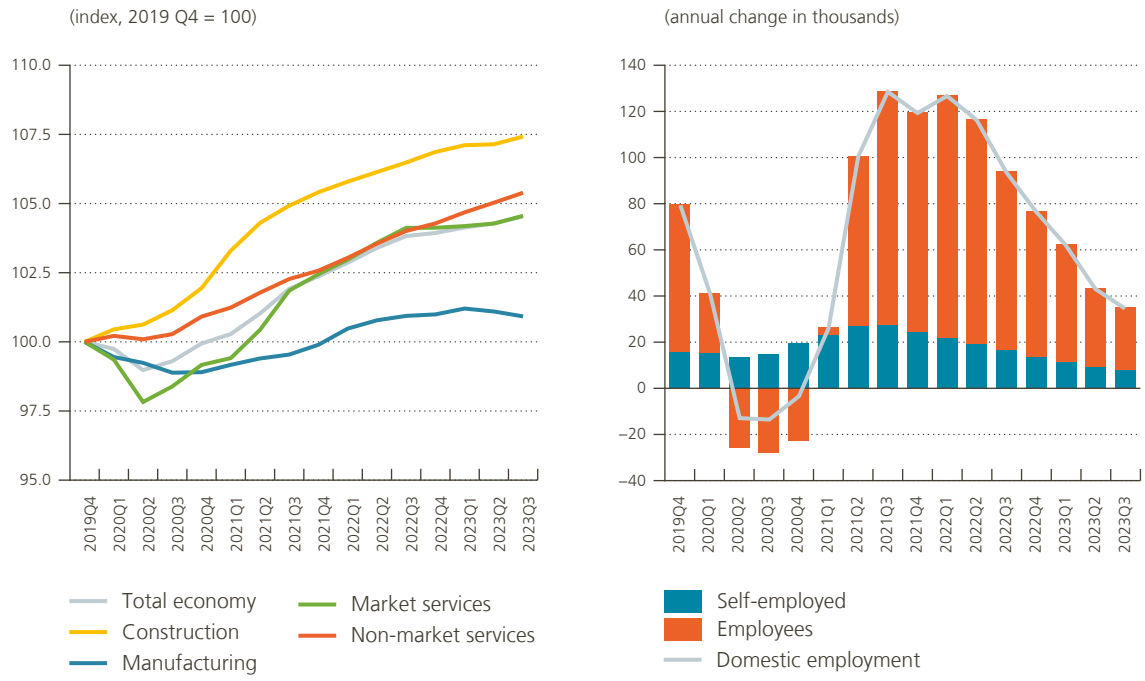
5.1 Employment continued to grow despite recruitment difficulties and the cyclical downturn

Resilient job creation

After record job creation during the post-pandemic recovery, 2023 was a year of normalisation. Domestic employment proved resilient to the various shocks that buffeted the Belgian economy. It should be noted that 2021 and 2022 were extraordinary years, with net job creation of 94 000 and 104 000, respectively. In 2023, this figure was just over 40 000, a level comparable to the average observed between 1996 and 2022, but below that of the period 2015-2019 (64 000). Although this dynamism was slightly more pronounced in Belgium, it was not exceptional in the European union. Between the fourth quarter of 2019 and the third quarter of 2023, employment rose by 4.5 % in Belgium,

Figure 5.1

Domestic employment



Source : NAI.

3.2 % in the EU and 3.7 % on average in Germany, France and the Netherlands. Since 2022, however, there has been a slowdown, which is more apparent in Belgium than in the rest of the EU.

Both employees and the self-employed contributed to employment growth. Self-employment is on a long-term upward trend and made a significant contribution to the post-Covid-19 recovery. Against the backdrop of a dynamic labour market, the number of self-employed workers has grown faster than that of employees. The self-employed now account for 17.3 % of total employment, compared with 16.5 % a decade ago. Their number even rose during the pandemic, but growth has since slowed markedly. The expansion of entrepreneurship can be seen in several sectors, particularly the liberal professions and manufacturing. In addition, the number of self-employed women, although still under-represented in the total (35.5 % in 2022), has risen slightly faster than that of men.

Some sectors benefited more from the post-Covid-19 recovery. Job creation was most dynamic in construction and services, where employment grew by 7.4 % and 4.9 %, respectively, between the fourth quarter of 2019 and the third quarter of 2023, compared with 4.5 % for the economy as a whole. The public administration and defence, education, and health and social work sectors, which together account for almost a third of domestic employment, made a significant contribution to net job creation, recording an increase of 5.1 % since the end of 2019. On the other hand, employment in the financial sector has been falling since the early 2000s, mainly as a result of successive restructurings and the closure of bank branches. Employment in the manufacturing industry is showing positive, but below-average, growth. Manufacturing's share of total employment therefore continues to fall, in accordance with the trend towards the tertiarisation of the economy.

The employment rate rose significantly. The employment rate for the 20-64 age group reached 72.2 % in the third quarter of 2023, which is still well below the European average of 75.5 %. It also remains below the federal government's 2030 target of 80 %. Over the last ten years, however, the Belgian employment rate has grown by 0.5 percentage points on average on an annual basis. This is a more sustained pace than that observed over the previous decade, when the growth rate was below 0.1 percentage points. Certain categories of workers contributed more to this upward trend, such as women and the over-55s, although their employment rate remains below the national average. The rise in the proportion of higher education graduates and the fall in the school drop-out rate are also having a positive influence on the employment rate. It should be added that part of the more vigorous rise in the employment rate over the last decade can be explained by a slowdown in the denominator of the ratio : the growth rate of the working-age population between 2003 and 2013 was more than twice as high as between 2013 and 2023.

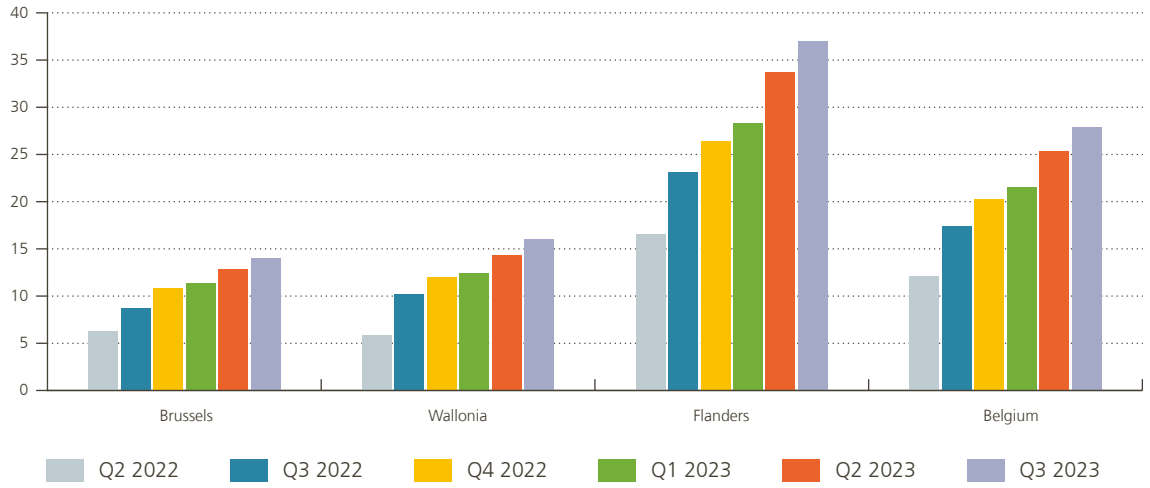
The Brussels-Capital Region narrowed the gap with the national average during the post-Covid-19 recovery. While the employment rate rose in all three regions, it remains significantly higher in Flanders (76.5 % in the third quarter of 2023) than in Brussels (68.2 %) and Wallonia (65.9 %). Brussels recorded the strongest growth between the end of 2019 and the third quarter of 2023, with a jump of six percentage points. The sharp rise in the employment rate of non-EU workers, who are over-represented in Brussels (12 % of the working-age population, compared with 4 % in the other two regions), has largely contributed to this, but there is still room for improvement since it remains below average. The rates in Flanders and Wallonia both showed an upward trend, albeit less marked and which was slightly more dynamic among workers aged 55 and over.

The inflow of refugees from Ukraine affected initially population dynamics and then employment. At the start of Russia's invasion of Ukraine, the inflow of Ukrainian refugees increased the population but did not have a major impact on employment, notably given that the refugees were mainly women and children and rarely spoke one of Belgium's national languages. Furthermore, there was a great deal of uncertainty about the length of their stay. Between March 2022 and November 2023, the Immigration Office issued 77 000 temporary protection certificates, two-thirds of which were to people of working age, i.e. between the ages of 18 and 64. Over time, an increasing share of these refugees joined the working population, from 12 % in the second quarter of 2022 to 28 % in the third quarter of 2023. However, there are still significant regional differences : the level of labour market integration for Ukrainian refugees is clearly highest in Flanders.

Figure 5.2

Ukrainian refugees in employment by region and quarter

(percentage of Ukrainian refugees aged 18-65 with at least one period of employment in Belgium, regardless of the duration, since 1 January 2022)



Sources: BCSS, Statbel, VDAB.

The number of hours worked per worker recovered and the unemployment rate remains low

During the pandemic, there was a substantial fall in hours worked, but, since then, even average working hours have recovered. During the lockdowns, the adjustment of working hours, facilitated by policies such as furlough schemes or bridging allowances, made it possible to protect jobs. Since then, the average number of hours worked per person has normalised, which can also be explained by the labour shortages facing the Belgian economy. Manufacturing, however, is an exception. The number of employees has grown less than in construction or services, and the volume of hours worked is below its 2019 level. An employee in the manufacturing industry worked 382 hours on average in the third quarter of 2023, seven hours less than before the crisis, thereby narrowing the gap with the national average of 360 hours per quarter.

The unemployment rate remains historically low. The unemployment rate – measured by labour force surveys – has remained relatively stable in recent quarters. It stood at 5.6 % in the third quarter of 2023. In all three regions, the unemployment rate is close to the lowest level ever recorded, but there are still significant differences: 10 % in Brussels, 8.3 % in Wallonia and 3.5 % in Flanders. For the latter region, this percentage is close to the frictional unemployment rate and is thus difficult to push down further.[1] It is interesting to note that, in the space of five years, the unemployment rate for under-25s has fallen by 1.4 percentage points, based on the average for the last four quarters. This partly reflects the sharp rise in employment in sectors in which younger people are overrepresented, such as hospitality and events. The transition of young people into work is also the focus of several European programmes and public employment service initiatives (such as the "Accompagnement de jeunes NEET 2019-2023" campaign run by Actiris in Brussels and co-financed by the European Social Fund).

On the other hand, the number of jobseekers registered with the public employment services (PES) increased. In December 2023, the regional public employment services reported around 50 000 more unemployed jobseekers than at the

1 Frictional unemployment corresponds to the period needed to find a new job after voluntarily leaving an old one. This type of unemployment is considered to be short term.

same time a year earlier. This increase could be seen in all three regions, in different age categories and for different durations of inactivity. It can be explained in particular by a methodological change: certain reforms carried out at the level of the public employment services – Actiris, ADG, Forem and VDAB – resulted in a higher number of referrals being classified as unemployed jobseekers.[1] These changes can be likened to a break in the statistical series. Their aim is to keep people who are generally farther removed from the labour market among the population of job seekers, which is positive *per se*. This increase may seem at odds with the stability of the unemployment rate, which is calculated based on a survey and, therefore, on the employment situation declared by respondents. It is possible that survey respondents who recently registered with the public employment services do not yet declare themselves as jobseekers (as defined by the International Labour Organization).

Certain forward-looking indicators point to a slowdown in job creation in the short term

According to the NBB's monthly business survey, employment expectations, which had soared after the Covid-19 pandemic, returned to a lower level. In the fourth quarter, they were below the historical average in the manufacturing industry, the construction industry and trade, while they gradually fell towards the historical average in services. The number of bankruptcies has also been on a slight upward trend since mid-2022. In 2023, business failures rose by 11 % compared with 2022, pushing up job losses directly linked to bankruptcies by 23 %. As such, the current level is close to, but slightly below, that seen before the health crisis. Collective redundancies as part of restructuring plans also increased: in 2023, these affected 7 300 employees, compared with only 3 700 in 2022 and 5 100 in 2019. This downturn in the labour market is part of a certain cyclical normalisation, which logically followed the upward phase of the recovery in 2021 and 2022. It should be recalled that the figures for these two years were heavily influenced by the measures put in place during the Covid-19 crisis.

1 Examples of these reforms include, firstly, that people who are not entitled to unemployment benefits and who register voluntarily as jobseekers do not, since the beginning of 2022, have to confirm their registration with Forem every three months and, secondly, that since January 2023, the VDAB has required social housing tenants to register as jobseekers.

BOX 4

The construction industry will play a key role in the energy transition but is facing major labour shortages

Employment in the construction industry continues to grow, especially self-employment. The construction industry employs more than 300 000 people. It accounts for 5 % of employees and 10 % of self-employed workers. This sector is in fact more labour-intensive than the rest of the economy. During the Covid-19 pandemic, employment in construction was unaffected, even on a quarterly basis. Furthermore, it was particularly buoyant during the recovery, especially in terms of the number of self-employed. This development forms part of a longer upward trend : over 20 years, the number of self-employed has grown by 75 % in the construction industry, compared with 29 % in the economy as a whole.

The workforce in the construction industry is relatively young and predominantly male. In 2022, 88 % of workers were men, compared with 53 % for the economy as a whole. Looking at younger age groups, no major differences can be detected : 89 % of workers in the 15-39 age group are male. The physical nature of the work no doubt explains why only 26 % of construction workers are aged 50-64, compared with 31 % in the economy as a whole.

Construction companies are experiencing major recruitment difficulties. According to the Statbel survey, 16 000 vacancies existed in the construction industry in the third quarter of 2023, representing 8 % of unfilled job offers in Belgium. These positions are overrepresented in Flanders, where almost three quarters are concentrated. The lists of shortage occupations, i.e. those for which vacancies are less easily filled and for which recruitment takes longer, drawn up by the public employment services at regional level reveal a similar picture. In 2023, construction-related jobs accounted for between one-fifth and one-third of shortage occupations. A wide range of jobs is involved, including quantity surveyor, site manager, sanitary fitter, electrician and road worker.

Employers in the construction industry are struggling to find the skills they need. Construction-specific skills or knowledge are crucial to filling a significant number of vacancies. This is true in all three regions. This skills gap can be explained in part by the low number of students enrolled in technical or vocational courses in construction. Moreover, this number has fallen over the last decade. However, this is not just true of construction : the attractiveness of technical and vocational courses is declining overall. The gender gap among enrolled students is also significant ; almost all are male, which automatically reduces the supply of labour down the road.

The labour supply is limited by working conditions and retirement. The working conditions associated with construction jobs are not sufficiently attractive (pay, work-life balance, the physically demanding nature of the work) and gender stereotypes remain a major barrier for potential candidates. Furthermore, even though the workforce in the construction sector is relatively young, the proportion of workers aged 55 to 64 has risen from 13 % to 18 % in ten years, which may reflect an improvement in working conditions but is likely, in the long term, to increase the number of retirements if it does not continue.

Labour scarcity increases reliance on foreign workers and weighs on production. To make up for the shortage of skilled labour, some companies are turning to Belgian self-employed workers or to foreign workers, whether self-employed or seconded. According to Myria (the Federal Migration Centre), the number of posted workers will reach 214 000 by 2022. Of this figure, 39 % are employed in the construction industry, making it the leading sector of activity for foreign workers. These workers are mainly EU nationals. The use of foreign labour can be associated with abuse such as unfair competition, social dumping and irregular immigration. In 2015, a fair competition plan was signed by the social partners in the construction industry, the federal government and the Social Information and Research Service (SIRS). In the absence of a sufficient workforce, some companies are also forced to restrict output or extend delivery times. In the short term, this has a negative impact on production and, in the longer term, companies may be forced to revise their development strategies. According to a survey by the European Investment Bank (2022), the unavailability of skilled labour is a long-term obstacle to investment for 92 % of Belgian construction companies.

Construction is a crucial area for the energy transition. The energy transition will require the acquisition of new skills in order to incorporate innovations in the fields of energy renovation and the installation of renewable materials. CEDEFOP (the EU agency responsible for promoting the development of vocational education and training) ranks construction among the fields expected to see a solid expansion in employment between now and 2035. An increase in the number of workers is expected in trades such as heat-pump installers, carpenters and joiners, bricklayers, and technicians, all of whom will need to be trained in energy efficiency and renewable energy sources.

The recent rise in input costs and interest rates is curbing building activity. The war in Ukraine and transport problems during the post-Covid-19 recovery resulted in a shortage of building materials and higher prices. In addition, the rise in interest rates has had a two-fold impact on construction companies, as it has reduced demand for property investment and increased the cost of business loans. High inflation has been passed on to the wage bill, including in the construction sector, but wage indexation protects the purchasing power of Belgian consumers, which is crucial for a sector such as construction that is mainly oriented towards the domestic market.

A tighter but more flexible labour market

More flexible forms of work are gaining in popularity. First introduced in the hospitality industry in 2015, so-called "flexi-jobs", i.e. additional jobs held by workers already employed on an 80 % basis or by retirees, have gradually been made possible in other fields, such as retail trade and hairdressing and beauty salons. However, one in four flexi-jobs is not directly listed in the employer's sector, since these jobs are "officially" with temporary employment agencies, highlighting the important role played by these agencies in making the labour market more flexible. In 2024, the flexi-job scheme was further extended, notably to education, transport and agriculture. Flexi-jobs enable employers to increase the size and flexibility of their workforce at limited expense. Indeed, the employer's social security contributions are reduced by ordinary social security contributions and payroll tax, and the administrative procedures are less cumbersome. In the second quarter of 2023, according to the NSSO, 120 000 people held 140 000 flexi-jobs (compared with 57 000 and 67 000, respectively, in 2019). Flexi-jobs increase the volume of work, but their impact remains limited: they represent only 21 000 full-time equivalents (FTEs); in other words, each person works an average of 18 % of a full-time job.

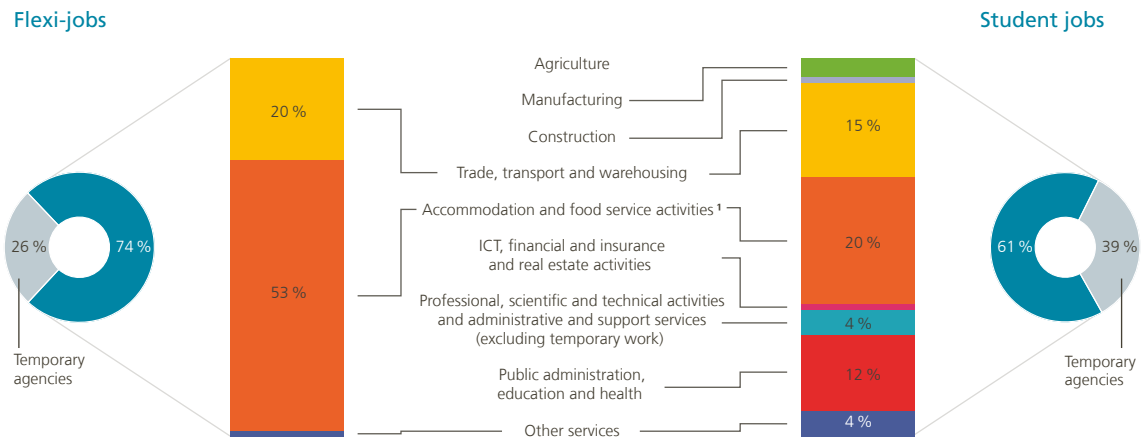
Reliance on flexible working arrangements is highest in the hospitality industry. In 2022, the hospitality industry was the main provider of flexi-jobs, although retail trade and hairdressing and beauty salons have seen their share rise over time. Furthermore, hotels and restaurants can take on additional workers during periods of peak activity. These workers, known as "extras", can be employed for up to two consecutive days or 50 days per year in total. Unlike flexi-jobs, the use of extras has fallen in recent years, from 8 500 FTE in 2017 to 5 900 in 2022. It is likely that flexi-jobs are partly responsible for this reduction.

Firms also rely on other flexible working arrangements, such as student employment. A student contract qualifies for reduced employee and employer social security contributions. The maximum duration of employment over the course of the year, which was 50 days until 2016, was raised to 475 hours in 2017 and to 600 hours in 2023. At the same time, the number of student jobholders has increased over the years, reaching 627 000 in 2022, up from 523 000 in 2017. The shift from working days to working hours has made student employment more flexible. In line with the gradual raising of the ceiling on authorised hours, the average number of hours actually worked per student has also jumped, from 171 to 206 per year.

Figure 5.3

Distribution of flexi-jobs and student jobs by sector[1]

(2022, number of people in employment)



Source: National Social Security Office.

1 Workers in flexi-jobs covered by the joint committee for the hospitality industry but whose employer's main activity does not fall within the NACE hospitality sector are included in this sector (less than 4 % of flexi-jobs).

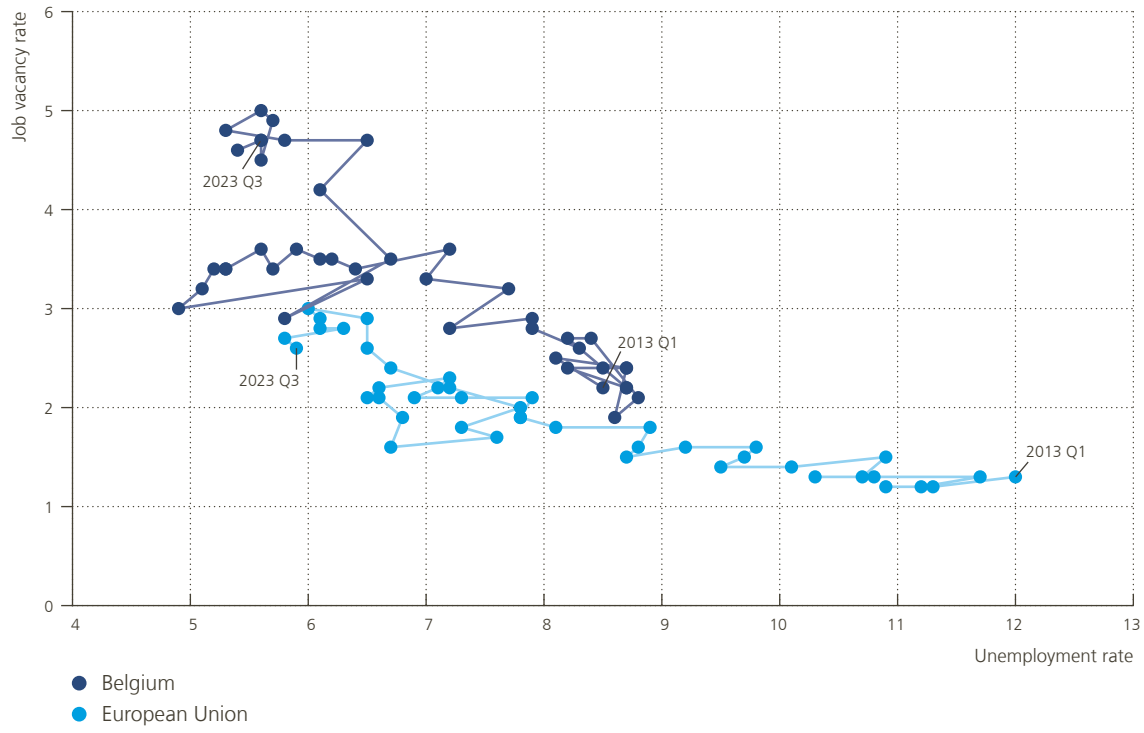
The increase in flexi-jobs and student jobs is most evident in Flanders. Over 90 % of flexi-jobs and 63 % of student jobs are concentrated in Flanders, compared with 61 % of domestic employment.

The post-Covid recovery led to a tighter labour market. The Beveridge curve, which establishes a negative relationship between the job vacancy rate and the unemployment rate, reveals growing tensions on the labour market. More specifically, firms are finding it more difficult to recruit. Compared to the European average, the situation in Belgium is even more critical. The difficulties encountered in matching labour supply and demand are more marked since, for a given unemployment rate, the job vacancy rate has always been higher in Belgium than the EU average (see section 5.2). According to quarterly business surveys, the proportion of manufacturing and service companies mentioning a shortage of skilled labour as an obstacle to production or doing business rose sharply between mid-2020 and mid-2022, before declining thereafter. Looking at historical data, there is still a fairly significant shortage of skilled labour in manufacturing, but it has normalised in services. Labour market slack is another indicator of tightness and refers to all unmet employment needs. This concept includes jobseekers, those working part-time who would like to work more and are available to do so, people looking for work who are not immediately available to work, and people who are available to work but are not actively seeking work. In the third quarter of 2023, this indicator stood at 9.5 % in Belgium and 11.3 % in the EU for the population aged 20-64, both relatively low margins in their respective statistical series which began in 2009.

Figure 5.4

Beveridge curve in Belgium and the EU

(percentage, quarterly data)



Source : Eurostat.

5.2 Recruitment difficulties

A scarcity of labour

Low labour market participation contributes to recruitment difficulties for companies. If Belgium's active population were proportionate to the EU average, [1] 300 000 more people would be available to meet the needs of the country's employers. In 2020, the High Council for Employment [2] argued for a multipronged approach to this issue. Its recommendations were aimed at removing barriers to participation for underrepresented groups, namely the low-skilled, young people, older workers, people of non-European origin, and women. They relate to education and training (combating early school leaving, orientation towards growth sectors, student internships, vocational training); financial incentives for the low-paid to work; combating discrimination and encouraging integration policies for foreign nationals; measures to raise the effective retirement age; a better distribution of household tasks; and better collective care for young children.

The working population is ageing and a growing proportion of workers is reaching (pre-) retirement age. The proportion of workers aged 55 and over rose from 10 % in 2008 to 18 % in 2022. The gradual exit of these workers from the workforce creates a labour shortage in the short and medium terms. Needs will be particularly acute in certain sectors already affected by large-scale shortages, such as healthcare and manufacturing. In addition, a majority of Belgian workers retire early. At 61, the effective retirement age in Belgium remains well below the statutory retirement age of 65. This is also lower than the European average, which stands at 64. Since the early 2000s, the authorities have been taking measures to keep older workers in work for longer, in particular by gradually raising the qualifying age for (early) retirement. The statutory retirement age will rise to 66 in 2025 and to 67 in 2030. In July 2023, the government agreed a pension reform that includes the introduction of a pension bonus [3] to provide a financial incentive to people to work beyond their possible retirement date. The precise details have yet to be worked out, however. According to Minne and Saks (2023), [4] influencing the motivation of older workers, through ongoing training and the adaptation of working conditions, could encourage them to stay in work longer.

One possible solution to this labour shortage could be migration. In Belgium, immigration for economic reasons is still uncommon, although the rate is increasing. In 2020, economic reasons accounted for only 11 % of the grounds cited by non-EEA nationals to obtain a first residence permit (Myria, 2022). The other main reasons given were family considerations (45 %) and studies (15 %), followed by international protection (11 %) and humanitarian or medical reasons (6 %). The remaining 12 % gave no reason. According to Myria (2023), [5] apart from the slowdown observed during the pandemic, the number of foreign workers has been rising steadily in recent years. Most of these workers are highly skilled. In 2022, 60 % of first residence permits for paid employment were issued to highly skilled workers (i.e. just over 7 000 out of almost 12 000 permits issued on this basis to third-country nationals). However, the number of low- and medium-skilled foreign workers rose sharply in 2022. These workers

1 In 2022, the activity rate stood at 74.5 % for the EU, compared with 70.5 % for Belgium.

2 HCE (2020), *Plus d'actifs pour une économie prospère et inclusive*.

3 Federal Pensions Service, *Pension Reform 2021-2024*.

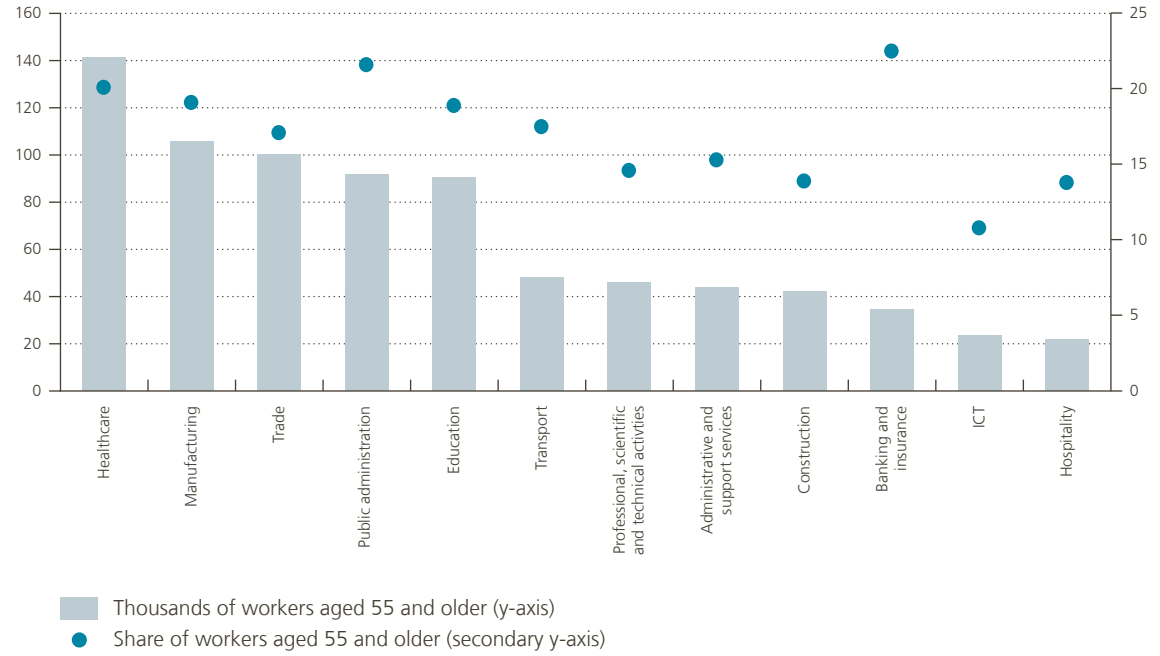
4 See G. Minne and Y. Saks (2023), "Older workers and retirement decisions in Belgium: mapping insights from survey data", NBB, *Economic Review*.

5 See Myria (2023), *La migration en chiffres et en droits*.

Figure 5.5

Some sectors will face the widescale departure of workers at the end of their careers[1]

(2022, as a percentage and in thousands of people)



Source: Eurostat.

1 Sectors with at least 20 000 workers aged 55 and over in 2022.

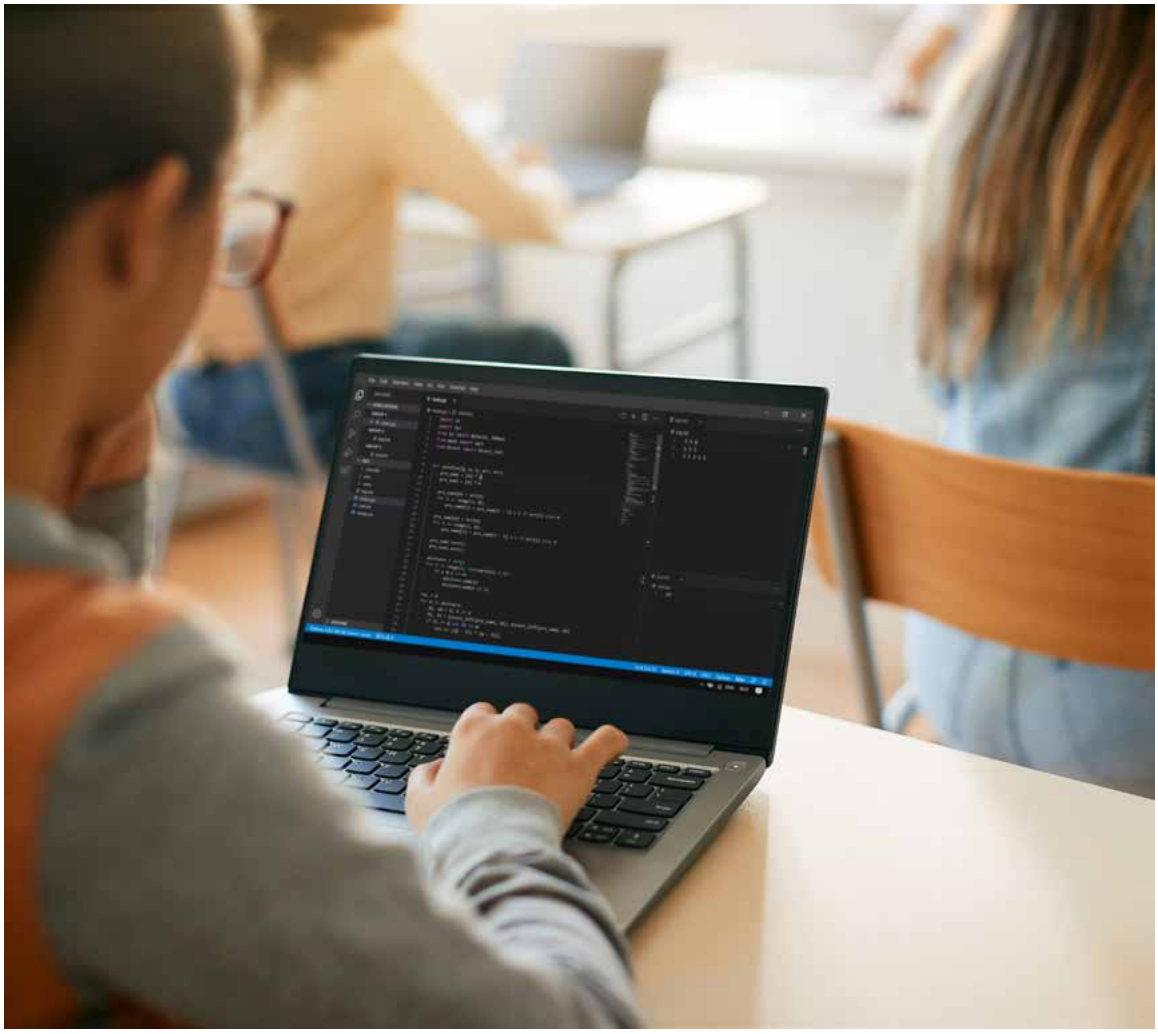
are often employed in shortage occupations or in jobs subject to a market survey (the employer must demonstrate that there are no candidates available on the local labour market). Their numbers rose from just over 1 000 in 2021 to over 4 000 in 2022. Despite this increase, economic migration remains insufficient given the scale of the country's labour shortage. Immigration policies and integration programmes have been put in place to attract foreign talent, but complex administrative procedures appear to constitute a hurdle for both employers and workers. These obstacles are compounded by language barriers, cultural differences, and the difficulty having foreign qualifications and diplomas recognised.

A skills mismatch

Candidates' skills do not always match employers' requirements. Some jobs require specific skills or technical training. This is the case, for example, in IT, where there is a shortage of candidates with the skills sought for vacant positions. For these types of jobs, recruitment difficulties can often be traced back to the source: although they offer many opportunities and attractive pay, enrolment in STEM (science, technology, engineering and mathematics) courses remains inadequate.

Shortage occupations do not necessarily require a lengthy investment in training. Many vacancies in transport, construction, manufacturing or personal and community services do not require higher education. Indeed, a university degree is not required for a large share of vacancies advertised by the public employment services.

Ideally, skills needs should be anticipated and training adjusted to meet them. In the context of the green and digital transitions, technologies and skills requirements are changing rapidly. It is important to inform students and jobseekers about career opportunities to ensure that Belgium has a workforce whose qualifications align with market needs.



For workers, targeted training and retraining programmes should improve skills acquisition and thus help reduce the mismatch between labour supply and demand. A report by the HCE[1] on the continuing training of employees showed that training efforts are inequitably distributed: the groups that need it most, namely workers whose skills are obsolete and low-skilled workers, participate the least.

Numerous policies aim to promote a better match between workers' skills and market needs. Each year, the regional PES draw up lists of shortage occupations, enabling a precise and up-to-date identification of these occupations. In 2022, the federal government decided on a plan to combat shortages, focusing primarily on skills. Some of the measures relate to the identification of shortage occupations, based on the lists drawn up by the PES. On this basis, firms should establish an annual training plan. The social partners in the various sectors should discuss the causes of shortages every two years in order to propose corrective measures to the federal authorities responsible for employment policies (the creation of an interfederal platform). The measures are also aimed at orienting jobseekers towards shortage occupations. For example, the degressive nature of unemployment benefits is frozen when jobseekers follow a training course leading to a job in a shortage occupation. The long-term unemployed can now combine income from a job in a shortage occupation with a portion of their unemployment benefits (25 %) for three months. As from 2024, all employees will benefit from a right to five days of training per FTE per year. Derogations related to the size of the firm exist, and companies with fewer than ten employees are exempt.

1 HCE (2021), *La formation continue des salariés : investir dans l'avenir*.

A lack of geographical and professional mobility

Despite unemployment disparities, few workers cross the linguistic divide to work. Although Belgium is a small country, the labour market is characterised by wide disparities in the unemployment rate between the three regions. These differences are persistent, and no significant convergence can be discerned. Indeed, 85 % of employees work in the region in which they live. However, a trend towards greater inter-regional mobility appears to be emerging in the regions with the highest unemployment rates. In Brussels and Wallonia, the share of inter-regional commuters (almost 20 % of employment) is higher than in Flanders (12 %).

Distance is clearly a barrier to geographical mobility, but its impact varies depending on the individual characteristics of workers and jobs. Duprez and Nautet (2019)[1] found a concentration of well-paid jobs in the capital region, in occupations requiring high qualifications in finance and insurance, IT, public administration and business services. These jobs attract highly educated workers who prefer to live in nearby non-urban areas and commute daily. As they are less mobile, workers with lower qualifications are generally more dependent on local employment opportunities.

Other factors also influence mobility, such as the quality of infrastructure, the efficiency, availability and cost of public transport, and the language barrier. The multinational character of Brussels, its role as a bilingual capital and its more developed transport system make it the destination of choice for many inter-regional commuters.

The PES have put in place initiatives and increased collaboration to stimulate inter-regional mobility. Among the measures adopted are language training, the funding of lessons to obtain a driving licence, and the sharing and dissemination of job offers with other regions. The rise of teleworking, which makes it possible to cut back on commuting, could encourage people to accept jobs farther away from home. However, this is not an option for a wide range of occupations, particularly manual, technical and personal care jobs which require workers to be physically present. It is unrealistic to believe that improving worker mobility could contribute significantly to reducing the number of shortage occupations, as these are often identical in all three regions.

