REPORT 2021

Economic and financial developments

National Bank of Belgium
Eurosystem

Economic and financial developments


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1. International economy

1.1 The global economy bounced back strongly in 2021, but the recovery is uneven and incomplete

The strengthening of the global economy that began in mid-2020 continued throughout the year under review, and even exceeded the expectations prevalent in January 2021. Quite obviously, it was more difficult than previously to predict how the recovery would proceed, and the growth forecasts underwent multiple significant revisions. It was in fact the first time in modern history that a pandemic had caused a severe global economic crisis, and the erratic course of this tenacious virus continued to affect the economy in 2021. However, the link between the epidemic and the crisis has weakened as the proportion of vaccinated citizens in the population has risen continuously, and people and businesses have adapted their behaviour and learned to live with the virus. Moreover, at the beginning of the year, there was still great uncertainty over the pace at which the vaccination campaigns could be rolled out around the world and the degree to which the success of that vaccination would permit the speedier reopening of the economy. In short, economists and policy-makers are advancing into unknown territory: forecasts are even harder than usual to make and they have to be constantly revised as our understanding of events evolves.

Table 1.1

GDP of the main economies

(percentage changes in volume compared to the previous year)

	January 2022 projections			*p.m. January 2021 projections*	*p.m. Level compared to pre-COVID[1]*
	2019	2020	2021	*2021*	*2021 Q4*
Advanced economies	1.7	–4.5	5.0	*4.3*	*101.6*
of which:					
United States	2.3	–3.4	5.6	*5.1*	*102.9*
Japan	0.0	–4.5	1.6	*3.1*	*99.6*
Euro area	1.5	–6.5	5.1	*3.9*	*99.9*
United Kingdom	1.4	–9.4	7.2	*4.5*	*98.7*
Emerging economies	3.5	–2.2	6.8	*6.4*	*106.0*
of which:					
China	6.0	2.3	8.1	*8.1*	*110.3*
India	4.0	–7.3	9.0	*11.5*	*105.9*
Russia	2.0	–2.7	4.5	*3.0*	*102.9*
Brazil	1.4	–3.9	4.7	*3.6*	*99.6*
Low-income countries	5.3	0.1	3.1	*5.1*	*n.*
World	2.8	–3.1	5.9	*5.5*	*103.9*
p.m. World trade	0.9	–8.2	9.3	*8.1*	*n.*

Sources: ECB, IMF.
1 Index, 2019 Q4 = 100.

A global recovery marked by geographical faultlines

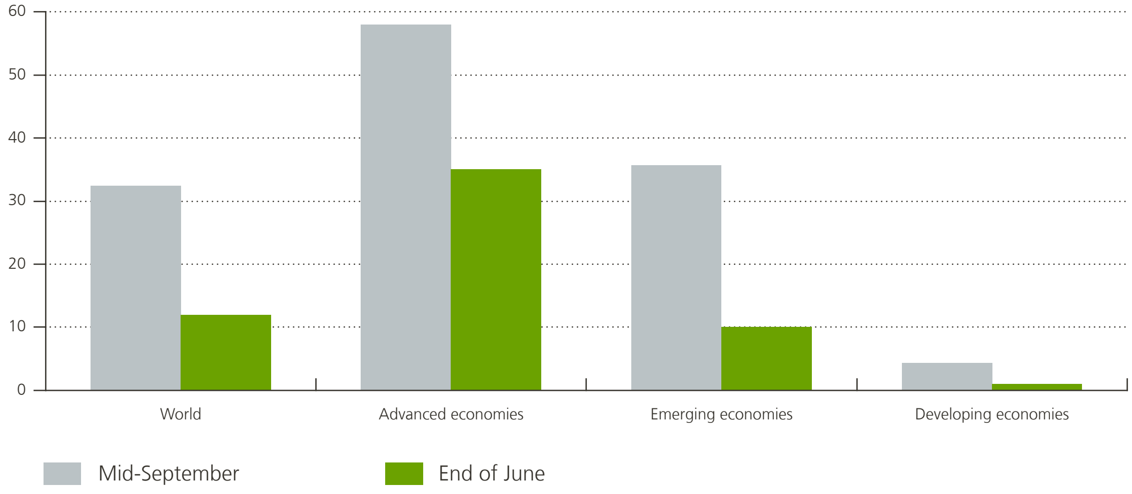
On average, the year 2021 was much better than expected for the advanced economies. But low-income countries achieved very disappointing economic growth, so that – for the first time in several years – they collectively recorded a slower expansion than the advanced economies. In addition, taking account of their faster population growth, the income gap widened considerably in 2021. Unequal access to the coronavirus vaccines is a major factor here. In September, while 60 % of the population of the advanced economies was fully vaccinated, the vaccination campaigns had yet to be launched in the poorest countries. The more fragile institutional framework in developing countries and the more informal character of their economies make them very vulnerable to any resurgence of the virus, while their governments do not have the financial resources to grant substantial aid.

The emerging economies as a whole recovered in line with expectations, but wide variations emerged between countries. Many, with the exception of China, initially struggled to restart their economic activity, owing to new waves of the more contagious Delta variant of the coronavirus in the spring (in India and Latin America) and in the summer (in South-East Asia). The vaccination campaign also started later there than in the advanced economies or was greeted with great scepticism by the population (in Russia, Eastern Europe and the Balkans), so that those countries remained more susceptible to the virus. However, once the restrictions were lifted, the economic rebound generally exceeded expectations, as is evident from the robust growth of the Indian economy in the third quarter.

Chart 1.1

The vaccination campaigns are progressing much more slowly in the poorest countries

(fully vaccinated individuals, in % of the population)



Source: IMF.

The Chinese economy was the first to recover from the pandemic in the second half of 2020. There, a zero-tolerance policy and restrictions on international travel were the main measures taken against the virus. The economy also benefited from the vigour of global demand for certain goods (face masks, electronics) which China produces in large quantities. As international trade continued to pick up following the full reopening of the Western economies in the first half of 2021, Chinese exports recorded further sustained growth. However, production struggled to keep up with this strong demand for exports, as the economy faced acute shortages of electricity plus new waves of coronavirus leading to the temporary closure of factories and ports. In the autumn, the Chinese economy also had to contend with headwinds coming from the real estate sector, which is estimated to represent, directly and indirectly, almost 30 % of activity. The measures taken by the authorities in 2020 to contain the financial risks in that sector had in fact caused problems for some heavily indebted Chinese developers, such as Evergrande. In addition, small regional banks and shadow banks that are very exposed to property companies saw a rise in their non-performing loans. All these factors caused the property market to run out of steam, curbing the growth of the Chinese economy.

In the advanced countries, full reopening of the economy and society was only possible after a successful vaccination campaign. The United Kingdom and the United States kicked off first at the turn of the year, and the rest of Europe soon followed. These advanced economies bounced back with unprecedented vigour. In comparison with previous crises, the economy was in fact in a unique position at the start of the revival. Unlike the global financial crisis, this one did not require the correction of underlying macroeconomic imbalances. On average, the current crisis has caused hardly any deterioration in the financial situation of households, thanks to the savings built up during the successive lockdowns (scope for consumption was limited and governments made up for the loss of income) and the new rise in the value of housing and financial assets. Consequently, the reopening led to a spending spree with a strong focus on consumer durables, which created a mismatch between demand and supply resulting in price increases and extended delivery times. As the year progressed, firms also encountered ever more problems in obtaining the raw materials, intermediate inputs or staff they needed and were forced to scale down their activities or even suspend them temporarily. Global value chains came under pressure when production units remained closed in countries where the virus was raging. These supply-side constraints, which are examined in detail below, and the accompanying spike in inflation, alongside the resurgence of this tenacious virus, put the brakes on the recovery at the end of the year.

A mismatch has emerged between demand and supply, resulting in price rises and extended delivery times

In Japan, on the other hand, the recovery fell short of expectations throughout the year, as the country lagged behind with vaccination and even had to reimpose temporary restrictions at the time of the Olympic Games.

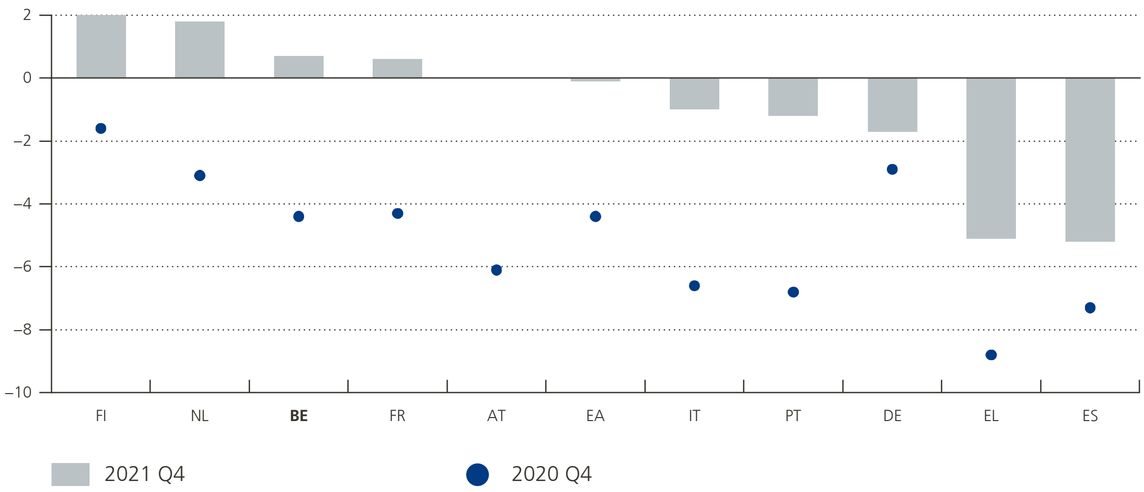
The economic profile outlined above was particularly pronounced in the United States, largely on account of the country's unprecedented policy response involving three support plans for the American economy, adopted successively between March 2020 and March 2021 and together representing 20 % of GDP. On each occasion, the emphasis was on assistance for households, except the most wealthy ones, with the aim to boost the purchasing power of people with a high propensity to consume and thus to give a strong impetus to the US economy once it was fully reopened. That rebound actually occurred in the first half of the year. Conversely, the termination of certain temporary support measures at the end of the summer produced a negative fiscal impulse in the third and fourth quarters.

In the United Kingdom, economic activity in 2020 was particularly affected by the pandemic, especially during the winter, with what was initially termed the British variant, and by the risk of an abrupt exit from the European Single Market and Customs Union in the absence of any agreement. Thanks to the Trade and Cooperation Agreement concluded on 24 December 2020, the impact on

Chart 1.2

In many euro area countries, GDP has already regained or even surpassed its pre-crisis level

(change compared to GDP in 2019 Q4, percentage points)



Sources: ECB, NBB.

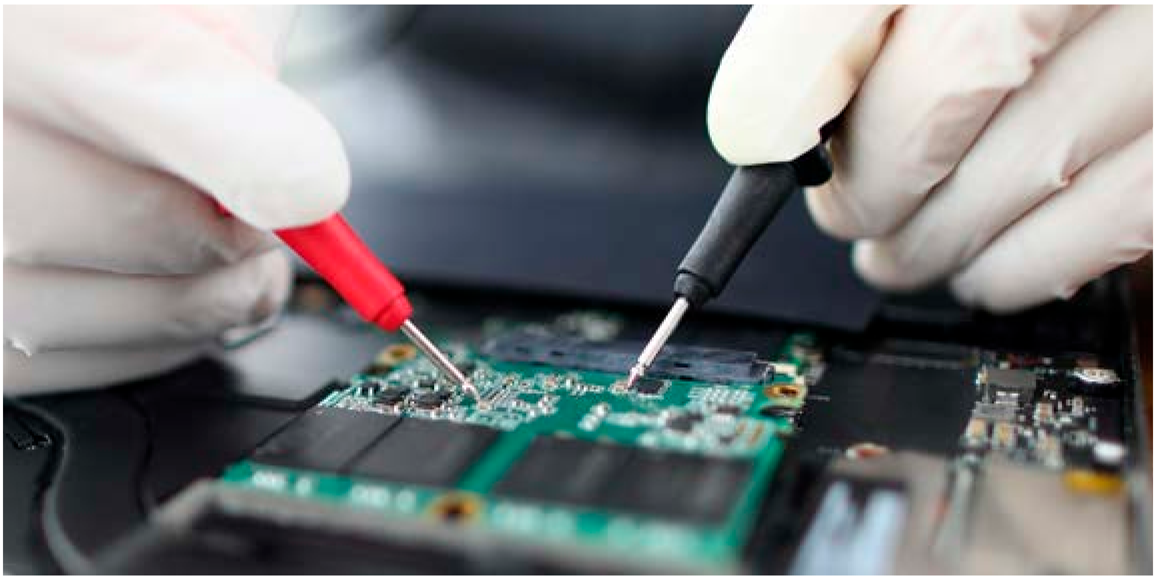
trade relations between the EU and Great Britain – Northern Ireland remaining in the European Single Market and Customs Union – was limited, especially as the introduction of certain barriers was postponed until 1 January 2022. In addition, thanks to prompt vaccination, the United Kingdom was able to ease the public health restrictions more quickly, resulting in a remarkable rebound in 2021.

In the advanced countries, the recovery following the coronavirus crisis was thus significantly faster than after the global financial crisis: at the end of the year, many of them had regained or even surpassed the level of production prevailing just before the pandemic. That was true of many euro area countries, with the main exception of the Southern Member States where the recovery remained incomplete. They were in fact the most severely affected by the epidemic. Their heavy dependence on tourism is certainly a factor. Nonetheless, Germany's economic recovery also failed to live up to expectations, with production in manufacturing industry suffering from bottlenecks in the supply of certain components. In particular, the motor vehicle industry which is very important in Germany saw output slump on account of the shortage of semiconductors and other supply chain disruptions. Finally, the Member States with a lower vaccination rate were more vulnerable to the resurgence of the more contagious Delta variant during the autumn. Overall, income inequality between the euro area Member States widened less than initially feared. The solidarity mechanisms provided by the European policy response were a contributory factor here.

Bottlenecks hamper the rapid expansion of supply

During the lockdown, the accelerating digitalisation of society following the outbreak of the pandemic and the temporary closure of services involving close contact led to a shift in demand from services to goods, and a shift between various categories of goods, particularly in favour of consumer electronics. Even after the full reopening of the advanced economies, the shadow of the epidemic continued to hover over consumption behaviour. In particular, demand for consumer durables thus reached an extreme peak and came up against the shortage of supply. The rapid increase in production was impeded by bottlenecks affecting the various links in the production process, particularly commodities, intermediate goods such as semiconductors and plastics, and logistical services.

The transport sector, and more specifically maritime container transport, had trouble coping with the



exceptional peak in the trade of goods. Port infrastructure cannot be expanded quickly, and a number of container ship operators that had gradually scaled back their capacity owing to the lack of demand following the outbreak of the pandemic were only able to build it back up gradually. In addition, when industrial activity took off again in China, the containers were apparently located in the wrong place so they first had to return empty. New outbreaks of the virus also led to a shortage of port workers and further temporary closures of major container ports in China. This resulted in long waiting times in the ports. A container ship which ran aground in the Suez Canal in March further exacerbated the delays.

Semiconductors are a key component in a number of products such as smartphones, computers, consumer electronics, ICT infrastructure, motor vehicles and industrial machinery. The sudden surge in demand for remote working equipment and consumer electronics combined with an unexpectedly rapid revival in demand for motor vehicles at the time of reopening led to serious bottlenecks in the supply of semiconductors. The shortages were made even worse by temporary interruptions in the case of some major producers and by the build-up of strategic stocks of semiconductors by Chinese firms affected by the American export restrictions.

The organisation of production processes in the form of complex global value chains, a particular feature of the semiconductor industry and the motor vehicle industry among others, makes such sectors vulnerable to disruption in one link or another. Apart from the need to restart machinery, the principal requirement for the production chain's recovery is good coordination between entities and locations. Production processes based on maximum efficiency and minimum stocks are therefore vulnerable to unexpected demand and supply shocks. Thus, many vehicle manufacturers reduced their stocks of semiconductors significantly when demand for motor vehicles collapsed following the outbreak of the pandemic, which left them unprepared for the ensuing vigorous upsurge in demand.

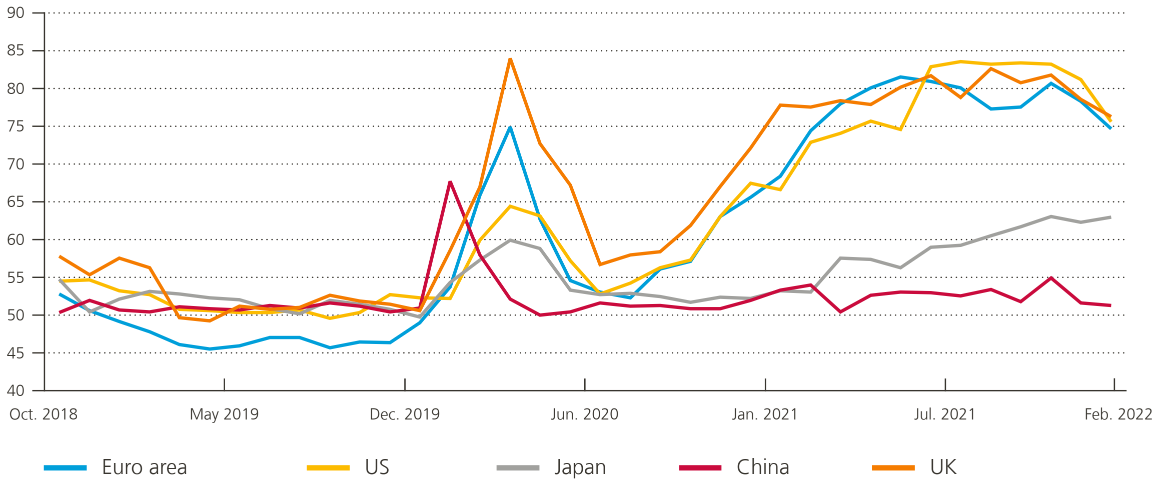
Whereas the lack of demand previously eroded business leaders' confidence, supply problems have now become the main source of concern for business leaders in manufacturing industry. The bottlenecks are causing a (marked) extension of delivery times and historically low stocks of finished products. The problem is particularly acute in the United States, the United Kingdom and the euro area, economies which are driven by strong domestic demand, in contrast to Japan and China where consumption remained sluggish, especially in the second half of the year. Nonetheless, export-oriented Chinese and Japanese firms also faced longer delivery times.

There is great uncertainty over how long it will take to eliminate all the shortages. If the disruptions are due to temporary closures of production facilities following natural disasters or epidemiological emergencies,

Chart 1.3

Delivery times lengthened considerably in the United States, the United Kingdom and the euro area

(PMI indices[1] for delivery times in manufacturing industry)



Source: Refinitiv (an LSEG company).

1 Indices defined as 100 less the proportion of firms polled responding that delivery times are shorter or the same as in the preceding month.

the shortages can generally be corrected in a few months. That is the baseline scenario that many economists had initially anticipated. But experience also tells us that structural shifts in demand or supply have a much longer-lasting impact on the economy. Thus, some of the changes relating to the coronavirus will probably become permanent. In the absence of any notable improvement, there is a growing conviction that the supply disruptions will last longer than expected.

The shift in demand towards consumer durables was also behind the rapid recovery of international trade in goods, following its collapse in the second quarter of 2020. That vigorous expansion persisted at first in 2021 but subsided later in the year owing to the bottlenecks described above. International trade in motor vehicles and spare parts was particularly affected, and that was also reflected in the downturn in sales of new cars in all the large economies (euro area, United States and China). Conversely, trade in services remained below its end-2019 level, as tourism only partly returned to normal.

There are signs of a growing shortage on the labour markets

The labour markets also staged a swift and vigorous recovery once the restrictions were lifted. But their revival remained incomplete in that employment (in persons and in hours worked) has not yet returned to its end-2019 level. In the euro area, the United Kingdom and Japan, the shock was essentially absorbed by reductions in working time via the use of furlough schemes, which maintained the link between employers and workers. However, American firms had to make their workers redundant because there is no temporary lay-off scheme in that country. Employment there recovered faster in terms of hours worked than in numbers of persons.

The number of vacant posts also increased sharply, notably in the United States and the United Kingdom, where historically high figures were recorded at the end of the year. In the euro area and Japan, too, the number of vacancies regained its pre-pandemic level in the third quarter.

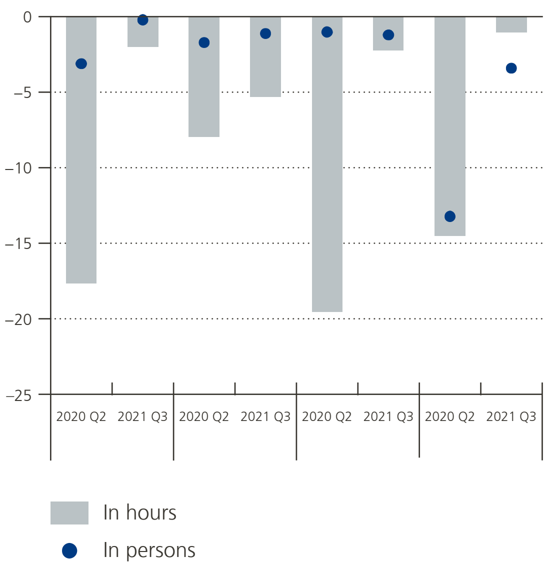
A high number of vacancies sends various signals about the labour market. On the one hand, it may be a sign of a healthy recovery with ample new jobs. On the other hand, it may also suggest a slump in the supply of labour and/or mismatches between demand and supply. These last factors certainly apply in the United Kingdom and the United States. In the latter country, where many workers lost their job after the outbreak of the pandemic, firms are having difficulty attracting them back again now that the economy is picking up. The number of workers in the United States is still more than 3 % below the pre-crisis figure, possibly implying that the labour supply is still suffering from the crisis. The temporary increase in replacement incomes may have contributed to a more wait-and-see attitude, while fear of infection has made a number of sectors less attractive. That is particularly true in hospitality. As well as that, many workers are opting to quit voluntarily, in the hope of benefiting from the current tightness on the labour market and finding a job offering better working conditions. In the United Kingdom, employers are also increasingly reporting recruitment problems; they attribute them not only to the strength of demand but also to a smaller supply of workers from the EU (owing to Brexit) and skills mismatches. Structural mismatches on the labour market are not yet as pronounced in the euro area as a whole, but they are growing in certain sectors and in some Member States, such as Belgium and the Netherlands.