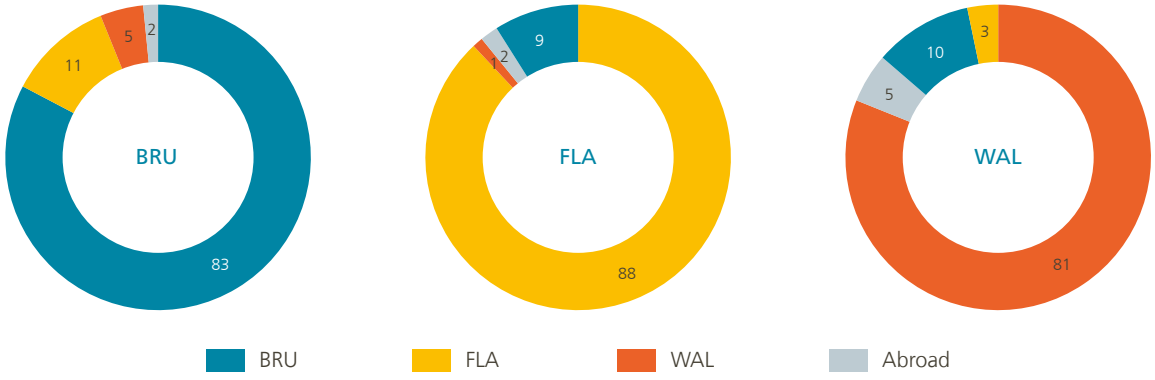
In addition to a lack of geographical mobility, the Belgian labour market is characterised by a low number of job transitions. Certain characteristics

1 See C. Duprez and M. Nautet (2019), "Economic flows between Regions of Belgium", NBB, *Economic Review*.

Figure 5.6

Most commuters work in the region in which they live

(percentage of corresponding employment, 2022)



Source: Statbel.

of the labour market render professional mobility less attractive and encourage immobility on the part of both employees and employers, the latter because redundancy costs are high, procedures are lengthy and restrictive and, in the event of an upturn in activity, recruitment difficulties are significant. The wage formation system, which emphasises seniority, especially for employees and civil servants, also discourages job transitions. Likewise, the incentive for companies to hire workers decreases with their age if there is no expected added value in terms of productivity. According to a report by the FPS ELSD, [1] Belgians have a marked preference for job stability. The report notes, however, that highly skilled workers have more professional mobility and are likely to earn more. An article by Saks (2021) [2] indicates that, due to centralised wage negotiation and generalised wage indexation, wage dispersion is low in Belgium from an international perspective, which could also exert downward pressure on professional mobility.

Unattractive working conditions and insufficient financial incentives

The working conditions and pay for a number of professions are considered too unattractive. Working conditions, which include working hours, the physically demanding nature of the work, and pay, are crucial to attracting and retaining workers, as are career opportunities. Difficult working conditions may dissuade workers from choosing certain sectors, activities or professions. The employer's values and the social value of certain professions are important criteria, particularly for the younger generations. For example, technical and vocational courses are often avoided by students as they have a negative image of them. However, these useful and practical trades are also associated with high rates of labour market integration. To counter this negative perception, the construction sector, for example, has launched information campaigns designed to improve its image.

A key factor in attracting candidates, although far from the only one, is the level of pay. Salary is closely linked to a worker's profession or trade. According to Statbel's latest salary survey, jobs with

1 See FPS ELSD (2022), *État des lieux de la mobilité professionnelle in Belgium*.
2 Y. Saks (2021), "Wage differentiation in Belgium according to SILC data", NBB, *Economic Review*.

below-average pay include a number of occupations that are experiencing recruitment difficulties, particularly in the hospitality, construction, trade, industrial and transport sectors.

For the unemployed, the financial incentives to accept a job are insufficient. This is particularly the case for low-paid jobs. The participation tax rate measures the extent to which the choice to work is taxed, both directly, through social security contributions and personal income tax, and indirectly, through the loss of benefits. The higher the rate, the less incentive there is to work, reinforcing unemployment or inactivity traps. For an unemployed person faced with taking up a low- or medium-paid job, the participation tax rate is very high at the start of the period of unemployment, which reduces the financial incentive to accept the job. As the period of unemployment lengthens, benefits become more degressive and work becomes financially more attractive.

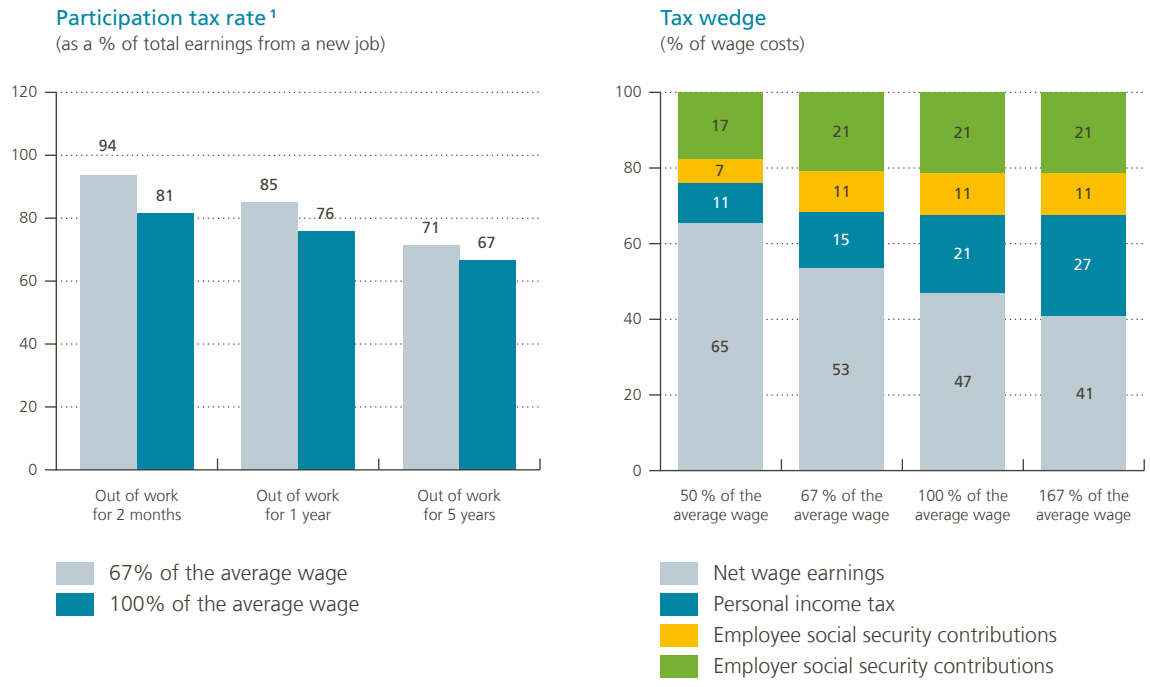
Other factors influence the decision to accept a job. These include the loss of certain advantages when leaving the benefits system (e.g. reduced tariffs for energy or transport, access to certain services, higher allowances) or the costs incurred when returning to work. It is important to emphasise that the decision to participate in the labour market depends not only on the cost but also the accessibility of childcare and means of transport. Other aspects, such as social mores, physical and mental health, housing conditions, indebtedness and deductions from wages, can also influence the decision to work or not. Finally, longer-term financial benefits, such as possible future pay rises or effects on pension entitlements, may not be factored in to the thinking of potential candidates.

Various actions have been taken to extend employment incentives for low-wage workers, but they appear insufficient. The issue of

Figure 5.7

The financial attractiveness of work is modest for low-wage earners, and social security pressure increases rapidly

(typical case for a single person without children, 2022)



Source: OECD.

1 Percentage of gross income from the new job that is lost due to an increase in tax or a reduction in benefit entitlements when a person who was unemployed returns to work.

financial incentives has formed the object of public debate for years, and numerous reforms have been undertaken. In 2016, the tax shift contributed, through the reform of the personal income tax system, to making work more attractive, in particular for those earning the lowest wages, by raising the PIT threshold and increasing the so-called "social security bonus" for employment, consisting of a reduction in social security contributions for low-wage workers, and the "tax bonus" for employment, corresponding to a tax credit, thereby making it possible to boost net pay without affecting the gross amount payable by the employer. However, the effect of these advantages quickly disappears as gross pay rises: for an income equivalent to 67 % of the average wage, the impact is already limited and becomes non-existent the closer one gets to the average wage. The Flemish government also introduced an employment bonus for low-wage workers. Moreover, the minimum wage was raised in 2022 (+€75) and 2024 (+€35) and will be raised again in 2026 (+€35). Incentives to work have also been increased through reforms to the unemployment benefits system: more support for and monitoring of jobseekers, the introduction of degressive unemployment benefits, and changes to the criteria defining suitable employment. For workers who are unable to work, there is a possibility to resume work on a part-time basis through a reintegration pathway adapted to their state of health. Nevertheless, despite these reforms, the risk of unemployment or inactivity traps remains higher in Belgium than in neighbouring countries and within the EU on average.

As well as financial aspects, the quality of work and working conditions are fundamental to attracting candidates

The type of employment contract offered has an impact on the attractiveness of a job. Temporary contracts enable companies to cope with peaks in demand, carry out specific projects or meet flexibility requirements. Temporary contracts take a variety of forms: fixed-term contracts, seasonal work contracts, student contracts and temp contracts. For two out of ten temporary workers, the type of contract concluded is a voluntary choice. In eight out of ten cases, however, it is not. More often than not, the worker was unable to find a permanent contract or the desired job was only available under a temporary contract. Candidates clearly prefer permanent employment, which provides greater job security and a stable income over the long term.

Most sectors that make extensive use of temporary contracts are experiencing greater recruitment difficulties. The sectors with the highest concentrations of temporary contracts are education – due to the system to replace absent staff – trade and healthcare (according to the 2022 labour force surveys). The hospitality industry also employs an impressive proportion of temporary workers: almost one in four jobs in this sector is under a temporary contract, compared with an average of 8 % for the economy as a whole. Although no formal causal link can be proven, it has been found that these sectors are also characterised by structural recruitment difficulties. In the job vacancy surveys carried out by Statbel, positions are divided into two categories: on the one hand, those corresponding to the employer's own staff – known as permanent jobs – and, on the other hand, those that are filled by workers from temporary agencies. Notably, the proportion of temporary contracts to fill vacancies is particularly high in manufacturing, transport, trade, construction and hospitality. Section 5.1 explains that the labour market is becoming increasingly flexible, which could be a particular issue to consider in the fight against recruitment difficulties.

Some jobs are associated with physical or psychological hazards that are likely to discourage applicants. The situation varies widely from one sector and job to another. Physical hazards include repetitive movements, exposure to dangerous products, the operation of machinery, the handling of heavy loads, etc. According to an *ad hoc* survey conducted by Statbel in 2022, employees working in finance and insurance are the least likely to be exposed to this type of hazard, followed by those in professional, scientific and technical activities, ICT and trade.[1] On the other hand, more than two out of three workers in manufacturing, transport, construction, agriculture, and water and waste management may be exposed to at least one physical hazard. In addition to physical hazards, certain aspects of a professional activity can generate or contribute

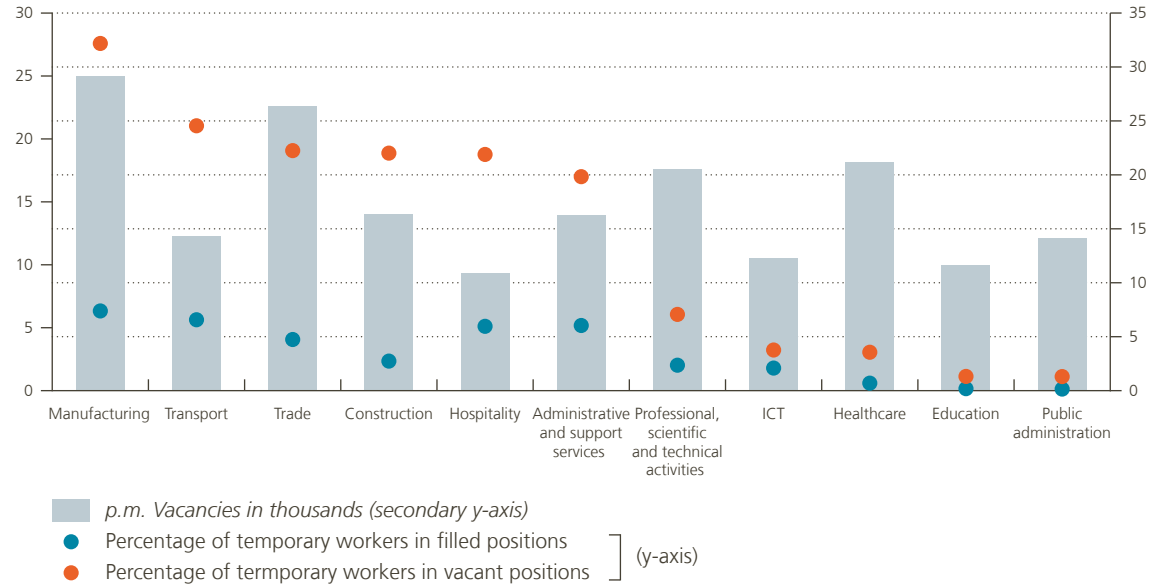
1 See HCE (2024), *Incapacity for work and reintegration into the labour market.*

to mental health hazards. These include tight deadlines and heavy workloads, violence, harassment, the management of conflictual relationships, job insecurity, a lack of autonomy, etc. The education, hospitality, transport, and healthcare sectors are those most exposed to mental health hazards, with more than 55 % of staff subject to at least one of these factors. Once again, it has been found that sectors characterised by shortages are associated with greater physical and mental health hazards.

Figure 5.8

Temporary contracts are associated with greater recruitment difficulties

(percentage of filled and vacant positions and thousands of positions, [1] 2022)



Source: Statbel (JVS).

1 Sectors with at least 10 000 vacancies in 2022.

6. Productivity, competitiveness, and the sustainability of the Belgian economy

While, from an economic point of view, Belgium is in good shape despite the successive shocks of recent years, it still faces a number of structural challenges. Firstly, Belgium's public debt is high and rising, raising concerns about the sustainability of its public finances. The challenge is to strike a balance between implementing fiscal policies aimed at reducing the deficit and guaranteeing the provision of efficient public services (for more information, see chapter 8). Secondly, like many other European countries, Belgium is also faced with an ageing population. These demographic changes are having an impact on the viability of the pension system, on healthcare costs and on the labour supply. In addition, the labour market, which has been under pressure in recent years due to labour shortages, remains relatively rigid, with little professional and geographical mobility. Moreover, the participation rate remains low compared to other European countries (for more information, see chapter 5). Finally, productivity growth and the competitiveness of Belgian businesses are two additional key challenges, discussed in more detail in this chapter, which have a significant influence on GDP growth.

Economic growth, as measured by traditional performance indicators (e.g. competitiveness, productivity, employment, etc.), is, by itself, insufficient to guarantee prosperity. It must also be inclusive and sustainable. Economic development must be accompanied by an equitable distribution of wealth across the population, reducing the risk of poverty and income inequalities, if it is to be inclusive : equal access to education and employment also contribute to this. This chapter thus features a box on indicators of sustainable development. The final section describes Belgium's progress towards the climate transition, *the* major challenge of the coming decades.

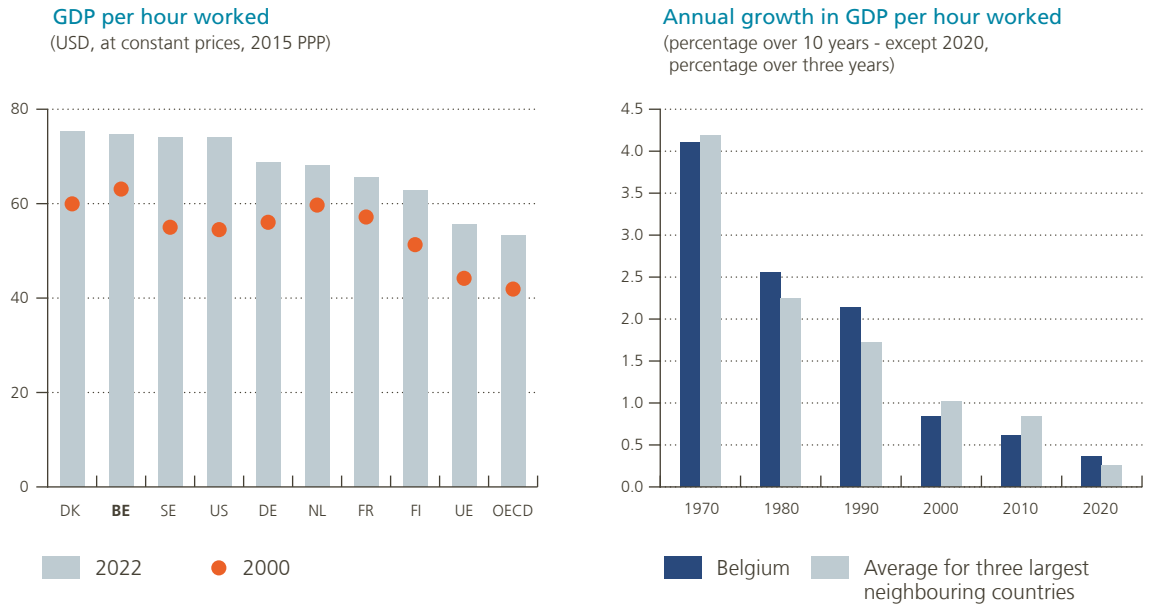
6.1 What levers can be used to revive productivity growth ?

A number of challenges need to be met in order to return to high productivity growth

Belgium is one of the most productive countries in the world, but productivity growth is slowing. Belgium boasts a commendable economic position on a number of fronts. Its population is characterised by high levels of education and skills, while its businesses maintain a competitive edge, particularly in terms of innovation. The economy has a considerable level of capital intensity, and the country is an attractive destination for many multinationals. All of these factors contribute to making Belgium one of the world's most productive economies, which has been the case for several years. However, while, for example, apparent labour productivity, measured as the level of GDP produced per hour worked, is high, its growth has seen an underlying decline since the 1970s, and this slowdown has intensified over the last decade. Although productivity growth reached 4 % in the 1970s, it fell to 2.5 % in the 1980s and to almost 2 % in the 1990s, before dropping below 1 % in the 2000s. While this slowdown was common to (almost) all advanced economies, it was particularly pronounced in Belgium. It is important to emphasise that productivity growth has followed a specific

Figure 6.1

Belgium has high productivity, but it is growing less quickly than elsewhere



Sources : Eurostat, OECD.

trajectory in recent years, largely influenced by the impact of the coronavirus crisis. On average over the period 2020-2022, GDP per hour worked increased by 0.4 % in Belgium, compared with growth of 0.3 % in neighbouring countries. According to the most recent estimates, growth in GDP per hour worked remained low in 2023, at only 0.3 %.

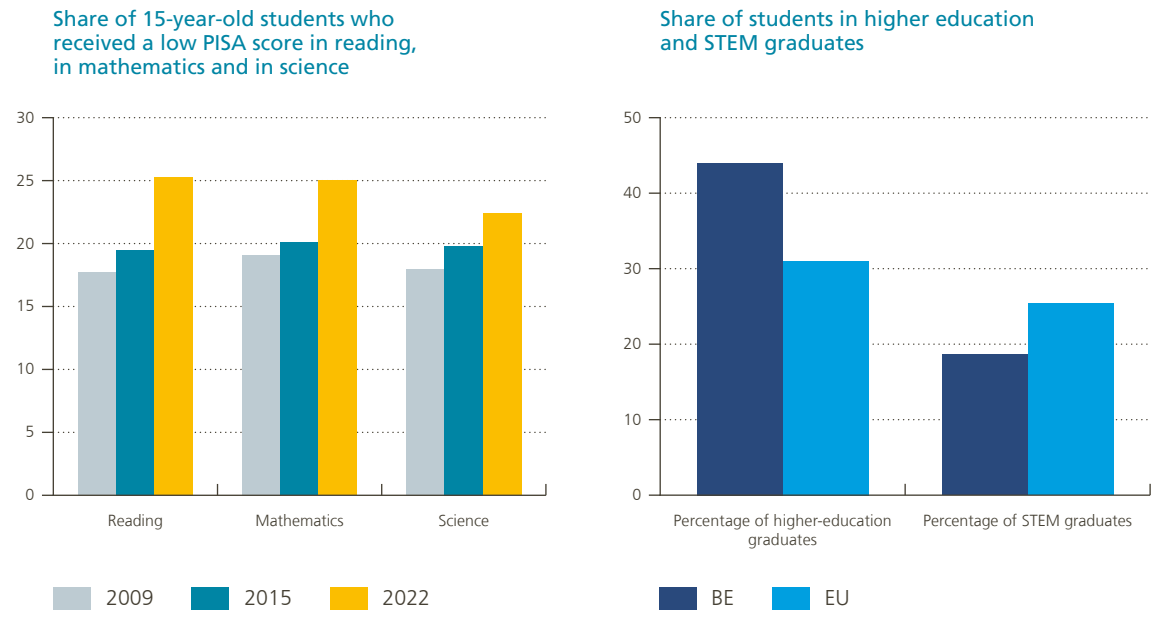
The decelerating trend in productivity growth can be attributed to a number of factors. One major factor is the development of the services sector, with services recording lower average productivity growth than manufacturing. In addition, growth has been concentrated within a small number of firms and has not been dispersed across the market, thereby hampering overall growth. Significant restrictions on competition are also playing a role. According to the OECD's[1] indicator on the country's regulatory framework, in 2018 (the latest update) Belgium had a higher level of regulation (1.69) than the OECD average (1.38). This difference was particularly marked with respect to access to certain professions, but also in relation to the cumbersome procedures in place to obtain business permits and licences. The lack of dynamism in market entry and exit by firms creates a stagnant environment and hinders the optimal reallocation of resources from declining or inefficient firms to growing or technologically advanced ones.

Education and training have a role to play in current and future productivity growth. In the future, digital skills will be increasingly in demand. However, participation in lifelong learning, which provides the opportuntity to refresh or acquire new skills, is insufficient in Belgium, especially amongst the less educated. Moreover, while a healthy percentage of people graduate from higher education in Belgium (44 % in 2022, compared with an EU average of 33 %), too few students opt for STEM (science, technology, engineering and mathematics) subjects. Yet these disciplines will be called upon more and more often by businesses in the coming years. This reality is contributing to the creation of an imbalance between labour supply and demand, thus hampering productivity growth. Regardless, even if desirable from a social inclusion standpoint, the fact that part of the low-skilled population is

1 The indicator is measured on a scale from 0 to 6, where 0 represents the least restrictive system and 6 the most restrictive system.

Figure 6.2

The declining quality of education threatens future productivity growth



Sources: Eurostat, OECD.

entering the labour market could mechanically restrain productivity from advancing steadily. However, in its 2019 report[1] analysing productivity in Belgium, the OECD showed that the trade-off between the employment rate and productivity is not empirically proven, as the composition of the workforce tends towards a higher level of education on average over time. The percentage of people graduating from higher education in Belgium duly rose from 27 % in 2002 to 44 % twenty years later.

The deterioration in the acquisition of basic skills by secondary school pupils could also limit productivity growth. The results of the OECD's PISA survey, which assesses the performance of 15-year-olds in a range of subjects, gives an indication of the quality of the Belgian education system compared with those of other countries. The latest survey, dating from 2022, was inevitably influenced by the consequences of the Covid-19 crisis on the education system (i.e. successive prolonged closures of educational establishments and distance learning). Compared with the previous results from 2018, student performance weakened on average in OECD countries, and Belgium was no exception. This was true for all three disciplines covered by the survey, namely mathematics, science and reading. It was also true for all three of the country's communities. Despite this decline, the results remain close to the OECD average in terms of level. Nevertheless, if this downward trend continues, it could have a negative impact on the employability of future graduates and on the acquisition of skills essential to the economy.

Artificial intelligence could change the way the economy works

Digital technologies are developing rapidly and can impact productivity. In recent years, new digital technologies have experienced unprecedented growth, revolutionising various aspects of our lives. Innovations such as artificial intelligence (AI) are

1 See OECD (2019), *In-Depth Productivity Review of Belgium*, OECD Publishing, Paris.

reshaping industries and transforming the economic landscape. The coronavirus crisis reinforced this trend, particularly through the widespread use of teleworking. Recent research shows that the acceleration of digitisation is likely to have a positive, albeit limited, impact on productivity growth, with relatively heterogeneous effects depending on the sector and the type of business. The investment required to support the acquisition of digital skills or to provide necessary additional infrastructure is holding back productivity gains.

Artificial intelligence, in particular, is playing an increasingly important role in the economy. Figures show that over 10 % of firms in Belgium are already using AI. This puts Belgium in a relatively good position compared with other European countries. That said, the use of AI is still heavily concentrated amongst the largest firms. While large firms, with 250 or more employees, account for only 1 % of all firms in Belgium, 41 % of them are using AI technologies. For very small firms, with two to nine employees, research shows that barely 4 % use AI.

However, there are a number of obstacles to the development of AI. To improve the spread of AI, it is important to understand the obstacles firms face. According to the Statbel survey on the use of ICT and e-commerce by businesses, a lack of relevant expertise is the main barrier to the adoption of AI technologies. Incompatibility with existing equipment, software or systems, high costs and difficulties linked to the availability or quality of necessary data are also cited by respondents. Legal and ethical aspects, despite their importance, are at the bottom of the list.

Once widely adopted, AI could have a significant impact on business productivity. Regarded as a general purpose technology, like the steam engine or electricity in previous industrial revolutions, AI has the potential to completely reshape the economic landscape and generate major productivity growth.[1] In fact, according to the Federal Planning Bureau,[2] 18.5 % of the most productive firms are currently using AI, compared with just 7.5 % of the least productive. This link between the adoption of AI and firm-level productivity persists even after taking into account firm size, age, the industry in which it operates and the additional investment it makes in information and communication technologies.

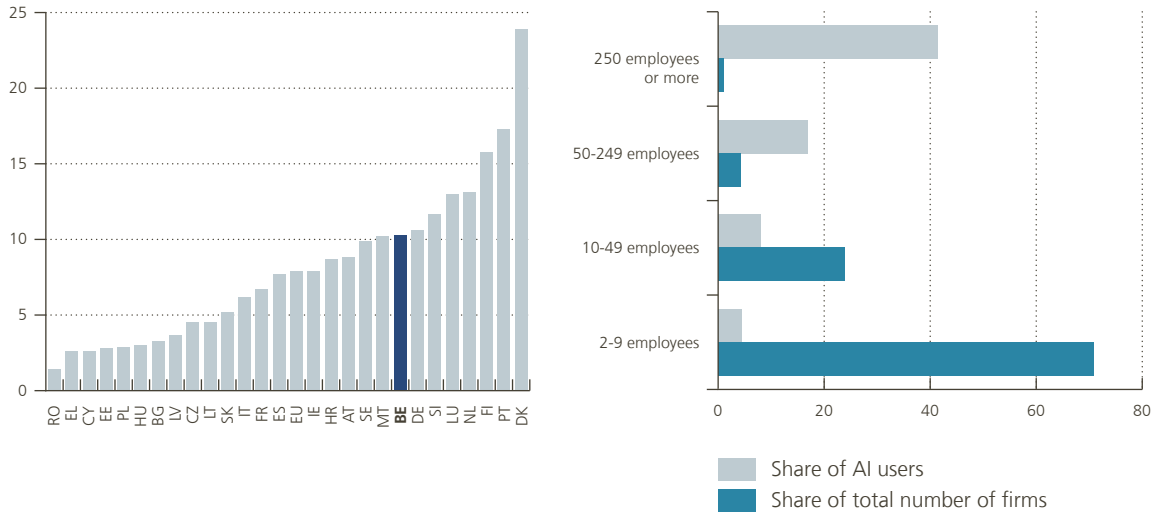
1 For more information, see C. Piton (2023), "The economic consequences of artificial intelligence: an overview", NBB, *Economic Review.*

2 Federal Planning Bureau (2023), *Utilisation de l'intelligence artificielle par les entreprises en Belgique,* article no. 16.

Figure 6.3

The use of artificial intelligence is on the rise amongst firms

(firms using at least one AI technology, percentage, 2021)



Sources: Eurostat, NBB.

However, the deployment of AI is not without risk. One of the main challenges associated with the development of AI is the elimination of certain jobs. As automation becomes more widespread, routine and repetitive tasks are likely to be performed by AI systems. Ethical considerations are another major challenge. The biases inherent in AI algorithms and the lack of transparency in decision-making processes pose ethical dilemmas. The ubiquity of AI also raises issues concerning data confidentiality and security. The collection and analysis of vast quantities of data to feed AI applications pose questions about individuals' right to privacy and the risk of data breaches. The energy consumption induced by the large-scale deployment of artificial intelligence is a further concern, given the ambition to achieve climate neutrality. Finally, the cost of implementing AI technologies could be an obstacle, particularly for small and medium-sized enterprises (SMEs), generating the risk of a digital divide in relation to larger firms.

Teleworking is another important digital development of recent years, one that could have a positive impact on worker productivity if used optimially. The Covid-19 pandemic significantly increased the number of employees regularly working remotely (from 7 % in 2019 to 16.4 % in 2022, with a peak of 26 % in 2021), raising questions as to its potential effects on workers and productivity. Working from home is often seen as positive for employees, as it offers them a better work-life balance and reduces the need to commute. On the other hand, there are also negative aspects, such as limited social interaction, longer working hours, difficulties in disconnecting from work, reduced teamwork, and a weakened sense of belonging to an organisation. A hybrid system combining teleworking and office work allows workers to benefit from the advantages of the former while limiting its disadvantages, thereby improving individual productivity.[1] From the employer's point of view, the possibility of teleworking broadens the talent pool by facilitating recruitment from a wider geographical area. In addition, teleworking can reduce the need for capital investment, particularly in real estate, leading to cost savings for businesses in terms of space and property. If both labour and capital productivity are considered, teleworking could contribute to an increase in total factor productivity, although this benefit may take time to appear.

1 See in particular A. Bergeaud, G. Cette and S. Drapala (2023), "Telework and Productivity Before, During and After the COVID-19 Crisis", *Economics and Statistics,* 539, 73-89 and C. Criscuolo, P. Gal, T. Leidecker, F. Losma and G. Nicoletti (2023), "The Role of Telework for Productivity During and Post COVID-19", *Economics and Statistics,* 539, 51-72.

6.2 More dynamic firms for greater competitiveness

Analysis of firm competitiveness must go beyond labour costs alone

The current economic conditions of rising labour costs are having an impact on the competitiveness of Belgian firms. The high inflation seen in 2021 and 2022, and the automatic indexation of salaries that followed, mean higher labour costs for Belgian firms. As a result, their competitiveness has deteriorated compared with neighbouring countries. However, this disadvantage will gradually be overcome in the medium term, provided (1) the zero margin for real wage increases over the next few years (due to the legislation safeguarding competitiveness) is respected, (2) wage negotiations in neighbouring countries push wages upwards there, and (3) there are no new price shocks (for more information, see chapter 3).

Other, more structural, factors are also affecting Belgium's competitiveness. Analysis of the international positioning of Belgian firms is not limited to changes in labour costs alone. The efficiency of the reallocation of resources through firm turnover also plays a role, as does the degree of innovation within the economic fabric. Belgium's dependence on imported energy products and raw materials places it at a disadvantage. Finally, the overall attractiveness of the country in the eyes of foreign investors will also influence the global competitiveness of firms established in Belgium.

Firm turnover does not allow for a sufficiently efficient reallocation of resources

Entrepreneurial dynamics are less strong in Belgium than in other European countries. According to Eurostat data for 2020 (the latest year available), the rate of business creation, at 6.9 % of total active businesses, is not only lower than the European average (8.9 %), but also lower than that of comparable countries (with the exception of Sweden). In contrast, the rate of business destruction is relatively low, at 3.2 %, compared with an EU average of 7.2 %. The survival rate of businesses after five years is over 60 %, compared with 47 % on average in the EU. While this could be a sign that businesses are more robust, it also means that the market is less dynamic and that resource reallocation may not be sufficiently efficient.

Several factors explain this lack of dynamism among businesses. These include a certain over-protection of established businesses and administratively burdensome liquidation procedures, which are likely to slow down not only the exit but also the entry of the most innovative and therefore the riskiest entrepreneurial projects. The insolvency framework, as assessed by the OECD, illustrates this phenomenon by taking into account personnel costs in the event of bankruptcy, the lack of prevention and monitoring, and the obstacles to restructuring. Although the country's insolvency framework has improved over the years, Belgium remains the second most complex and costly country in this regard. The lack of incentives to establish a business is also due to current legislation and regulations. According to the World Bank's "Ease of doing business" indicator, which takes into account the regulatory framework of the 190 countries surveyed, Belgium ranks 46th, well behind Denmark (3rd), Sweden (10th), Finland (20th) and Germany (22nd). Although lower down the ranking, France (32nd) and the Netherlands (42nd) are nevertheless more favourable to entrepreneurship than Belgium.

The aid provided to businesses during the coronavirus crisis to keep them afloat did not lead to further zombification of the economy. During the Covid-19 crisis, a large amount of financial support was granted to businesses due to successive lockdowns and measures taken to slow the spread of the virus. According to data gathered by Statbel, this support led to a significant reduction in the number of business bankruptcies in 2020 (–32 %) and 2021 (–9 %). The number of bankruptcies rose again in 2022 (+42 %) and in 2023 (+11 %), but remained at a level similar to that seen before the crisis, signalling that there was not a backlog of delayed bankruptcies. This raises the question of whether there is a growing risk of business zombification. However, the data show that the share of zombie businesses has been falling steadily since 2011, as has their share of total employment.

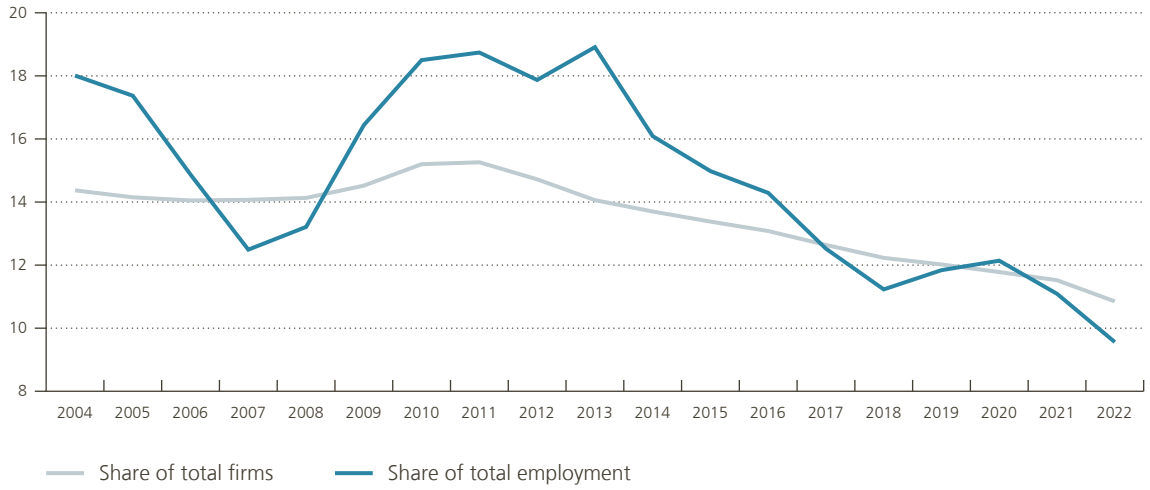
Entrepreneurial dynamics vary by sector. The rate of business creation in Belgium ranges from 3.9 % in the real estate sector to 8.9 % in the information and communication sector. This rate is lower than those observed in neighbouring countries for most sectors, with the exception of construction and hospitality. The differences between sectors are less pronounced for business failures, where the rate varies between 1.8 % in the real estate sector and 5.3 % in the hospitality sector. It should also be noted that the rate of business destruction is systematically lower than in Belgium's three main neighbouring countries, for all sectors analysed.

Labour shortages and the mismatch between labour supply and demand are weighing on business development. According to a survey of Belgian businesses conducted by the World Bank in 2020, 41 % cited a lack of suitably qualified labour as a major obstacle to their development (see chapter 5 for more information on labour shortages). Indeed, for many years now, firms have been facing labour shortages, with insufficient numbers of graduates in the most in-demand fields, particularly STEM subjects. Yet these skills are in high demand as they are needed for the digital and environmental transformations of the economy. The other obstacles cited, to a lesser degree, were tax rates (18 %), labour market regulations (11 %), informal sector practices (6 %), access to finance (5 %) and political instability (4 %). This could explain why the share of high-growth firms, as measured by Eurostat, is lower

Figure 6.4

Zombie firms [1] are structurally in decline

(percentage, non-financial corporations)



Source : NBB.

1 A company is considered a zombie if it has been active on the market for ten years or more and if, for three consecutive years, its profits have been lower than its financial costs. The company only leaves zombie status once its profits have exceeded its financial costs for at least two consecutive years.

Table 6.1

In almost all sectors, business creation and destruction rates are lower than in neighbouring countries

(average over the period 2009-2020)

	Business creation rate				Business destruction rate			
	BE	DE	FR	NL	BE	DE	FR	NL
Industry	4.7	5.7	8.5	7.7	2.7	6.2	4.4	5.4
Construction	7.1	6.9	10.5	9.2	3.1	7.5	5.8	5.9
Trade	5.3	7.0	10.1	10.2	3.5	8.7	6.0	8.3
Transport	6.6	7.7	14.3	11.1	3.8	9.5	5.7	7.6
Hospitality	8.5	8.5	8.5	9.7	5.3	9.8	5.8	7.0
Information and communication	8.9	10.4	14.7	11.8	3.2	11.1	6.1	7.2
Real estate	3.9	8.3	8.0	7.8	1.8	7.3	4.2	7.3
Professional, technical and scientific activities	6.9	8.4	13.7	11.5	2.8	9.8	5.7	6.7
Administrative and support services	7.7	10.8	13.5	13.0	3.2	10.2	5.7	8.2
Total [1]	**6.4**	**7.8**	**11.0**	**10.4**	**3.2**	**8.7**	**5.6**	**7.1**

Source: Eurostat.

1 All sectors falling under NACE codes B to N, with the exception of the financial sectors.

in Belgium (6.9 %) than elsewhere in the European Union (9.4 % on average). It is also worth mentioning the obstacles that only a small proportion of respondents considered to be of major concern. These were customs and trade regulations (2.2 %), electricity costs (1.9 %), licences and permits (1.7 %), access to land (0.7 %), corruption (0.7 %), the courts (0.6 %) and crime (0.4 %).

Belgium remains a leader in innovation, which fosters competitiveness

Innovation plays a crucial role in wealth creation and can therefore have a positive impact on productivity growth. Like the Nordic countries and the Netherlands, Belgium is a leader in innovation. The innovative capacity of the Belgian economy is one of its major strengths, and its performance, as summarised in the European Commission's Innovation Scoreboard, is growing faster than the European average. Its strengths include co-publications between the public and private sectors, collaboration between innovative SMEs and other entities, the number of foreign doctoral students, international scientific co-publications and government support for business R&D. However, Belgium also has shortcomings, including a relatively low number of design applications, limited development of environmental technologies, limited exports of high- and medium-tech goods, less lifelong learning, and the lowest level of non-R&D innovation spending.