Chart 1.4

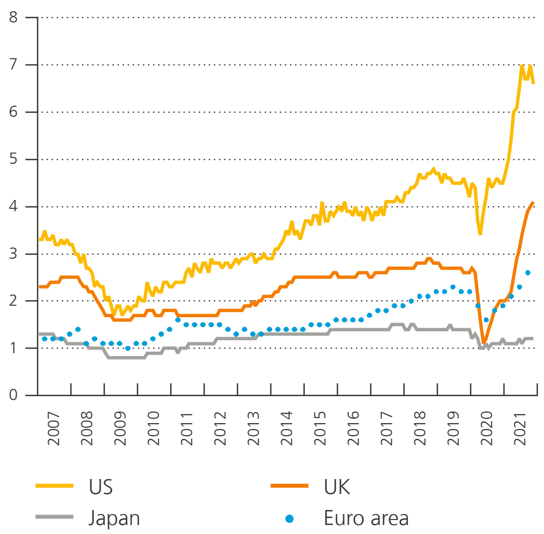
The labour market's recovery is still incomplete, but there are also signs of tightness

(in %)

Employment has not yet fully recovered [1]



Vacancies [2] are rising again



Sources: Bureau of Labour Statistics (US), Bureau of Statistics (Japan), ECB, Eurostat, Federal Reserve Bank of St Louis, Office for National Statistics (UK).

1 Deviation from the corresponding average value in the last quarter of 2019.

2 Defined as the ratio between the number of vacancies and the total number of posts filled and not filled.

1.2 Inflation has accelerated considerably in most countries owing to both supply and demand factors

The combination of supply shortages and vigorous demand has driven up many input prices

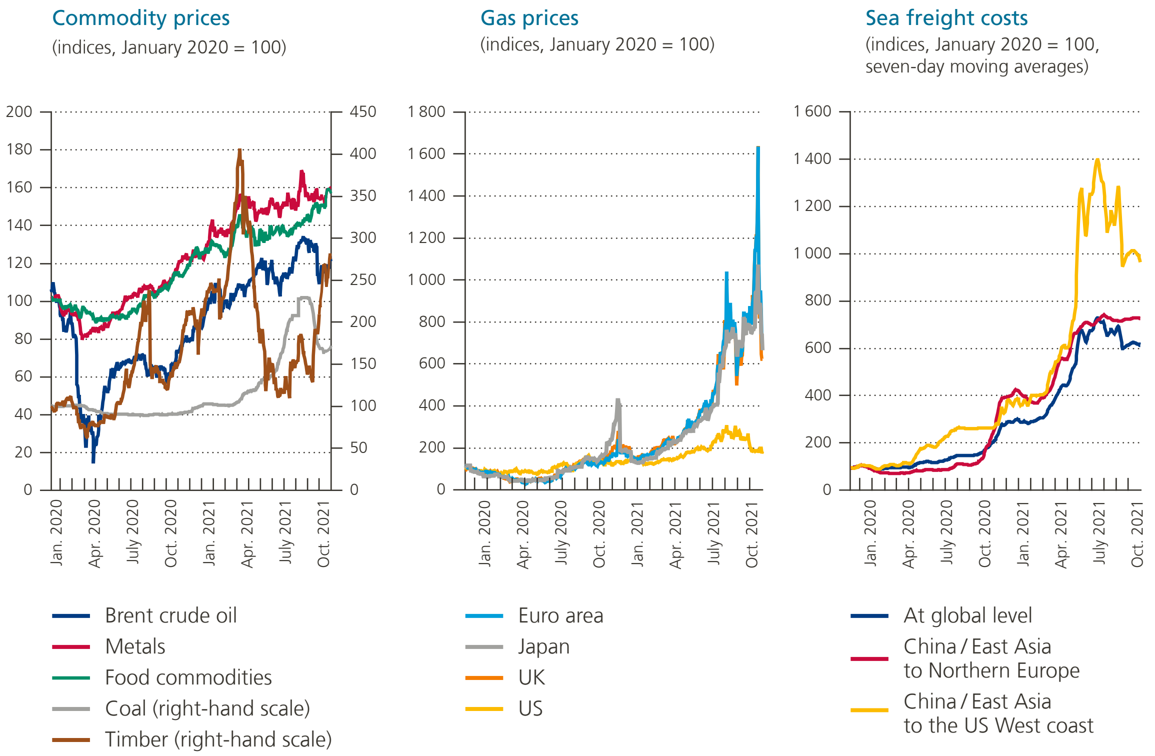
The strong recovery of demand after the sharp decline in 2020 also drove up prices, mainly energy and commodity prices but also the cost of intermediate goods and transport (particularly sea freight). As previously mentioned, various factors contributed to the situation where supply fell short of demand and global value chains were seriously disrupted. For example, the price of container shipping from China and East Asia to the West coast of the United States increased tenfold between January 2020 and the end of December 2021.

In the case of oil and gas, investment in production capacity during the years preceding the coronavirus crisis had been clearly insufficient owing to the low market prices prevailing at that time. Moreover, the slump in oil prices in 2020 bankrupted several independent shale oil producers in the United States, while others underwent mergers or acquisitions. When global demand for oil picked up following the particularly weak year 2020, OPEC+ only slightly raised its output targets. In some parts of Asia and Europe, high gas prices have also led to the substitution of oil for gas in electricity generation, putting additional pressure on oil prices. However, discovery of the Omicron variant of the coronavirus did trigger a fall in oil prices at the end of November, just after a number of countries (including the United States, the United Kingdom and China, in particular) had announced plans to use strategic oil reserves in order to curb the rising cost of energy. In regard to gas, the scheduled scaling down of extraction in Groningen, in the Netherlands, continued as planned (activities closing down in 2022) so that the supply of gas diminished further. In addition, various idiosyncratic factors were at work, such as a long, cold winter in 2020-2021 in the United States and North-East Asia, so that stocks were largely exhausted and frozen wells impeded production; periods of drought that limited hydroelectric production in Brazil, Turkey and California; below-average wind-generated electricity in Europe; Hurricane Ida in the United States; insufficient extra gas supplies from Russia to make up for the shortfall in supplies from other regions; the closure of various Chinese ports owing to coronavirus restrictions, etc.

Owing to the COVID-19 crisis, maintenance work also had to be postponed from 2020 to 2021 at gas and coal extraction sites (especially gas production sites in the United Kingdom and Norway), further reducing the supply of these energy commodities just at a

Chart 1.5

Input prices rose sharply in 2021



Sources: EIA, Freightos, Refinitiv (an LSEG company).

time when demand was expanding strongly. The unplanned shutdown of some LNG plants, supply problems upstream of the production chains, unexpected repairs and cumulative delays on certain investment projects are all additional factors which reduced global gas supplies. In China, the economic recovery caused the coal price to jump, as coal production was unable to keep up with demand. China is a global price setter for coal, in view of its massive demand for it. Disruptions in coal production in other major exporting countries (Indonesia, Australia and South Africa) also drove up coal prices. Pressure on prices only eased to some extent when China stepped up its coal production considerably in the final quarter. High gas prices also prompted a shift in global demand, as a number of electricity producers on major American, European and Asian markets switched back from gas to coal.

Gas and coal prices therefore reached record levels, taking electricity prices in their wake. In China, the soaring coal prices were not reflected proportionately in electricity prices since they are subject to strict government regulation there. As a result, several electricity producers refused to produce at a loss, leaving electricity supplies diminished and large swathes of China had to contend with power cuts. Consequently, a number of highly energy-intensive industries (such as steel, aluminium and cement) suspended their activities entirely or in part, and that in turn had repercussions on the availability and prices of certain materials and goods at global level. In October, in a bid to prevent a prolonged energy crisis, the Chinese government therefore decided to authorise larger electricity price fluctuations. In Europe, electricity prices reached unprecedented levels, mainly owing to the transmission of high gas prices (for various reasons, gas power stations currently dictate the prices on European electricity markets), but also as a result of the marked rise in the price of emission rights under the European Emissions Trading System in 2021.

The prices of various other commodities also increased or fluctuated widely owing to supply problems and the strong surge in demand linked to the pandemic. For example, the price of timber for construction displayed substantial variations in 2021, rising steeply in the spring and at the end of the year. Food commodity prices climbed throughout the entire year, except for a brief decline during the summer months. In particular, prices of vegetable oils and cereals went up because of poor harvests in Canada, the United States and Russia, while strengthening demand and the shortage of seasonal workers in Malaysia exerted upward pressure on palm oil prices.

Apart from commodity prices, intermediate goods also became more expensive. Semiconductor prices are an obvious example. The reason lies in the situation described above in which rising demand – due mainly to the expansion of remote working and growing demand for motor vehicles – is confronted by disrupted supplies.

In various countries, consumer prices increased much more steeply than in recent years

Inflation rose sharply in most of the major economic blocs

The higher prices of commodities and inputs were then transmitted to consumer prices, so that core inflation also exhibited a marked – albeit less steep – upward trend. Consumer prices were also affected by the increase in prices of services. The reopening of economies caused booming demand for services, while the rise in input prices, and above all the shortage of labour in some services involving close contact, likewise had an adverse effect on the supply of services. Finally, inflation rates were also propelled by base effects compared to 2020, including certain government measures relating to the coronavirus crisis (such as the temporary cut in VAT in Germany in the second half of 2020).

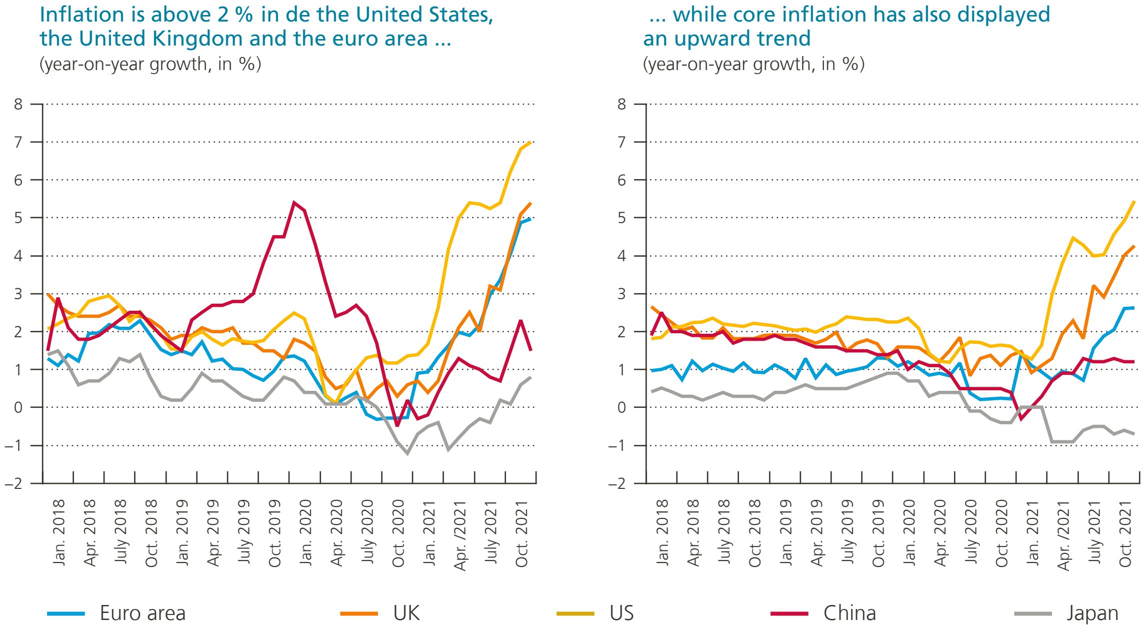
From the second half of the year, consumer prices therefore rose much more sharply than in recent years in almost all the major economic blocs, with the notable exceptions of Japan and China. While input prices did go up in Japan as elsewhere, that rise was passed on to a much smaller extent in consumer prices. In China, low inflation is due partly to the large weight of food prices in the consumption basket (around 30 %), and in particular the price of pork, which has fallen in the course of the year. In the United Kingdom, consumer prices rose faster than in the euro area because the labour market was already tighter there, partly on account of Brexit. In addition, temporary government measures related to the COVID-19 crisis (such as the cut in VAT rates in the hospitality sector) generated base effects. The United States recorded the highest inflation rates owing to the marked rise in transport costs, the growing tightness on the labour market – which affected services prices – and an escalating demand for goods (essentially durables).