The diffusion of innovations nevertheless remains limited, which reduces the productivity gains generated by innovations for the economy as a whole. Despite Belgium's generally positive performance in terms of innovation, the latter remains concentrated mainly amongst large firms (which represent barely 5 % of the total number of firms) and within certain sectors, in particular the pharmaceutical sector. Firms at the cutting edge of technology continue to innovate and record significant productivity gains, while those lagging behind invest little in R&D, managing at best to prevent their disadvantage from worsening over time. Thus, the challenge lies less in stepping up innovation efforts than in encouraging more firms to innovate.

The current context of high prices for energy and raw materials may weaken the competitiveness of Belgian firms

After a turbulent year on the European energy markets, energy prices have fallen sharply, but remain higher than before the crisis. The effects of Russia's invasion of Ukraine affected the entire European energy supply. The war quickly necessitated a complete reconfiguration of gas supplies to the EU in favour of purchases of liquefied natural gas (LNG) on the spot market, resulting in an unprecedented rise in the price of gas in a tight market. Electricity prices moved in parallel, given the dominant effect of gas prices on the setting of electricity prices. In 2023, the gas market gradually rebalanced at EU level, as a result of a significant reduction in demand, energy-saving measures and the gradual relaxing of gas supply constraints (e.g. the increased availability of regasification terminals in the EU). However, the new dependence on LNG means that the EU is more vulnerable to movements on the global gas market given that LNG, due to its flexible nature, can be shipped to the highest bidder. This leads to increased price volatility, as markets remain alert to any potential supply disruption. Furthermore, as long as the global LNG market remains tight, pending the commissioning of new liquefaction capacity in 2025-2026, European prices are unlikely to return to pre-crisis levels.

As a result, the price competitiveness of internationally active Belgian industrial firms has deteriorated significantly in recent years. Above all, industrial producers of globally marketed basic products, for which product differentiation is limited, have seen their price competitiveness particularly exposed to the rise in prices paid in Europe compared with those paid in other regions of the world, particularly the United States. American manufacturers have access to production from unconventional gas (and oil) fields, the exploitation of which accelerated in the 2000s. This has made the country independent of international supplies, limiting the impact on the competitiveness of US firms.

The competitiveness of Belgian firms, especially those that are electricity-intensive, also deteriorated compared with neighbouring countries. At 1 January 2023, the energy cost component was significantly cheaper for German and French firms. Since the beginning of 2023, German firms have

benefited from a capping mechanism for energy costs, while the price paid by French manufacturers is an average of the market price and an advantageous tariff reflecting the historically lower cost of French nuclear electricity. The loss of competitiveness is even clearer when it comes to electricity-intensive firms. In neighbouring countries, these firms benefit from exemptions on surcharges and network costs (up to 90 % of transmission costs), which do not apply in Belgium. For non-electricity-intensive firms, these exemptions are fewer in number and the differences are narrower. The price of natural gas paid by industrial consumers is rising in all countries. The differences between countries are smaller than for electricity, due to the relatively low tax rates on gas and the absence of reductions of network costs. Although natural gas prices are more competitive in Belgium than in neighbouring countries, this advantage is being eroded.

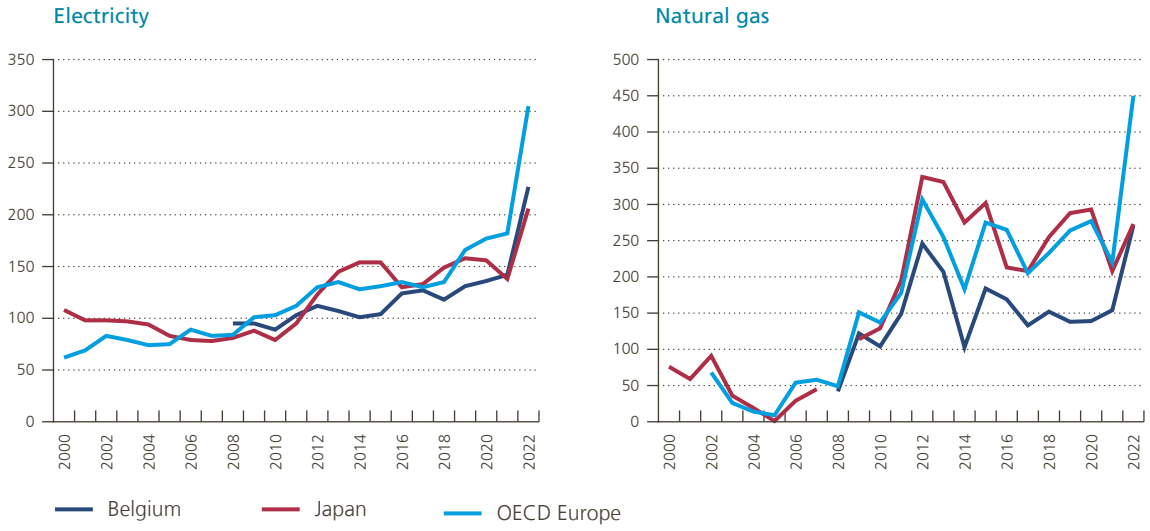
At the aggregate level, Belgium is also more dependent on imports of energy and raw materials. According to Eurostat data, the country's energy import dependency rate was 71 % in 2021, compared with 63 % in Germany, 58 % in the Netherlands and 44 % in France. This means that the most energy-intensive sectors are more vulnerable to a general rise in prices. The gap with neighbouring countries is even more marked

Figure 6.5

Energy costs weigh on price competitiveness

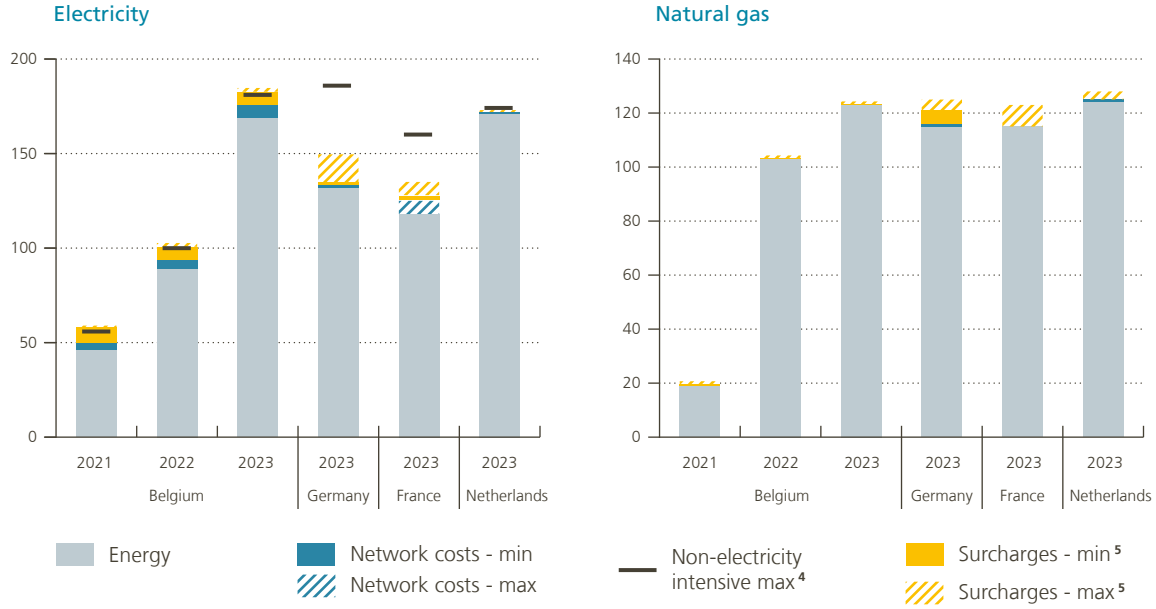
Price competitiveness is deteriorating in Belgium compared with the US...

(difference between unit values of electricity and gas sales to industry [1] in Belgium, in Europe and in Japan compared with the US [2], percentage)



...but also in relation to manufacturers in neighbouring countries

(price paid by a large industrial consumer [3], €/MWh)



Source: Based on data from the IEA Energy Prices and Taxes Statistics (database), all rights reserved, as processed by the NBB. FORBEG (2023), "A European comparison of electricity and natural gas prices for residential, small professional and large industrial consumers".

1 Final price paid by manufacturers, including taxes, transport/distribution costs and intermediary margins.

2 Differences calculated on the basis of unit values expressed in terms of purchasing power parity.

3 Energy prices in force in January of the year in question. Electricity consumption of 500 GWh/year with connection to the transmission grid and gas consumption of 2 500 GWh/year.

4 Flanders only.

5 Includes taxes and levies linked to green certificates and cogeneration systems (for electricity) as well as those linked to public service obligations.

for imports of materials,[1] where the rate is 73 %, compared with 40 % in Germany and 35 % in France. In the Netherlands, the rate is no less than 82 %. More specifically, the large quantities of critical raw materials (copper, cobalt, nickel and lithium, among others) that will be needed in the future for the climate and digital transitions are exacerbating Belgium's dependency rate, but also that of the EU in general. Their geographical concentration and predominant control by entities outside the EU pose major challenges.[2]

Belgium remains an attractive country overall

Belgium is making steady progress in global competitiveness rankings. It is encouraging to see our country's continued progress in the IMD (International Institute for Management Development) ranking, which summarises the attractiveness of countries around the world.[3] In 2023, Belgium ranked 13th, just behind the Netherlands and well ahead of Germany (22nd) and France (33rd). Positive developments are evident in all four categories of the overall indicator, namely economic performance, government efficiency, business efficiency and infrastructure. Of particular note is the country's remarkable 5th place position for business efficiency, a significant improvement on last year's 19th place. Considerable progress was also made in the traditionally difficult category of "government effectiveness", where Belgium moved up from 30th place in 2021 to 22nd place. This puts Belgium well ahead of Germany (27th) and France (47th), but still behind the Netherlands (12th). While this rise in the IMD's global rankings is promising for the country's prospects, there are still crucial areas for improvement, such as the lack of STEM graduates and the lack of investment in infrastructure and green and digital technologies.

The country's attractiveness is conducive to significant foreign investment. According to EY's European Investment Monitor, Belgium ranks 9th among those European countries attracting the most foreign direct investment, with 234 projects in 2022. The majority of these are in Flanders (68 %), with fewer in Brussels (20 %) and Wallonia (12 %). Numerous multinational groups are also present in the country: Statbel recorded a figure of approximately 10 700 in 2021, including almost 26 000 Belgian establishments. The presence of multinationals is not negligible, representing 2.6 % of firms and over 30 % of employment.

1 The materials taken into account include biomass (a dependency rate of 62 % in Belgium), crude metal ores (100 %), non-metallic ores (40 %) and fossil energy materials/vectors (100 %). It should be noted that, overall, Belgium and the Netherlands are characterised by a high proportion of re-exports, which could partly explain their higher rates.

2 For more information, see K. Buysse and D. Essers (2023), "Critical raw materials: from dependence to open strategic autonomy", NBB, *Economic Review*.

3 The rankings are based on 336 competitiveness criteria selected from the economic literature and international, national and regional sources, as well as feedback from the business community, government agencies and academic researchers. The criteria are reviewed and updated as new theories, research and data become available and as the global economy evolves.

6.3 The climate transition: the major challenge for the future

Numerous regulations are being introduced to ensure the transition to a greener economy

Climate policy has become an essential part of the EU's economic policy and, therefore, of Belgium's. Since ratifying the Kyoto Protocol in 1997, the EU has gradually set itself more binding emission reduction targets. In 2018, the EU and its Member States committed to achieving total decarbonisation by 2050. However, the complete elimination of emissions appears more difficult to achieve in certain economic sectors. Most experts now consider that the elimination of carbon dioxide has a role to play to compensate residual greenhouse gas (GHG) emissions by 2050. The objective of net-zero emissions has been enshrined in EU law since the adoption of the European Climate Act in 2021. The latter also sets an interim target of a 55 % reduction in GHG emissions by 2030, compared with 1990 levels.

Although not negligible, the overall cost of achieving climate neutrality appears manageable from a macroeconomic point of view. These ambitious climate policy objectives will require a profound overhaul of the Belgian economy. At present, the country's GHG emissions total around 115 million tonnes of CO_2 equivalent per year. A recent analysis by the NBB [1] showed that, overall, in terms of euros per tonne of CO_2 equivalent removed, a carbon price of no more than € 200 per tonne of CO_2 would probably enable most of the economy to be decarbonised. This finding suggests that full decarbonisation could cost less than € 20 billion in total per year, or around 3.5 % of current GDP and 2.5 % of GDP in 2050. However, the analysis shows that the cost of decarbonisation varies substantially from one sector to another. While this estimate is of course also subject to considerable uncertainty, it gives an idea of the (purely theoretical) cost of the transition to climate neutrality. The literature (see, for example, the IMF, [2] McKinsey, [3] and France Stratégie [4]) presents broadly consistent results. Cost-benefit analyses of different options will be essential to guarantee the cost-effectiveness of climate policy instruments, in order to ensure an optimal policy mix. Box 6.1 looks at the reduction of GHG emissions from buildings through the decarbonisation of heating production.

With regard to the objective of reducing emissions by 2030, the EU has adopted a package of climate measures called "Fit for 55". This package describes a number of key actions designed to implement climate policy and enable the decarbonisation of the European and Belgian economies:

- **Strengthening carbon pricing:** The European Union Emissions Trading Scheme (EU ETS) is a carbon emissions cap-and-trade scheme for emitters in the power generation and industrial and domestic aviation sectors. It currently covers around 40 % of EU emissions. Since its launch in 2005, GHG emissions from the sectors to which it applies have fallen by 37.3 %. The EU's

1 Speech by Governor Pierre Wunsch at the conference on "The macroeconomic implications of climate action" organised by the Peterson Institute for International Economics in June 2023. A recording and additional documents are available at https://www.piie.com/events/macroeconomic-implications-climate-action.

2 IMF (2022), *Near-term Macroeconomic Impact of Decarbonization Policies,* World Economic Outlook 2022.

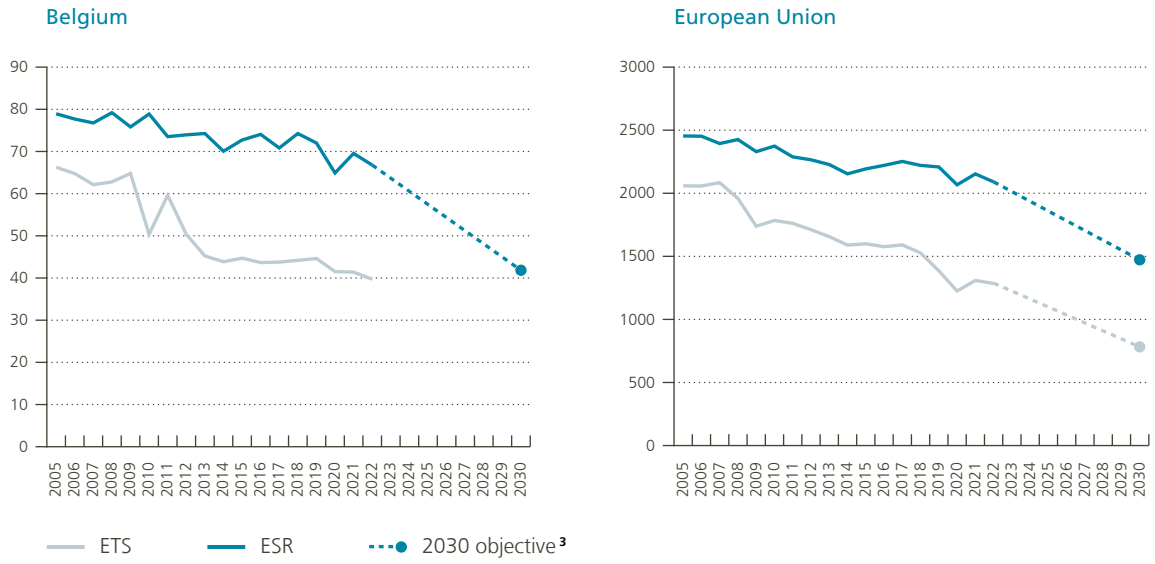
3 McKinsey Sustainability (2023), *Net zero or growth ? How Belgium can have both,* Brussels.

4 J. Pisani-Ferri and S. Mahfouz (2023), *Les incidences économiques de l'action pour le climat,* France Stratégie.

Figure 6.6

GHG emission reduction targets have been further strengthened by the European Climate Law [1]

(GHG emissions in millions of tonnes of CO_2 equivalent) [2]



Sources: EC, EEA, Eurostat.

1 The ETS (Emissions Trading System) regulates emissions from the most energy-intensive firms in the EU. The ESR (Effort Sharing Regulation) regulates all emissions not covered by the ETS. These include emissions from road transport, buildings, waste treatment and agriculture.

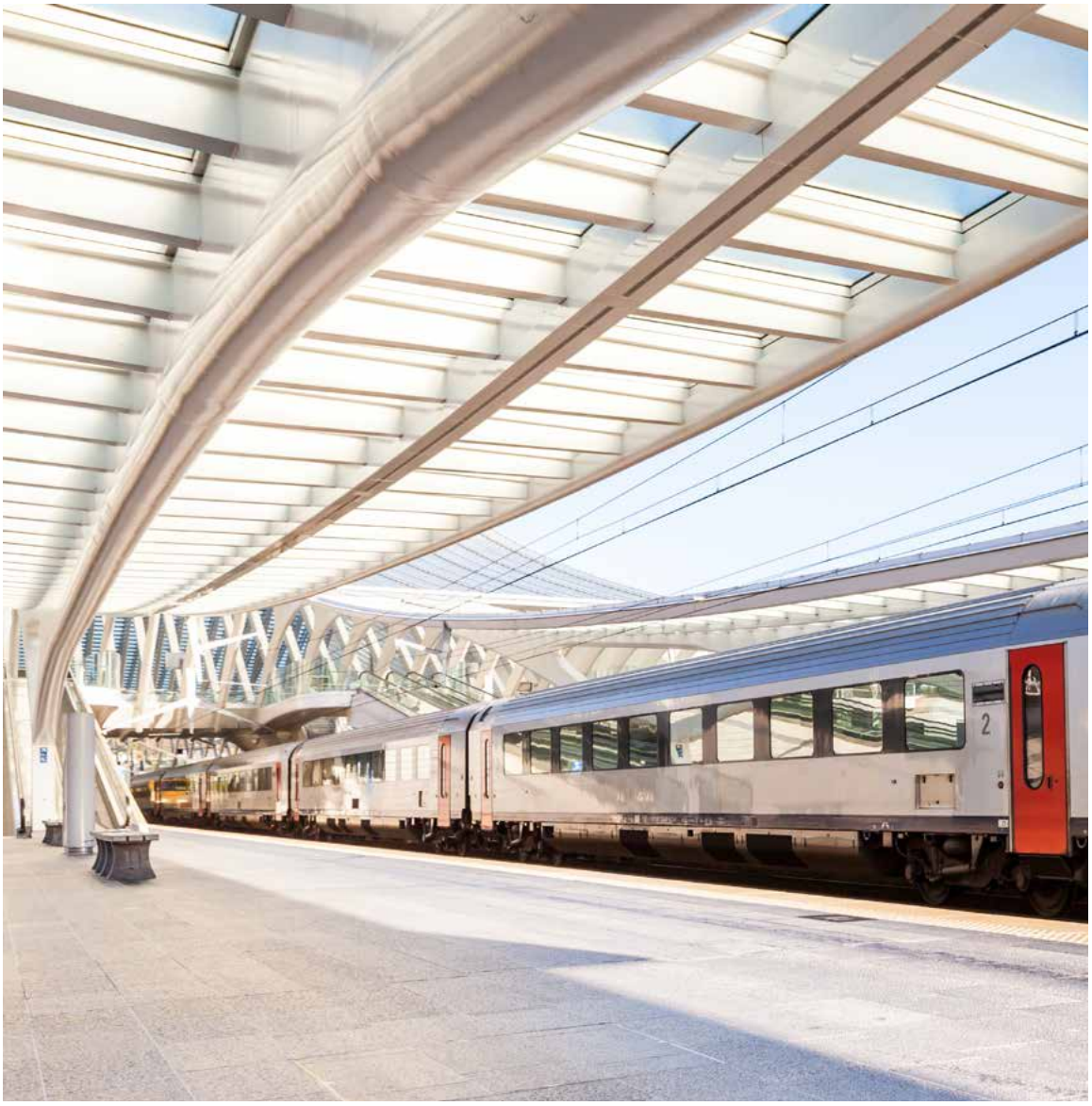
2 The figures presented do not include emissions from the "land use, land-use change and forestry" sector, which are subject to other regulations.

3 Belgium's target is defined on the basis of the distribution between Member States of the efforts required to achieve the EU target in the sectors subject to the ESR.

new climate policy package strengthens the existing system (by phasing out, from 2026, the free allowances that have until now been largely allocated to energy-intensive industries and by integrating emissions from the maritime sector) and extends the scope of carbon pricing to include road transport and buildings in a new trading scheme (EU ETS 2, in addition to the sectors already covered by the existing EU ETS). In total, from 2027, some 75 % of the EU's GHG emissions will be subject to carbon pricing. By 2030, emissions from sectors currently covered by the existing mechanism will have to be 62 % below 2005 levels.

- **Redistributing revenue from carbon pricing to citizens:** By creating the European Social Climate Fund, the EU has committed to redistributing a portion of the revenue from carbon pricing to its citizens and micro-enterprises. Each EU Member State will be able to draw up a plan suggesting a way of distributing its share. The details have yet to be finalised, but redistribution should begin as early as 2026, before the launch of the EU ETS 2. The objective of the European Social Climate Fund is to address the distributional effects of carbon pricing by helping vulnerable households, transport users and micro-enterprises through support measures and investments to stimulate the energy efficiency of buildings, the decarbonisation of heating production and the adoption of zero- or low-emission mobility and transport solutions. Taking account of the uneven effects of climate policy has therefore become a key issue when drawing up climate policies.

- **Overall strengthening of climate policy instruments:** The "Fit for 55" package reflects the increased ambition of Europe's climate objectives by consolidating the range of climate policy instruments available. These also



include national GHG emission reduction targets for sectors not covered by the EU ETS (currently road transport, buildings, small-scale industry, agriculture and waste treatment). For Belgium, the updated target under the Effort Sharing Regulation (ESR) is a 47 % reduction by 2030 compared to 2005 levels. All measures adopted are listed in the national energy and climate plan and are monitored and assessed by the European authorities.

Belgium's federal structure has led to a fragmentation of powers. Coordination difficulties between the various levels of government complicate the implementation of coherent climate policies, especially as these measures and public policies cover a wide range of areas such as mobility, urban planning, taxation, innovation, training or industrial policy. The objective to be achieved at national level entails a shared effort by all entities. The Brussels-Capital Region and the Walloon Region are aiming for a 47 % reduction in emissions, in line with the target set for Belgium. The federal level is committed to taking additional measures to support the regions. However, in view of the measures proposed and taking into account the smaller commitment by Flanders, which is targeting a maximum reduction of 40 %, Belgium will achieve a reduction in its emissions covered by the effort sharing regulation (ESR) of 42.6 %, which represents a cumulative deficit

over the period 2021-2030 of 13.7 million tonnes of CO_2 equivalent at national level. Belgium is committed to keeping this deficit to a minimum and to offsetting it by using the flexibility provided for in the European regulation (e.g. savings, borrowing, trading and the acquisition of emission rights). Initial consultations resulted in an explicit recognition by all entities of the target objective. Agreement has also been reached on a joint financial responsibility mechanism for an entity or entities that, due to a lack of ambition or action, are unable to achieve their targets, thereby putting that of Belgium as a whole at risk. However, the arrangements for effort-sharing between Belgian entities have yet to be defined. In this context, a stable regulatory framework that is consistent across sectors and geographical regions is essential to make the investments needed for the transition.

Tensions between decarbonisation and competitiveness

Another key pillar of the "Fit for 55" package is the carbon border adjustment mechanism (CBAM), a tool to fight carbon leakage and preserve the competitiveness of European industry as the stringency of climate policies increases more rapidly in the EU than in other regions. The CBAM ensures that imports covered by the mechanism are subject to the same carbon price as that imposed on producers within the EU, in the absence of a common global approach. The CBAM entered into force on 1 October 2023 in a transitional phase, meaning it applies only to imports of cement, iron, steel, aluminium, fertilisers, electricity and hydrogen, – goods considered to be the most vulnerable to carbon leakage. During this phase, EU importers of the goods concerned are required to report the volume of their imports and the GHG emissions associated with their production, but they do not yet have to make any financial adjustments or payments. Under the permanent system, which will come into effect in 2026 and is aligned with the gradual phasing out of free ETS allowances for energy-intensive industries, importers will have to purchase and surrender the number of CBAM certificates corresponding to the GHGs linked to the production of the goods concerned. The price of these CBAM certificates will be based on the average weekly auction price of EU ETS emission rights. The CBAM is WTO-compliant and also provides an incentive to strengthen carbon pricing and decarbonisation efforts outside the EU. If importers can prove that a carbon price has already been paid during the production of the imported goods, the corresponding amount can be deducted. However, the CBAM does not protect emissions-intensive European exports, which face competition from less climate-ambitious regions where exporters face a lower carbon price.

Given the necessary speed of the transition and the stringency of the regulations that are to be implemented legally between now and 2050, European industries (and, in particular, producers in energy-intensive sectors) risk seeing their competitiveness weakened. While decarbonisation is a global objective, no other major country or group of countries is as advanced in its climate policies as the EU. Carbon pricing policies aim to increase the cost of using polluting energy sources and industrial inputs, so as to encourage economic actors to choose decarbonised solutions. Major technological progress has made it possible to supply energy with decarbonised electricity at a cost comparable to wholesale fossil fuel prices. Although grid balancing and storage are not included in these costs, it is widely expected that the generation costs of renewable energy will continue to decline sharply. On the other hand, technological advances are still needed to decarbonise certain industrial processes, such as the upstream use of carbon-free hydrogen and its derivatives, or carbon capture and storage. Large-scale access to decarbonised electricity at an affordable price is essential to the deployment of these technologies. Low-carbon solutions still sometimes involve higher costs than their traditional equivalents or are less lucrative. If no other options are available or cost-effective at this stage, production costs are likely to rise considerably. This is particularly true in the short term, given the rising cost of raw materials and the immediate investment required for the transition and to comply with the European regulatory framework. An undesirable consequence could be that firms relocate their production to sites established in jurisdictions that impose less stringent climate regulation on industry. This would clearly be a lose-lose situation for the EU, as it would penalise both value-added creation and employment, and there would be no significant or guaranteed reduction in global emissions, which is the primary policy goal.

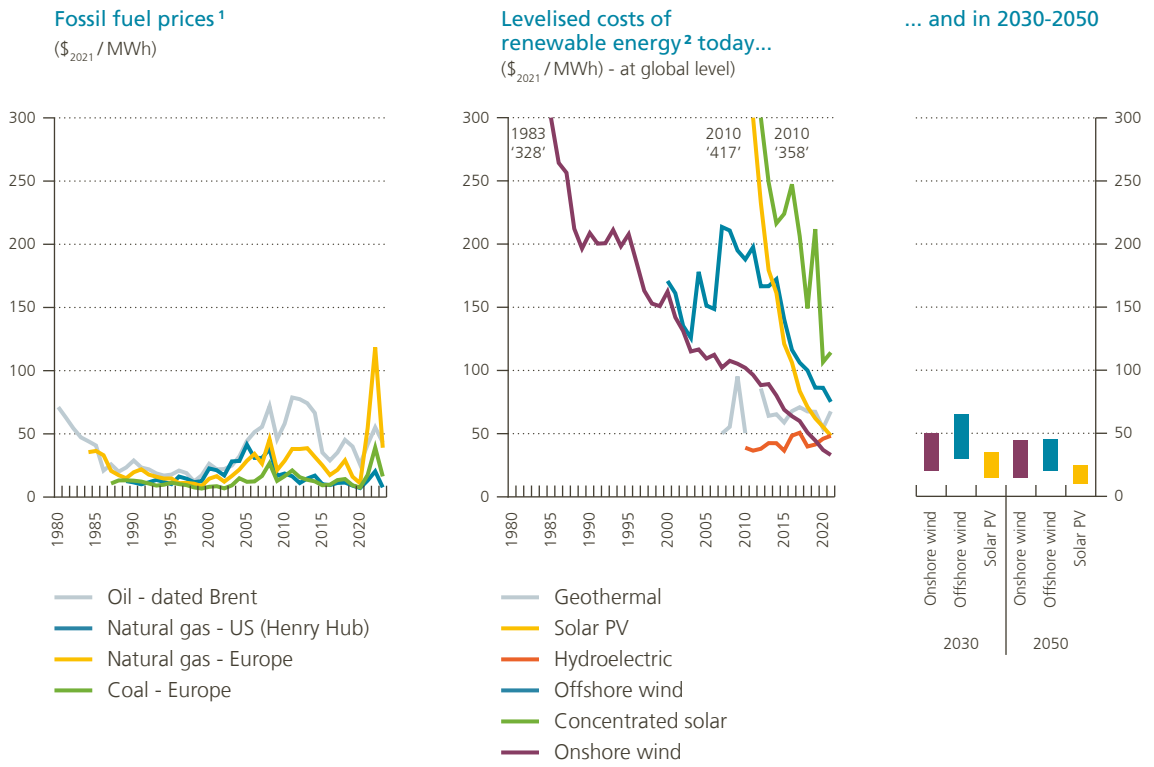
Achieving the objective of carbon neutrality requires further adaptation of Belgium's economic fabric

Until now, the reduction in GHG emissions in Belgium has been achieved in parallel with sustained economic growth. Between 1990 and 2022, GHG emissions fell by 25 %. At the same time, real GDP grew by some 76 %. Both the fall in energy intensity (energy/GDP ratio) and carbon intensity (GHG emissions/energy ratio) contributed to the drop in emissions, with average annual reductions of 1.6 % and 1.1 % respectively, over the period. The decarbonisation of the energy mix has been continuous and can be explained by developments concerning the electricity mix, firstly, through the gradual use of natural gas as a replacement for coal and, secondly, the increase in energy generation from renewables from 2005 onwards. The substitution by natural gas and the use of biofuels have also had industrial applications, helping to reduce emissions from industry. The reduction in energy intensity accelerated from 2000 onwards, reflecting improvements in efficiency in the energy transformation process (i.e. higher power plant output) and in end-use (i.e. household behaviour, more energy-saving and efficient industrial equipment). It also reflects the tertiarization of the economy, as the services sector is less energy intensive.

By mobilising efforts to improve energy efficiency, the authorities are aiming to limit the impact of human activities on the use of resources and related GHG emissions. Increasing energy efficiency goes hand in hand with the electrification of end-use consumption and the substitution of fossil fuels with carbon-free energy sources. Since 2012, efforts to reduce energy consumption in Belgium and at EU level have been on the agenda of the Energy

Figure 6.7

The costs of generating renewable energy are increasingly competitive with fossil fuel prices



Sources: IRENA (2022), *Renewable Power Generation Costs in 2021*, BP (2022), *BP Statistical review of world energy 2022,* LSEG, IEA (2022), *World energy outlook 2022.*

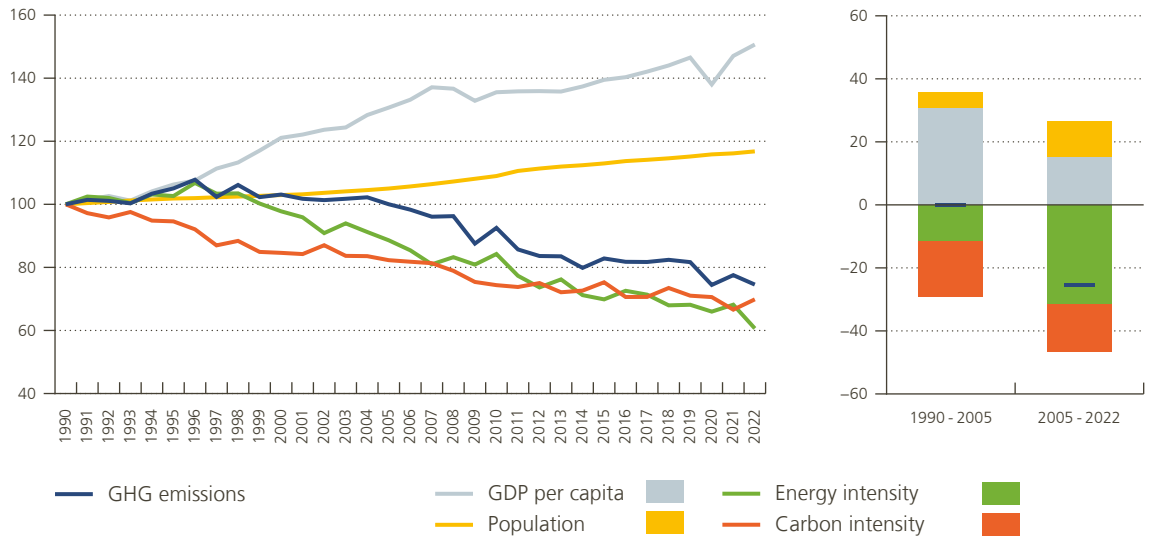
1 Wholesale market prices.

2 The levelised costs of renewable energy only take into account the costs of generating the energy, excluding the costs of grid balancing and seasonal storage.

Figure 6.8

The fall in GHG emissions in Belgium is linked to a reduction in energy intensity and carbon intensity

(change in the index, 1990 = 100 (left-hand graph) and breakdown [1] of cumulative changes in GHG emissions over the periods 1990-2005 and 2005-2022 (right-hand graph))



Sources: EEA, Eurostat.

1 Breakdown of GHG emissions in Belgium according to the Kaya identity: GHG emissions = population x (GDP/population) x (primary energy consumption/GDP) x (GHG emissions/primary energy consumption).

Efficiency Directive. The latter requires specific national measures to promote energy efficiency in various areas. At firm level, the authorities are making use of several levers to encourage businesses to adapt and improve their production processes, including regulation, financial incentives, and the provision of information on energy-efficient products and systems. Obligations in terms of energy audits and energy management systems have been introduced, particularly for large energy consumers. These obligations are enshrined in sectoral energy agreements. Firms commit to reducing their energy consumption and, in return, may benefit from financial support and partial exemption from certain charges relating to their energy bill.

The objective of reducing GHG emissions is a challenge for the manufacturing industry. In Belgium, 41 % of GHG emissions linked to GDP production come from the industrial sector. [1]

1 Sector-specific figures do not take into account emissions from households (e.g. using natural gas for heating or fossil fuels for vehicles), which account for 24 % of Belgium's total emissions.

This sector represents a significant share of the economy, accounting for 14 % of value added and 10 % of jobs (or 513 000 workers). Although manufacturing is also the biggest emitter of GHGs in the EU, its share of the total is much smaller than at domestic level, at 26 %. The Belgian economy is still largely based on the services sector (58 % of value added and 61 % of employment), which (with 8 % of GHG emissions) is less polluting than industry.

While the ecological transition has long-term economic benefits, it also generates short-term costs. Industries that rely heavily on fossil fuels will face increasing costs as regulations and taxes on carbon emissions come into force. Meeting new environmental standards often entails large-scale investment in technology upgrades, pollution control measures and the adoption of more sustainable practices. Switching to cleaner technologies requires significant upfront investment in research, development and implementation. Abrupt or poorly managed environmental transitions can lead to economic disruption.

The ecological transition is also bringing its share of new economic developments and, with them, value added and jobs. Based on the Eurostat definition, the environmental goods and services sector[1] employed 71 000 people on a full-time equivalent basis in 2020. Although this number remains small in relation to the total number of people in employment, it has been rising steadily since 2014 (the first year for which data are available). In terms of value added, the environmental sector contributed 1.7 % of GDP. Although this share is increasing, it is still below the EU average of 2.5 %.

1 The accounts of the environmental goods and services sector (EGSS) provide an analysis of the economic sector engaged in the production of environmental products, which include goods and services designed for environmental protection or resource management. On the one hand, environmental protection products aim to prevent, reduce and eliminate pollution and other forms of environmental degradation. They include measures to restore damaged habitats and ecosystems; electric vehicles, catalysts and filters to reduce pollutant emissions; sewage and waste treatment services; and soundproofing work. On the other hand, products related to resource management aim to protect natural resource reserves from depletion and include elements such as renewable energy production; energy-efficient and passive buildings; seawater desalination; and rainwater harvesting.

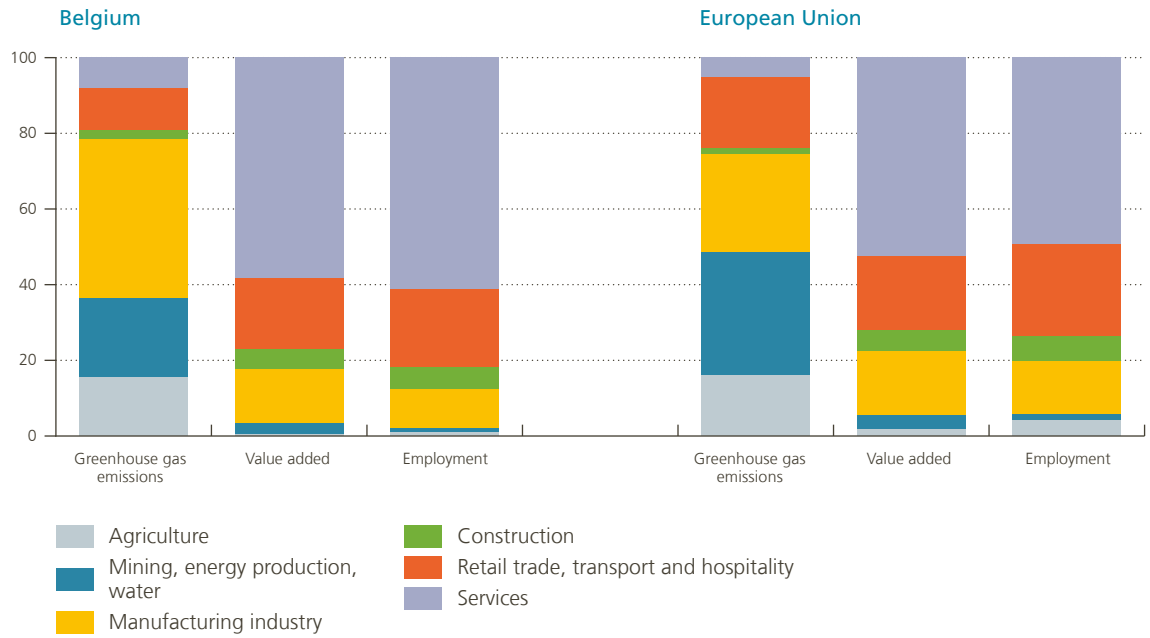
The key role of electrification in decarbonisation

Electrification is an essential lever for decarbonisation, but it is currently being held back by the unfavourable relationship between the price of electricity and that of fossil fuels in Belgium. Decarbonised electricity offers businesses and households the opportunity to reduce their CO_2 emissions by electrifying activities that are major GHG emitters, such as road transport and buildings (see Box 5). Electrification can also improve the cost-effectiveness of the current range of climate and energy policy instruments. However, electrification in Belgium is currently hampered by the high cost of electricity compared with fossil fuels. Although the electrification of buildings does not require parity between electricity and fossil fuel prices, given that heat pumps are around three and a half times more energy efficient than gas boilers, the ratio remains high by international comparison. In Belgium, compared with other European countries, retail electricity prices are the

Figure 6.9

The manufacturing industry, a major GHG emitter, is an important sector in Belgium

(percentage of total, 2022)



Sources: Eurostat, Statbel.