The pandemic makes it hard to interpret wage indicators, which are biased, for instance, by the use of different temporary unemployment schemes in several countries and by the sharp fall in the number of hours worked. Nevertheless, excluding certain sectors in some countries, the labour market situation and the upswing in inflation did not trigger exceptional wage increases in 2021. That could be a sign that the inflationary spike was believed to be temporary. However, wages usually do take a while to respond to fluctuations in inflation. Thus, higher inflation could prove to be more permanent if significant wage increases were to occur in 2022 and be reflected in turn in consumer prices (second-round effects). In particular, in countries where the labour market is already tight and where fuel prices and rents are already rising rapidly (cost increases which are much more apparent to consumers), workers could become more demanding in wage negotiations, and that could spark an escalating wage-price spiral.

Rents often go up in the wake of house price rises, which occurred almost everywhere last year. In much of Europe, Canada and the United States, growth rates were actually in double figures. House prices in the United States shot up, and in November 2021 were already 60 % higher than their previous peak in April 2007. This boom in property prices is attributable to the large volume of savings that households built up during the coronavirus crisis, the low interest rate environment and perhaps also to changes in preferences. The transmission of such a steep rise in house prices to consumer price inflation depends on the way in which the costs associated with owner occupied housing are taken into account and the weight of that component in the total consumer price index.

Chart 1.6

Headline inflation and core inflation of consumer prices[1] took off almost everywhere in 2021



Sources: ECB, BLS, BIS, CEIC, NSO, Refinitiv (an LSEG company), Federal Reserve.

1 Core inflation: CPI excluding food and energy in the United States and Japan; excluding food, energy, alcoholic beverages and tobacco in the United Kingdom and in the euro area.

1.3 Macroeconomic policies supported the global economy, but the first signs of divergence between countries became apparent

Monetary policy generally remained expansionary, …

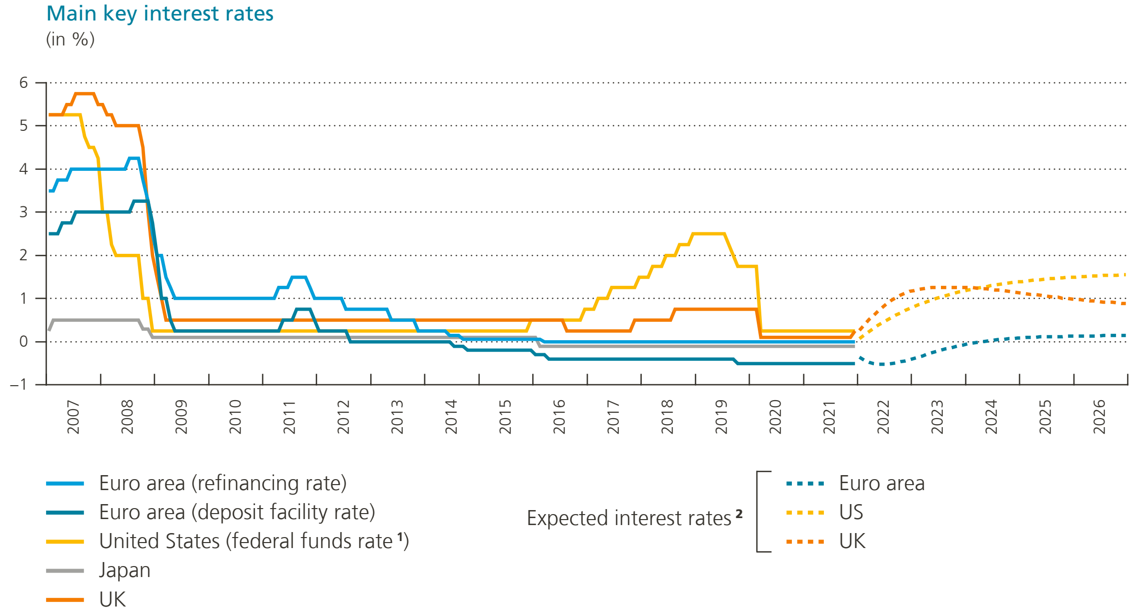
In response to the pandemic shock, monetary policy was deployed in order to support economic activity, stabilise the financial markets and maintain bank lending to businesses and households. For instance, central banks had cut their key interest rates in the spring of 2020 while also stepping up their asset purchases and, in some cases, widening the range of corporate debt they would agree to buy.

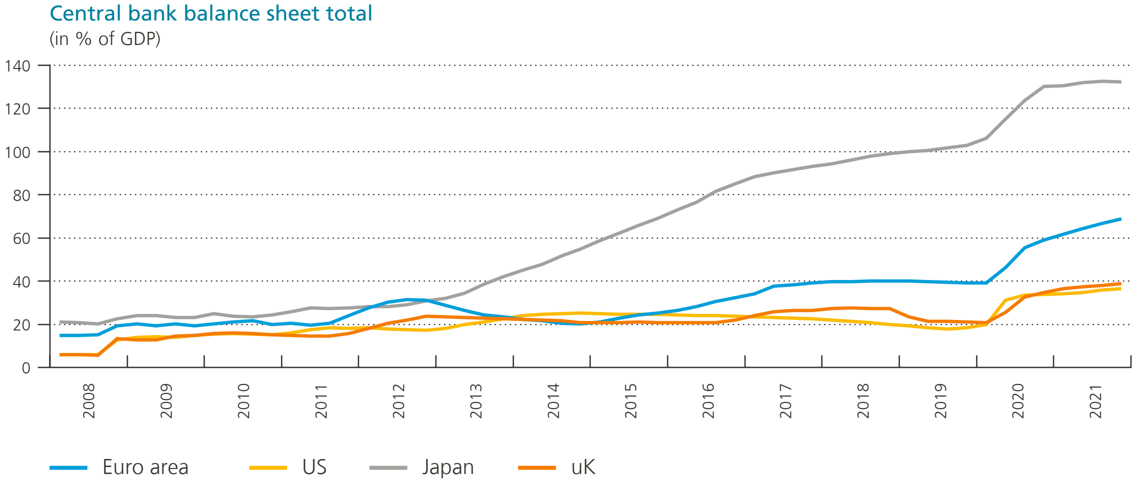
During most of 2021, the main advanced economies did not adjust their key interest rates and where asset purchase policies applied the practice continued, driving up the weight of central bank assets in GDP to new heights.

Conversely, a number of emerging countries – notably in Latin America (Brazil, Mexico, etc.) and Eastern Europe (Russia, Poland, etc.) – had to tighten their monetary policy in order to curb inflationary pressures. In Turkey, however, the monetary authorities which had raised the key interest rates sharply between September 2020 and March 2021 cut the rates by several percentage points in 2021, despite galloping inflation. In most of the large emerging economies (with the exception of Indonesia), asset purchase policies were discontinued. In China, borrowing costs were driven down by the use of monetary policy instruments other than the key interest rates (such as easing of the banks' reserve requirements).

Chart 1.7

The central banks of the main economies kept their key interest rates low and continued to expand the size of their balance sheet





Sources: Bank of England, BIS, Eurostat, OECD, ONS, Refinitiv (an LSEG company).
1 Upper limit of the target range.
2 Interest rate expectations at the end of December.

… but normalisation has begun

In March, in view of the vigorous economic rebound and the ensuing rise in inflation, the financial markets were already expecting interest rates to go up and central banks took the first steps towards normalisation. The Bank of Korea was the first central bank among the G20 advanced countries to raise its interest rates since the start of the pandemic, while Australia's central bank and the Bank of Canada began to taper their asset purchases. From October, the Bank of Canada only purchased securities to replace bonds reaching maturity.

In the United Kingdom, the Bank of England's Monetary Policy Committee decided to raise its key interest rate from 0.1 % to 0.25 % at its meeting on 15 December, owing to the tight labour market and signs of more persistent pressure on prices and domestic costs. For the time being, it maintained its stock of sovereign bonds and bonds issued by high-grade non-financial corporations. It also considered that, at this stage, a modest tightening of monetary policy would probably be necessary over the coming three years to bring inflation down sustainably to the target of 2 %.

In the United States and in the euro area, the response by the central banks was guided by the new strategies[1], redefined in August 2020 and July 2021 respectively. Although they differ, these strategies both imply tolerance in the event of the inflation target being temporarily exceeded, notably after a long period in which inflation has remained (well) below that target. Nonetheless, as inflation has risen, central banks have launched a process of normalisation on both sides of the Atlantic, albeit each at their own pace.

In the United States, the Federal Reserve announced in November that it would cut its net purchases of Treasury securities from $ 80 to $ 70 billion and its purchases of agency mortgage-backed securities from $ 40 to $ 35 billion. At its December meeting, it decided to double the rate of tapering, bringing the additional monthly reduction to $ 20 and $ 10 billion respectively over the following three months, so that net purchases of securities will cease by the end of March 2022. The Federal Reserve also plans to raise its key interest rates with effect from March 2022.

In the euro area, the ECB kicked off in December with a gradual reduction in its monetary easing. The rate of normalisation there will be slower and more flexible and will probably start with a lower rate of balance sheet expansion rather than a tightening of the key interest rates (see chapter 2).

Fiscal policy had to remain expansionary in most of the G20 countries

Fiscal policy, which had been radically eased in 2020, remained expansionary overall. With each successive wave of the coronavirus epidemic, governments in the advanced countries had to make regular adjustments to the main measures supporting their economies and they allowed the automatic stabilisers to do their work. Nonetheless, as the economy picked up, the support measures became fewer and more finely targeted, while recovery and investment measures – usually phased over future years – proliferated on both sides of the Atlantic : the European recovery plan focusing mainly on green and digital investment in the EU Member States, and various plans by President Biden in the United States. Congress approved some elements of the Biden plans : innovation and competition, and infrastructure.

In most emerging countries, fiscal policy likewise supported economic activity in 2021, albeit to a lesser degree than in 2020. Nonetheless, some countries ran out of fiscal leeway and were forced to tighten the purse strings.

Overall, and taking account of relatively robust economic growth, the budget deficits declined to a greater or lesser degree from one country to another. Oil-exporting countries, such as Russia and Saudi Arabia, or other commodity-exporting countries like Brazil, Argentina and South Africa, took advantage of soaring prices to reduce their deficits substantially, against the backdrop of high debt levels and limited budgetary scope. On the other hand, these escalating prices placed a burden on the public finances of countries which import these commodities, including India and Turkey. In the euro area, looking at just the large economies, the deficit remained more or less stable, as the deterioration of the deficit recorded in Germany in an election year offset the improvement in the French, Italian and Spanish deficits.

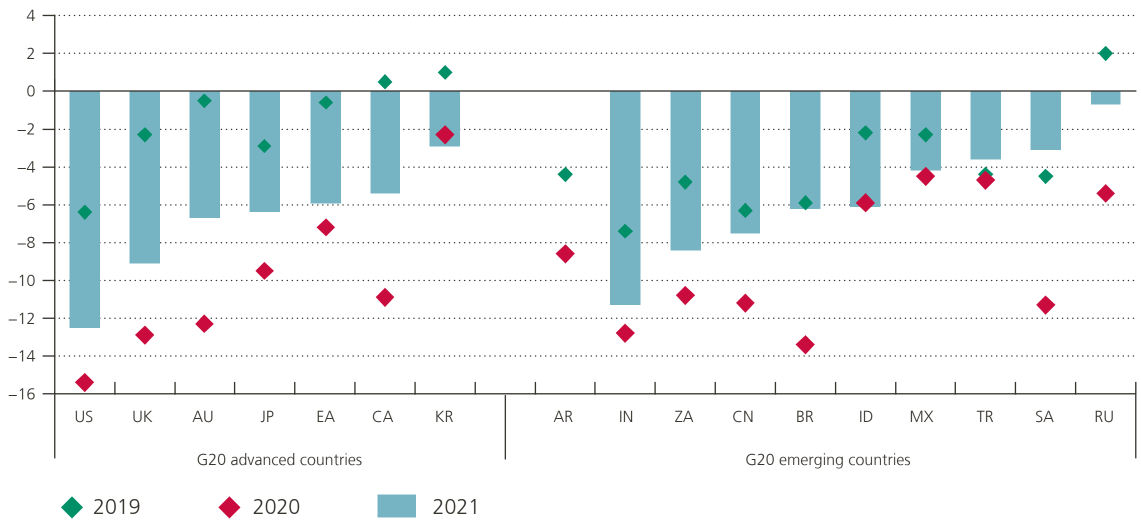
In some countries, the deficits remained substantial, driving public debt to new record levels in 2021 (see box 1 for a historical overview of the public debt). In other countries, despite the deficits, the debt diminished because the (partly mechanical) growth revival enabled growth to exceed the (implicit) interest rate on the debt, and hence to achieve an endogenous reduction in the government debt ratio.

1 See box 2 of the Report 2020 for the revision of the American monetary strategy and chapter 2 of this Report for the ECB's new monetary policy strategy.

Chart 1.8

Public deficits which had deteriorated sharply in 2020 were reduced in 2021, but in varying proportions between countries[1]

(in % of GDP)



Sources: ECB for the euro area, EC for Russia and Turkey, OECD for the other advanced economies and IMF for the other emerging economies.

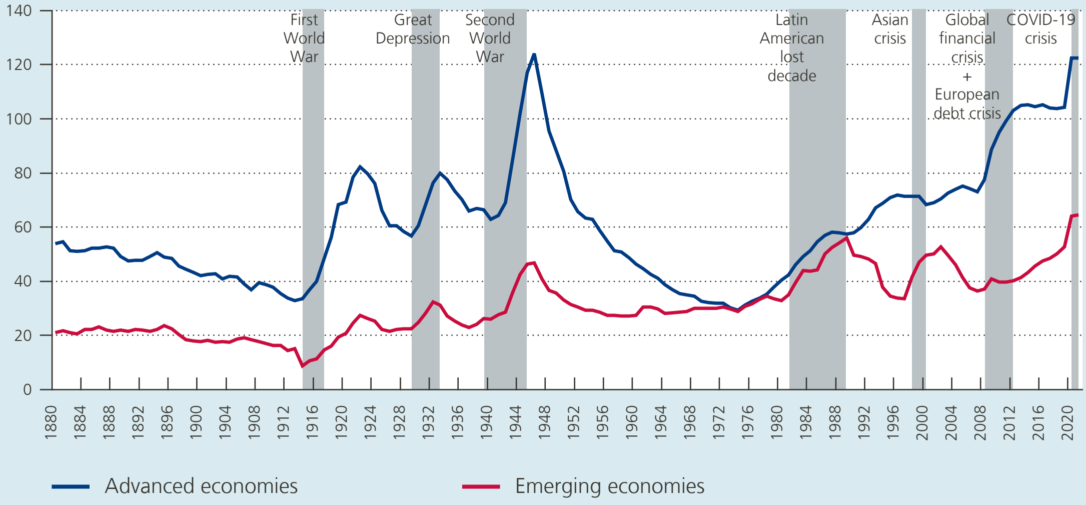
1 The G20 countries are divided into advanced and emerging economies. In each of these two categories, the countries are ranked in descending order of their public deficit in 2021.

BOX 1

Public debt is reaching historic highs: is the sky the limit? *

Public debt [1]

(in % of GDP)



Source: IMF.

1 The aggregates for the advanced and emerging economies are based on samples of 25 and 27 countries respectively and are weighted by GDP in purchasing power parity terms.

On average, the current public debt-to-GDP ratio of advanced economies is very close to the level observed at the end of the Second World War. The sharp reduction in the public debt ratio in the post-war years was due to an exceptional combination of factors which persisted until the late 1970s: very strong economic growth fuelled by the reconstruction, persistently high inflation, and extensive financial repression (in other words, policies aimed at keeping nominal interest rates on public debt below the free market rate by means of regulatory restrictions and other government interventions). Other major jumps in the public debt ratio of advanced economies coincide with the First World War, the Great Depression of the 1930s, the global financial crisis and the ensuing European sovereign debt crisis, and finally, the COVID crisis. In contrast to what happened after the Second World War, more recent shocks and crises were followed by much more modest debt reductions (if any), so that the overall public debt has been on an upward trajectory since the mid-1970s. The public debt ratio of emerging economies tends to follow a less steep path but is equally characterised by waves of debt accumulation and crisis-related jumps.

While the exact debt dynamics vary between countries, no or hardly any fiscal buffers were rebuilt between the global financial crisis of 2008-2009 and the eruption of the COVID-19 pandemic. True, negative interest-growth differentials (the famous "r-g") often had a beneficial impact on the debt ratio,

* See Buysse K., F. De Sloover and D. Essers (2021), "Indebtedness around the world: Is the sky the limit?" NBB, *Economic Review*, June.

but the effect was not always sufficiently large to offset the primary fiscal deficits. In the emerging economies, the increasing primary deficits seen in recent years, sometimes combined with other factors (such as exchange rate depreciation) drove up the public debt ratio despite GDP growth which traditionally outpaces that in the advanced economies. As regards the impact of the COVID-19 crisis, public debt ratios jumped in response to the massive budgetary support (particularly in advanced economies), temporarily reinforced by severe drops in economic activity during lockdowns (in both advanced and emerging economies).

High debt levels hamper the government in conducting countercyclical policies and in responding to future shocks. The public debt ratio tends to be negatively correlated with economic growth, but the relationship is likely non-linear and it remains difficult to establish clear causality. Moreover, there is no "magic" universal threshold beyond which public debt has an unambiguously negative impact on growth. The growth effects of public debt also depend on the motives underlying governments' borrowing, such as temporary countercyclical fiscal support, the funding of major investment projects designed to boost production, or politically motivated expenditures (e.g. for electoral purposes).

At the end of the day, public debt has to remain "sustainable", which means that the primary fiscal balances necessary to at least stabilise debt under realistic scenarios should be economically and politically feasible, while keeping refinancing risks manageable and preserving sufficient potential growth. In practice, assessing public debt sustainability is a complex and intrinsically forward-looking exercise which involves a good dose of judgment.

It is sometimes suggested that debt-friendly interest-growth differentials (resulting largely from low interest rates) should make us worry less about high public debts and open up possibilities for more aggressive fiscal stabilisation policies and public investment. While it is true that a negative r-g provides some extra budgetary leeway, it should not be used as a free pass to waive all fiscal discipline. In fact, when primary deficits are large they may outweigh the favourable effects of a negative r-g. Additional fiscal expansion and debt accumulation could themselves lead to a rise in interest rates and/or slower growth. Research has also shown that, while a negative r-g is historically fairly common in both advanced and emerging economies, it is certainly not guaranteed over the longer term since sudden inversions of r-g moving into positive territory may occur if investors lose confidence in public debt sustainability. Furthermore, not all public debts and debtors are created equal. The creditor structure, the currency in which the debt is denominated, together with the macroeconomic fundamentals and the perceived institutional quality of a country are all key factors for public borrowing costs and debt sustainability.

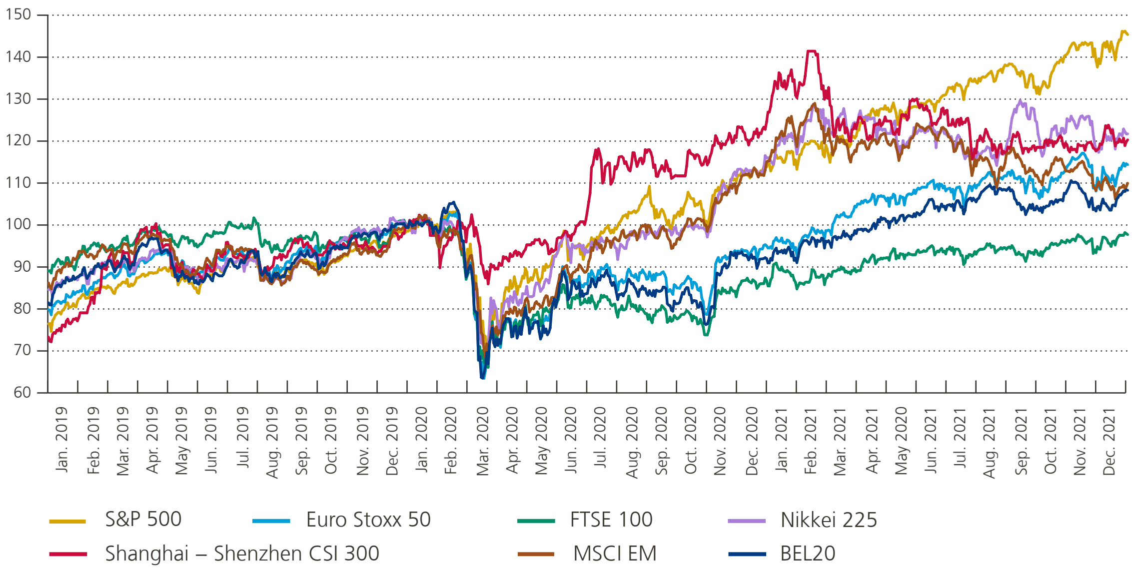
1.4 The financial markets continued to recover but expected regional divergences concerning further policy support began to play a role

Generally speaking, stock markets had a strong year, particularly in the euro area and still more so in the United States, where markets remained on the up-sloping path on which they had embarked in the final months of 2020. This upward trend was fuelled mainly by the rollout of the vaccination campaigns and the ensuing further reopening and revival of the economy, enabling firms to post good profits which often exceeded expectations. The continued support of fiscal and monetary policies also boosted market confidence. However, uncertainty over the upswing in inflation and signals implying that the Federal Reserve would consequently tighten its accommodative monetary policy more rapidly than expected triggered a series of temporary drops on American and other stock markets, most notably in September. Uncertainty surrounding the Omicron variant of the coronavirus was another source of volatility towards the end of 2021. While almost all corporate sectors recorded positive results on the American and European stock markets

Chart 1.9

American and European stock markets had a strong 2021

(indices, January 2020 = 100)



Source: Refinitiv (an LSEG company).

over the year as a whole, the shares of technology companies and financial institutions gained the most from the economic rebound. The latter were able to reduce their provisions for default since the expected wave of corporate bankruptcies did not materialise. In addition, American shares in the energy and real estate sectors, like shares in the European car industry, performed better than the stock market average, despite supply chain problems. The strong rise in American stock market indices such as the S&P 500 and Nasdaq was driven to a considerable degree by a small number of positive outliers – including by shares of some large technology companies – and was accompanied by intensive derivative trading.