Note: GHG emissions are those emitted during production (excluding household emissions) and are calculated in tonnes of CO_2 equivalent; gross value added is expressed as a percentage of GDP; employment is assessed by taking into account the number of people in work.

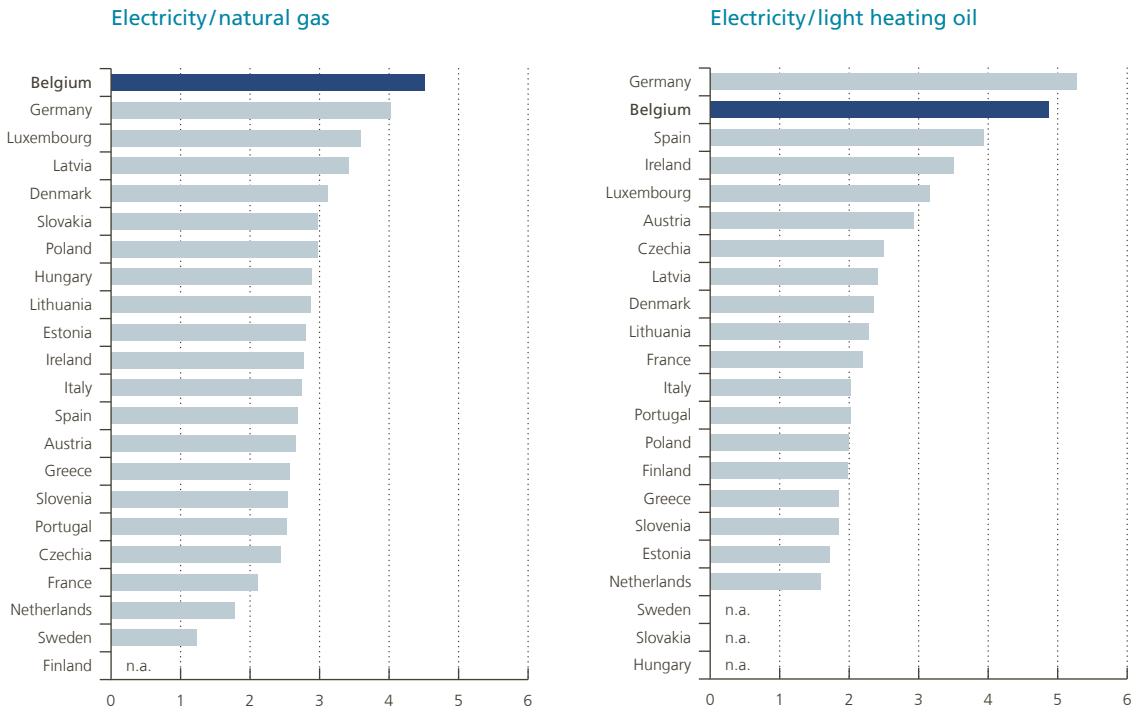
highest when compared with those of gas, and the second highest when compared with those of heating oil, which is slowing down electrification. This problem is also highlighted in recent work by the Federal Public Service for Health, Food Chain Safety and Environment, [1] which suggests that excise duties on electricity should be almost entirely transferred to fossil fuels in order to increase the profitability of heat pumps. On the other hand, the use of electric vehicles has already gained ground in Belgium, partly due to a change in the tax treatment of fossil fuel-powered cars compared with their electric counterparts.

1 FPS Public Health, Food Chain Security and Environment (2023), *The Landscape of Carbon and Energy Pricing and Taxation in Belgium.*

Figure 6.10

The high ratio of prices paid by households for electricity to those paid for natural gas (left) and heating oil (right) is hampering electrification in Belgium

(average 2016-2021)



Source: Based on data from the IEA Energy Prices and Taxes Statistics database. All rights reserved; as processed by the NBB.

BOX 5

The importance of decarbonising residential heating

Decarbonising homes (and other buildings) is an important part of achieving the Belgian and European objective of climate neutrality by 2050. In 2021, residential buildings accounted for 21 % of energy consumption and 15 % of direct greenhouse gas (GHG) emissions in Belgium, with 75 % of this residential consumption attributable to heating. GHG emissions from heating are higher in Belgium than in most other European countries with a similar climate, which can be explained by the fact that Belgian homes are, on average, larger and older. Although this box focuses on residential buildings, the same considerations apply to non-residential and public buildings.

The complete decarbonisation of residential heating will require the deployment of carbon-free heating supply technologies and a degree of reduction in heating demand. At present, the installation of heat pumps, whether in individual buildings or in heating networks, combined with decarbonised electricity production, seems set to become the cornerstone of efforts to reduce emissions from residential heating, along with, to a lesser extent, other technologies such as solar thermal systems, low-carbon fuels and waste heat recovery. Heat pumps produce heat without releasing direct emissions and, what's more, boost the energy efficiency of heating, thereby reducing total energy demand. In particular, a heat pump returns around 350 % of its energy input (electricity) in the form of heat, compared with only around 95 % for a new gas boiler. However, despite these efficiency gains, demand for electricity is set to rise considerably, especially during cold spells. In order to stem this (costly) increase, heating demand will have to be moderated to some extent through solutions aimed at reducing heat loss in buildings, such as insulating roofs, walls and floors, and replacing windows and doors. In addition, heating demand could also be curbed by reducing the average living space per inhabitant and by behavioural changes, such as lowering heating set points and heating certain parts of homes less.

Current policies aimed at decarbonising housing in Belgium are strongly focused on reducing heating demand through measures targeting energy efficiency. The three regions have set themselves the target of moving towards an energy-efficient housing stock by 2050, with an average EPC score of 100kWh/m² for the Flemish and Brussels-Capital Regions and 85kWh/m² for the Walloon Region. Only the Walloon Region currently specifies that residual energy requirements must be carbon-free. To achieve this objective, minimum energy performance standards play an important role. Firstly, the Flemish and Walloon Regions have announced increasingly stringent standards for new homeowners, which will have to be achieved within five years of the purchase of the property. The initial obligation to achieve at least an EPC label D, which is already in force for homes sold from January 2023 in the Flemish Region and will be introduced in 2026 in the Walloon Region, will be progressively tightened to an EPC label A (corresponding to an EPC score of 100kWh/m² in Flanders and 85kWh/m² in Wallonia) from 2040-2045. The three regions have also announced increasingly stringent minimum energy performance standards for all dwellings, imposing a maximum EPC score of 300kWh/m² in Flanders, 170kWh/m² in Wallonia and 150kWh/m² in the Brussels-Capital Region from 2040-2050.

This in-depth energy renovation of the Belgian housing stock, within a limited timeframe, will require huge investment and will come up against major obstacles on both the demand and supply sides. The vast majority of existing homes will need to undergo energy

▶

renovations by 2050 in order to meet regional energy-efficiency targets, which works out to an average of 185 000 homes per year requiring major renovation over the next 27 years. Based on estimates from previous studies[1] and taking into account the rise in the cost of building materials and labour in recent years, the investment required to achieve an energy efficient dwelling stock by 2050 is estimated to be approximately € 350 billion for Belgium as a whole, or an average of € 65 000 per home. This figure could be even higher if additional costs are included, such as interior finishing costs, housing-specific costs, government administrative costs, and costs related to the management of waste streams (e.g. asbestos removal). In addition, energy-efficiency renovations are labour-intensive and could be significantly hampered by labour shortages in the construction sector, which could also lead to upward pressure on prices and increased renovation costs. On the demand side, energy-efficiency renovations are often not considered a priority by households. What's more, many households are unable to finance deep renovations (for example as they may already have an existing loan to service). Incentive mismatches may also exist between tenants and homeowners, as well as between homeowners in apartment buildings.

Changing the policy mix by placing greater emphasis on the decarbonisation of heating would increase the cost-effectiveness and speed of the climate transition. Recent research[2] has shown that a reduced emphasis on energy efficiency and a greater focus on the decarbonisation

1 M. Ryckewaert, K. Van den Houte, L. Vanderstraeten and J. Leysen (2019), *"Inschatting van de renovatiekosten om het Vlaamse woningpatrimonium aan te passen aan de woningkwaliteits- energetische vereisten"*, Steunpunt Wonen; SERV (2019) *"Klimaat- en energiebeleid 2019-2024 van alfa tot omega"*; Energyville (2022), *"De snelste weg naar A: optimale renovatiemaatregelen in het kader van de Vlaamse 2050 doelstellingen voor woningen"*; Service Public de Wallonie (2020) *"Stratégie wallonne de rénovation énergétique à long terme du bâtiment"*; Région de Bruxelles-Capitale (2019) *"Energie-Klimaatplan 2030"*.

2 A. Levesque, S. Osorio, S. Herkel and M. Pahle (2023), *"Rethinking the role of efficiency for the decarbonization of buildings is essential"*, Joule 7 (6); N. Eyre, T. Fawcett, M. Topouzi, G. Killip, T. Oreszczyn, K. Jenkinson and K. Rosenow (2023), *"Fabric first: is it still the right approach?"*, Buildings & Cities.

of heating would provide a more cost-effective pathway for the decarbonisation of buildings. It would also reduce the additional labour capacity required in the construction sector, which is a major barrier to the decarbonisation of buildings. Adjusting the policy mix may require a recalibration of existing policy instruments. For example, existing policy objectives linked to energy performance certificates are not yet aligned with decarbonisation objectives. In fact, a building with an EPC label A is not necessarily emission-free, while a zero-emission building is not automatically awarded an EPC label A. Adjusting instruments to focus more on climate neutrality would avoid the need to impose additional and unnecessary burdens on buildings that, in practice, already meet ambitions in terms of decarbonisation.[1]

Improving the energy efficiency of homes will continue to have an important role to play. Firstly, it facilitates the decarbonisation of heating, by enabling low-temperature heating and reducing overall energy demand and, above all, peak heating demand. This helps to reduce the investment in network infrastructure required for the electrification of heating. The cost-effectiveness of reducing heating demand is generally higher for energy-intensive homes where low-temperature heating is not yet possible. Secondly, investments to improve energy efficiency can have a positive return on investment for householders, by lowering energy bills, enabling the installation of smaller (and cheaper) heat pumps, and increasing property values. Furthermore, investing in energy efficiency can have other societal benefits, by increasing the security of energy supplies, as well as positive effects on health and thermal comfort thanks to a better indoor climate. This could justify placing greater emphasis on energy efficiency compared with cost-optimisation based uniquely on decarbonisation considerations. Given that calculating the optimal balance between energy efficiency and the decarbonisation of heating is very complex and that this optimal balance also depends on each specific building, Rosenow and Hamels (2023)[2] recommend policy instruments that leave multiple options open for decarbonising heating and that are not overly prescriptive. Finally, to be optimal, policies should take into account not only operational emissions but also emissions during the life cycle of buildings and renovations, including those resulting from the production, installation and disposal of building materials.

In any case, clear communication to the general public about long-term policy objectives should constitute a sizeable lever with a view to the decarbonisation of residential property. Firstly, it would enable the construction industry to better anticipate future demand for energy efficiency retrofits and investments to decarbonise heating, ensure sufficient and timely recruitment and retraining of labour, and invest in productivity-enhancing innovations. Secondly, it could increase the price discount of energy-intensive and high-GHG-emitting homes, with the benefit that buyers of such homes could spend more of their budget on energy-efficient and decarbonising renovations. Finally, it would spur and encourage households to improve the energy efficiency of their homes and reduce their GHG emissions from heating.

1 See also SERV (2023), *"Verzameldecreet V – puntsgewijze interventies missen kader en perspectief"*; Minaraad (2023), "Actualisering VEKP – transitiemaatregelen sector gebouwen", Advies Minaraad.

2 J. Rosenow and S. Hamels (2023), *"Where to meet on heat? A conceptual framework for optimising demand reduction and decarbonised heat supply"*, Energy Research & Social Science 104.

The technologies required for a large-scale deployment of renewable energy sources are in place, and ambitious targets have been set, but achieving them will require a necessary reinforcement of networks. Both electricity transmission and distribution networks will need to be upgraded and fitted with new equipment. Generation from renewables requires greater flexibility in the electricity system, be it through reduced demand, active consumer participation or the use of storage solutions. It also makes it possible to limit the need for generation and transmission capacity. Mobilising this potential for flexibility relies to a large extent on the distribution networks. The availability of suitable equipment capable of handling decentralised energy flows (through automation and the installation of digital meters and IT platforms) is vital in this respect. These enable the introduction of targeted pricing to encourage consumers to use the electricity system more efficiently. Since the introduction of the "capacity tariff" on 1 January 2023, Flemish consumers have been billed partly according to their peak consumption, encouraging them to shift the times at which they consume electricity and/or, for those with photovoltaic panels, to make use of the electricity they themselves have generated, to the benefit of the grid. A similar "incentive tariff", comprising four bands (which better correspond to peak and off-peak consumption periods), has been defined in the Walloon regulator's new tariff methodology for the 2025-2029 distribution tariffs. Its effectiveness will also depend on the accelerated deployment of smart meters (only 10 % of connections in Wallonia are equipped with them, compared with 80 % in the Flemish Region) and the presence of smart equipment capable of delivering this flexibility to consumers.

Adapting networks to the transition will come at a cost. The investment plan of the distribution network operator for Flanders, Fluvius, provides for an investment budget for the period 2023-2032 of € 4 billion over and above its normal network renewal budget. For Wallonia, the distribution network operator, Ores, is putting forward a € 4 billion industrial plan for the period 2022-2038, while Resa estimates its plan at € 820 million by 2050. On the transmission side, Elia has revised its 2024-2028 investment plan from € 6.4 to € 9.4 billion due to the increased costs of some major projects (and the inclusion of an additional year of capital expenditure). It is up to regulators to ensure that tariffs for the use of these monopolistic infrastructures cover costs and provide a fair return on invested capital, while preserving both the purchasing power of consumers and the competitiveness of businesses.

While specific measures have been put in place by the European authorities to speed up permit procedures for renewable energy projects, public opposition to transport infrastructure is also having an impact. This is the case with the Ventilus and Boucles du Hainaut high-voltage power line projects required to integrate future offshore wind generation and reinforce the onshore grid. The tensions and opposition that have arisen attest to the difficulty of reflecting subjective assessments of the impact on local residents in financial compensation. Care must therefore be taken to ensure that compensation arrangements are transparent and non-discriminatory. According to Elia, a two-year delay in the construction of these network infrastructures will result in the need for additional production capacity (of 800MW).

BOX 6

Sustainable development indicators

The Act of 14 March 2014 mandated the Federal Planning Bureau (FPB) to develop a set of indicators to measure quality of life, human development, social progress and economic sustainability. In response to this request, a "Sustainable development indicators" report is published each year. In accordance with the law, a summary is provided in the Bank's annual report. The data underlying the FPB report are available at www.indicators.be in the form of 78 indicators providing information on the three dimensions of sustainable development, structured around the 17 Sustainable Development Goals (SDGs) defined by the United Nations (UN).

Assessing progress towards the targets for individual indicators

As part of its task to evaluate federal policy on sustainable development, the FPB publishes a report on the progress made towards achieving the target under each indicator. The evaluation is based on 51 indicators – three for each SDG – evaluated over the period 2000-2022. How progress is assessed differs: where an objective is quantified and accompanied by a (target) deadline, the report indicates whether maintaining the current rate of progress would allow the target, set on the basis of various international programmes or commitments to which Belgium has subscribed, to be achieved. Where there is no target date for the indicator, the assessment specifies whether the progress made since 2000 is moving in the right direction to meet the objective.

Based on data available at the end of October 2023, no clear trend emerges: progress was assessed to be unfavourable or indeterminate for 35 out of 51 indicators. For these indicators, additional efforts will be required to achieve the SDGs. On the environmental front, progress was favourable against 8 indicators (out of a total of 16). Conversely, progress against 17 indicators (out of 23) relating to the social component of sustainable development was rather unfavourable or indeterminate. For the economic (7 indicators) and governance (5 indicators) components, progress was deemed favourable against only one indicator. An assessment was also made of progress towards each of the SDGs, identifying those for which the three indicators point in the same direction. SDG 2 (Zero hunger) and SDG 6 (Clean water and sanitation) were given the highest scores. With unfavourable assessments of progress against their three respective indicators, the situation is worrying for SDGs 4 (Quality education) and 17 (Partnership for achieving the goals) as well as for SDG 5 (Gender equality), for which progress was assessed as unfavourable against two indicators and indeterminate for the third.

International position

The report also provides an insight into how Belgium compares with other EU countries and the regional average, gauging its international position on the basis of 59 available indicators. The assessment is done for the most recent year for which data are available, without taking into account the change in this position over time or explaining any differences between countries (i.e. a static assessment). The results are mixed when compared with EU countries: Belgium is in the best performing group for 23 indicators (gender equality, R&D, development aid); for 22 indicators it is in the average performing group (education, pollution); while for 14 indicators it is among the worst performing countries (water quality, energy and climate, biodiversity). Belgium scored above the EU average against 38 indicators. Even if the country scores better than others against certain indicators,

this is not a guarantee of sustainable development and is not necessarily sufficient to achieve the corresponding SDGs by 2030. Belgium often compares more favourably with regard to social and economic components, when a component-specific analysis is made, due to its relatively well-developed social security and health systems and a GDP per capita in the top third of the EU27. When it comes to the environmental component, however, the comparison is often unfavourable for Belgium, which is a densely populated and highly urbanised country with relatively fewer natural areas. In addition, its industrial fabric is concentrated in intermediate industries, which are more energy-intensive and more polluting than final goods industries.

Breakdown by region

The positions of the regions remained very stable over the period 2015-2022. For 13 SDGs, they were unchanged against 26 of the 42 indicators broken down by region. The three regions are moving in the desired direction for 18 indicators, 13 of which have a quantified target. For five indicators, the three regions are moving in the wrong direction, while the trend is divergent between the regions for 14 indicators and there is no clear trend for the last five indicators.

Breakdown by population category

"Leave no one behind" is a guiding principle of the UN's Agenda 2030, which clearly justifies monitoring the progress made by several categories of the population, namely: by gender, income, age, education, household type and employment status. While the assessment is done on the basis of the latest available data, this does not detract from the fact that the positions of the various population categories have changed very little. Thirty-eight indicators offer a breakdown by gender: for 18 indicators, women are disadvantaged, while for 18 others it is men. The gaps persist over time, but are narrowing in some areas (poverty, early mortality from chronic diseases, road accidents, the unemployment rate, the activity rate, young people not in jobs or education, fatal occupational accidents and the risk of poverty). The gap increases for higher education graduates, to the disadvantage of men, and for the long-term disabled, to the disadvantage of women. Unsurprisingly, the breakdowns by income level (20 indicators) and education level (11 indicators) reveal a more favourable situation for the population categories with the highest income or education levels. No general trend emerges when a distinction is made by age (16 indicators), except regarding the perception of one's health, the low level of work intensity and the employment rate, for which the gaps narrow between young and old. On the other hand, these gaps widen for people receiving social benefits and for people on long-term sick leave. Six indicators, all linked to a single aspect of poverty (income, employment, material deprivation, housing), provide information by household type. The differences are very marked, with single-parent households systematically worse off for most of the indicators. The impact of poverty is also striking when assessed against employment status: the unemployed are always the most disadvantaged, with no change over time, followed by other economically inactive groups and retired people. People in paid employment systematically score best.

Composite well-being indicators

The FPB has developed composite indicators of well-being for two of the three dimensions of sustainable development: the well-being of the current generation in Belgium ("Here and Now") and that of future generations ("Later"). The indicator for the "Elsewhere" dimension, which takes into

account the impact of the Belgian way of life on people in the rest of the world, is currently being developed.

Here and now: a marked deterioration in the well-being of Belgians in 2022

Over the period 2005-2022, the "Well-being here and now" composite indicator shows a significant downward trend. This indicator measures the change in current well-being in Belgium and aims to best reflect the variations observed. After falling to a low in 2019, the indicator recovered in 2020 and 2021, but deteriorated significantly in 2022, falling back to close to its minimum level. This downturn can be explained by a continuing deterioration in the general state of health of the population – the main determinant of well-being in Belgium – which is proving too great in relation to the improvements recorded at the socio-economic level (unemployment rate, severe material deprivation and early school leaving) and in terms of social support. Further analysis by population category shows that the decline in well-being between 2005 and 2022 was statistically significant for men, the 16-24 age group, the 50-64 age group, and the fourth income quintile. Over this period, only the indicator score for those aged 65 and over increased significantly. The impact of the Covid-19 pandemic was broadly the same across the different categories, with the level of well-being remaining relatively stable. However, by 2022, all categories had seen their well-being decline, more markedly for women than for men, for the 25-49 age group, and for people in the third quintile.

Later: the well-being of future generations will be diminished by the degradation of environmental capital

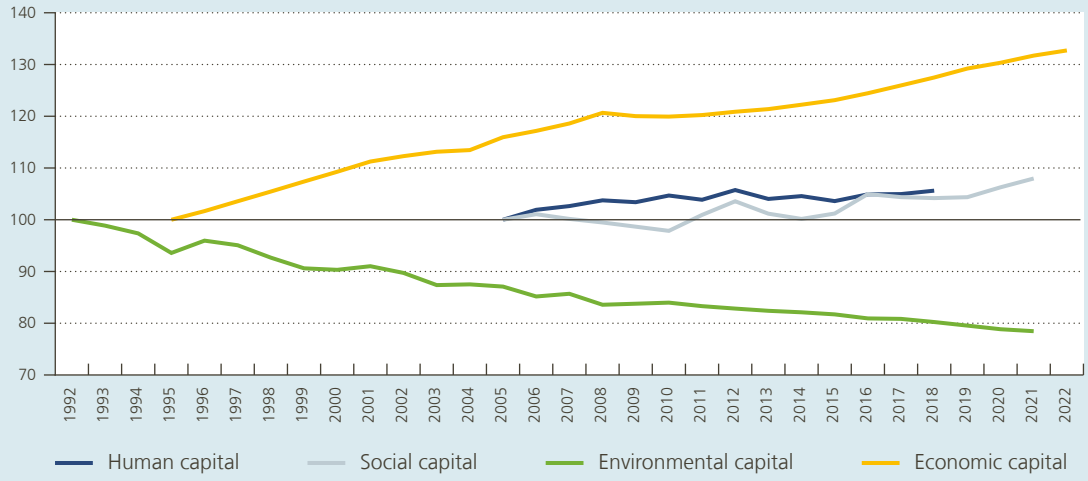
The sustainable development of a society implies that the needs of the current generation should not be met at the expense of the well-being of future generations. Given that it is not possible to determine in advance either its composition or the way in which it will be produced, future well-being (the "Later" dimension) is assessed based on a capital stock approach. This involves measuring changes in the stocks of resources needed to ensure the well-being of future generations, in accordance with the principle that a society develops sustainably if it guarantees future generations a stock of capital at least equivalent to the current level. Thus, in the conceptual framework used in the FPB report, development is sustainable if it at least preserves all capital stocks.

There are divergent trends in the indicators of capital stocks considered necessary for future generations. "Human capital" covers individual health and the qualifications and skills that contribute to employability and higher incomes. Overall, it has increased since 2005 as a result of the rise in the number of higher-education graduates, particularly from 2015 onwards, while performance against the indicator of adequate reading skills has been deteriorating since 2012, resulting in a reading level that was at its lowest in 2022. "Social capital" refers to the quality of relationships between people, both at individual and community level. Its marked rise over the period 2005-2021 is explained by an increase in confidence in society, while indicators measuring relationships with close friends and family remained fairly stable. As for "economic capital", which covers the totality of economic assets, performance increased significantly from 1995 and peaked in 2022; performances against the indicators for both physical capital stock and knowledge capital stock contributed to this increase. As for "environmental capital", performance against the four sub-indicators (air, water, land and biodiversity) continued the downward trend observed since 1992.

The update of the composite indicators confirms past trends. On this basis and given the deterioration in the environmental capital indicator, the FPB report concludes that Belgium's current development is unsustainable.

Composite indicators – "Later" dimension

(100 = reference year)[1]



Source: FPB.

1 The indicators are normalised to 100 for a reference year that corresponds to the first year common to the components of each composite indicator. As these capital types are not substitutable, they are not aggregated into a single composite indicator.


CASH
CASH
CASH
CASH

7. Financial developments

7.1 The tightening of monetary policy was reflected in interest rates on loans to households and businesses

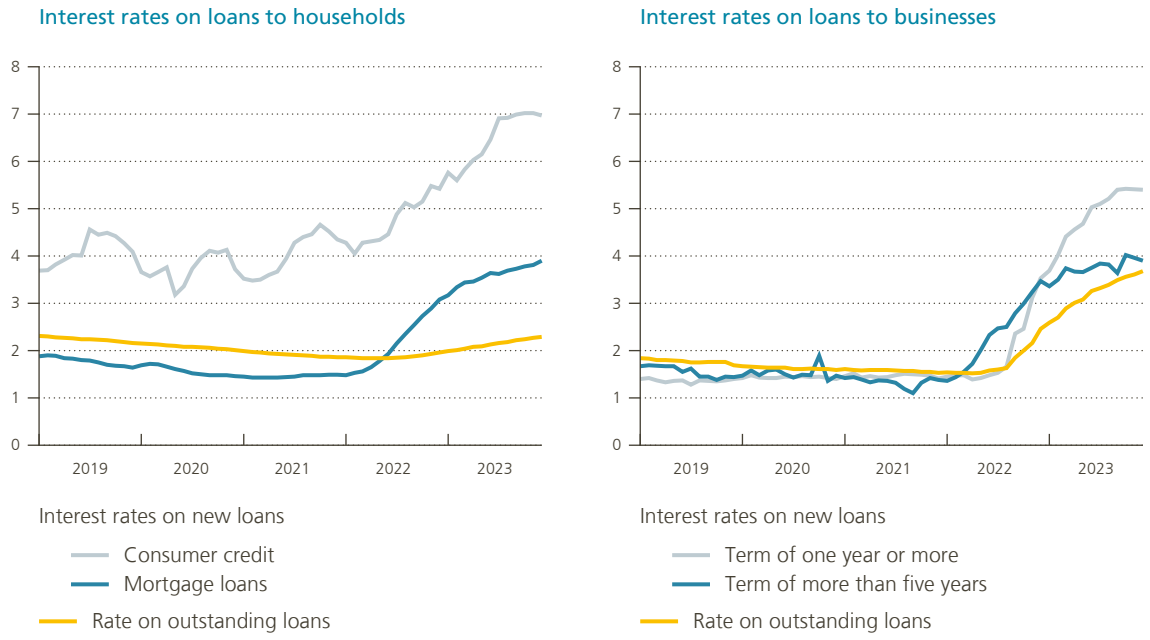
The increase in the Eurosystem's key rates, which began in the summer of 2022, continued to push up the interest rates charged by Belgian banks on new loans in 2023. In particular, new household mortgage rates rose from an average of 1.9 % in June 2022 to 3.9 % in December 2023. Rates on consumer credit and business loans followed the same trend. However, as on the financial markets, the rise in long-term rates slowed in 2023. As mentioned in chapter 2, this development was linked to the expectation that the ECB would stop raising its key rates.

Overall, however, the effective burden of higher interest costs for households remained limited. The interest rate hikes only concerned loans granted from mid-2022 onwards and a limited number of outstanding variable rate loans. In fact, 90 % of the outstanding loans to households in June 2022, i.e. before

Figure 7.1

Lending rates have been rising since 2022

(average interest rates, percentage)



Source : ECB.

the rate increases, were for the purchase of real estate, most of which were taken out at a fixed rate. In other words, the vast majority of Belgian households that had to repay a loan were protected against the rise in interest rates. As a result, the latter was only very partially reflected in the interest actually paid by households as a whole and hence in the return on the loan portfolios of Belgian banks. According to the results of the MIR survey, the average interest rate on outstanding loans to households rose from 1.8 % in June 2022 to 2.3 % in December 2023. Moreover, in many cases, the burden of fixed-rate debt contracted before the resurgence of inflation in 2022 was also alleviated by the sharp rise in nominal personal income due, among other things, to wage indexation (see chapter 4).

In contrast, interest paid by businesses increased more significantly. The average rate on outstanding loans to non-financial corporations rose from 1.6 % in June 2022 to 3.7 % in December 2023. This was due to the fact that a large proportion of the lending by banks to Belgian companies takes the form of revolving credit agreements or other types of credit lines with variable rates.

However, banks did not substantially tighten their business lending policies in 2023. At least this is what emerges from the lending survey (BLS) of the four largest banks in Belgium. The results of the survey on the access to finance of enterprises (SAFE), conducted jointly by the ECB and the European Commission, support this view, as they do not point to an increase in the number of credit applications from Belgian SMEs being declined. Nevertheless, respondents to the Bank's quarterly survey on business credit conditions mentioned a slight tightening of constraints in terms of the volume of loans issued and the guarantees required by banks.

The conditions for household mortgage lending remain somewhat shaped by the prudential expectations formulated by the Bank in order to limit the origination of high-risk loans. In force since 1 January 2020, these expectations urge lenders to restrict, among other things, the proportion of loans with a high loan-to-value ratio, i.e. those where the amount of the loan exceeds 90 % of the value of the property, if it is intended for owner-occupation, or 80 % of that value for buy-to-let properties. However, tolerance limits allow the loan-to-value threshold to be exceeded in some cases. These margins are wider for loans granted to first-time buyers. On the other hand, they are narrower for credit agreements combining a loan-to-value ratio of more than 90 % with a monthly repayment burden equivalent to more than 50 % of the borrower's income or where the value of the loan is more than nine times the borrower's annual income. The effects of this measure have been clear since its introduction : while loans with a loan-to-value ratio of more than 90 % accounted for 33 % of new mortgages originated by Belgian banks in 2019, this share fell to 19 % in 2020 and to 14 % in 2021. It remained at this level through the first half of 2023.

This implies that lenders once again did not exceed the acceptable tolerance limits provided for by the prudential expectations, for both first-time buyers and other loans for owner-occupied dwellings. In the first half of 2023, only 22 % of new loans granted to first-time buyers had a loan-to-value ratio of more than 90 %, whereas the tolerance limit set by the Bank is 35 %. In the case of loans to non-first-time buyers for owner-occupied homes, 8 % of new mortgages exceeded the 90 % loan-to-value ratio, whereas the tolerance limit for this type of loan is 20 %.

However, as interest rates have risen, lenders have demonstrated greater flexibility towards their customers. On the one hand, in order to reduce the annual repayment burden, lenders are allowing payments to be spread over time through longer maturities. As a result, the proportion of new mortgages granted to first-time buyers with a maturity of more than 20 years was 72 % in the first half of 2023, compared with 59 % in 2021. On the other hand, the proportion of these mortgages for which the repayment burden exceeds 40 % of the borrower's income gradually rose, from 27 % in 2021 to 33 % in the first half of 2023.

7.2 Rising interest rates reduced household borrowing capacity and changed the structure of household financial assets

The residential property and mortgage markets slowed sharply as interest rates rose

The sharp rise in mortgage rates had a negative impact on activity in the residential property market and weighed on house prices, but this was largely offset by rising income and longer maturities for new loans. The sharp rise in mortgage rates means that, for the same monthly payment, the amount households can borrow is significantly lower than at the start of 2022, which has dampened housing demand. In addition, the rise in interest rates is also likely to have weakened demand for investment property, which had been high in previous years due to low rates and a resulting search for yield. However, the negative effects of the rise in interest rates on house prices were largely offset by longer maturities for new mortgages, as mentioned above, and by the significant increase in income, which pushed up the amount households could borrow to purchase a home.

After two years of intense activity, the number of transactions involving existing homes fell sharply. In the first three quarters of 2023, the number of residential property transactions fell by 18 % compared with the same period in 2022 and by 7 % compared with 2019. While all regions and types of housing were affected, this fall in the number of transactions mainly concerned houses and the Flemish Region. In Flanders, this was probably due to the fact that sales of certain homes with an EPC rating of E or F were moved forward at the end of 2022, so as not to fall under the energy renovation obligation that entered into force in Flanders on 1 January 2023, requiring such dwellings to have an EPC rating of at least D.

Activity on the new-build market also contracted sharply, with rising construction costs compounding the effect of higher interest rates. While new properties still accounted for 22 % of apartment sales and 2.9 % of house sales in 2021, these shares fell by more than a third to 14.3 % and 1.7 %, respectively. Household investment in housing also continued to fall in 2023 (see section 4.2). Finally, forward-looking indicators point to a further slowdown in expansion of the housing stock. Indeed, the number of building permits granted for new residential dwellings in the first three quarters of 2023 fell by 20 % compared with the corresponding period in 2021, while order books and demand expectations in the structural building works sector also deteriorated significantly. This slowdown on the new-build market was due not only to the rise in interest rates, but also to the sharp increase in construction costs, which have jumped by 22 % compared with the start of 2021.

Growth in the prices of existing houses slowed in the first three quarters of 2023, but remained positive. After rising strongly, by 7 % annually on average from 2020 to 2022, nominal house prices climbed by 2.7 % year-on-year in the first three quarters of 2023. Despite this significant loss of momentum, price growth was more robust in Belgium than in the euro area, where prices fell by 1.1 %. Price growth was stronger in the Flemish Region (3.4 %) than in the Walloon Region (2.0 %) and the

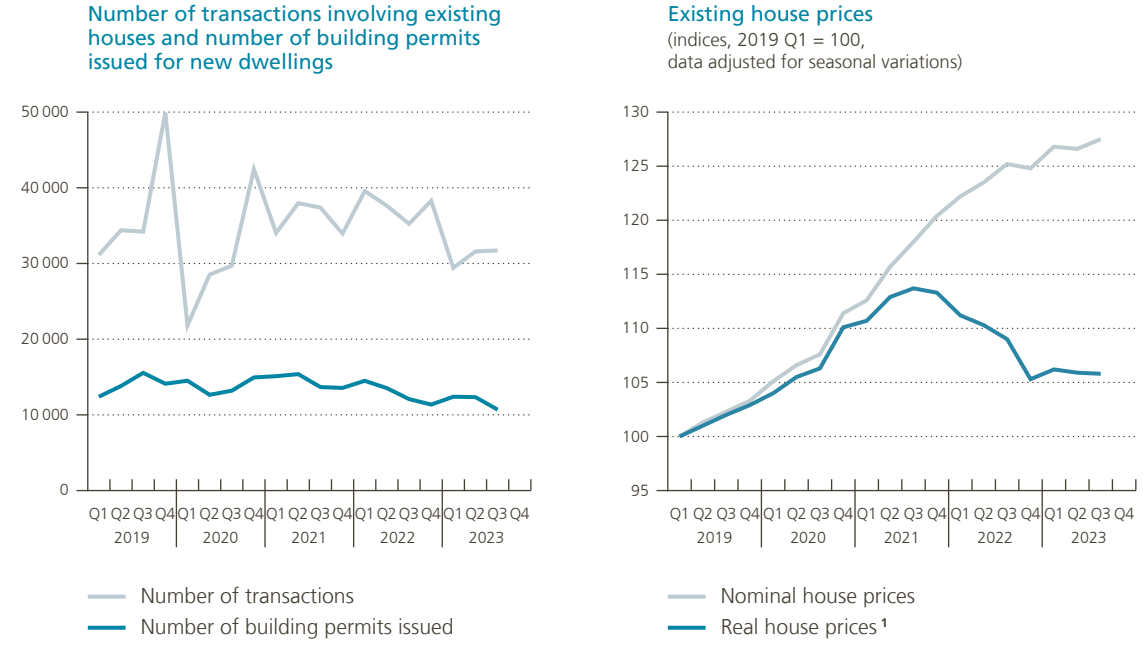
Brussels-Capital Region (–1.5 %), but the figures for Flanders somewhat overstate the actual increase for an identical dwelling, as sales of energy-inefficient homes were probably weaker than usual. Finally, house prices in real terms, which take into account the high inflation seen in recent years, fell by 6.4 % in the first three quarters of 2023 compared with the end of 2021.

Prices for new homes rose more than for existing homes. In the first nine months of 2023, sales prices rose by 4.9 % year-on-year. On the one hand, this was due to the significant rise in construction costs. On the other hand, it could also be the result of increased demand for energy-efficient homes, due to high energy prices and the introduction or announcement of increasingly stringent renovation requirements (see Box 5). Finally, rising prices for new properties sustained demand for existing homes, which act as substitutes.

Housing affordability for would-be buyers continued to deteriorate, but their annual repayment burden eased somewhat thanks to longer maturities and larger down payments. The change in affordability over time can be seen from the change in the repayment burden for a mortgage with a loan-to-value ratio of 80 % and a 20-year term. While it had already risen substantially in recent years, from 22.8 % of net disposable income at the start of 2020 to 27.4 % at the end of 2022, it rose again moderately in the first three quarters of 2023, to 27.9 %. However, the lengthening of mortgage maturities for first-time buyers tempered the rise in the average annual repayment burden somewhat. In fact, annual repayments for a 22-year loan were 1.7 percentage points lower than for a 20-year loan in the third quarter of 2023 (assuming the same interest rate and house price). In this case, the repayments obviously have to be spread over a longer period, which increases the total amount of interest to be repaid. The longer average maturity of new mortgages also pushed up house prices. In addition, the average down payment rose again in 2023, reducing both the amount borrowed and annual repayments. Finally, if the abovementioned affordability indicator is applied to a household with average income for the purchase of an average-price home, the repayment burden is

Figure 7.2

The housing market slowed in 2023



Sources: Statbel, NBB.