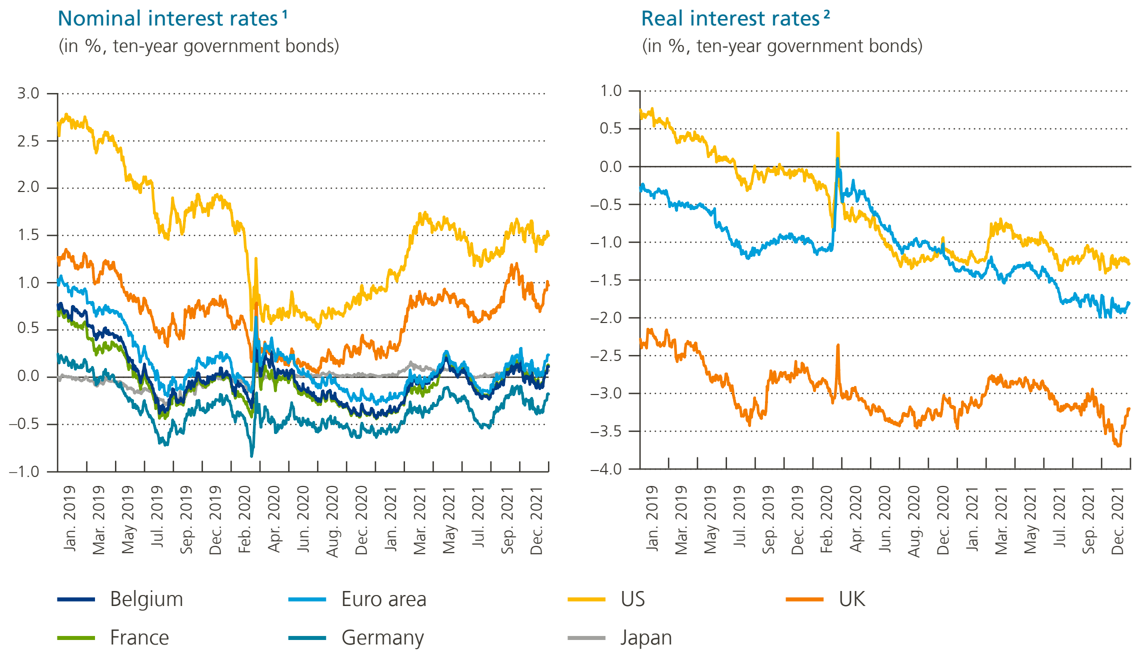
In the United Kingdom, the stock market revival was considerably more gradual than in the United States and Europe, given the persisting concerns over post-Brexit relations with the EU. At the end of 2021, the British FTSE 100 index had still not regained its pre-pandemic level. The Japanese stock market climbed rapidly in the first quarter but then moved rather sideways.

After an exceptionally strong year in 2020, stock markets in continental China underwent a substantial correction. The steepest drops occurred in February-March, when the perception of a potential overvaluation of equity and an expected normalisation of Chinese monetary policy spooked investors, and in July, when the Chinese authorities announced stricter regulation of firms operating digital platforms and in related sectors. Concerns over the Chinese real estate sector, exacerbated by the payment problems of property giant Evergrande, had apparently very little impact on the stock markets. In most of the other emerging Asian and Latin American countries, stocks also performed less well than in the advanced economies. That is due not only to the limited progress of the vaccination campaigns and other domestic vulnerabilities, but also to the expected growth slowdown in trading partner China and the prospect of a general normalisation of monetary policy in the main advanced economies, making riskier investment less attractive.

Nominal yields on advanced countries' sovereign bonds remained historically low, partly owing to the effect of the still highly accommodative monetary policy. However, nominal interest rates ended the year 2021 at a higher level than the year before. In the United States, Treasury yields rose sharply in the first quarter. Thanks to the favourable economic news combined with the strong fiscal stimulus announced by President Biden, investors expected faster growth and accelerating inflation, and consequently a quicker phasing out of the Federal Reserve's monetary policy support. In the second quarter and at the start of the third, the rapid spread of the Delta variant of the coronavirus and disappointing economic data again triggered a slight fall in the nominal yield on US Treasuries. From August onwards, more persistent inflation rates and the Federal Reserve's announcement of the tapering of its purchase programme nevertheless drove interest rates higher again. In the euro area and the United Kingdom, the evolution of nominal yields on sovereign bonds mirrored the pattern in the United States but the upward trend in interest rates was generally less marked – especially in the euro area where the markets expected a more

Chart 1.10

Nominal sovereign bond yields increased but remained historically low, while real interest rates reached new troughs



Sources: Eurostat, Refinitiv (an LSEG company).
1 The euro area aggregate is a GDP-weighted average.
2 Nominal ten-year interest rates minus expected inflation derived from swap contracts covering the inflation risk over a ten-year period.

gradual tightening of monetary policy. In emerging economies, except those in Asia, nominal yields on local currency sovereign bonds picked up significantly in 2021. But the rise in yields on dollar-denominated bonds was considerably more muted, demonstrating the growing importance of currency risk in the pricing of those economies' sovereign bonds.

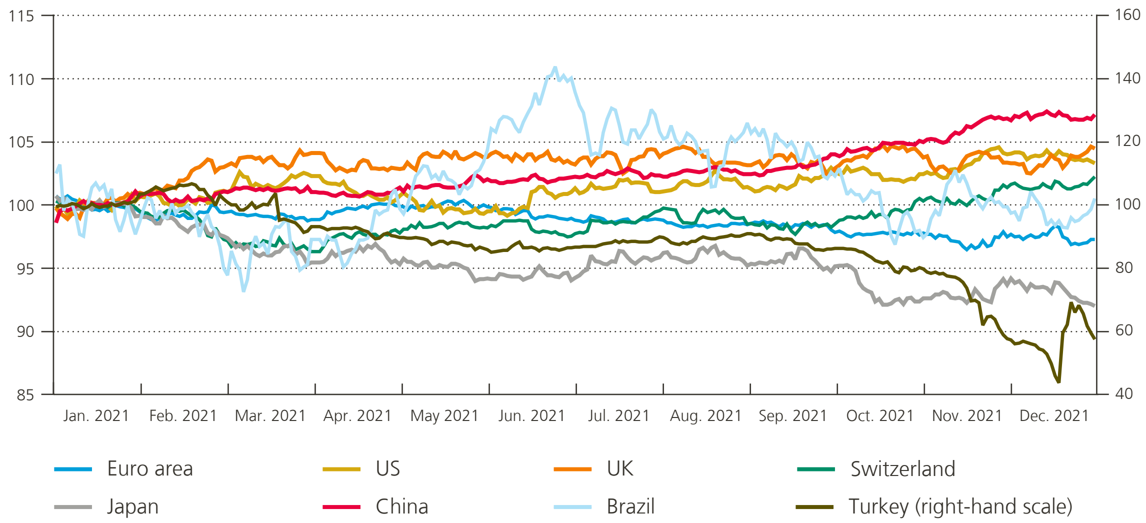
Since inflation expectations outpaced the rise in nominal interest rates, *ex-ante* real yields on government bonds continued to fall. Real interest rates, which had already been negative for some time in the United States, the euro area and the United Kingdom, actually dropped to historically low levels towards the end of 2021.

The exchange rates of the main advanced economies were relatively stable in 2021. Nonetheless, the prospect of monetary policy tightening in the United States, particularly in the second half of the year, caused the dollar to appreciate against the currencies of America's main trading partners, including the euro. Also more generally, the euro depreciated over the course of the year. The Japanese yen weakened considerably, in accordance with predictions that the accommodative monetary policy stance would be maintained longer in Japan than elsewhere. Conversely, the British pound strengthened considerably against the euro because the markets expect the Bank of England to scale down its monetary policy stimulus more quickly than the ECB. The Chinese renminbi also appreciated strongly thanks to China's continuing (albeit decelerating) economic recovery and partly as a result of an attractive carry trade marked by relatively low exchange rate volatility and high yields on renminbi-denominated financial instruments. The currencies of other emerging economies, notably Brazil and Turkey, exhibited high volatility in 2021. Runaway inflation combined with successive reductions in the policy interest rate caused the Turkish lira to sink to new lows.

Chart 1.11

The US dollar appreciated while the euro depreciated against the currencies of the respective main trading partners

(effective nominal exchange rate, indices, January 2021 = 100)



Sources: BIS, Refinitiv (an LSEG company).

2. Monetary policy in the euro area

2.1 Favourable financing conditions supported the recovery in the first half of the year

When the coronavirus spread across continental Europe in early 2020, it soon became clear that major measures would be needed to cushion the economic repercussions of the health crisis. In this context, monetary policy backed up the measures adopted by governments and prudential authorities by stabilising the financial markets, supporting bank lending and, more generally, by maintaining favourable financing conditions. To this end, the ECB Governing Council initially adapted its existing policy instruments. The operational modalities of the third series of targeted longer-term refinancing operations (TLTRO III) were thus loosened, while the amount of debt securities purchased under the Asset Purchase Programme (APP) was stepped up by € 120 billion in 2020. However, as it soon turned out that the severity of the crisis would require a much bigger policy reaction, a new temporary crisis asset purchase programme – the Pandemic Emergency Purchase Programme (PEPP) – was launched. The PEPP envelope was revised upwards several times, to reach € 1 850 billion, with asset purchases planned to continue at least until the end of March 2022, or in any case until the crisis phase of the pandemic is over.

Despite the sheer scope of the pandemic, the Eurosystem has managed to soften the repercussions for the euro area economy. The financial markets recovered quite quickly and bank lending remained intact. However, the euro area was still in a highly precarious situation at the beginning of 2021, with some sectors

of the economy having been shut down while vaccination campaigns still needed to be rolled out. Consequently, in the first half of 2021, monetary policy continued to focus on maintaining favourable financing conditions, through the instruments put in place in 2020, so as not to jeopardise the dynamic – although nascent and uncertain – economic revival.

The December 2020 Governing Council decision to use three additional TLTRO III operations implied that one such transaction took place in each quarter of 2021. These operations above all guaranteed that banks were able to continue to get funding at the highly attractive TLTRO III conditions. In 2021, the need for Eurosystem liquidity nevertheless turned out to be well below the previous year's level. While the banks still borrowed around € 1 700 billion through TLTRO III in 2020, some € 450 billion, net of repayments, were added in 2021. The amounts lent under the pandemic emergency LTROs (PELTRO), which provide banks with shorter-term liquidity, have remained quite limited, at around € 3 billion in 2021, as in the previous year (roughly € 25 billion).

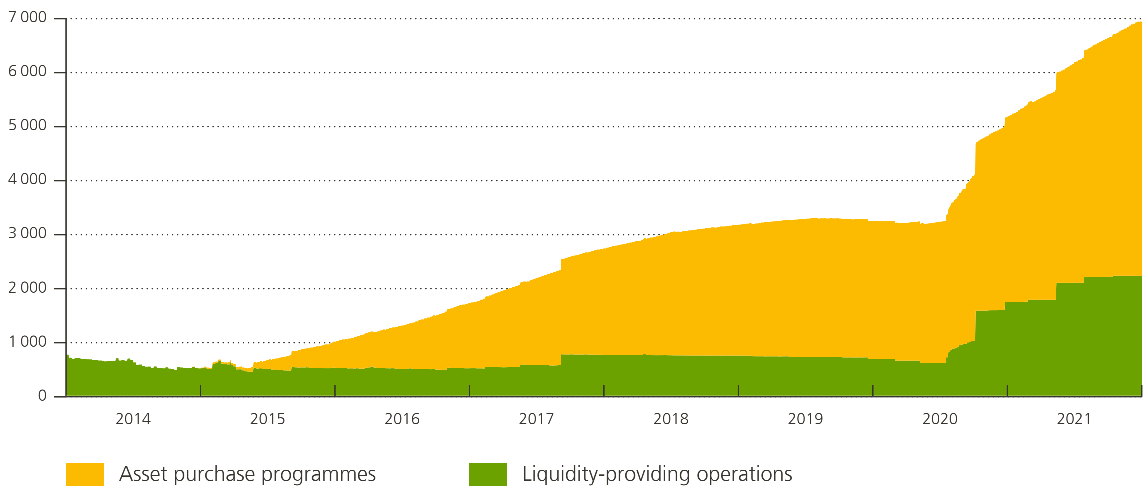
Bank lending rose considerably in 2020, on the back of strong demand for business loans over the first few months of the COVID-19 crisis. In 2021, this growth abated sharply. While firms saw their revenue start rising again as a result of the economy reopening, they were also able to resort to the liquidity buffers built up the year before. Loans to households in the euro area followed a net upward trend over the last year, bolstered by demand for mortgage loans. This, in turn, needs to be seen against a backdrop of rising house prices and with interest rates still extremely low. Thanks to the continued accommodative monetary policy, bank lending rates to firms and households remained at historically low levels in 2021. Against that background, the Governing Council decided in December to schedule no further new TLTRO operations after 2021. It is nevertheless continuing to closely monitor the banks' funding conditions so as to make sure that discontinuing these operations does not hinder the smooth transmission of monetary policy.

Once the additional envelope of € 120 billion had been spent in 2020, purchases made under the Eurosystem's APP dropped back to a pace of € 20 billion a month in 2021. As far as asset purchases under the PEPP were concerned, the Governing Council had decided in December 2020 that they would be carried out to maintain favourable financing conditions and tackle the downward impact of the pandemic on the projected path

Chart 2.1

The Eurosystem balance sheet total has continued to rise

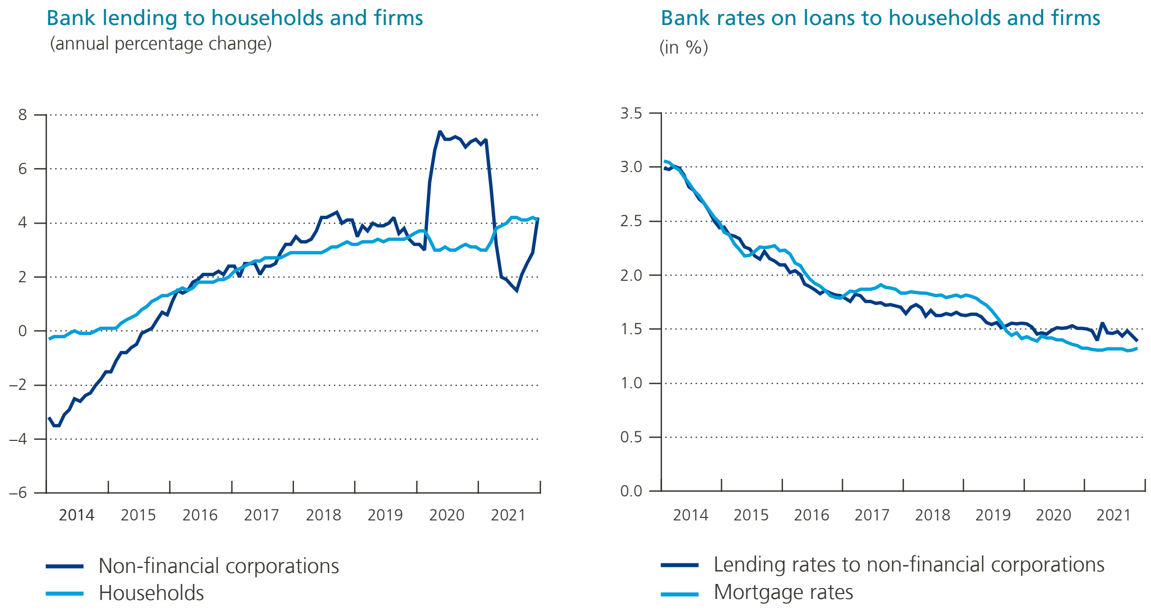
(€ billion)



Source: ECB.

Chart 2.2

Accommodative monetary policy has supported bank lending in the euro area



Source : ECB.

of inflation. Guaranteeing advantageous financing conditions implies that neither the overall level of interest rates, nor market fragmentation tensions should rise too much. As government bond yields and the risk-free interest rate serve as a reference for borrowing conditions applied to households and firms, they are closely monitored by the Governing Council.

At the beginning of the COVID-19 crisis, government bond rates had risen more in some countries – that had higher initial debt levels and had been hit harder by the crisis – than in others. The PEPP has managed to stem these fragmentation tensions, that were no longer evident in 2021 : government bond rates in the different euro area countries moved in very similar ways last year. The EU itself also became a big bond issuer, with similar rates to Belgian and French government bonds.

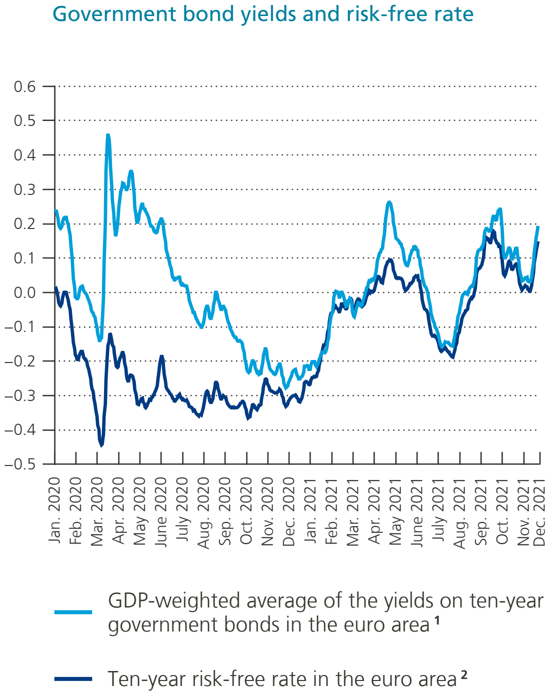
The acute tensions observed on the financial markets were no longer evident in 2021

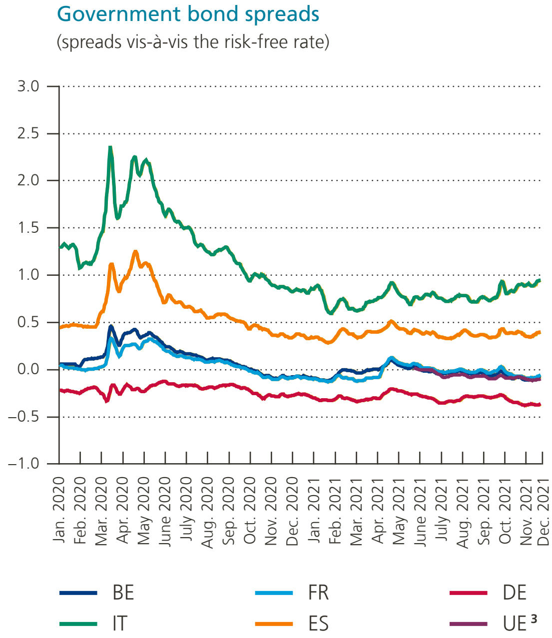
In a bid to stimulate the economic recovery, it was also important for the general level of borrowing costs not to increase excessively. In this context, the Governing Council decided in March to significantly step up the pace of asset purchases under the PEPP. At the start of the year, the nominal risk-free interest rate had in fact started gradually rising and government bond yields in the various euro area countries followed this movement. That can be largely explained by spillover effects associated with the situation observed at the time in the United States, where Treasury rates had started to rise earlier, fuelled by favourable prospects for the economic recovery. The roll-out of vaccination campaigns and the recovery plan that President Biden approved in March generated a wave of optimism across the economy. To tackle rising interest rates, the Governing Council decided in March to considerably step up the pace of asset purchases made under the PEPP in the second quarter of 2021 compared with the first few months of the year. In this way, it intended to prevent any increase in government bond yields and the risk-free interest rate from being passed onto households' and firms' financing conditions, which was deemed undesirable given the still extremely fragile economic situation in the euro area. Even though the recovery had gained further momentum in June,

Chart 2.3

The PEPP has played a key role in preserving easy financing conditions in the euro area

(in %, five-day moving averages)





Source: Refinitiv (an LSEG company).

1 Based on data from eleven euro area countries, namely Germany, France, Italy, Spain, the Netherlands, Belgium, Austria, Portugal, Finland, Ireland and Greece.

2 Ten-year Eonia swap rates.

3 Yields on EU bonds issued under the NGEU.

the Governing Council felt that the faster pace of purchases under the PEPP should also be kept up in the third quarter so as not to jeopardise the nascent recovery and the upward pressure on inflation.

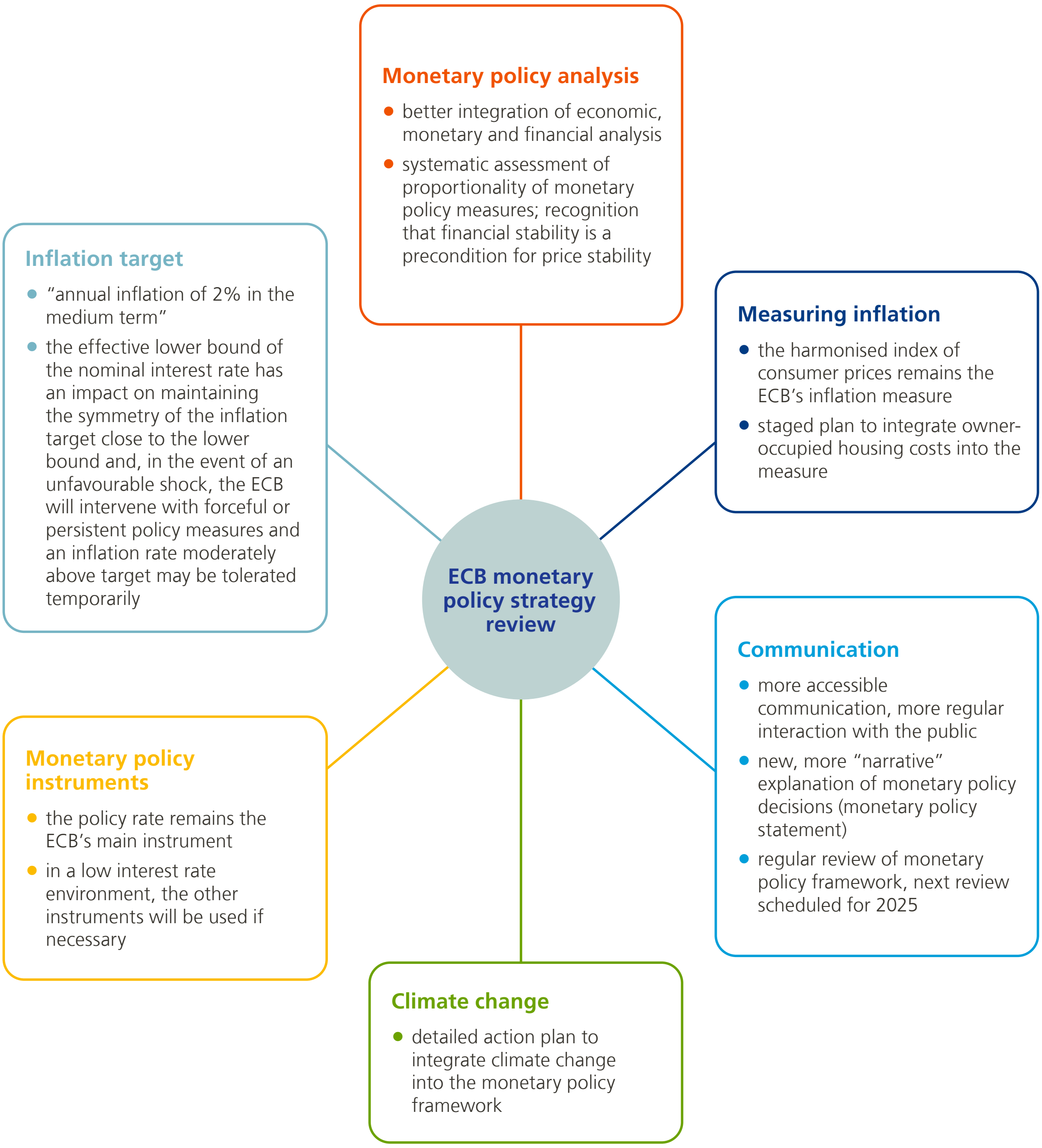
Thanks to the increased rate of asset purchases via the PEPP, the Governing Council managed to halt any further rise in government bond rates in the euro area. After this initial rise at the beginning of the year, their GDP-weighted average has remained stable, at around 0%. It was not until early summer that these rates started to drop, after the Governing Council announced, on 8 July, the results of its monetary policy strategy review.