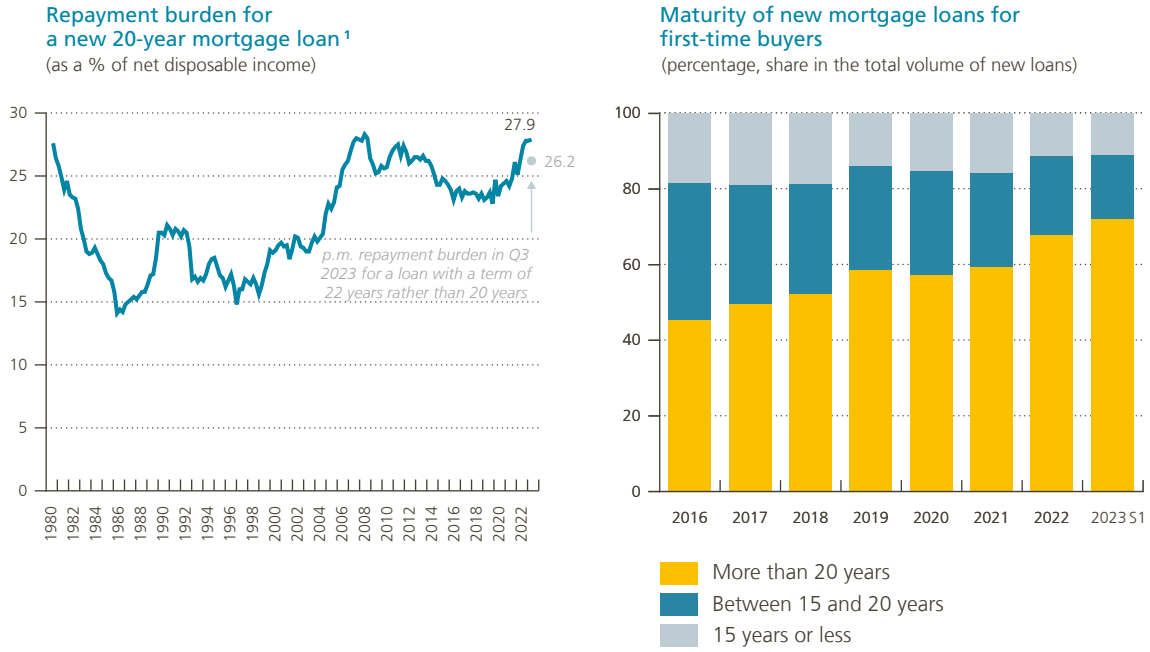
1 Deflated by the private consumption deflator.

significantly higher for households with low incomes and limited financial assets, particularly in the more expensive regions.

In 2023, mortgage lending declined much more sharply than the number of property transactions. The rise in interest rates made it much more expensive to finance the purchase of a home with a new mortgage. Whereas in the past, when interest rates were falling, it was usually more advantageous to refinance a mortgage at a lower rate, it is now often advisable to maintain contracts concluded at low rates insofar as possible. As a result, if a mortgage has not been fully repaid at the time of purchasing a new home, the preferred option is often to continue to pay it off and, if necessary, only borrow the additional amount required. Furthermore, according to the responses of Belgian banks to the BLS, other sources of funding, such as savings or gifts from family, have been used more often since 2022. Lastly, new mortgages for renovation and construction works have

Figure 7.3

Housing affordability for would-be buyers continued to deteriorate, but the annual repayment burden was reduced somewhat by longer loan maturities



Source: NBB.

1 This indicator is based on the assumption that a household with average disposable income buys a home at an average price and finances 80 % of the purchase with a 20-year fixed-rate mortgage. The tax deductibility of the loan, transaction costs and future changes in income are not taken into account.

fallen significantly more than those for the purchase of existing homes.

Nonetheless, total mortgage loans outstanding rose again. Households with surplus cash probably made less use of the opportunity to repay their low-interest loans early. Overall, net new lending amounted to € 5.5 billion in 2023, compared with € 14.4 billion the previous year. As a result, overall annual growth in home loans fell from 5.8 % at the end of 2022 to 2.1 % in December 2023.

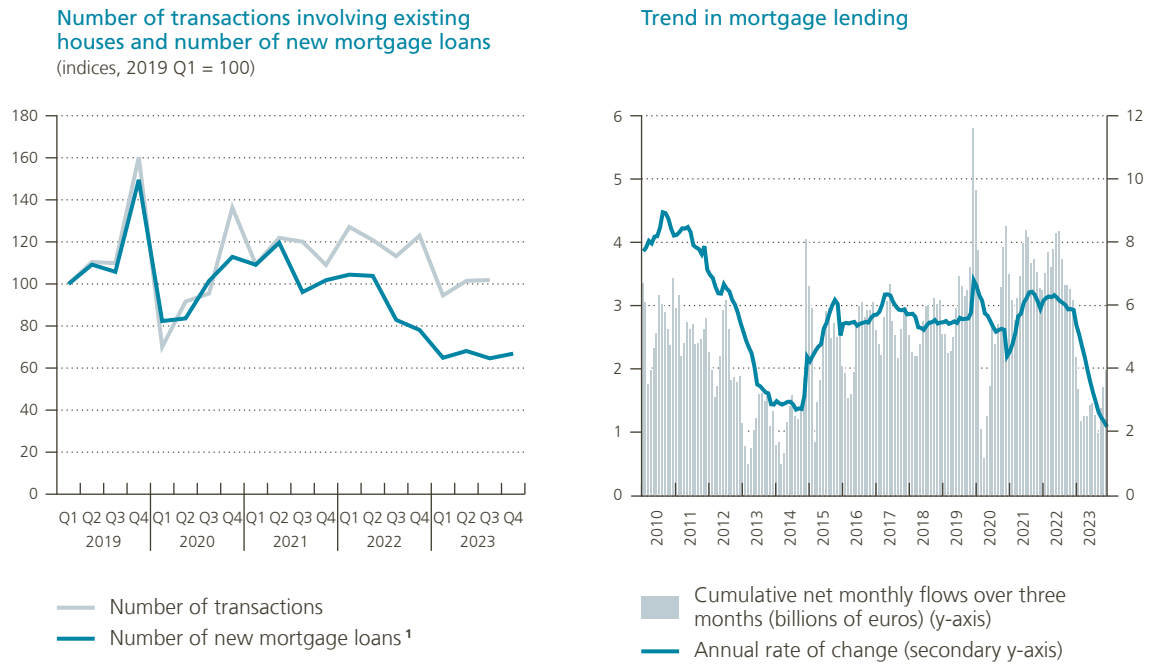
Despite the rise in interest rates, growth in consumer credit accelerated slightly. The annual rate of change peaked at 4.8 % in April, 1.7 percentage points higher than at the end of December 2022. However, it then fell back to 2.0 % in December. Other loans to Belgian households fell significantly. In total, non-mortgage loans account for around 9 % of the volume of loans taken out by households with Belgian banks.

Overall household debt rose only slightly. Growth was essentially determined by that of mortgages, which are its main component. Due to the slow growth in mortgage lending, the increase in total household debt was limited to 3.3 %, compared with around 5 % per annum in recent years. Thanks in part to exceptionally strong nominal economic growth, the overall household debt ratio as a percentage of GDP fell further. After peaking at 66.1 % of GDP at the start of 2021, it gradually fell back to 58.5 % of GDP in the third quarter of 2023. Belgium's debt ratio is thus following the trend seen in the euro area as a whole, where the debt-to-GDP ratio stands at around 54 %.

Belgian household debt therefore remains sustainable. This is also reflected in the fact that defaults on both mortgages and consumer loans remained limited. The default rate on home loans stabilised at 0.9 % in 2023, while the rate on consumer loans rose modestly over the year, although remaining moderate by historical standards at less than 4 %.

Figure 7.4

Mortgage lending is no longer in line with the property market

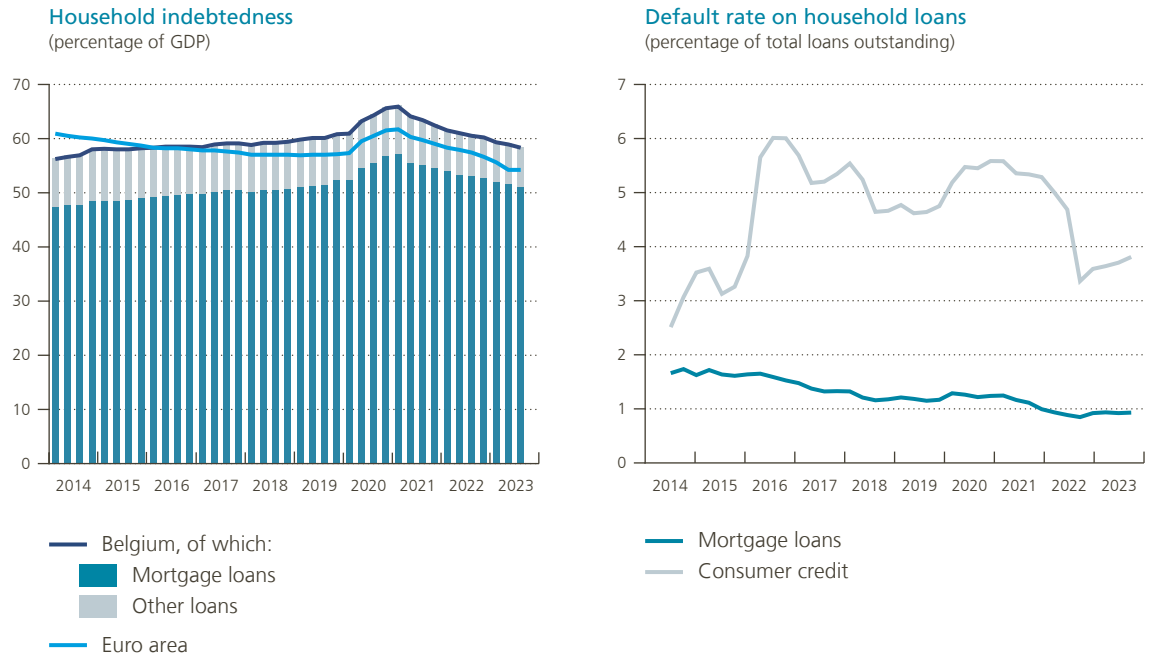


Sources: Statbel, NBB.

1 Excluding the refinancing of outstanding loans.

Figure 7.5

Household indebtedness remains under control and sustainable



Sources: ECB, NBB.

Investment decisions are geared towards higher-yield financial assets

In the first nine months of 2023, households increased their overall holdings of financial assets, although total new investments were lower than in the previous three years. The latter reached € 13.1 billion in the first three quarters, compared with € 26 billion in 2020, € 28 billion in 2021 and € 15 billion in 2022.

Furthermore, 2023 was characterised by significant shifts between the various types of financial assets held by households. Throughout the year, interest rates on bank accounts and deposits remained low compared with those applicable to other short-term investment vehicles. As a result, from the start of the year and for the first time since 1999, individuals drained funds from their current accounts and invested them in term accounts. In August and September, this trend picked up steam and also affected the amounts held in savings accounts, following the issuance of a one-year State note by the federal government, whose yield was more advantageous than that of products offered by commercial banks (see Box 7).

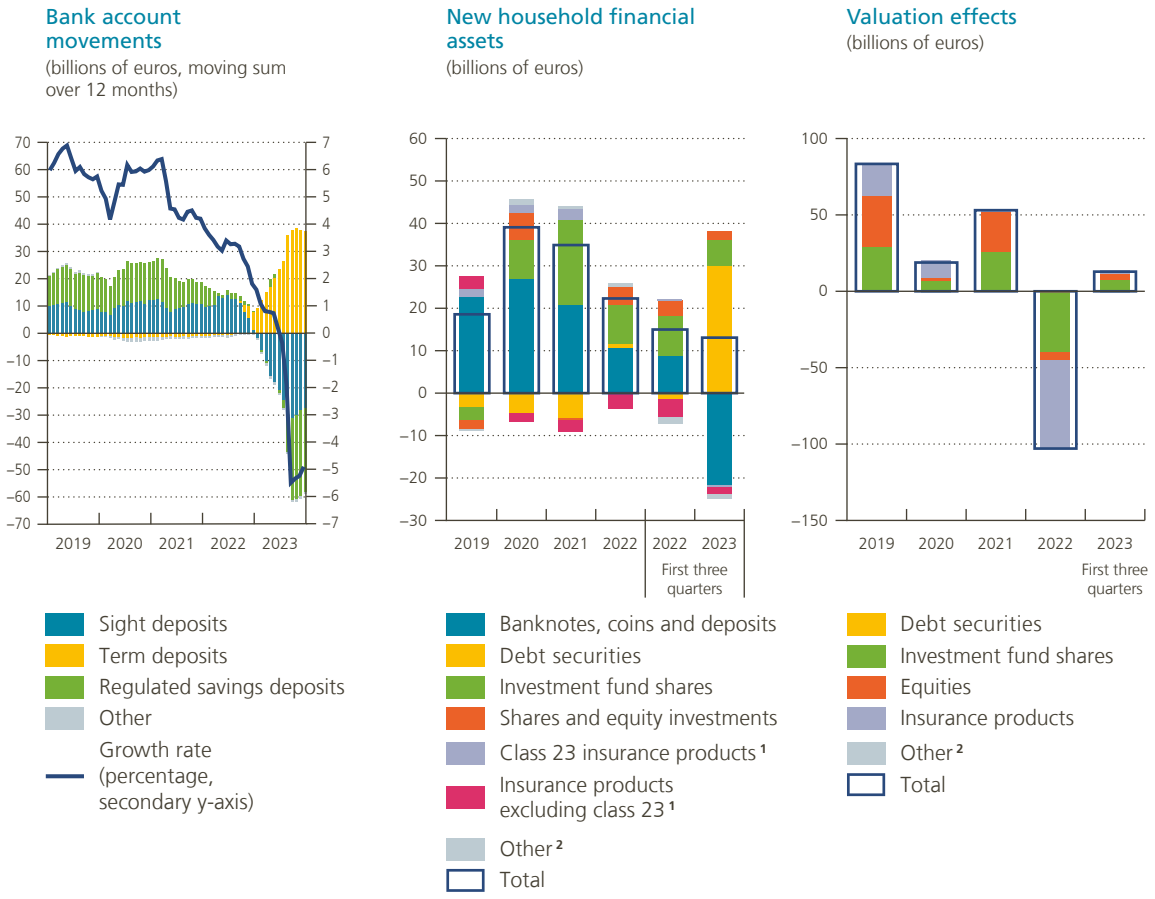
Between January and September, a total of € 56 billion was moved from current (or sight) accounts and savings accounts and mainly invested in term accounts (€ 32 billion) and State notes (€ 22 billion). As a result, the growth rate of bank deposits turned negative for the first time in 20 years, standing at –5.5 % in September.

Households also invested some of their savings in riskier instruments, mainly in the first quarter of the year. Between January and September, individuals bought shares in investment funds to the tune of € 6 billion. Similarly, shares, both listed and unlisted, and other equities were popular, accounting for a total of € 1.9 billion.

The valuation effects resulting from price changes on the financial markets were positive in 2023. However, these did not offset the valuation losses suffered by households on investment funds, equities and insurance products in 2022, given the rise in interest

Figure 7.6

Households transferred some of their bank deposits to higher-yield assets



Source : NBB.

1 This item includes net household entitlements to insurance technical reserves, pension funds and standard warranty reserves.

2 In the centre chart, this item includes commercial credit and miscellaneous assets on general government and financial institutions, insofar as they are recorded. In the right-hand chart, this item also includes banknotes, coins and deposits.

rates and the downturn on the stock markets. In the first nine months of 2023, households realised € 12.9 billion in valuation gains, mainly on assets invested in mixed and equity funds, as well as in share and equity investments. Insurance products were also affected.

As a result of shifts between different types of financial products, new investments and valuation effects, the structure of household financial assets changed slightly. Cash savings and deposits, as well as savings in the form of shares and equities, still represent the main categories (with, respectively, € 465 and € 438 billion, or 31 % and 29 % of financial assets at the end of the third quarter of 2023), but the share of debt securities grew thanks to the issuance of a State note in September. The amount allocated to debt securities totalled € 57 billion at the end of September 2023, compared with € 27 at the end of 2022.

As a whole, the financial wealth of Belgian households was estimated at € 1 510 billion in September 2023, up from € 1 484 billion at the end of 2022. In relative terms, however, the value of this wealth fell over the first three quarters of 2023, from 267.9 % to 261.4 % of GDP. This difference may seem small, but the trend has been ongoing for several years. Between 2011 and 2019, the financial wealth of Belgian households hovered around 300 % of GDP.

BOX 7

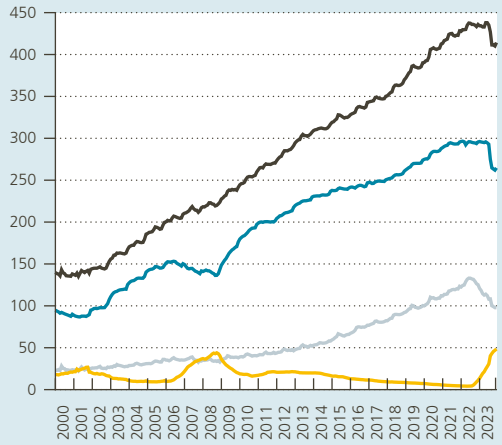
Issuance of the one-year State note

In 2023, the Federal Debt Agency issued its first one-year State note, maturing on 4 September 2024. By issuing a risk-free investment product with a short maturity, similar to a savings account, [1] the finance minister had three aims: to stimulate competition for savings and thus push up bank deposit rates; to send a positive signal to the financial markets about Belgians' ability to save; and, finally, to offer households a safe and attractive short-term investment option.

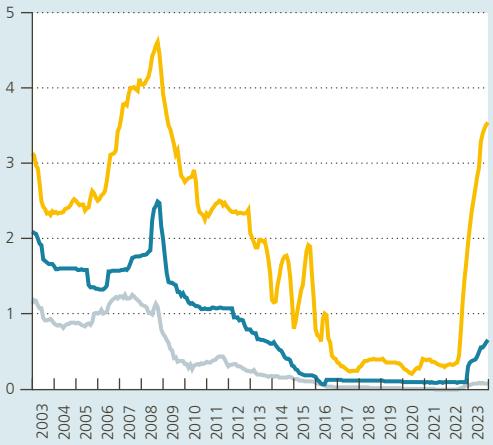
The response from households to the new State note was enormous: more than 500 000 savers subscribed, for a total amount of € 21.9 billion. The issue was so successful that it broke the record previously held by the "Leterme notes", which raised € 5.7 billion in December 2011. Subscriptions to the one-year State note also resulted in a considerable outflow of funds for banks. The € 21.9 billion raised represented 5 % of the total value of household deposits (measured in July 2023).

Amounts outstanding and deposit rates of Belgian households with banks active in Belgium

Amounts outstanding of household bank deposits
(billions of euros)



Interest rates on household bank deposits [1]
(percentage)



Source: NBB.

1 These data are from a bank interest rate survey. Prior to July 2016, the savings rate only included the base rate. Since July 2016, bonuses (such as loyalty or growth bonuses) have also been included, where applicable. In practice, it is possible to observe a certain time lag between the adjustment of loyalty bonuses by banks and their impact on the data.

Household withdrawals in August and September 2023 were the highest since the start of record-keeping for banking statistics.[2] In total, the decline between July and September 2023 was almost € 24 billion. Households mainly drew from their savings accounts to subscribe to the State notes. Regulated savings accounts fell by € 28 billion between July and September. This decline can be explained in part by the issuance of the State note and in part by increased demand for term deposits. These tend to offer a higher return than savings accounts, and transfers to this type of account were encouraged by the very attractive terms temporarily offered by some banks as an alternative to the State note. However, regulated savings accounts remain the largest category of deposit, with € 265 billion outstanding in December (equivalent to two-thirds of household deposits).

The success of the State note can be explained by its attractive yield, at a time when the transmission of the rise in interest rates on the capital markets to the rates offered on deposits by Belgian banks was particularly slow. The gross coupon of 3.30 %, combined with a reduction in the withholding tax applicable to the bond, translated into a yield of 2.81 % after tax. This yield was higher than the interest rates offered by banks on household deposits.

Even though issuance of the State note unsettled the savings market, interest rates on savings accounts remain low. In fact, compared with the trend in deposit rates observed in other countries and with the trend in rates on the financial markets, the rise in interest rates on personal savings accounts in Belgium has been slower than expected. The average rate applied to regulated savings deposits was 0.55 % in September 2023. It then rose slightly to 0.65 % in December.

1 In Belgium, savings accounts are partly remunerated by a loyalty bonus. This is fixed at the time of deposit and is added to the base rate, provided the amount deposited remains in the account for an uninterrupted period of twelve months. This period corresponds to the maturity of the one-year State note.

2 The subscription period ran from 24 August to 1 September. The drop in household deposits observed in August was mainly attributable to early payments made by investors who subscribed directly with the Federal Debt Agency rather than through commercial banks. Subscriptions made through commercial banks, which make up the largest proportion, appear in the September data.

Many households live in poverty

The net financial wealth of households (as measured by total financial assets less debt) has been rising steadily since 2000, with the exception of a few well-defined periods. Two periods in particular stand out in this respect: the financial crisis of 2008 and the energy crisis of 2021-2022.

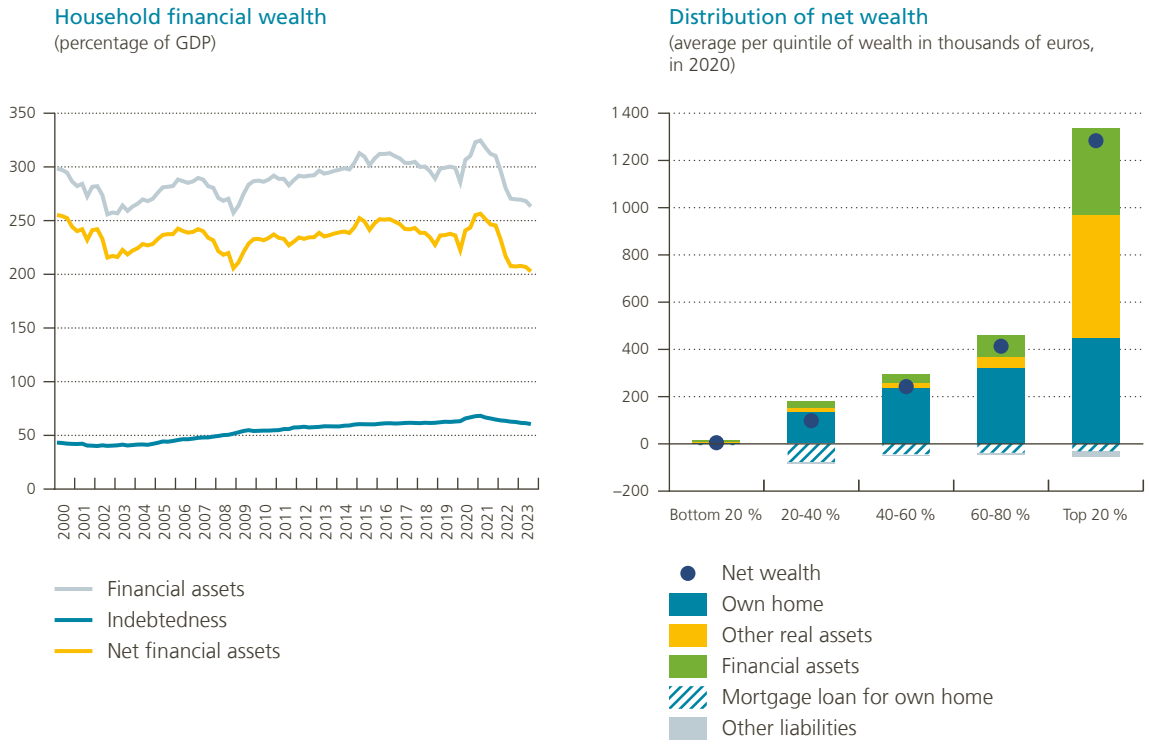
Expressed relative to GDP, which measures the annual production of wealth (and annual income) in Belgium, net financial wealth tends to hover around 230 % but in 2022 a significant fall was recorded. While the level was 235 % of GDP at the end of 2019, it fell to 206 % in the third quarter of 2022 and to 201 % in the third quarter of 2023. This period of decline has lasted longer than previous phases of weakening. During the Covid-19 and energy crises, which were characterised by high inflation and high interest rates, Belgian households as a whole therefore became relatively poorer.

Although Belgian households have significant wealth, it is unevenly distributed. Much of this wealth is in the hands of the most affluent. As well as owning their own homes, they also hold most other property and financial assets. The poorest quintile of the population, on the other hand, has barely more assets than debts. Statements such as "Belgians are wealthy", which are based on aggregate household wealth, are therefore generalisations which should be qualified.

The unequal distribution of wealth makes certain groups of the population more or less vulnerable to financial vicissitudes. For example, less affluent households are relatively more likely to rent, while affluent households are more likely to own their own home. Changes in house prices, mortgage interest rates and rents will therefore affect different types of household differently. When looking at the financial components of wealth, it should be borne in mind that these are mainly held by the wealthiest households. Finally, in terms of indebtedness,

Figure 7.7

Household net financial wealth remained stable and at a low level in 2023, but wealth is unevenly distributed



Source: NBB.

the solvency and guarantee requirements of financial institutions often prove prohibitive for the poorest households, forcing them to turn to other, very costly, forms of credit.

Households with limited assets usually also have a low income. The number of people living in poverty is thus generally estimated on the basis of income, which is also easier to determine. While assets can include very disparate components whose present value is not always easy to calculate, income provides a quantified current indication of the monthly resources available to a household, which can be compared with the expenses to be covered.

Around one-fifth of the population is at risk of poverty. According to the AROPE indicator, [1] 18.7 % of the Belgian population was at risk of poverty or social exclusion in 2022, i.e. their income was below the poverty threshold, their labour potential was under-exploited or they were facing serious material or social deprivation. Certain categories are particularly vulnerable : the low-skilled, the unemployed and inactive, tenants, single people (especially single parents) and people born outside the EU. Residents of (large) cities also tend to have a more precarious profile, hence the high percentage recorded in the Brussels-Capital Region.

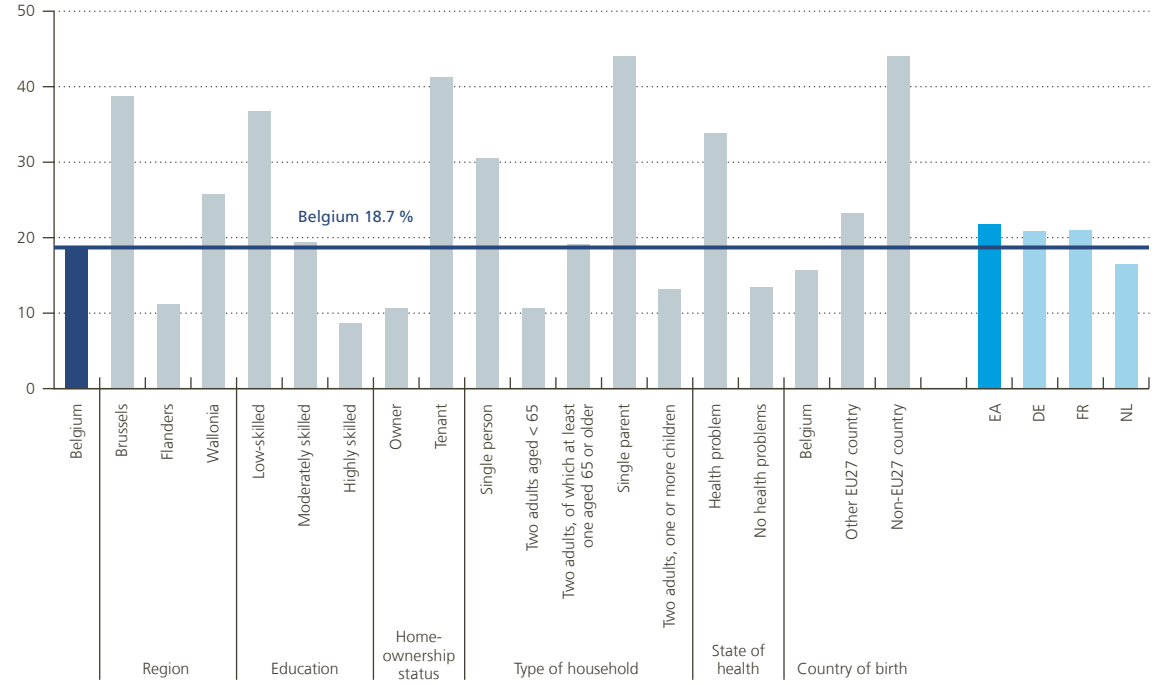
Aside from the structural risks to which certain sections of society are exposed, specific circumstances can also lead to poverty. For example, economic crises tend to increase the number of people living in poverty, as those in relatively more precarious situations are more likely to lose their job and, as a result, at least part of their income. When this occurs, a number of mechanisms can limit the loss of income. For example, workers who are made redundant are generally entitled to unemployment benefits. In addition to these "automatic stabilisers",

1 AROPE stands for "at risk of poverty or social exclusion". This is the indicator used to monitor the EU 2030 target on poverty and social exclusion.

Figure 7.8

Poverty is concentrated in certain categories of the population

(risk of poverty or social exclusion, 2022, percentage of the corresponding population)

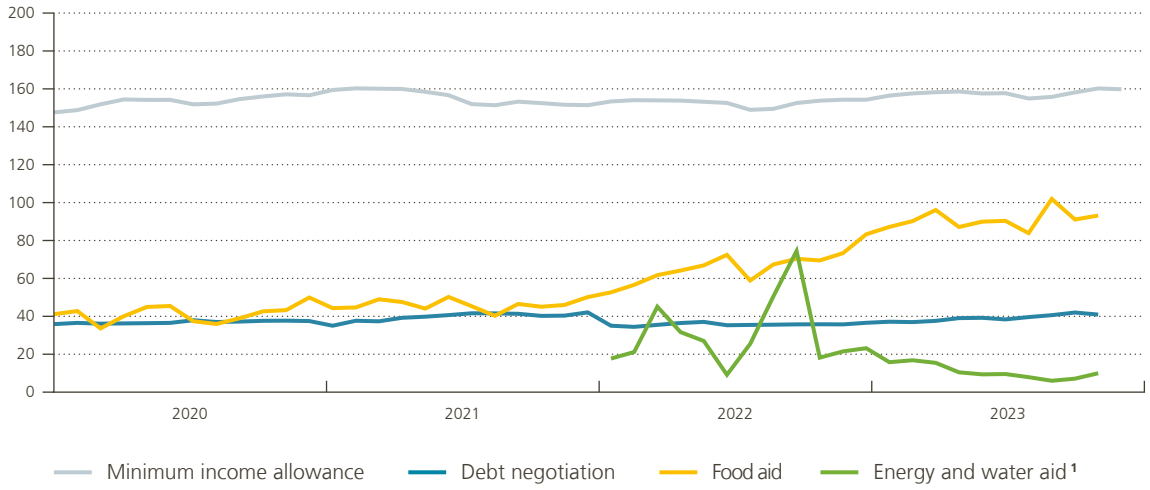


Source : Statbel (SILC).

Figure 7.9

In times of crisis, there is greater reliance on certain types of state support

(thousands of beneficiaries)



Source: PPS Social Integration.

1 Data for the "Energy and water aid" series are only available from 2022.

the authorities can also take specific measures to mitigate the consequences of a crisis. For example, during the Covid-19 pandemic and the energy crisis, large-scale government measures were adopted to reduce the loss of household income or to contain the increase in household bills (see the Bank's 2020 and 2022 Annual Reports).

The number of recipients of the minimum income allowance has barely increased since 2020, but demand for other forms of social assistance has risen. Since 2022, the number of people receiving food aid from the public centres for social welfare has increased significantly. In that year, significant support was also provided for the payment of energy and water bills. For this latter type of assistance, a drop in recipient numbers was observed in 2023, probably linked to the fall in energy prices. Income growth may also have contributed to this: indexation mechanisms operate with a time lag, meaning the high inflation of 2022 still continued to lead to an increase in wages and benefits in 2023. An average of 91 000 and 11 000 people, respectively, requested food aid or energy and water aid in 2023. Finally, the number of people involved in debt negotiation has remained fairly stable at around 40 000 since the start of the Covid-19 crisis. This confirms the above observation based on default rates.

Belgium has been more successful than other European countries in containing the impact of the Covid-19 pandemic and the energy crisis on poverty levels. Thanks in particular to vigorous intervention by the authorities, the AROPE indicator in Belgium actually fell by around one percentage point over the period 2019-2022, while the euro area recorded an average increase of the same proportion. The risk of poverty increased in Germany and France, while it stabilised in the Netherlands. As a result, Belgium is currently doing slightly better than many other European countries in terms of poverty. While the percentage of the population at risk of poverty in Belgium was around 19 % in 2022, it averaged almost 22 % in the euro area and around 21 % in Germany and France. Even so, Belgium falls squarely into the middle of the European ranking, with the Netherlands (16.5 %), among other countries, having a much lower risk of poverty.

7.3 Businesses took on less debt in 2023

Belgian companies entered 2023 in very good financial health overall, a situation they owed largely to the profits they were able to generate in previous years. As mentioned in chapter 4, corporate profit margins have increased significantly since 2014. This is due in particular to a structure of economic activity oriented towards more profitable sectors, lower consumption of fixed capital, and labour productivity trending above wage costs. In addition, against the backdrop of particularly accommodative monetary policy up to 2022, business profitability was boosted by the low cost of bank loans for investments and working capital.[1]

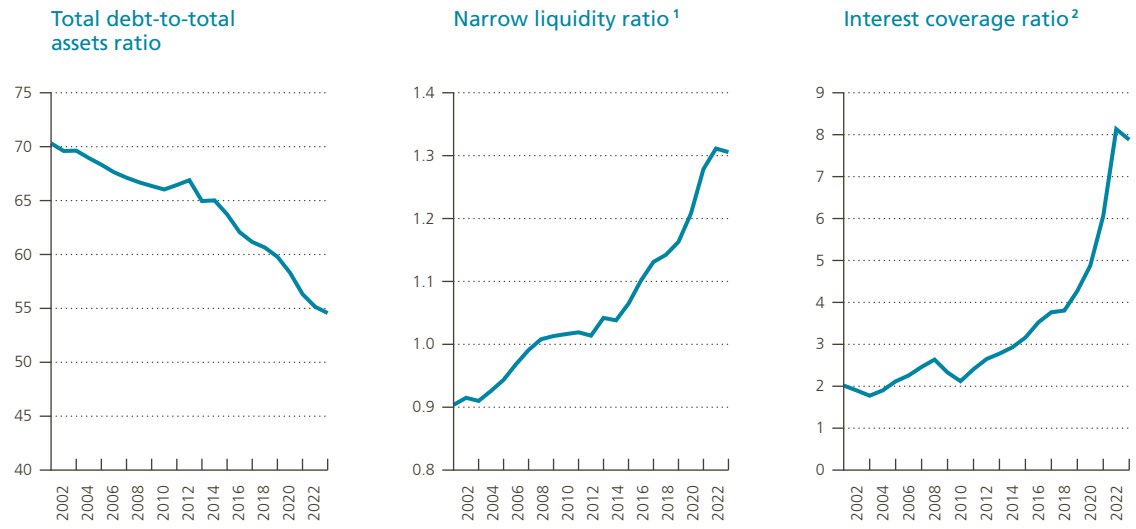
Rising profits enabled firms to strengthen their equity and cash reserves. As a result, the median debt-to-equity ratio for the entire population of non-financial corporations was only 55 % in 2022, compared with 65 % ten years earlier, while their liquidity buffers correspond in most cases to at least 130 % of their debts with a maximum maturity of one year. Combined with the fall in financing costs, this growing profitability made corporate debt burdens

1 See Ch. Piette and J. Tielens (2023), "How did Belgian firms benefit from three decades of declining interest rates?", NBB, *Economic Review*.

Figure 7.10

Corporate financial ratios followed very favourable trajectories up to 2022

(median values calculated for the entire population of non-financial corporations)



Source : NBB.

1 The ratio between the sum of the company's cash on deposit and in hand, cash investments and accounts receivable due within one year, on the one hand, and its accounts payable due within one year, on the other.

2 Ratio of profit before tax and financing costs to financing costs.

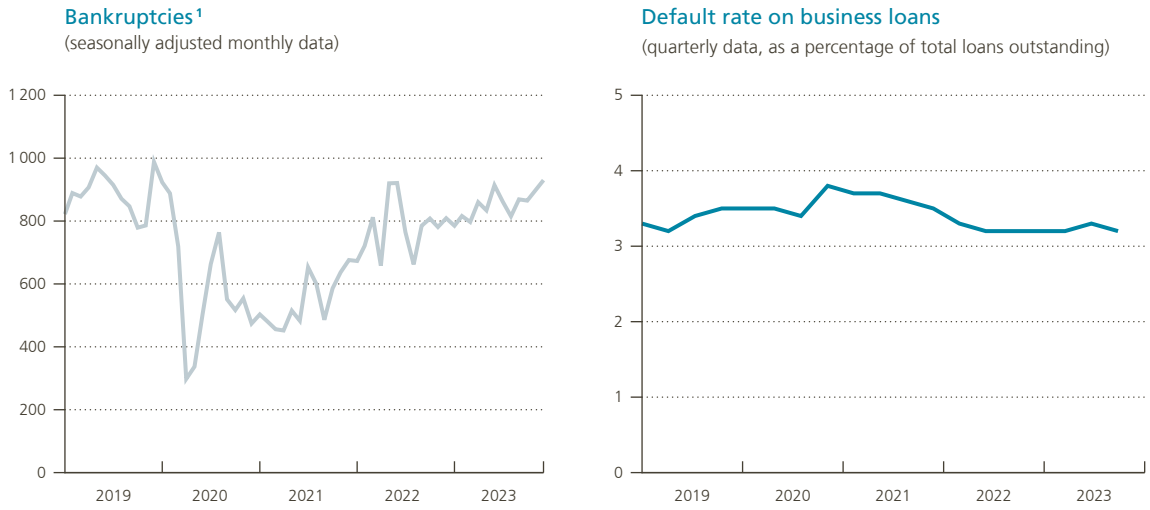
more sustainable. In 2022, the revenue of firms, again in median terms, was eight times their financing costs.

The slowdown in economic activity in 2023 and the gradual rise in lending rates charged by banks have thus far not had a substantial effect on companies' ability to honour their financial commitments. Despite the expectation of a rise after the ending of the support measures and various moratoria on bank, tax and social security debts put in place during the Covid-19 crisis, the increase in business bankruptcies remained moderate. At the end of 2023, the number of bankruptcies was lower than at the end of 2019, i.e. prior to the start of the pandemic. The good financial health of Belgian businesses is also reflected in the trend in the number of non-performing loans on bank balance sheets. The share of such loans in total outstanding bank loans to non-financial corporations had fallen to a low of 3.2 % by the end of 2022, a level that was maintained until the third quarter of 2023. The risks associated with lending to businesses were therefore still marginal for banks.

Several factors contributed to the slowdown in bank lending to Belgian businesses. One was the trend in short-term lending. Short-term loans were a major contributor to the peak in bank lending growth in July 2022, when it reached 6.4 % year-on-year. As a result of the sudden rise in energy costs, businesses faced more pressing liquidity needs, as higher input costs and wage indexation led to an increase in their working capital requirements. This effect subsequently faded and growth in bank lending to businesses was therefore receding up to September 2023.

Figure 7.11

Bankruptcies and defaults on bank loans remained contained

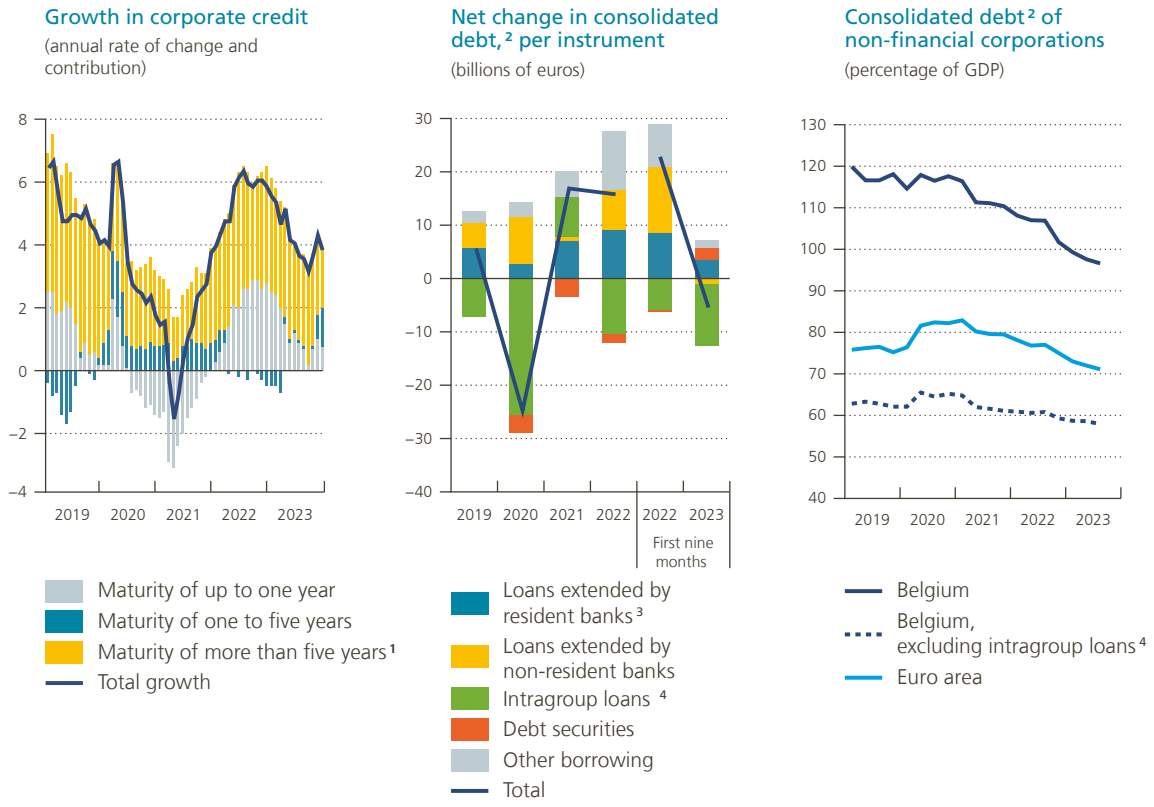


Sources: Statbel, NBB.

1 The data cover bankruptcy filings by the self-employed, legal entities and organisations without legal personality.

Figure 7.12

Growth in bank loans to non-financial corporations slowed in 2023, and their total debt contracted



Source : NBB.

1 Including securitised or otherwise transferred loans.

2 Borrowings by resident non-financial corporations from other resident non-financial corporations are not included in the definition of consolidated debt.

3 Including loans appearing on the balance sheet of securitisation vehicles.

4 Intragroup loans are defined as those granted by captive money lenders and the foreign non-financial sector.

However, short- and medium-term borrowing picked up again in the final quarter of the year, taking total credit growth to 3.9 % by the end of 2023. The increase in longer-term borrowing was less marked than in 2022, which suggests that the substantial investments made by firms in 2023 were increasingly financed with cash reserves and less with bank loans.

While it had risen in 2022 as a result of substantial bank borrowing, corporate debt contracted by € 5.2 billion in the first three quarters of 2023. This was mainly due to changes in intragroup transactions between resident non-financial corporations, on the one hand, and companies established abroad or captive money lenders established in Belgium, on the other. In the first nine months of 2023, these transactions resulted in net repayments of € 11.5 billion by Belgian firms. Repayments of loans taken out with non-resident credit institutions also contributed to the € 1.1 billion reduction in corporate debt. The main source of external financing used by Belgian companies in 2023 was therefore borrowing from resident banks, whose outstandings increased by € 3.6 billion during the first three quarters. Their liabilities, in the form of debt securities or loans from financial intermediaries other than banks, increased by € 2.3 billion and € 1.4 billion, respectively. All in all, the outstanding consolidated debt of Belgian non-financial corporations stood at € 557.9 billion, or 96.6 % of GDP, at the end of the third quarter of 2023. If intragroup debt is excluded, this figure falls to € 334.4 billion or 57.9 % of GDP.

7.4 The financial sector remains resilient to various macroeconomic shocks

As mentioned in chapter 1 and in the "Prudential regulation and supervision" section of this report, the global banking sector experienced some turbulence in March and April 2023 following the collapse of several US regional banks and the Swiss bank Crédit Suisse. However, the crisis of confidence did not spread to other European countries or to the Belgian banking sector. In addition to negligible exposure to the severely affected institutions, the stronger financial position of Belgian banks and their diversified business model, improved risk management, effective supervision, and the quality and quantity of their liquidity and capital buffers all played an important role in this respect.

The Belgian financial sector had already demonstrated its resilience during the pandemic, the severe floods in the summer of 2021 and the energy price shock in 2022. This resilience enabled the sector to rely on its solid financial position, underpinned by the buffers it had built up, to absorb unexpected shocks when necessary, with the aim of providing solutions to severely affected customers.

While bank profits were boosted by the rise in interest rates, banks remain dependent on household deposits

The Belgian banking sector plays a crucial role in the financing of households and businesses, as credit mainly takes the form of bank loans. For the most part, Belgian banks follow a classic financial intermediation model whereby their customers' (short-term) deposits finance (long-term) loans. The remuneration for this maturity transformation corresponds mainly to net interest income: if the average return on assets exceeds that on liabilities, banks generate a positive interest margin.

With the rise in key rates and other market rates, the profitability of this banking activity improved significantly in 2022 and 2023, for both large and smaller (savings) banks. As the core business of Belgian banks is to attract deposits in order to grant loans, net interest income is the main component of the sector's financial earnings, accounting for 68 % of total operating income. In recent years, the environment of low or even negative interest rates put this business model under pressure. Indeed, the average interest income banks received on the loans they granted fell significantly, while the average interest rate they paid could not fall further, and the commercial margin on deposits shrunk sharply. However, banks increased their lending volumes during the period of low interest rates, which mitigated the impact on their bottom line. The rapid successive interest rate hikes since 2022 widened interest margins. In effect, banks' liquidity, short-term investments and new loans were immediately rewarded more strongly, whereas the return on a large proportion of deposits was only revalued very slowly and with a delay. As assets were revalued more quickly than liabilities, the interest margin improved. Interest flows on instruments used to hedge interest rate risk also contributed to this recovery in interest income.

Maturity transformation, for example when regulated savings account balances are used to finance long-term fixed-rate mortgages, involves credit, liquidity and interest rate risk. Banks must carefully manage and hedge this risk in order to preserve their financial stability. Credit or default risk arises when the customer is unable to repay

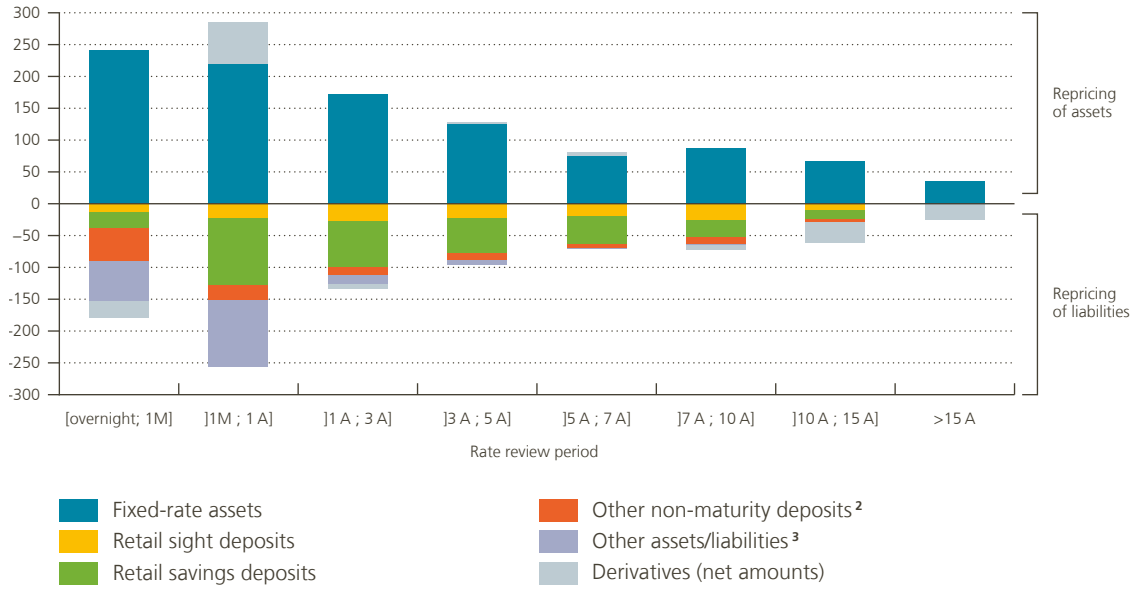
the loan on time. Since loans are repaid over a long period, whereas savings deposits can be withdrawn immediately, the bank is also exposed to liquidity risk. Moreover, since the return on mortgage loans is immutable, whereas the interest rate on deposits can fluctuate, banks are also exposed to interest rate risk.

In order to manage interest rate risk properly, it is essential for banks to strike a structural balance between sensitivity to changes in the interest rates on sight and savings deposits, on the liabilities side, and loans, on the assets side. Figure 7.13 illustrates how the Belgian banking sector manages interest rate risk. It categorises rate-sensitive assets and liabilities according to the timeframe in which they are likely to be repriced. For example, for a mortgage whose interest rate will be revised within five years, the outstanding balance at that stage will be placed in category]3A, 5A]. Savings deposits are categorised on the rate scale based on the estimated extent to which a permanent interest rate shock will, after a given period, affect the returns on the deposits. Banks' internal models indicate the speed with which they have historically repriced their savings rates following a rate shock. According to bank models for savings deposits, 38 % of a rise in interest rates is passed on to savings rates in the first year following the shock, on average, and a further 29 % is passed on in the two following years. In other words, a permanent interest rate shock of one percentage point will lead to a 0.38 percentage point increase in the average deposit rate on outstanding amounts in the first year, followed by a further 0.29 percentage point increase in the following two years. For maturities where the gradual repricing of interest rates on sight and savings deposits does not (as was the case in the past) provide adequate coverage for fixed-income assets, banks use interest rate derivatives to balance the interest rate sensitivity of assets and liabilities across maturities. These derivatives are mainly used to balance the interest rate risk for instruments with (very) long repricing periods and

Figure 7.13

The interest rate repricing profile[1] of assets and liabilities is very balanced

(consolidated data for the six largest banks, based on modelling assumptions, June 2023, billions of euros)



Source : NBB.

1 The amounts shown on this chart include both principal and interest payments arising from interest-sensitive assets and liabilities, expressed in relation to the remaining term to their repricing, assuming a run-off balance sheet, and in line with the interest rate environment in June 2023. The modelling assumptions refer, for example, to those used in banking models concerning the maturities of items for which the rate review period is not fixed (such as savings accounts), early repayments of fixed-rate loans, early repayments of term deposits, etc. The data used are based on the banking book.

2 These include non-maturity deposits with companies and financial institutions, excluding term accounts.

3 These include outstanding debt securities and term deposits.

for which the size of sight and savings deposits plays a lesser role in managing risk.

The stability and gradual transmission of market rates to the remuneration of current and savings accounts enable Belgian banks to issue a large proportion of fixed-rate assets, thus protecting household borrowers from interest rate fluctuations. In countries where a large proportion of bank loans are variable rate, fairly sharp increases in deposit rates were recorded, as banks in those countries also benefited almost immediately from higher remuneration on their (mortgage) loan portfolios. In Belgium, on the other hand, a large proportion of loans are fixed rate, as is the case, for example, for over 70 % of Belgian household mortgages. This protects households from interest rate fluctuations and means that, for banks, the interest income they earn on loans increases less quickly when market rates rise. This state of affairs could in turn restrict the margin available to adjust interest rates on deposits.

Generally speaking, Figure 7.13 shows that the assets and liabilities of Belgian banks are fairly evenly distributed by maturity and that they are therefore well protected against interest rate risks. The fact that the savings rate did not rise as quickly as banks themselves had modelled in their interest rate risk management and that the credit margin on deposits recovered, indicates that there was a degree of latitude to apply a higher rate of remuneration to deposits than what was observed. As the limited remuneration of deposits became a societal issue, three legislative proposals were tabled, which stipulated that banks should offer higher remuneration by linking the interest rate on savings deposits to the European Central Bank deposit rate or the ten-year OLO rate. In this context, the finance minister sought the Bank's opinion (see also part B.2 of the "Prudential regulation and supervision" section of this report). The Bank warned of the considerable risks to interest rate risk management, solvency and profitability and, by extension, to financial stability posed by the proposals. However, in view of the balanced distribution of interest-sensitive assets and liabilities and the very high return on equity, the Bank confirmed that there was indeed room for a gradual increase in the remuneration of savings deposits.

In the context of financial stability, it is also crucial to preserve the stability of deposits as a source of funding for the Belgian banking

sector, which implies that their remuneration should remain in line with changes to market conditions. If savers find the return on savings insufficient, they will seek higher returns elsewhere. This was highlighted by the popularity of the State note issued in September 2023, which raised € 21.9 billion (see also Box 7 in this chapter).

The increase in net interest income (+€ 2.4 billion), due in part to the slow pace of the repricing of savings rates, but also to the recovery of the credit margin on sight deposits and the higher remuneration of variable-rate assets, sustained the high profitability of the Belgian banking sector in the first nine months of 2023. In fact, the sector's profitability reached an all-time high of € 7.2 billion in this period and rose by € 1.9 billion compared with the same period in 2022 (see Table 7.1). The return on equity (RoE) for the Belgian banking sector averaged 12.5 % (compared with 9.4 % in the corresponding period of 2022). The cost-to-income ratio also improved, falling from 63.3 % to 59.5 %.

Savings banks also recorded much more robust rates of return in 2023 than in the past, narrowing the gap with big banks and enabling them to raise interest rates on deposits. While the typical savings bank could expect an average return on equity of 8.5 % in the first nine months of 2023, this figure rose to 13 % for big banks. The main reasons for this long-standing discrepancy are that larger banks can achieve much greater economies of scale as they are able to spread their expenses (such as IT investment) over a wider asset base, while the typical small savings bank business model of collecting deposits to make loans came under severe pressure in the low interest rate environment. Nevertheless, Figure 7.14 shows that the widening of the interest margin enabled savings banks to boost their returns significantly over the period (from 4.8 % in the first nine months of 2022 to 8.5 % for the same period in 2023).

Table 7.1

The profitability of the Belgian banking sector increased

(income statement of Belgian credit institutions; in € billion, unless otherwise stated)

				First three quarters	
	2020	2021	2022	2022	2023
Net interest income	14.2	14.4	15.3	11.1	13.5
Non-interest income	8.2	7.6	7.9	6.0	6.1
Net income from fees and commissions [1]	5.6	6.4	6.5	5.0	5.0
Realised and unrealised gains and losses on financial instrumentss	0.0	0.6	0.8	0.6	0.4
Other non-interest income	2.6	0.6	0.6	0.4	0.6
Operating income (banking income)	22.4	22.0	23.2	17.1	19.6
Operating expenses	–13.8	–13.3	–14.2	–10.8	–11.7
Gross operating profit (before impairments and provisions)	8.6	8.7	9.1	6.3	7.9
Impairments and provisions	–3.1	–0.2	–1.1	–0.7	–0.4
Other components of the income statement [2]	–1.2	–0.7	–0.3	–0.2	–0.4
Net profit or loss	4.3	7.8	7.6	5.4	7.2
Return on equity (in %)	5.9	10.2	9.9	9.4	12.5
Return on assets (in %)	0.4	0.7	0.7	0.6	0.8
Cost-to-income ratio (in %)	61.7	60.4	61.0	63.3	59.5

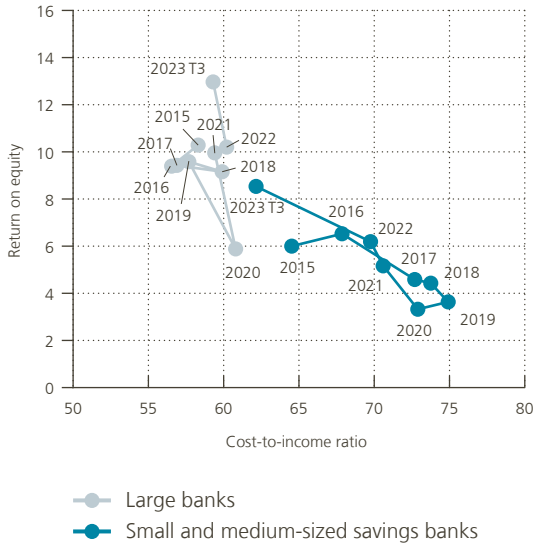
Source: NBB.

1 Including commissions paid to (self-employed) banking agents.

2 This item includes tax, exceptional items, negative goodwill recognised in profit or loss, and the share in profits or losses of investments in subsidiaries and joint ventures.

Figure 7.14

The return on equity and cost-to-income ratio of large banks and small and medium-sized savings banks improved significantly



Source: NBB.

Between the first three quarters of 2022 and the corresponding period of 2023, banks' expenses rose by € 0.9 billion, mainly as a result of higher operating costs. In particular, inflation and the associated automatic indexation of wages pushed up costs. At the same time, provisions for credit losses helped limit recorded costs. In fact, the stock of provisions for credit losses returned to its pre-pandemic level. In addition, credit losses were limited, falling by € 0.4 billion compared with the first nine months of 2022, despite the sharp rise in interest rates and the slowdown in economic growth. The good quality of loans to businesses and households explains this situation.

Net new provisions for credit losses fell. As the Bank considered that these provisions were too low at a time of macroeconomic uncertainty, the countercyclical capital buffer was reactivated in October 2023, to ensure that Belgian banks have sufficient liquidity to absorb unexpected future losses (see also part B.2 of the "Prudential regulation and supervision" section of this report).

The fact that the problems experienced by US banks and Credit Suisse did not spread to banks in the euro area, and to Belgian banks in particular, is a sign of their solidity and resilience. Thanks to their ample and robust capital and liquidity buffers, banks can continue to serve as a major lever to support the real economy, even when macroeconomic circumstances are less favourable. Capital and liquidity ratios are well above minimum requirements. The average common equity tier 1 ratio (CET 1 ratio) of the Belgian banking sector stood at 16.9 % in the third quarter of 2023, above the euro area average (16 % in June 2023). The liquidity coverage ratio (LCR) for the sector stood at 157 % at the end of the third quarter of 2023, whereas the minimum requirement is 100 %. Despite the high level of liquidity on bank balance sheets, this ratio declined slightly for a number of reasons. On the one hand, banks drew on existing liquidity reserves to repay some of the ECB's longer-term refinancing operations (TLTRO III), which will mature in full in the course of 2024. On the other hand, the outflow of deposits in favour of the State note had a negative effect on the liquidity position of Belgian banks. That being said, the impact of this situation on the liquidity coverage ratio seems more limited than initially expected, as most Belgian banks adopted several measures to strengthen their liquidity position, such as intragroup transactions and the issuance of covered bonds or other commercial debt securities.

Rising interest rates also had a positive impact on the insurance sector

The insurance sector has shown resilience in recent years and entered 2023 on a sound footing. In 2020, the Covid-19 pandemic had little effect on the sector, thanks in particular to containment measures that led to an overall reduction in claims. The sector was therefore in a robust position when it had to deal with the floods that hit the country hard in July 2021. It should be recalled that based on the legislative framework in force at the time, as well as the one-off agreements made in the wake of the floods, it was established that the burden of claims would be borne by a number of public and private players, including insurance companies and reinsurers. In 2022, the energy crisis that followed Russia's invasion of Ukraine was accompanied by an increase in credit risk in the insurance sector's investment portfolio. However, this increase did not have a significant negative impact. Finally, the direct impact of the current conflict in the Middle East on the sector remains very limited for the time being, but second-round effects cannot be ruled out. In terms of profitability,

the sector posted a net profit of € 3.7 billion in 2022, compared with € 2.6 billion at the end of 2021. Net income on non-technical reserves was mainly responsible for driving up the sector's profitability, while the net income from life and non-life branches remained relatively stable between these two periods.

The rise in interest rates kept the solvency of insurance companies at a structurally higher level than in the low-rate environment. In 2022, the solvency of the insurance sector benefited greatly from the rapid rise in interest rates. The solvency capital requirement ratio (SCR ratio) reached 221 % in the third quarter of 2022. The increase in risk-free rates had pushed down the discounted market value of commitments to policyholders. Given that, at sector level, the average maturity of liabilities is structurally longer than that of assets (resulting in greater sensitivity to changes in interest rates), this fall in market value was relatively greater on the liabilities side than on the assets side. This had led, mechanically, to a positive effect on the sector's level of net capital. By the fourth quarter of 2022, the SCR ratio had fallen to 209 %, mainly as a result of the inversion of the yield curve . It then remained relatively stable during the first two quarters of 2023. In the third quarter of 2023, the SCR ratio deteriorated slightly, falling from 211 % to 207 %.

The rise in interest rates strengthened the guaranteed-rate life insurance business model. This model remained resilient in the low-rate environment. In order to generate sufficient margins to honour class 21 life insurance contracts concluded in the past with guaranteed rates that were at times still very high, life insurance companies continued to adapt. On the one hand, they continued to reduce the average guaranteed rate on the stock of existing contracts, thanks notably to programmes to sell portfolios of contracts with high rates to other insurance companies. On the other hand, life insurance companies continued to generate returns by redirecting their investments towards riskier and often less liquid assets (see below). In the environment of higher interest rates, insurance companies also had the opportunity to reinvest the proceeds generated by maturing assets into assets with higher returns. Between 2021 and 2022, the yield on assets held to cover class 21 contracts rose from 2.9 % to 3.2 %, while the average guaranteed rate on the stock of life insurance contracts fell from 1.9 % to 1.8 %. With regard to the latter point, it is important to emphasise that the current interest rate environment recently enabled several insurance companies to offer higher rates on new guaranteed-rate life insurance policies.

Inflation is impacting not only the assessment of claims but also, gradually, the (re)pricing of premiums in certain lines of business. According to the Bank's monitoring exercises, the negative impact of inflation has been relatively well absorbed by insurance companies. At the peak of inflation in 2022, simulations concluded that the sector's SCR would fall by three percentage points over the first three quarters of the year. Inflation affects the liabilities of insurance companies by increasing their overhead (salaries, operating expenses, etc.) and the cost of claims to be covered. This is mainly the case for non-life and health insurance, where cover is expressed at current prices. On the assets side, the pricing of premiums collected is adjusted gradually, particularly where premiums are calculated on the basis of indices which are themselves adjusted for inflation (home insurance, etc.). However, competition in certain non-life lines limits the scope to increase premiums. Changes in reinsurance conditions for insurance companies also play a role in the upward (re) pricing of certain premiums (see below).

Despite higher interest rates, insurance companies continue to face a number of risks

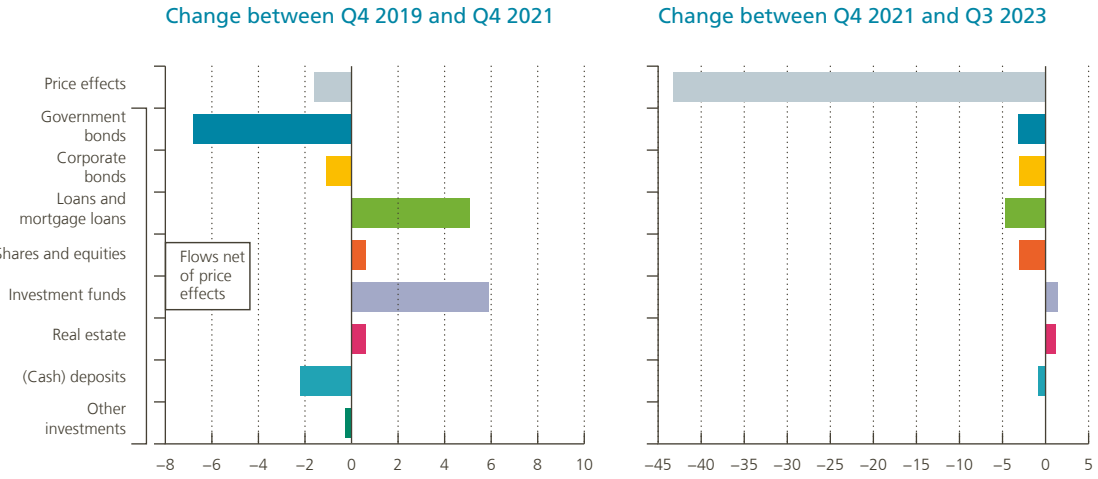
The rebalancing of the investment portfolio continued in 2023, mainly due to valuation effects. Following the rise in interest rates that began at the end of 2021, the value of a wide range of assets held in the portfolios of insurance companies depreciated. This was particularly the case for sovereign bonds. Although they still account for a large proportion of the sector's investments, especially for companies offering guaranteed-rate life insurance policies, their relative share fell from 44 % in September 2021 to 39 % in September 2023. This decline was mainly due to valuation effects, [1] while the falls recorded prior to 2022 were mainly due to volume effects in the context of a search for yield and an increased appetite for riskier, less liquid exposures. Over the years,

1 In the Solvency II regulatory framework, the balance sheets of insurance companies are expressed at market value. Changes in the value of the sector's investment portfolio are therefore the result of price effects (resulting from fluctuations in the market value of assets) and volume effects (net flows).

Figure 7.15

The rebalancing of investment portfolios (excluding class 23) continued in 2023, mainly driven by valuation effects, whereas volume effects had been more influential before the rise in interest rates

(Solvency II unconsolidated quarterly data, billions of euros)



Source : NBB.

the sector has increased its exposure to certain asset classes offering attractive returns, such as real estate, loans and investment funds. As a result, the insurance sector has become progressively more vulnerable to potential shocks on these markets.

Exposure to the property sector is significant and remains potentially subject to market correction. At the end of 2022, the estimated exposure to residential property was € 20 billion (at the low end) or 8 % of the investment portfolio excluding class 23 products. Direct or indirect exposure to commercial real estate (CRE) amounted to € 24.5 billion, equivalent to 10 % of the investment portfolio in the third quarter of 2023. Although there has been a significant reduction in CRE exposure since the end of the third quarter of 2022, due in particular to price effects, monitoring the valuation of some of these assets remains a key issue in the current macroeconomic context.

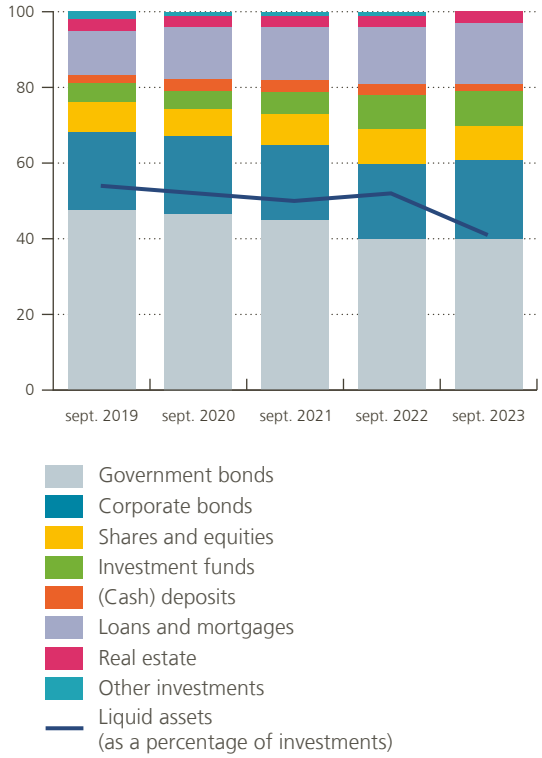
Vigilance is required when it comes to managing liquidity risk. In an environment of rising interest rates, life insurance companies face increased liquidity risk for two reasons. On the one hand, higher interest rates could prompt some households to terminate the lower-rate life insurance policies they had taken out in the past in order to switch to investments that have become more attractive. On the other hand, when interest rates rise, insurance companies that use derivatives, including interest rate swaps, to hedge (downward) interest rate risks could face margin calls. In order to offset variations in their positions in these transactions, these companies must be able to mobilise liquidity, often in the form of cash, on a daily basis, the amounts of which can be relatively substantial. In practice, with regard to the first point, the surrender rates for guaranteed-rate life insurance contracts recorded in 2023, expressed as a percentage of premium income, remained stable, although the situation varied widely from one insurance company to another, and were below those observed during the Covid-19 pandemic. Notably, taxation, among other factors, plays a considerable role in household redemption decisions. As for the second point, there was considerable heterogeneity between insurance companies in 2023, both in terms of how extensively derivatives were used and the size of related margin calls. From a sectoral point of view, liquid assets still represented 41 % of the sector's investment portfolio in the third quarter of 2023 (or 188 % of liquid liabilities), providing a comfortable margin in the event of an increase in liquidity risk.

Climate-related and cyber risks continue to warrant close monitoring. The financial risks induced

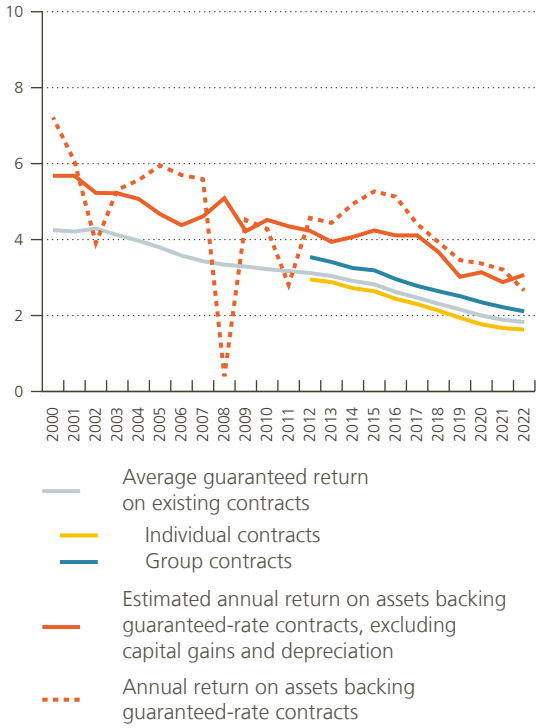
Figure 7.16

Liquid assets still account for a significant proportion of the sector's investment portfolio, and the guaranteed-rate life insurance business model has been revived

Change in the sector's investment portfolio (excluding class 23), per type of asset
(percentage)



Change in the guaranteed average rate for class 21 contracts and the return on the assets held to cover them
(percentage)



Source: NBB.

by climate-related risks, both physical and transition risks, are not negligible for insurance companies. On the one hand, claims linked to the damage caused by climate change are on the rise in Belgium, and it is absolutely necessary to finalise the adaptation of the statutory framework for the coverage of natural disasters. Secondly, the investment portfolios of insurance companies are exposed to transition risk through the assets they contain. According to updated mapping by the Bank, around 48 % of the corporate bond portfolio, 51 % of the equity portfolio and 45 % of the commercial loan portfolio held by the insurance sector are exposed to sectors likely to suffer from the risks associated with the transition to a low-carbon economy. At an individual level, exposure to climate risk is very heterogeneous and can be very high for certain insurance companies. In view of growing climate-related risks and, more generally, the current macroeconomic context, reinsurance companies have significantly revised their conditions. Insurance companies are thus facing substantial rate increases and may have to adjust their reinsurance levels. Although the level of reinsurance remains adequate, the insurance sector is now subject to greater capacity constraints for the coverage of certain risks, against a backdrop of increasingly frequent small claims.

Lastly, the Covid-19 pandemic spurred digitalisation in the sector, while Russia's invasion of Ukraine highlighted growing cyber risk. The Bank continues to take initiatives in these areas. For more information on this subject, please refer to the discussion on digitalisation in the "Prudential regulation and supervision" section of this report.

8. Public finances and fiscal policy

8.1 General situation and challenges

The budget balance deteriorated sharply in 2023, despite the continued phase-out of temporary support measures

In 2023, Belgium's budget deficit widened by 0.7 percentage points of GDP to 4.2 % of GDP. After a clear improvement in the budget balance over the previous two years, mainly as a result of the economic recovery and the systematic lifting of the support measures adopted in response to the pandemic, this trend came to a halt in 2023. Nevertheless, temporary factors had a positive impact on the development of the budget balance. The almost complete withdrawal of the temporary pandemic-related measures in 2023 led to an improvement in the balance of 0.5 percentage points of GDP.

The budgetary impact of the temporary factors linked to the energy crisis and Russia's invasion of Ukraine fell by 0.4 percentage points of GDP. That being said, the measures adopted to shore up household purchasing power (such as the basic energy package), to preserve business profitability (such as the temporary reduction in employer social security contributions) and to cope with Russia's invasion of Ukraine (such as expenditure on refugee support) remained at the same level as in 2022. At the same time, the temporary additional revenue used to finance these measures rose sharply in 2023. Both revenue from the temporary tax on the windfall profits of electricity producers and the contribution from the nuclear sector increased significantly. In 2023, the federal government also received additional corporate tax revenue from the returns on frozen Russian assets held in Belgium.

Growth in primary expenditure weighed heavily on the primary deficit in 2023, taking it to a level well above that recorded before the pandemic.

Table 8.1

General government budget balance

(in % of GDP)

	2019	2020	2021	2022	2023 e
Revenue	49.9	49.9	49.5	49.6	49.9
of which : taxes and social security contributions	42.9	42.8	42.6	42.6	42.9
Primary expenditure	49.9	56.8	53.2	51.6	52.4
Current expenditure	46.6	53.2	49.4	48.0	48.6
Capital expenditure	3.4	3.6	3.8	3.6	3.7
Primary balance	0.0	–6.9	–3.7	–2.0	–2.5
Interest expense	2.0	1.9	1.7	1.5	1.8
Budget balance	–2.0	–8.9	–5.4	–3.5	–4.2

Sources : NAI, NBB.

This marked increase, which mainly concerned current expenditure, can be explained by several factors. Firstly, political measures such as a further increase in minimum benefits at the federal level and the strengthening of social security policy in Flanders had an impact. In addition, the costs of population ageing continue to rise structurally. Secondly, the automatic indexation of social benefits and public sector salaries pushed up the expenditure ratio in 2023. Finally, public investment also soared, driven by regional infrastructure projects.

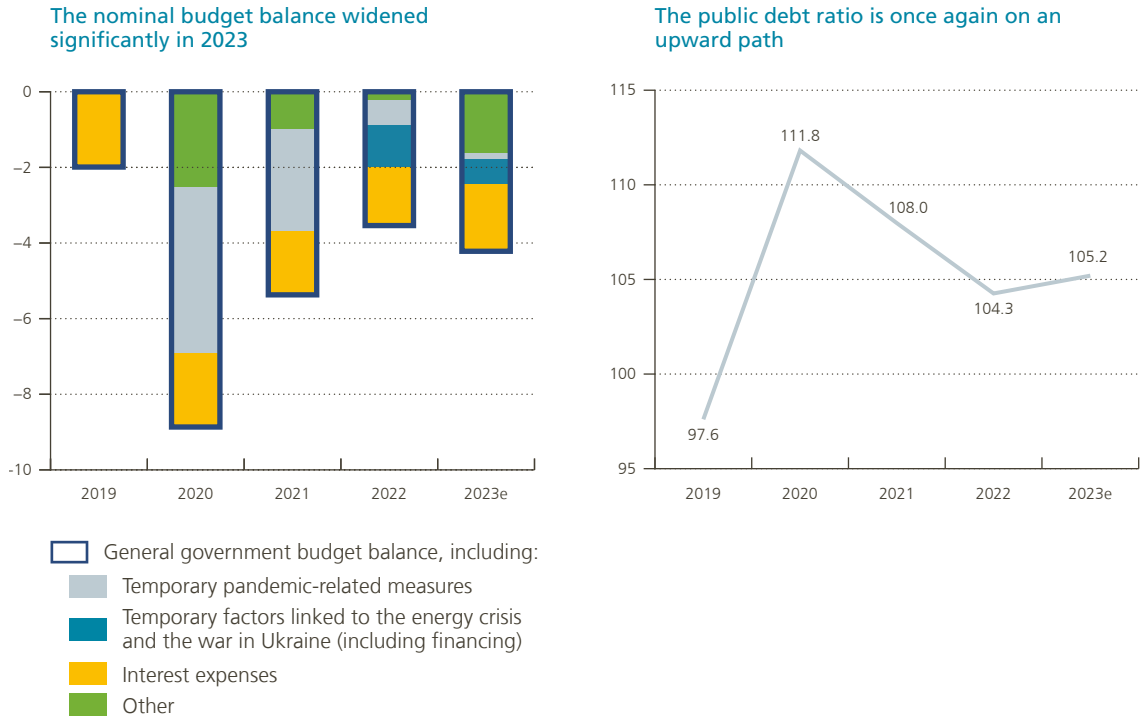
Excluding temporary factors related to the pandemic, the energy crisis and the war in Ukraine, tax revenue dropped in 2023. This decline was mainly due to the downward trend in indirect taxes, which were affected by the permanent reduction in the VAT rate on electricity and natural gas, which was not entirely recouped by the corresponding increase in excise duties, and the decline in revenue from registration duties due to the slowdown on the property market. Meanwhile, revenue from taxes on labour increased thanks to strong wage growth resulting from the delayed impact of automatic wage indexation. This effect was most apparent in the take from social security contributions. However, personal income tax revenue was in fact also contained by the sharp indexation of tax brackets, based on the previous year's inflation rate which far exceeded automatic wage indexation in 2023.

Against the backdrop of a primary deficit of 2.5 % of GDP, fiscal policy remained expansionary in 2023. While the economy almost reached potential output in 2023, the general government sector did not manage to reduce the primary deficit further. Since the end of the Covid-19 crisis, the primary balance has systematically recovered, albeit insufficiently in view of the rebound in economic activity. By comparison, in 2019, the economy was close to potential output and the primary balance was in equilibrium. Fiscal policy therefore remained very favourable in 2023. In fact, since 2019, there has been a structural increase in primary expenditure,

Figure 8.1

Belgium's budgetary situation is structurally deteriorating

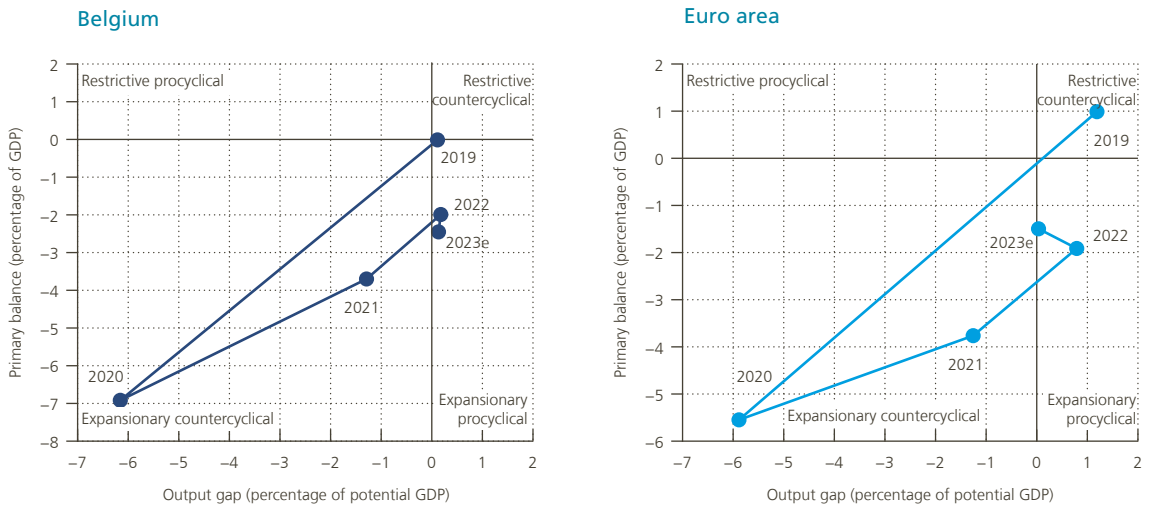
(percentage of GDP)



Sources: NAI, NBB.

Figure 8.2

Belgium's fiscal policy remains expansionary



Sources: EC, NBB.

while accommodative measures adopted in response to the energy crisis have not been quickly withdrawn.

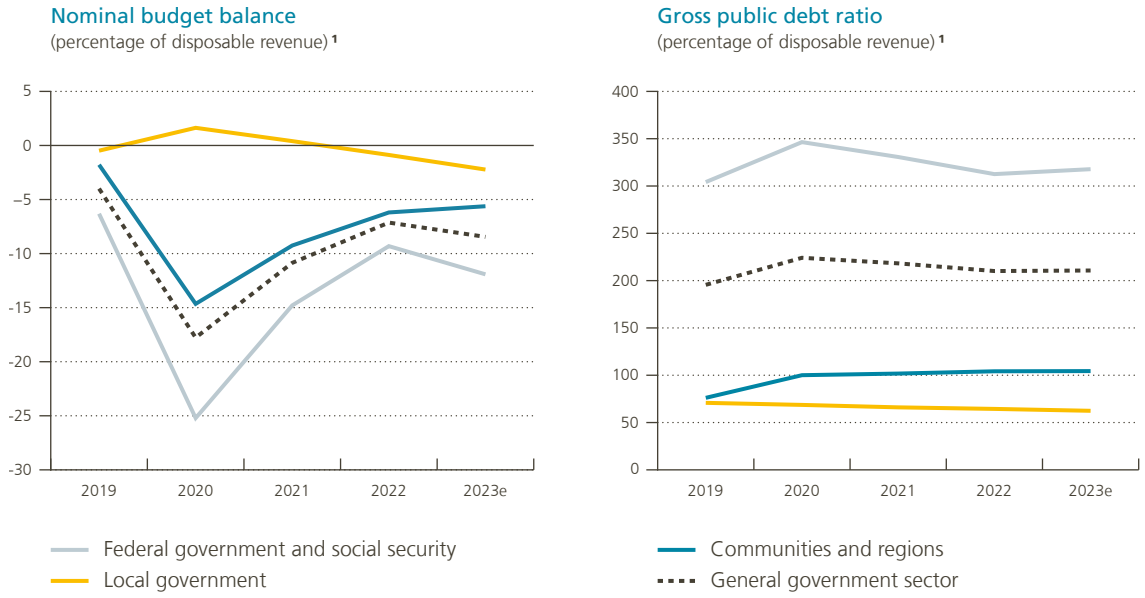
Interest expenses rose for the first time in many years, driven by further rises in short- and long-term interest rates. The rise in interest rates that began in early 2022 also led to a gradual acceleration in interest expenses as from last year. Although interest expenses fell slightly in 2022, as maturing debt could still be refinanced at a more advantageous rate, the average interest rate on outstanding debt (the implicit rate) rose again in 2023. Interest expenses are expected to rise by 0.2 % of GDP per annum on average over the next few years.

Due in particular to a pronounced primary deficit, the debt ratio increased in 2023 and remained well above its pre-pandemic level. In 2023, Belgium's gross debt ratio increased by 0.9 percentage points to 105.2 % of GDP. The denominator, nominal GDP, also rose sharply in 2023, driven by still substantial domestic inflation (growth in the GDP deflator). However, the favourable denominator effect was partially offset by the impact of the high deficit. Moreover, the issuance of a one-year State note in September 2023 proved exceedingly popular and led to a temporary 1.5 percentage point increase in gross debt (and a corresponding increase in cash reserves). In the coming years, the persistence of large primary deficits threatens to further increase debt, especially as implicit interest rates continue to rise. Belgium's debt ratio is therefore on a structurally upward path, an observation that applies to both the federal government and the communities and regions.

The increase in the public deficit in 2023 was almost entirely at the federal level. The deficit of the federal government and social security rose by 0.6 percentage points of GDP in 2023, corresponding more or less to the increase in the general government borrowing requirement. Primary expenditure swelled at the federal level partly as a result of a structural increase in the costs associated with population ageing. At the regional level, deficits remained virtually stable. If the budget balance of the various governments is expressed as a percentage of their disposable revenue, which allows a more accurate comparison, it appears that the deficits of both the federal government and those of the communities and regions are still much higher than they were before the Covid-19 pandemic. Finally, as was the case in 2022, the local government sector ran a small deficit, reflecting the local investment cycle in the run-up to elections in 2024.

Figure 8.3

Federal and regional budget balances remain structurally less favourable than before the pandemic



Sources: NAI, NBB.

1 Disposable revenue includes only revenue effectively available to government to implement a policy. More specifically, government revenue has been adjusted to take into account transfers to other levels of government.

Over the next few years, the budget deficit must be brought below 3 % of GDP, so as to put the debt ratio on a downward trajectory

A significant improvement in the budget balance is required to ensure the sustainability of public finances. Firstly, the deficit must be brought below 3 % of GDP in order to reduce the debt ratio. Secondly, as part of a forward-looking policy, it is important to build up reserves in calmer economic times so as to be able to cope with future shocks. Furthermore, a more restrictive fiscal policy helps contain inflation and thus aids monetary policy.

An effective European fiscal framework plays a key role in achieving sound public finances. At the end of the year, the Ecofin Council reached a political agreement on a new European economic governance framework, the fiscal dimension of which is a significant part. The primary objective of this new framework is to strengthen the sustainability of public finances, while supporting employment and promoting sustainable and inclusive growth. Member States will have to present medium-term fiscal-structural plans covering four or five years. These plans should adhere to country-specific fiscal trajectories, depending on the risk to the sustainability of their public finances. The trajectory will then be converted into an expenditure measure that allows subsequent monitoring to be ensured. Box 8 provides an overview of the main features of this new framework.

In March, the European Commission (EC) asked Belgium to bring its budget deficit below the reference value of 3 % of GDP by 2026 at the latest and to set its debt ratio on a downward path over the medium term. Although the recommendations for Belgium are based on the old fiscal framework, they include several elements that fall under the new framework. The EC further announced that it will propose to the Ecofin Council, in the spring of 2024, that the excessive deficit procedure be initiated for countries in non-compliance with the requirements, on the basis of figures recorded for 2023. In its April opinion, the Government Financing Requirements Section of the High Council for Finance adopted the deficit and debt targets proposed by the EC. It insisted that the requisite fiscal

consolidation should begin without delay, in the 2024 budget at the latest, in order to achieve the necessary turnaround in fiscal policy in the very near future.

In its country-specific recommendations published in July, the Ecofin Council asked Belgium to make a structural effort of at least 0.7 percentage points of GDP in 2024, by keeping the nominal increase in net primary expenditure financed at national level [1] to a maximum of 2 %. This was the first time since the general escape clause entered into force that a quantitative recommendation was made. The Council also ordered Belgium to phase out the current energy support measures as soon as possible and to allocate the resulting savings to reducing the public deficit. For the period after 2024, the EC recommended that Belgium pursue a fiscal strategy based on gradual and sustainable consolidation, combined with investment and reforms conducive to higher sustainable growth, so as to achieve a prudent fiscal position in the medium term.

1 This is nationally financed expenditure less discretionary revenue measures, interest expenses and cyclical unemployment expenditure.

BOX 8

The new European fiscal framework

At the end of December, the Ecofin Council reached a political agreement on a new European economic governance framework, the fiscal dimension of which is a significant part. [1] The European economic governance framework consists of a set of institutions, rules and procedures to coordinate and monitor economic and fiscal policies in the EU. The agreement on a new framework was the culmination of a process that began in early February 2020, with the publication of an assessment of the existing framework by the European Commission. It must still be presented to the European Parliament and could be adapted. [2] The new framework should be progressively introduced as from 2024.

1 See Council of the European Union, "Economic governance review: Council agrees on reform of fiscal rules", Press release, 21 December 2023.
2 An agreement was reached between the Ecofin Council and the European Parliament on 10 February 2024. This agreement does not contain any substantial changes.

The old framework has been adapted to remedy a number of shortcomings and to take account of several new challenges. According to an EC assessment, the old framework had several shortcomings, such as overly complex rules, a lack of national ownership, the often pro-cyclical nature of fiscal policy, a lack of attention to reforms and investment, and limited compliance with and enforcement of the rules. Stakeholders also called for greater account to be taken of the increased heterogeneity amongst Member States and the challenges facing the EU. These include the digital and climate transitions, energy security, population ageing, high budget deficits and public debt following the crises of previous years, and strategic security.

The new fiscal framework maintains several important features of the former framework and introduces several changes and new elements relating to Member State fiscal policies. Several major aspects of the former fiscal framework have been retained, such as the reference values of 3 % and 60 % of GDP for the budget deficit and public debt, respectively; the breakdown into preventive and corrective arms; the European Semester as an instrument for policy coordination; and the existence of escape clauses.[1] The main new aspects are outlined below.

National medium-term fiscal-structural plans covering four or five years (depending on the length of the legislative term) are the cornerstone of the new framework. These replace the current national stability, reform and convergence programmes. In these plans, the Member States commit to budgetary objectives as well as reform and investment targets. The aim is to facilitate a coherent and streamlined process and to strengthen national ownership. The fiscal trajectory set out in the plan will remain unchanged for its entire duration. Member States must submit an annual progress report on the implementation of their plan to the European Commission by 30 April at the latest.

1 The main aspects that have been abolished concern achievement of a medium-term budgetary objective (MTO), convergence towards this objective, the annual reduction in the debt ratio by 1/20th of the deviation from the 60 % of GDP reference value, and the national stability, reform and convergence programmes.

For countries whose deficit exceeds 3 % of GDP and/or whose debt ratio exceeds 60 % of GDP, the EC will establish a technical trajectory to be used as a basis for preparing a national plan.[1] This path forms the essence of the preventive arm of the fiscal framework. It is expressed in terms of maximum nominal growth in net primary expenditure financed at national level[2] and covers a four-year adjustment period, which can be extended by up to three years. An extension may be granted if Member States carry out certain reforms and investments that improve growth potential and foster fiscal sustainability.

The technical trajectory is based on an analysis of the sustainability of public finances per country and guarantees that, on the one hand, by the end of the adjustment period at the latest, the projected public debt ratio will be on a downward path or will remain below 60 % of GDP over the medium term[3] assuming no further budgetary measures. Secondly, during the adjustment period, the projected government deficit will be brought below the reference value of 3 % of GDP and will remain below this level in the medium term, assuming no further budgetary measures.

The technical trajectory must also meet two additional conditions. Firstly, it must enable the projected debt ratio to be reduced by a minimum annual average amount of at least one percentage point of GDP over the adjustment period, if the debt ratio exceeds 90 % of GDP, or by half a percentage point of GDP, if it is between 60 % and 90 % of GDP. Secondly, it must ensure that fiscal adjustment continues until a deficit level is reached that ensures a structural safety margin of 1.5 % of GDP in relation to the reference value of 3 % of GDP. The annual improvement in the structural primary balance to achieve the required margin is 0.4 % of GDP, which will be reduced to 0.25 % of GDP if the adjustment period is extended.

According to simulations by the think tank Bruegel, the technical trajectory for Belgium would require an annual fiscal adjustment of 0.7 percentage points of GDP for seven years or 1.2 percentage points of GDP for four years.[4] The structural primary balance would then trend towards a surplus of around 2.5 % of GDP. These simulations are based on the EC's autumn projections, which forecast a deficit of 4.9 % of GDP in 2024, and were prepared in accordance with the Commission's current methodology for analysing debt sustainability.

Member States determine the adjustment trajectory they intend to follow; this may deviate from the technical trajectory proposed by the EC. It must, however, be supported by objective factors and approved by the EC and the Ecofin Council.

For Member States whose debt exceeds 60 % of GDP and that stray too far from the agreed trajectory, as well as those whose deficit is persistently above 3 % of GDP, the excessive deficit procedure (EDP) will be initiated. This remains the corrective arm of the budgetary framework.

1 No fiscal adjustment is required from countries whose deficit does not exceed the reference value of 3 % of GDP and whose debt ratio does not exceed the reference value of 60 % of GDP. However, the EC can provide technical guidance upon request.

2 This is public expenditure net of discretionary revenue measures, interest expenses, expenditure on cyclical unemployment and expenditure on EU programmes fully covered by receipts from EU funds. One-off and temporary measures are also excluded from net expenditure.

3 Based on the European Commission's legislative proposals of April 2023, this is assumed to be a 10-year period.

4 See J. Zettelmeyer, *Assessing the Ecofin compromise on fiscal rules*, 21 December 2023, Bruegel.org.

The EDP rules on exceeding the 60 % debt-to-GDP threshold have been strengthened. For Member States whose debt exceeds 60 % of GDP and whose headline deficit is neither close to balance nor in surplus, the EC will launch an EDP (excessive deficit procedure) if the country's net expenditure strays significantly from the agreed trajectory. A deviation is considered significant if the actual change in net expenditure deviates by more than 0.3 percentage points of GDP in a given year or by more than 0.6 percentage points of GDP cumulatively from the path defined in the national plan. This ceiling on the cumulative deviation authorised over more than two years is a new feature. The corrective trajectory for net expenditure is at least as demanding as the agreed trajectory and, moreover, redresses cumulative deviations built up in previous years.[1]

The EDP rules based on the deficit criterion have been retained. Should the deficit remain above 3 % of GDP, the corrective trajectory for net expenditure is in principle the same as the agreed trajectory, with a minimum annual structural adjustment of 0.5 % of GDP. The Member States have agreed that the EC may, during the 2025-2027 transitory period, take into account higher interest expenses when calculating the adjustment required.

The fine to be imposed in the event of non-compliance with the Ecofin Council's recommendations under the EDP has been reduced. Whereas it was previously set at a maximum of 0.5 % of the preceding year's GDP per annum, it is now capped at 0.05 % of the preceding year's GDP per six-month period. The fine must continue to be paid until the Ecofin Council finds that its recommendations have been met; it may also decide to increase the penalties.

A standing and more independent European Fiscal Board (EFB) should play a greater role. The role of the EFB has been strengthened by extending its consultative powers in the governance process. To this end, its independence and access to information should be improved. The role of the national independent fiscal institutions has been confirmed but not strengthened. The national authorities may, however, turn to these institutions to assess compliance with the net expenditure trajectory. That being said, the resulting analyses are not binding on the EC.

A provisional assessment of the new European economic governance framework paints a mixed picture. The new framework includes clear improvements. This is particularly the case for the use of expenditure growth as the sole operational variable, the emphasis on the medium term for national plans which remain unchanged for the years to which they apply, the encouragement of greater ownership on the part of Member States through individualised trajectories, and reinforced rules for the debt-based EDP. Nonetheless, certain reservations remain. For example, the use of debt sustainability analysis as the touchstone to determine the fiscal trajectory will not lead to simplification. In addition, this method requires an upfront financing effort for the increasing costs of population ageing, which makes the requirements for Belgium particularly strict. The additional conditions concerning the technical trajectory and the 2025-2027 transitory period further complicate matters. In addition, the possible extension of the fiscal adjustment period to a maximum of seven years could raise questions about the application of the criteria used to this end. Only time will tell whether these adjustments will improve compliance with and application of the rules. The precise implications for Belgian fiscal policy are not yet entirely clear, as they will depend on the parameters used to calculate the technical trajectory and the use of discretionary powers by the European institutions when implementing the rules.

1 Annual deviations from the agreed net expenditure path are aggregated by the EC for each Member State in a control account.

In the stability programme put forward by Belgium in April 2023, the various governments set out a fiscal trajectory that could bring the deficit below 3 % of GDP in 2026, but which allows for a further increase in the debt ratio in subsequent years. The aim is to reduce the nominal general government deficit to 2.9 % of GDP by 2026. To achieve this, the deficit of the federal government and social security would fall to 2.2 % of GDP, while the combined deficit of the communities and regions and of local authorities would fall to 0.7 % of GDP. A structural improvement of 0.8 percentage points of GDP is targeted for 2024, to be achieved almost entirely by the communities and regions. This assumes a nominal deficit of 5.1 % of GDP in 2023, which is more pessimistic than more recent estimates.

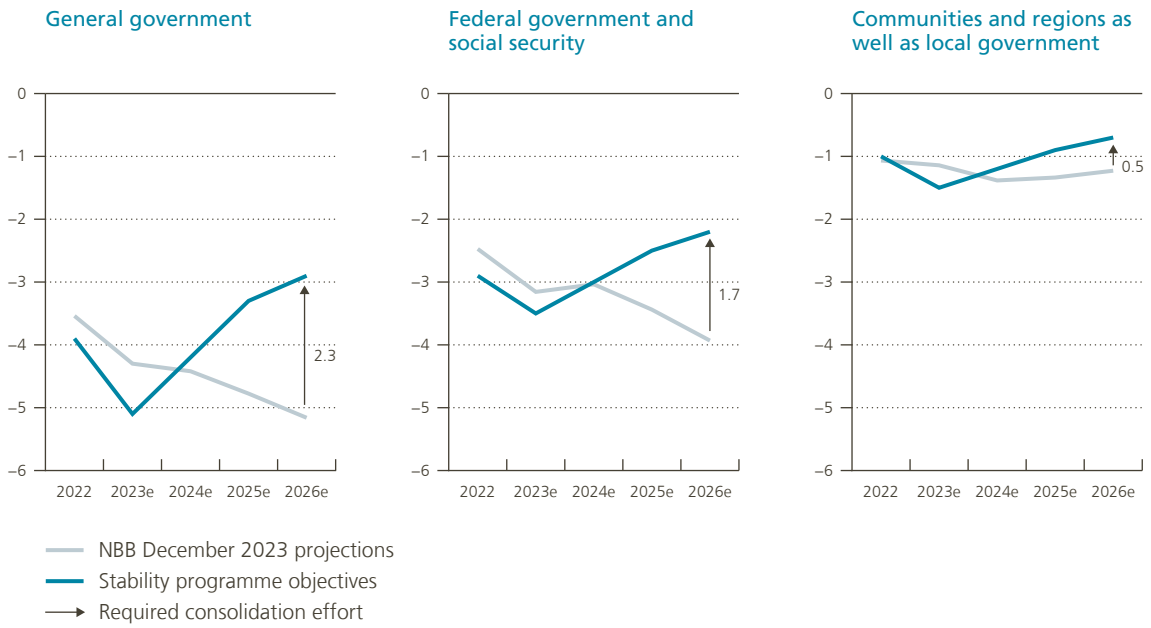
Once again this year, fiscal policy coordination between the various levels of government in Belgium proved unsatisfactory. Indeed, the various authorities were unable to agree on fiscal targets for the period 2023-2026 within the Concertation Committee. Since the entry into force of the cooperation agreement of 13 December 2013, the governments have never managed to agree on a common fiscal target – except in 2018 – and on how to allocate it between the entities within the stability programme. Achieving the necessary fiscal consolidation will, however, require the involvement of all levels of government in Belgium, as well as appropriate cooperation between them. It is therefore high time to conclude clear and binding arrangements on the division of these efforts among the various levels of government.

The Bank's December projections indicate that a substantial effort is required to achieve the objectives of the stability programme. At unchanged policy, a further widening of the deficit is forecast in the coming years, which would run counter to these objectives. The general government budget deficit is set to increase slightly in 2024. The envisaged structural improvement, of 0.8 percentage points of GDP, is thus unlikely to be achieved. The budget balance is expected to deteriorate by a further 0.4 percentage points of GDP per year in both 2025 and 2026, reaching 5.2 % of GDP in 2026. The deficit of the federal government and social security would thus increase, as would those of the communities and regions and of local government.

Figure 8.4

Substantial efforts are needed to achieve the stability programme objectives

(nominal government budget balance, percentage of GDP)



Sources: FPS BOSA, NBB.

All levels of government will therefore have to make a considerable effort, amounting to 2.3 percentage points of GDP, to meet the targets by 2026, of which 1.7 percentage points of GDP will have to come from the federal government and social security.

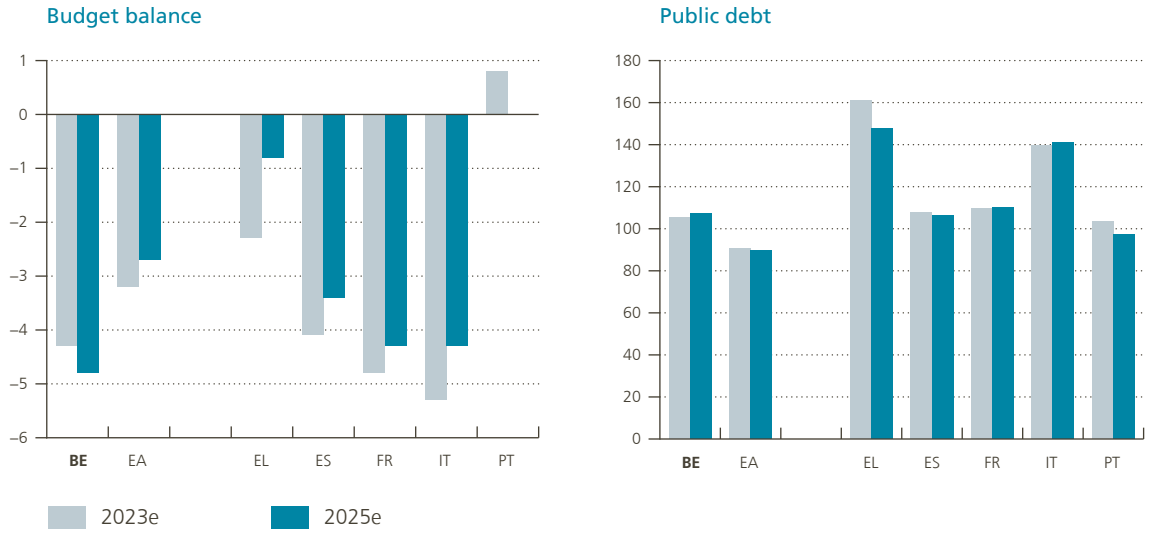
Based on its autumn forecasts, the European Commission estimated that the fiscal trajectory for 2024 may not be in line with the recommendations issued by the Ecofin Council in July. This conclusion was reached in its assessment of the Member States' draft 2024 budgetary plans. According to EC forecasts, nominal growth in net primary expenditure financed at national level will amount to 3.8 %, thus in excess of the maximum recommended increase of 2 %. The Commission has therefore asked Belgium to take the necessary measures under the national budgetary procedure to ensure that its fiscal policy in 2024 complies with these recommendations.

Belgium is among the countries facing the greatest risks to the medium-term sustainability of their public finances. The outlook for public finances is less favourable in Belgium than in most other euro area countries. In contrast to expected developments in Belgium, the EC forecasts suggest that the budget balance will improve in the euro area and in other high-debt countries, with the exception of Portugal, which is expected to achieve a balanced budget in 2025. Belgium is set to have the highest deficit of these countries. Its debt ratio is expected to rise, while that of the euro area is projected to fall. Among the other high-debt countries, only France and Italy are expected to see a slight increase in their debt ratio.

Figure 8.5

Public finances are projected to develop less favourably in Belgium than in other euro area countries

(percentage of GDP)



Sources: EC (November 2023 projections), NBB (December 2023 projections).

8.2 The deterioration in the primary balance is attributable to higher expenditure

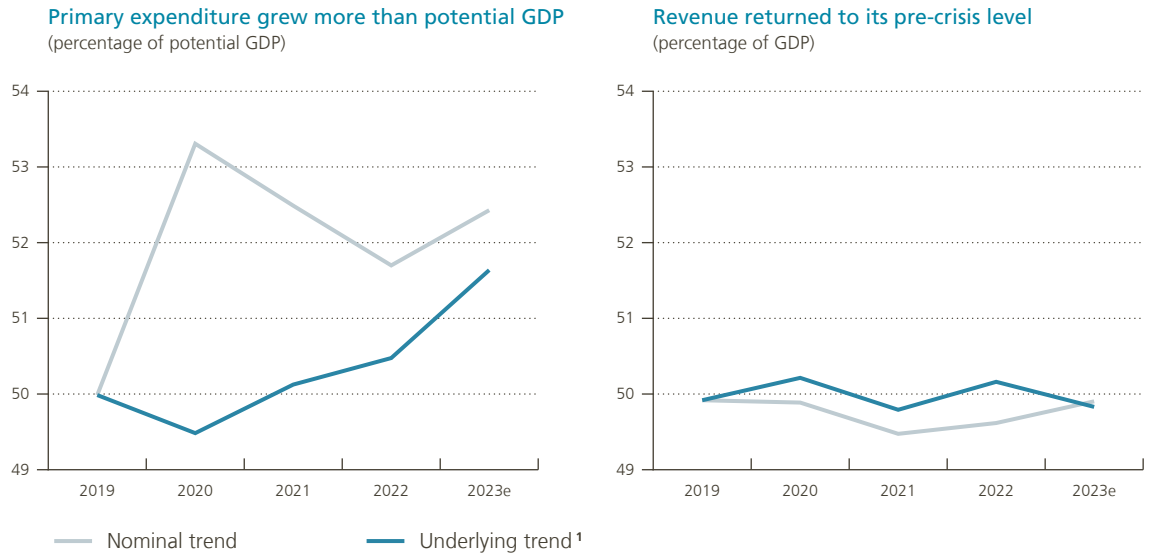
The significant deterioration in the primary balance since 2019 is entirely due to the increase in primary expenditure. By 2023, revenue had returned to its level in 2019, the year before the series of crises. This section looks successively at the changes in primary expenditure and revenue both over the past year and in relation to 2019. A distinction is systematically drawn between, on the one hand, the temporary factors attributable to the Covid-19 pandemic, the energy crisis and the war in Ukraine and, on the other hand, the underlying trend excluding these temporary factors.

Primary expenditure continues to rise structurally, regardless of temporary factors

The 2023 general government budget still provided for expenditure to help households and firms cope with the rise in energy prices. The scale of this support (€ 3.2 billion in expenditure, or 0.5 % of GDP) remained stable compared with 2022, despite the fall in prices on international markets. Households continued to benefit from the basic voucher for gas and electricity throughout

Figure 8.6

The recent deterioration in the primary balance is attributable to public spending



Sources: NAI, NBB.

1 Change in expenditure and revenue excluding temporary factors caused by the Covid-19 pandemic, Russia's invasion of Ukraine and the energy crisis, including temporary funding factors.

the first quarter. The extension of the "social tariff" to persons eligible for a higher healthcare reimbursement rate (BIM/RVT) ended on 30 June. In this respect, the fiscal cost of the standard social tariff, which is not considered temporary, fell sharply in the wake of the drop in energy prices. At regional level, depending on the fiscal space available in Flanders, Brussels and Wallonia, various subsidies were made available to help firms and nonprofits pay their energy bills.

Russia's invasion of Ukraine once again generated significant public expenditure in Belgium. A substantial share of Ukrainian refugees received the equivalent of the minimum income allowance. Funds were also allocated to provide temporary or permanent accommodation for migrants. In addition, humanitarian aid and military support were provided on the ground in Ukraine. If certain measures aimed at raising the level of preparedness of the Belgian army are classified as exceptional expenditure, it appears that the crisis mobilised a budget of around € 1.2 billion (or 0.2 % of GDP) over the course of 2023.

In contrast, the Covid-19 crisis had almost no budgetary implications. It generated residual expenditure estimated at around € 200 million, a far cry from the € 2.7 billion still disbursed in 2022 (representing a fall equivalent to 0.5 % of GDP).

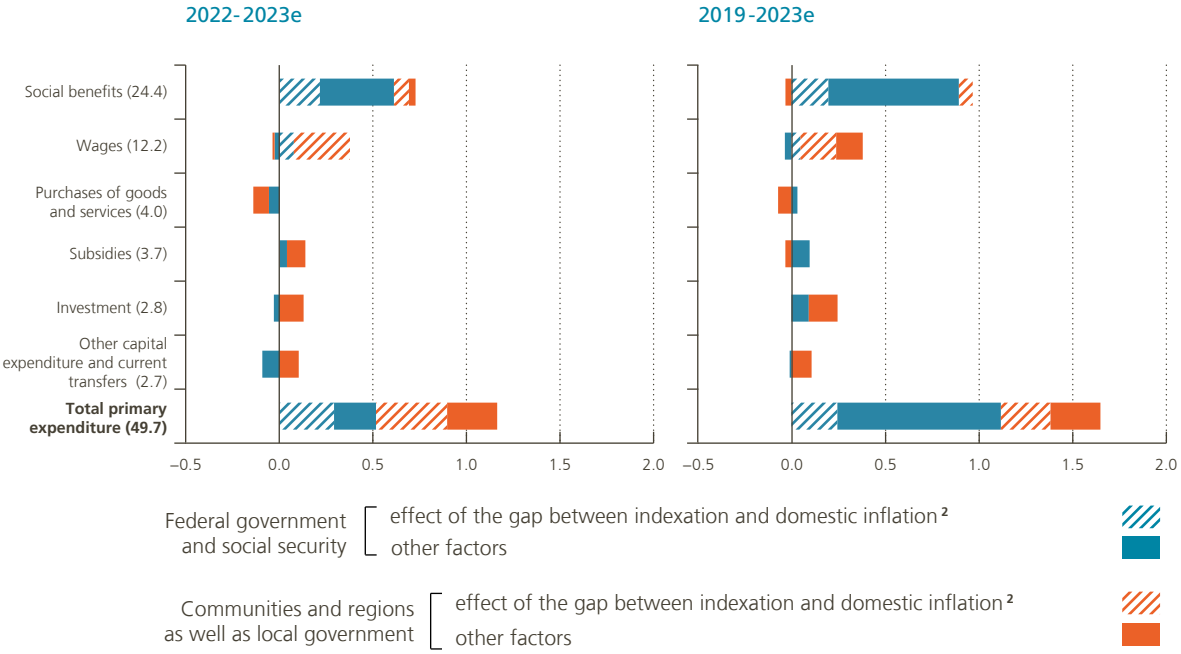
Leaving aside these various temporary factors, the underlying trend in expenditure is clearly upwards. In order to get a more accurate idea of the dynamics at work in public expenditure, it is important to exclude the exceptional expenditure caused by various recent crises (Covid-19, Ukraine, energy). In addition, it is important to associate them with the most appropriate denominator, namely potential GDP. This approach is adopted below.

In the space of four years, primary expenditure rose by the equivalent of 1.7 percentage points of potential GDP. In other words, the underlying trend in public spending since 2019 has outpaced potential economic growth in Belgium. This gap widened significantly in 2023, mainly due to the federal government and social security.

Figure 8.7

Social benefits are contributing substantially to expenditure growth

(underlying change [1] in percentage points of potential GDP; in brackets: weight of the category as a percentage of potential GDP in 2022)



Sources: NAI, NBB.

1 Change in expenditure excluding temporary measures due to the Covid-19 pandemic, Russia's invasion of Ukraine and the energy crisis.

2 Effect of the difference observed between the level of automatic indexation and that of domestic inflation measured by the GDP deflator.

Social benefits accounted for more than half the increase in expenditure between 2019 and 2023. These came mainly out of social security. This expenditure item is rising largely as a result of population ageing, which is putting pension and healthcare spending under pressure. In addition to this volume effect, minimum social benefits at federal level continue to rise gradually, and the gap between actual indexation and domestic inflation, as measured by the GDP deflator, continues to widen.

Pensions are the main driver of the rise in social benefits. Notably as well, over the last four years, benefits paid to people on sick leave increased more than the healthcare reimbursement budget. While the provision of healthcare services did fall temporarily during the Covid-19 crisis, as a result of the suspension of non-urgent consultations and hospitalisations, healthcare has benefited from a real growth target of 2.5 % since 2022. On the other hand, the fiscal cost of unemployment benefits trended downwards over the period under review. As the labour market proved resilient during the crisis and growth was job intensive during the economic recovery, the number of people receiving unemployment benefits has been falling for several years. This effect is compounded by the influence of structural factors which have driven up the employment of certain categories of workers, such as those aged 55-64 and women.

The automatic indexation of social benefits and public sector salaries undeniably weighed on expenditure. In 2023, growth in the health index slowed compared with the previous year. The pivot threshold, which triggers indexation, was crossed only once. In fiscal terms, however, the year under review saw the delayed impact of the five overruns that had occurred in 2022. As a result, inflation in expenditure items subject to automatic indexation was between 6 % and 7 %. This increase sustained the expenditure ratio, given that growth in the GDP

deflator was limited to 4 %. Overall, this delay between indexation and inflation, as measured by the GDP deflator, has contributed to underlying growth in expenditure of 0.5 % of GDP since 2019.

In practice, the increase in the government wage bill can only be seen in the communities and regions and at the local level. In 2023, the indexation gap mentioned above played a major role. Since 2019, the rise in the wage bill has also been fueled by growth in public sector employment, concentrated at regional and local levels. By contrast, personnel costs appear to be under control at federal level, where employment levels are fairly stable.

Consumption of goods and services is the only category with essentially no underlying growth. This expenditure item even fell slightly in 2023. Operating costs were only partially adjusted for the high inflation seen in recent years, which explains this relative stability.

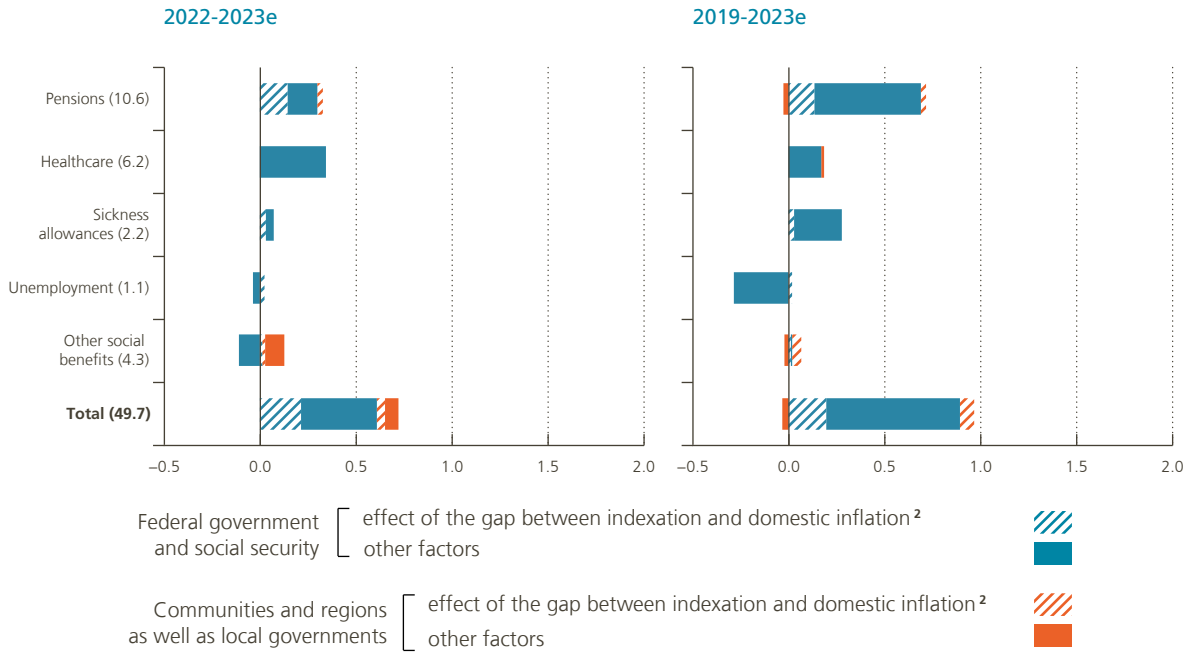
Subsidies have grown comparatively modestly since 2019. In this category, exemptions from the obligation to remit taxes withheld on earned income grew faster than potential GDP, while targeted reductions in social security contributions and subsidies for service voucher companies developed at a rate comparable to that of economic activity. The non-profit sector benefited from additional federal funding through the *Fonds blouses blanches* (White Coat Fund) and the social agreement to improve working conditions in hospitals. The regions adopted similar measures for nursing homes.

In terms of capital expenditure, 2023 was characterised by sustained growth, mainly at regional and local levels. Investment by local authorities was robust, as is often the case in the year preceding municipal elections. In Flanders, the huge Oosterweel project to complete the Antwerp ring road picked up steam. Stimulus projects also gained momentum, mainly generating direct public investment and state

Figure 8.8

Social spending is rising as the population ages

(underlying change[1] in percentage points of potential GDP; in brackets: weight of the category as a percentage of potential GDP in 2022)



Sources: NAI, NBB.

1 Change in expenditure excluding temporary measures due to the Covid-19 pandemic, Russia's invasion of Ukraine and the energy crisis.

2 Effect of the difference between the level of automatic indexation and that of domestic inflation, measured by the GDP deflator.

support for investment. These favourable dynamics, which emerged in the wake of the Covid-19 crisis, were nevertheless slow to materialise, but were to the advantage of many projects, whether matched by European funding or not (see below).

In the absence of far-reaching reforms, expenditure will continue to swell

Without major fiscal reforms, current expenditure will inevitably continue to rise. Population ageing plays a large part in this development. The fiscal burden of pensions and healthcare will continue to rise as a result. Added to this demographic factor is the worrying rise in the number of long-term sick, which is placing an increasing strain on Belgium's public finances. Assuming unchanged policy, the Study Committee on Ageing (SCA) expects the cost of social benefits to rise by 3.7 percentage points of GDP by 2050. Half of this increase will occur over the next nine years.

On the whole, the pension reforms adopted since 2011 have undeniably helped mitigate the expected rise in the costs of ageing. For example, the proportion of senior citizens who are pensioners will be reduced by the upcoming raising of the statutory retirement age and by the postponement of the qualifying age for early retirement, which is already applicable. On the other hand, the De Croo administration has gradually increased minimum pensions, while raising the pensions of the self-employed and certain categories of employees. These benefit increases were partially offset by a number of measures adopted in July 2023, the most important of which was the introduction of a cap on the increase in public sector pensions.

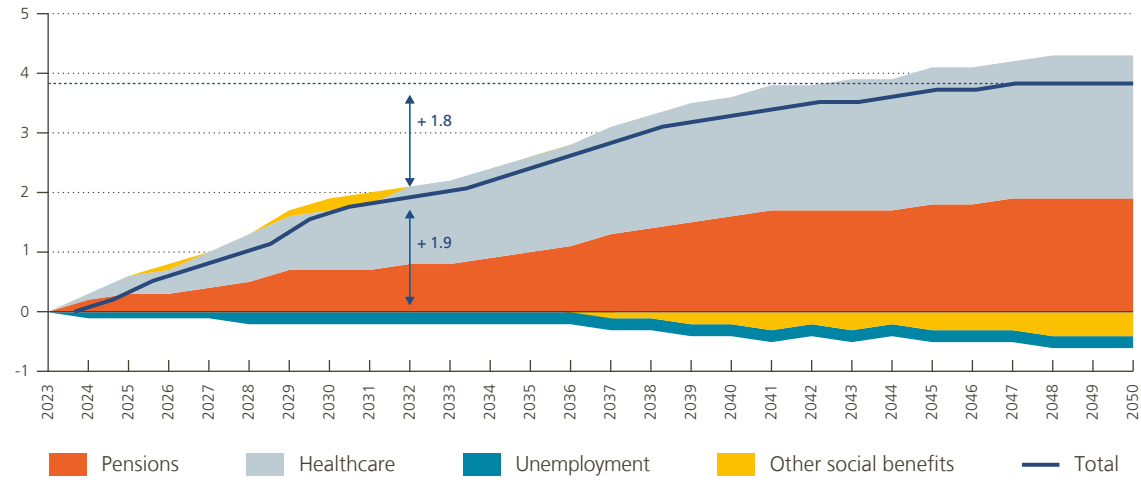
In a recent article,[1] the Bank described simulations setting out different ways to keep the pensions bill under control. This exercise showed that it is possible to reduce pension expenditure significantly as a percentage of GDP (or at least slow its growth) by bringing the determinants of the ratio into line with the euro area average. This will admittedly require tough, new measures. The most favourable policy entails raising the employment rate of older people, which would limit pension spending and increase GDP while reducing the risk of poverty among the elderly. More generally, policies aimed at increasing GDP by boosting employment or productivity

1 See M. Deroose, W. Melyn, P. Stinglhamber and S. Van Parys (2023), "Is public spending on pensions in Belgium sustainable ? A comparison with other euro area countries", *NBB Economic Review*.

Figure 8.9

At unchanged policy, the cost of pensions and healthcare will rise

(change relative to 2023 in percentage points of GDP)



Source : SCA.

also have the advantage of reducing the overall government expenditure ratio. However, a rebound in productivity will only lead to a fall in the pension expenditure ratio if the pensions of current retirees are not increased accordingly. Finally, any reduction (or slower rise) in the average state pension should preferably be at the expense of the highest pensions, so as not to increase the risk of poverty.

The NIHDI budget is also set to grow in the coming years. Healthcare costs are primarily being affected by population ageing, although new medical treatments made possible by technological advances are also driving up expenditure. In this sector, savings should be made without affecting the quality of care. To this end, greater efforts should be made in the area of prevention, in order to spare many patients treatments that prove costly for social security. As the effects of such preventive measures are only felt in the long term, they should ideally be implemented without delay. The other task entrusted to the NIHDI is the payment of sickness allowances. The budget for these has exploded in recent years, driven by long-term illnesses such as burnout and depression. Thus far, measures designed to tackle this problem have failed to reverse the trend. During the current legislative term, the "Back to Work Plan" was introduced, setting out a reintegration pathway for people on sick leave who are still able to work. In this area, too, better prevention, particularly in terms of mental health, would benefit all parties involved (workers, employers and society). Combined with getting the long-term sick back to work, such measures would be particularly beneficial for public finances.

Unlike current spending, capital expenditure should be boosted, provided it is well targeted. Over the last few years, governments have realised the importance of public investment and have begun to redress its trajectory. In this respect, the National Recovery and Resilience Plan (NRRP), which benefits from European funding, has acted as a catalyst for other programmes financed by the federal, community and regional governments. During the year under review, Belgium submitted a revised version of its plan to the European authorities, which was approved. The plan now covers projects totaling € 5.3 billion. Most of this funding comes from grants (€ 5 billion, including € 4.5 billion from the Recovery and Resilience Facility, with the remainder from the REPowerEU programme and the Brexit Adjustment Reserve). These subsidies, which generate a debt for the EU, are supplemented by a loan of just over € 250 million.

In this context, it is important to continue to carry out ongoing projects and to implement the expected reforms, to make full use of the resources allocated to Belgium. It appears that selected projects often require more time than foreseen in their budget planning. Delays typical of the construction sector have recently been exacerbated by labour and materials shortagages. Rising prices and wage indexation have also hindered the deployment of planned investments in some areas. Finally, Belgium has been slow in going further with pension reforms, which are considered necessary to qualify for a new tranche of European funds.

Revenue returned to its 2019 level

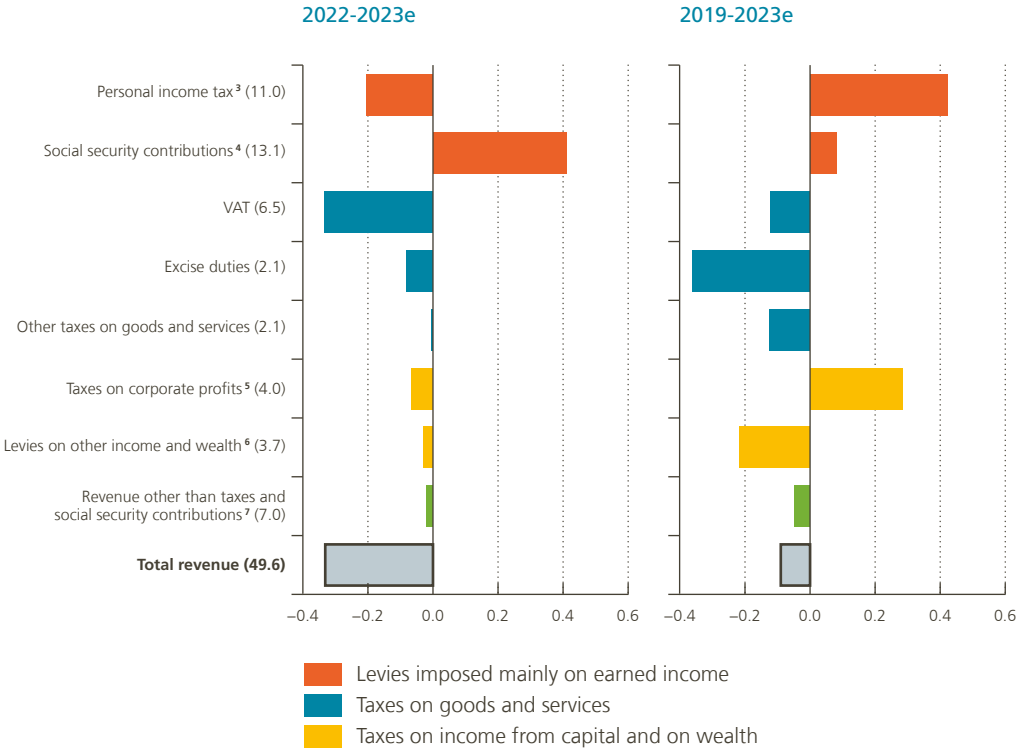
Temporary support measures linked to the energy and Covid-19 crises continued to weigh on revenue, amounting to 0.4 % of GDP in 2023. In 2022, these measures still amounted to 0.6 % of GDP. The temporary reduction of the VAT rate on electricity and gas only affected the first quarter, and cost around three times less than the previous year. The same was true of the reductions in excise duties on petroleum products. Social security contributions were marked by a temporary exemption of 7 % in the first two quarters of the year, at an estimated cost of around € 1 billion. Business support measures adopted during the Covid-19 crisis continued to depress revenue, by 0.1 % of GDP.

Temporary financing components linked to the energy crisis and the situation in Ukraine boosted revenue by up to 0.5 % of GDP in 2023, compared with 0.1 % of GDP in 2022. These included, in particular, the taxation of excess profits of electricity producers, which peaked during the year, and a specific contribution from the gas transport sector. A further boost came from the increase in revenue from the taxation of nuclear power generation, which was favourably impacted by the high prices recorded in 2022. In addition, in 2023, corporate tax revenue rose due to income from frozen assets held by Euroclear following the imposition of international sanctions on Russia. The institution holds cash corresponding to the income from these assets and maturing securities. The investment of this cash generates singular profits which are subject to corporate tax.

Figure 8.10

Overall, general government revenue [1] returned to a level close to that seen in 2019

(underlying change [2] in percentage points of GDP; in brackets: weight of the category as a percentage of GDP in 2022)



Sources: NAI, NBB.

1 In accordance with ESA 2010, general government revenue does not include customs duties transferred by government to the EU or revenue collected directly by the EU.

2 Change in revenue excluding temporary factors caused by the Covid-19 pandemic, Russia's invasion of Ukraine and the energy crisis.

3 Mainly taxes withheld from earned income, advance payments of tax, tax assessments and revenue from personal income tax surcharges.

4 Including the special social security contribution and contributions paid by people not in work.

5 Mainly advance payments of tax, tax assessments and corporate withholding tax.

6 Mainly withholding tax on income from personal property, property tax (including revenue from surcharges), inheritance tax and registration duties.

7 Income from property, imputed social security contributions, current and capital transfers from other sectors and sales of goods and services produced, including remuneration for government guarantees on interbank loans.

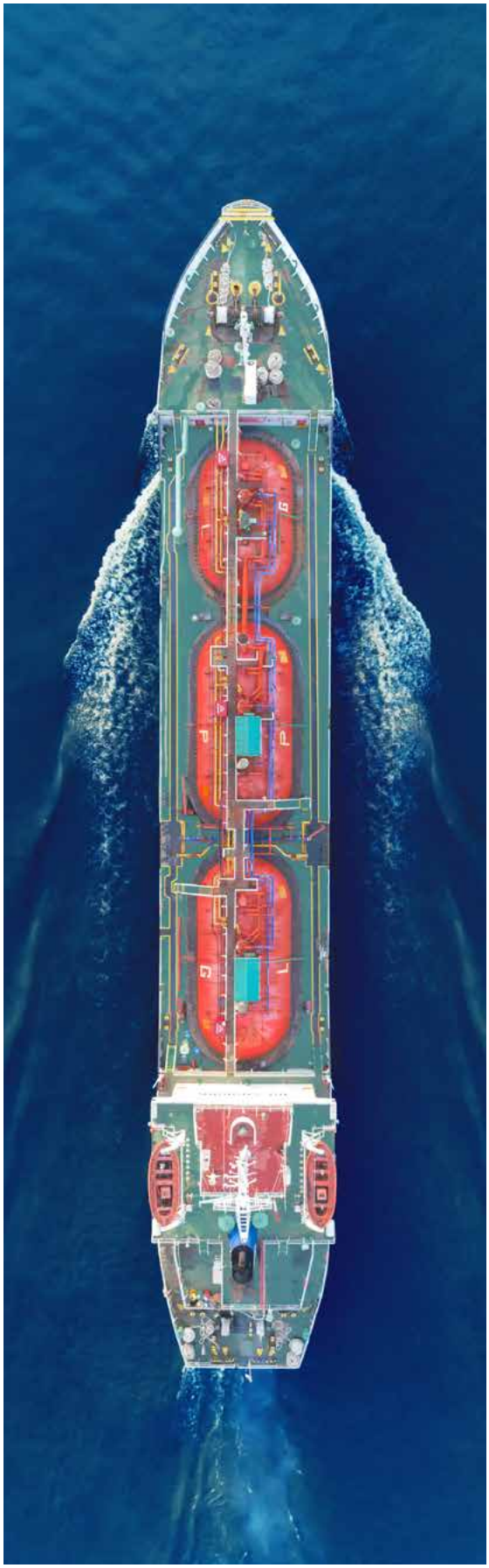
Excluding the impact of the temporary factors mentioned above, revenue fell by 0.3 % of GDP in 2023 and is back to pre-crisis levels. Given the significant impact of temporary factors on the development and level of the various revenue categories, they are excluded from the the above figure and the following analysis. Total underlying revenue essentially held steady compared with 2019, as a result of opposing movements in the various components. Levies imposed mainly on earned income (social security contributions and personal income tax) rose sharply relative to GDP, primarily because the wage bill increased more than GDP. Taxes on consumption (VAT and excise duties) were lower in 2023 than before the crisis. Finally, within the category of taxes on income from capital and wealth, the rise in corporate tax was almost entirely offset by a fall in levies on other income and wealth.

Compared with 2019, taxes on earned income expressed as a percentage of GDP increased, driven by automatic wage indexation, which outstripped the rise in the GDP deflator. The main factor was the sharp rise in personal income tax (0.4 % of GDP). Over this period, the measures taken in relation to personal income tax (PIT) contributed little to this trend. Bullish

measures, such as gradual reforms of the former regional housing tax-relief systems, were largely offset by bearish moves, such as the partial abolishment of the special social security contribution. In 2023, PIT revenue was broadly stable. The favourable effect on PIT revenue of automatic wage indexation, by 7.5 %, was tempered by growth in the tax brackets, by 9.5 % based on the previous year's high inflation. In addition, in 2023, the calculation of taxes withheld from earned income was adjusted in order to narrow the gap with the final tax due, which had a temporary downward impact. In addition, the correction applied after the final calculation of tax due, which usually results in a rebate, was artificially eased in 2022, and as such put revenue under strain in 2023. Social security contributions, for their part, have grown little in relation to GDP since 2019, although they have also benefited from the wage bill dynamics. This is due to greater reductions in employer contributions following the "tax shift" and, for employees, extension of the "employment bonus" aimed at low earners.

Taxes imposed mainly on consumption fell over the period 2019-2023. The decline in VAT receipts as a share of GDP largely reflects the permanent reduction in VAT rates on gas and electricity introduced in 2023 in the wake of the energy crisis. These reductions, from 21 % to 6 %, which were still temporary in the first quarter of 2023, were made permanent in the second quarter. They were partially offset by a permanent increase in excise duties on these products. Despite this increase in 2023 and the successive rate hikes for tobacco products, excise duties declined in relation to GDP over the period as a whole. Indeed, as these indirect taxes are defined as lump sums per quantity sold, their revenue does not automatically keep pace with inflation. Other taxes on goods and services fell slightly.

The increase in corporate tax over the period 2019-2023 should be viewed in conjunction with that of the macroeconomic parameters reflecting the tax base. Over the period as a whole, growth in gross operating surplus was more pronounced than that of nominal GDP. Another factor was the less marked change in depreciation, which is tax deductible. Depreciation for tax purposes is assessed based on the capital stock at historical prices, meaning it follows price increases with a certain delay. As the increase in depreciation was less than the increase in gross operating surplus, taxable income was even higher.



Leaving aside temporary favourable factors, corporate tax revenue grew more slowly than GDP in 2023, while remaining at a historically high level. The stagnation of gross operating surplus at the macroeconomic level weighed on the growth of this item. In addition, following strong growth in advance tax payments in 2022, the amounts received after calculating the tax due on the previous year's profits fell sharply. The downward impact of these factors was only partially offset by revenue-enhancing measures, mainly a reduction in tax deductions for the banking sector and measures temporarily reducing the deductions available to large firms.

The development of levies on other income and wealth was largely determined by the sharp fall in revenue from real estate transactions. The significant reduction in registration duties for the purchase of an "own and only" home in Flanders in 2022 compounded the considerable impact of the slowdown on the property market in 2023. This slowdown was reflected in both a fall in the number of transactions giving rise to the payment of registration duties and sluggish growth in sales prices. Overall, the other components of this revenue item, including in particular taxes withheld from income from movable property and real estate, grew at a rate close to that of GDP over the period, despite the raising of the tax on securities accounts.

8.3 Rising interest rates are leading to a gradual increase in the interest expense on the public debt

For the first time in several decades, the interest expense on the public debt rose

In line with the rise seen in 2022, interest rates climbed again, on average, in 2023. The ten-year interest rate on Belgian government bonds, which averaged 1.8 % in 2022, stood at 3.1 % on average in 2023. In the last two months of the year, however, the benchmark rate fell back slightly, to below the level seen at the end of the previous year. As far as short-term rates are concerned, the rate on three-month Treasury certificates averaged 0.1 % in 2022 and 3.3 % in 2023. Overall, servicing the public deficit on the financial markets is thus more expensive than in the past, and maturing securities are being refinanced at less favourable rates.

Spreads suggests that the financial markets still have confidence in Belgian government securities. The risk premium relative to other countries rose only slightly in 2023 compared with 2022.

The spread between the ten-year yield on Belgian government bonds and on German government bonds – which are considered the most creditworthy and liquid in the euro area – held stable in 2023, at around 63 basis points. This was also the case for French sovereign bonds, at around 10 basis points over the year as a whole. By way of comparison, in 2022, the Belgium-Germany spread was around 55 basis points, compared with four basis points for the spread with France.

The higher interest rates apply to (re)financing needs. At federal level, in 2023, in addition to financing on a cash basis of € 27.4 billion, OLOs amounting to around € 21 billion matured. These were issued at an average rate of close to 1.5 %. In 2023, the Federal Debt Agency issued long-term debt at an average annual rate of 3.2 % (compared with 1.7 % in 2022 and 0.1 % in 2021). Short-term refinancing was also significantly more expensive than in the past. The stock of Treasury certificates to be refinanced several times a year stood at around € 20 billion at the end of 2023. This was revised downwards by € 10 billion during the year (see below).

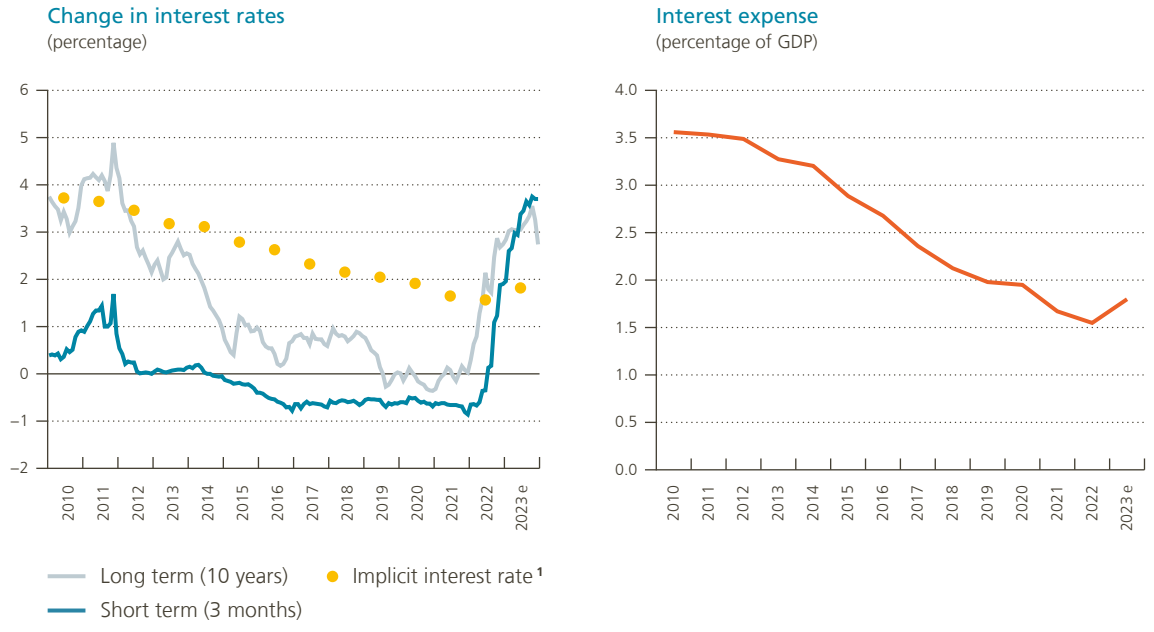
For the first time in several decades, the general government's interest expense on public debt increased. While it was around 1.5 % of GDP in 2022, it was approximately 1.8 % of GDP in 2023. The implicit interest rate on public debt, i.e. the ratio between interest expense for the current year and debt at the end of the previous year, also rose in 2023, from 1.6 % to 1.8 %.

The rise in the ECB's key interest rates impacts the Bank's earnings, which in turn affects the allocation of profits to the Belgian State. In recent years, the Bank purchased a large quantity of Belgian bonds with low yields to maturity. These purchases were financed by bank deposits, on which a deposit rate is payable, which has risen significantly in the meantime. This situation explains the negative earnings expected by the Bank in the coming years.

2023 was marked by the highly successful issuance of a State note at the beginning of September. Nearly € 22 billion was raised through this issuance, which has a historically short maturity of one year (see also Box 7 in chapter 7). The gross

Figure 8.11

In 2023, higher interest rates resulted in a historic increase in the interest expense on public debt



Sources: NAI, NBB.

1 Ratio of interest expense in year n to debt at the end of year n-1.

coupon of 3.30 % [1] offers a net yield of 2.81 % after the deduction of withholding tax at a reduced rate of 15 %. The success of the State note was due both to its short maturity and the low rates offered by commercial banks on other savings vehicles. This was the most successful issuance of a State note ever. Previously, the record had been held by the so-called "Leterme notes", which raised a total of € 5.7 billion in December 2011, with maturities of three, five or eight years.

The Federal Debt Agency's financing plan was revised following issuance of the State note. In particular, the amount of outstanding Treasury certificates was reduced by more than € 10 billion in 2023. Medium and long-term debt issuances were revised downwards by € 2.25 billion. The remaining cash surplus of around € 9 billion was reinvested in short-term securities with a yield at least equal to that of the State note. This investment led to a temporary increase in general government gross debt (see section 8.4).

The issuance of the State note did not have a significant impact on the federal debt management strategy. Once again, very long-term issuances were made. Over 2023 as a whole, the average maturity of new long-term borrowings was 17.3 years. At the end of 2023, the average residual maturity of all outstanding debt was ten years and five months, slightly higher than the previous year and well above the levels seen in the early 2010s.

Over the next few years, interest expenses are set to rise steadily, putting pressure on the general government budget balance.

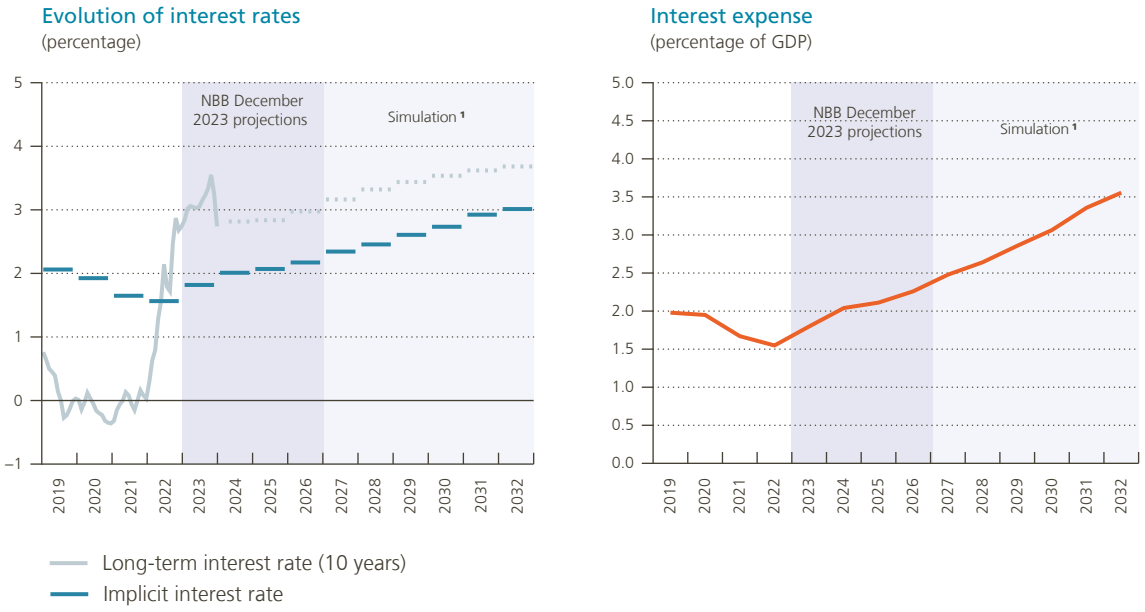
In January 2024, the markets expected the long-term interest rate to be around 3.5 % by 2030. Such higher interest rates, which are of course still very uncertain, would lead to a gradual and sustained increase in the interest expense on public debt.

1 After deduction of a bank commission of 30 basis points. At the time of this issuance, the yield on one-year Belgian government bonds on the secondary market was around 3.60 %.

Figure 8.12

Rising interest rates will have a gradual effect on interest expenses and the implicit interest rate on public debt over the next decade

(percentage, unless otherwise stated) [1]



Sources: Regional governments, Federal Debt Agency, SCA, NAI, NBB.

According to a simulation[1] based on these market expectations, interest expenses would thus rise from 1.8 % of GDP in 2023 to around 3.6 % of GDP in 2032. The average interest rate on the debt would rise from 1.8 % in 2023 to 3 % in 2032.

Over the next decade, interest expenses are expected to rise by, on average, 0.2 % of GDP per year, contributing to the deterioration of the budget balance. In the last decade, the opposite was true: interest expenses fell by around 0.2 % of GDP per year. In view of the increase in interest expenses, the fiscal adjustment required to keep the budget balance and debt dynamics under control will be increasingly large.

The simulation is based on the Bank's December 2023 projections, with the exception of the government's interest expense, which was calculated on the basis of market expectations in January 2024, according to which the 10-year interest rate on Belgian government securities will rise from 2.8 % in 2024 to 3.7 % in 2032. From 2027 onwards, (1) real GDP is derived from the December 2023 projections of potential GDP, (2) inflation is 2 %, which corresponds to the price stability objective, (3) the primary balance (as a percentage of GDP) corresponds to that of 2026 and is increased by the expected annual increase in ageing costs (as calculated in the Study Committee on Ageing's 2023 report), and (4) there are no exogenous factors.

1 For more information on this simulation, see the footnote to Figure 8.12.

8.4 High primary deficits are structurally increasing the public debt, while the favourable interest rate-growth differential is fading

Debt no longer melts like snow in the sun

Belgium's public debt rose by 0.9 percentage points to 105.2 % of GDP in 2023 and is significantly higher than before the pandemic. In 2021 and 2022, the debt ratio continued to contract – despite a high primary deficit – due to the very favourable contribution of the interest rate-growth differential. In fact, the combination of a historically low implicit interest rate on public debt and exceptionally strong nominal GDP growth turned the differential strongly negative. This means that the denominator of the debt ratio was increasing more than the numerator. In 2023, the interest rate-growth differential also had a debt-reducing effect (–3.7 percentage points of GDP), but this effect faded. On the one hand, nominal GDP growth slowed somewhat and, on the other hand, the implicit interest rate on debt increased as a result of higher policy and market rates. However, the high primary deficit (2.5 % of GDP) and exogenous factors[1] (2.1 % of GDP) outweighed the favourable interest rate-growth dynamics, leading to an increase in the debt ratio.

An important exogenous factor which temporarily increased the debt was cash reserves, which rose by € 9 billion due to the successful issuance of a one-year State note in September 2023. Loans extended by the Flemish Region under its social housing policy also added to the debt. In addition, debt management had an upward effect given that many government securities were issued at a discount in 2023: the issue value was lower than the face value, since the market rate was higher than the coupon rate. The debt therefore temporarily increased, as a corrective measure, up to the amount of the discount.[2] The accounting difference in the recording – under the budget balance and the debt, respectively – of tax revenue and defence expenditure also temporarily increased the debt.[3] On the other hand, the increase in exogenous factors was tempered by, among other things, the sale of a portion of the federal government's stake in BNP Paribas, which brought in approximately € 2 billion euros.

Dangerous debt dynamics loom

In the absence of a change in policy, the persistence of high primary deficits will further increase the debt burden. According to the Bank's December projections, the primary deficit will deepen further to reach 2.7 % of GDP in 2026, pushing the debt ratio structurally upwards.

In addition, the favourable contribution of the interest rate-growth differential is uncertain. Interest expenses are likely to rise sharply.

1 Exogenous factors directly influence debt, i.e. they do not affect the budget balance and concern, for example, the purchase and sale of financial assets by the government.

2 Over the next few years, the debt will again be adjusted downwards by the difference between (1) interest expenses calculated based on the higher market rate (and included in the budget balance) and (2) interest expenses calculated based on the lower coupon rate actually paid by the government.

3 This is because, according to ESA, revenue and expenditure are included in the budget balance at the time when the economic transaction takes place, whereas public debt is determined on the basis of cash flows, which may take place at different times.

The numerator of the debt ratio will then rise considerably, while nominal GDP growth returns to a more normal pace, meaning the denominator of the debt ratio will act less as a counterweight. According to a simulation, updating the Bank's December projections with interest rate expectations from January 2024 onwards, the interest rate-growth differential remains favourable (i.e. negative) but is gradually narrowing. A positive differential would put the Belgian debt ratio on a steeper upward trajectory. The debt ratio would then rise spontaneously as a result of a self-sustaining process in which the numerator increases faster than the denominator. Given the high level of indebtedness, this snowball effect of interest expenses can quickly become significant.

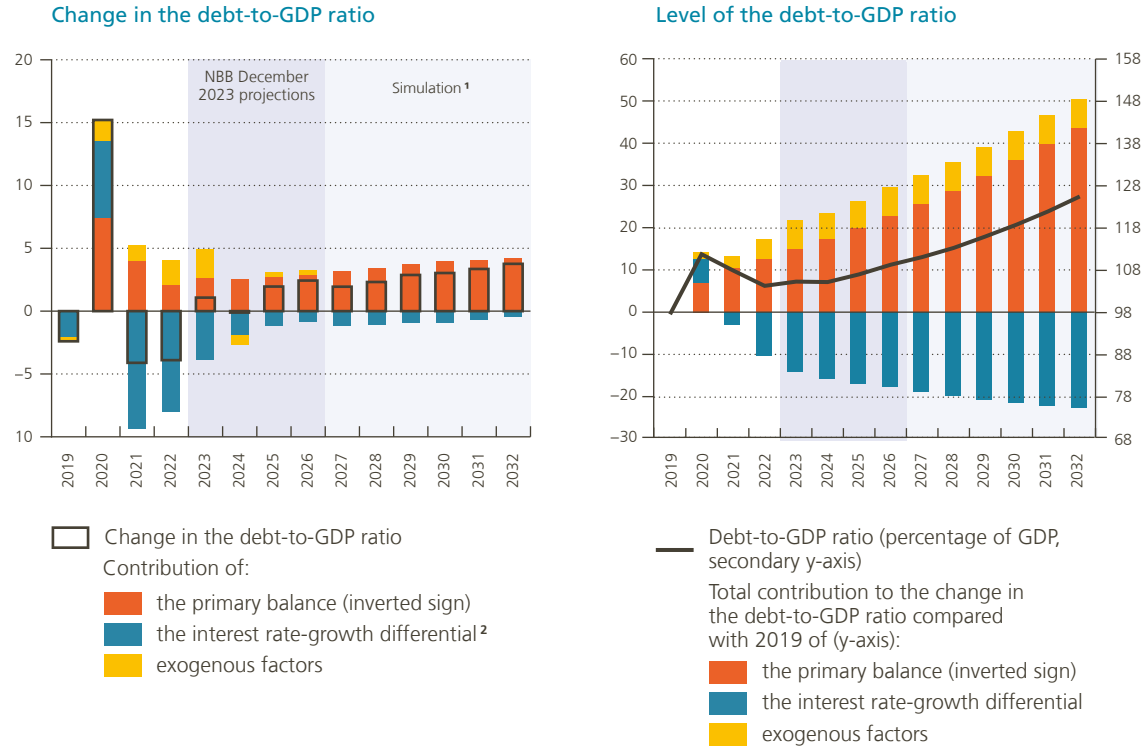
While the sustainability of public debt is not compromised in the short term, the upward debt dynamics are unsustainable in the long term. The European Commission considers the risks to the longer-term sustainability of Belgium's public finances to be "high".[1] According to simulations, assuming no policy change, Belgium's debt will amount to 126 % of GDP in 2033. Other high-debt countries, such as Greece, Portugal and Spain, seem to have their debt dynamics better under control in the medium term.

1 Based on a comprehensive analysis, the European Commission outlines the risks to the sustainability of public finances in the EU Member States in the short, medium and long term. More detailed information on the methodology is available in the Debt Sustainability Monitor 2022.

Figure 8.13

The favourable interest rate-growth differential is becoming narrower

(percentage points of GDP)



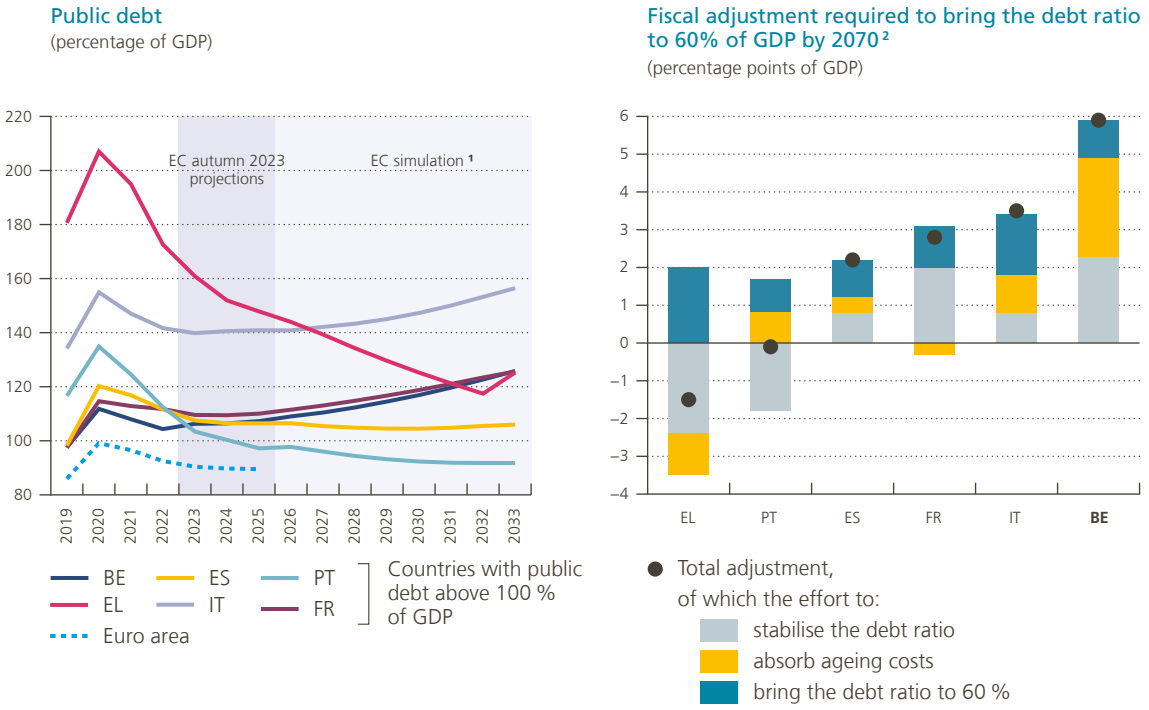
Sources: Regional governments, Federal Debt Agency, SCA, NAI, NBB.

1 The simulation is based on the Bank's December 2023 projections, with the exception of the government's interest expense, which was calculated on the basis of market expectations in January 2024, according to which the 10-year interest rate on Belgian government securities will rise from 2.8 % in 2024 to 3.7 % in 2032. From 2027 onwards, (1) real GDP is derived from the December 2023 projections of potential GDP, (2) inflation is 2 %, which corresponds to the price stability objective, (3) the primary balance (as a percentage of GDP) corresponds to that of 2026 and is increased by the expected annual increase in ageing costs (as calculated in the Study Committee on Ageing's 2023 report), and (4) there are no exogenous factors.

2 Difference between the implicit interest rate on public debt and nominal GDP growth, multiplied by the debt ratio at the end of the previous year.

Figure 8.14

The higher the initial level of debt and the greater its rise, the greater the risks to sustainability



Source: EC.

1 Debt simulation based on the EC's spring 2023 projections, which are included in the European Semester country reports.

2 This is the S1 indicator used by the EC in its debt sustainability analysis. It measures the permanent adjustment of the structural primary balance in 2024, relative to a baseline scenario, which ensures that the debt ratio is below 60 % of GDP by 2070.

In the very long term, too, Belgium will face an enormous budgetary challenge – both historically and from a European perspective. According to the European Commission, stabilising the debt between now and 2070 will require a structural adjustment of almost 5 % of GDP from 2024 onwards, also taking into account the increasing costs of population ageing. An additional structural adjustment of 1 % of GDP will be required to reach the European budgetary framework objective of a debt ratio of 60 % of GDP.

Debt sustainability analysis plays a key role in the new European fiscal rules and will largely determine the debt trajectory to be followed. High-debt-risk countries, including Belgium, will have to make greater efforts. At the end of the adjustment period, their debt ratio should be below the starting level and continue to fall thereafter for ten years (see Box 8).

To put the debt ratio on a downward trajectory, considerable fiscal consolidation will be required. More specifically, the deficit should be reduced to less than 3 % of GDP in the coming years. Secondly, a buffer will be needed to deal with unforeseen shocks. Given the expected developments that will put a strain on public spending – including population ageing, the climate transition and interest expenses – this will be a complex but essential task. The combination of limited resources and significant investment needs will oblige policymakers to set priorities. The consolidation of public finances is essential in order to maintain the confidence of the financial markets and prevent the risk premium on Belgian public bonds from rising and thus avoid or minimise the snowball effect of the debt ratio. The more swiftly consolidation is undertaken, the less will need to be spent on additional interest expenses.