2.2 The Governing Council completed the review of its monetary policy strategy in July

The ECB Governing Council started the review of its monetary policy strategy back in January 2020. Although the whole process had been due to be finalised by the end of 2020, it was postponed until the summer of 2021 because of the COVID-19 crisis. As the previous strategy assessment was as far back as 2003, a very wide-ranging review was deliberately chosen this time. However, the ECB's mandate *per se*, and the price stability objective in particular, were not being called into question, as that would have required an amendment of the Treaty on the Functioning of the EU. Instead, the assessment sought to examine how to best fulfill the ECB's mandate within the limits of the EU Treaty, but in a very different environment. The context in which the ECB and other central banks carry out their activities has in fact radically changed over the last few decades. The fall in the equilibrium interest rate, combined with a long period of sluggish growth and low inflation in the aftermath of the global financial crisis, has led to wider use of non-standard monetary policy instruments. The COVID-19 crisis has further reinforced this trend. Moreover, a series of structural developments – such as globalisation, digitalisation, climate change and the transformation of the financial landscape – also throw up major challenges for monetary policy.

Chart 2.4

The ECB's monetary policy strategy review was wide-ranging and covered various aspects of the policy framework



Source: ECB.

The new strategy was announced on 8 July and the changes cover six different aspects. First of all, it was felt that aiming for an inflation rate of "2 % in the medium term" rather than inflation "below, but close to, 2 % in the medium term" was the best way to safeguard price stability. This new definition is symmetric, with deviations, both positive and negative, from the target being regarded as equally undesirable. Through this simplified inflation target, the Governing Council wants to provide a clear nominal anchor for inflation expectations. In order to preserve the symmetry of the inflation objective, the ECB acknowledges that it is crucial to consider the consequences of the effective lower bound. More precisely, when interest rates are close to their lower bound, monetary policy measures that are especially forceful or persistent are necessary to avoid deeply rooted negative deviations from the objective. This can also imply a transitory period with inflation slightly above target.

With the new symmetric inflation target, the Governing Council wants to provide a clear anchor for inflation expectations

Secondly, monetary policy remains focused on the medium term. This makes it possible to take into account not only delays in monetary policy transmission, but also uncertainties or other considerations. On this last point, for example, the medium-term orientation provides the necessary flexibility to assess the nature of the shock – is inflation changing because of demand factors or supply factors ? – and enables any temporary rise in inflation to be discounted. Such a policy horizon also guarantees the necessary margin to assess the proportionality of monetary policy decisions in a systematic and well-thought-out way, balancing the benefits of the policy against any possible side effects. Such side effects may for example take the form of risks for financial stability, which, in the new strategy, is explicitly recognised as a condition for price stability. The new analytical framework, that underlies monetary policy decisions and involves a more integrated study of economic, monetary and financial developments, must be considered in this context too.

Thirdly, while the harmonised index of consumer prices (HIPC) will continue to be the ECB's inflation measure, a decision has been taken to include owner-occupied housing costs in it. The fact that these costs are not included in the inflation figures used by the ECB was considered to be an aberration by the general public, as revealed in the various "listening" consultations held as part of the strategy review. Therefore, over the next few years, an inflation measure that takes these costs on board will be sought. Until such an index is available, estimates will be used to start taking owner-occupied housing costs into account in the ECB's analyses[1].

A fourth aspect concerns the ECB's various monetary policy instruments. Although it was decided that the policy rate would remain the ECB's main instrument, the European Central Bank acknowledges that, in a low interest rate environment, other instruments will also have to be implemented in order to reach the inflation target. Asset purchases, longer-term refinancing operations and indications given in the Governing Council's communication on monetary policy (the so-called forward guidance) will therefore continue to be an integral part of the ECB's range of monetary policy instruments.

The way in which the ECB can take into account the effects of climate change was also on the agenda for the strategy review. Climate change actually has an impact on the economy and the financial system and, for this reason, involves risks in terms of price stability and financial stability. Climate transition risks can also influence the valuation of assets on the Eurosystem balance sheet. In this context, a detailed multiannual action plan has been drawn up with a view to integrating climate change into the ECB's monetary policy framework. There are initiatives that seek to improve the understanding of the consequences and risks of climate change and eventually integrate them into analyses and models underpinning the ECB's macroeconomic projections and policy. Specific measures will also be adopted for monetary policy operations, for example as regards risk assessment, the collateral accepted for such operations or corporate bond purchases under the ECB asset purchase programmes.

The central banks have changed the way in which they communicate on monetary policy matters. What's more, communication itself has become a

1 See also *La BCE va davantage tenir compte du coût du logement propre (ECB to take greater account of the cost of owner-occupied housing)*, NBB blog, 15 November 2021: https://www.nbb.be/fr/blog/la-bce-va-davantage-tenir-compte-du-cout-du-logement-propre.

monetary policy instrument, with forward guidance being a prominent example. Clear communication on monetary policy decisions actually makes them more effective: the better markets and the general public understand these decisions, the easier the policy transmission to the economy. This is why monetary policy communication will be adapted and made more accessible. That means, for example, that the monetary policy statement from now on takes a more "narrative" tone: monetary policy decisions are motivated by information drawn from economic, monetary and financial analysis. In addition, interaction with the public will be organised more systematically. The experience of the "listening" events, held in 2020 and 2021 by the ECB and the different national central banks of the euro area[1], will serve as a starting point here. Lastly, the ECB has undertaken to review its monetary policy strategy more regularly, with the next review already scheduled for 2025.

1 In Belgium, this listening event was held on 22 January 2021. To back up this event with viewpoints of Belgian citizens, an online portal "The NBB Listens" was also set up; its main conclusions are summarised in the article by Wauters J. (2021) entitled "Summary Report on the NBB Listens Portal", NBB, *Economic Review*, December.

2.3 The new monetary policy strategy guided policy decisions in the second half of the year

The revamped strategy has an impact on the way in which the different policy instruments are used. While some effects will mainly emerge in the longer term – including owner-occupied housing costs in the inflation measure and the implementation of the climate action plan being just two examples –, other aspects of the revised strategy have a more immediate impact. For instance, the ECB's forward guidance, which throws some light on future movements of policy rates, was adjusted during the Governing Council's 22 July meeting in order to align it on the new strategy. Two changes made to the monetary policy strategy in particular have required an adjustment of forward guidance: the new symmetrical inflation target and the statement that "especially forceful or persistent monetary policy measures" are required to safeguard this symmetry when the economy is close to the lower bound. With a low interest rate and medium-term inflation expectations below target, that implies keeping the accommodative monetary policy stance over a longer period.

More specifically, the conditions that need to be met – simultaneously – before the Governing Council starts raising policy rates have been tightened up. The first condition stipulates that inflation should reach its 2 % target well before the end of the ECB's projection horizon, which is two to three years. This condition provides reassurance that convergence of inflation towards the target is sufficiently advanced when interest rates are raised. By stating that inflation must reach 2 % well before the end of the projection horizon, the Governing Council is also seeking to prevent monetary policy decisions from being taken on the basis of projections that would need to be adjusted later on, as is more often the case for longer-term forecasts. The second condition is for the inflation target to be attained durably for the rest of the projection horizon. In other words, inflation cannot fall back below the 2 % mark in this timescale. That should prevent monetary policy from reacting to a brief surge in inflation. The third condition is that underlying inflation should also have increased sufficiently to be compatible with a stabilisation of inflation at 2 % in the medium term. This condition is based on published inflation rates and offers extra protection against monetary policy tightening in the event of shocks likely to trigger a temporary surge in inflation but destined to dissipate rapidly. Underlying inflation is a wide-ranging concept referring to the persistent component of inflation which rectifies short-term volatility and thus brings more clarity to the real direction in which inflation seems to be moving in the medium term. Lastly, the revised forward guidance explicitly acknowledges that inflation can remain moderately above target during a transitory period, which is in line with the new strategy.

The announcement of the revised strategy and forward guidance has not been without consequences for the financial markets. The prospect of seeing the Governing Council showing more patience in future before raising its policy rate has prompted the markets to expect a later interest rate rise. Moreover, the revised strategy and forward guidance have also influenced inflation expectations. Both market expectations – which are derived from prices of swap contracts covering inflation risks in the euro area – and expectations drawn from surveys of professional forecasters were revised upwards in the summer.

Expectations that the Governing Council would stick to a highly accommodative monetary policy over a longer period has also exerted some pressure on long-term risk-free interest rates and on government bond yields. This has resulted in an easing of borrowing conditions in the euro area, which prompted the Governing Council to decide in September to moderately slow down the pace of purchases under the PEPP in the last quarter of the year in comparison to the two previous quarters.

While the *nominal* interest rate, – such as sovereign bond yields – is directly observable, the *real* interest rate – that is, after deducting expected inflation – reflects the real cost of borrowing for economic agents. Prices of swap contracts covering inflation risk in the euro area give some measure of expected inflation, which enables the real interest rate level to be estimated. The combination of a falling nominal rate and rising inflation expectations therefore led to a drop in the real interest rate in the euro area over the summer, bringing down the real cost of financing in its wake.

From the end of August onwards, the rise in inflation expectations intensified even further, against the background of higher-than-expected inflation in the euro area. At the end of October, the ten-year inflation expectations inferred from inflation swaps for the euro area were again above 2 %, something that had not been seen for seven years. Initially, this trend was accompanied by a rise in the ten-year nominal interest rate, as the markets had once again revised upwards their anticipations of a possible tightening of monetary policy in the context of the higher-than-expected surge in inflation. However, when the nominal rate stopped rising from October on, the real interest rate also continued to fall back. At the end of the year, the ten-year real interest rate posted an all-time low of –2 %.

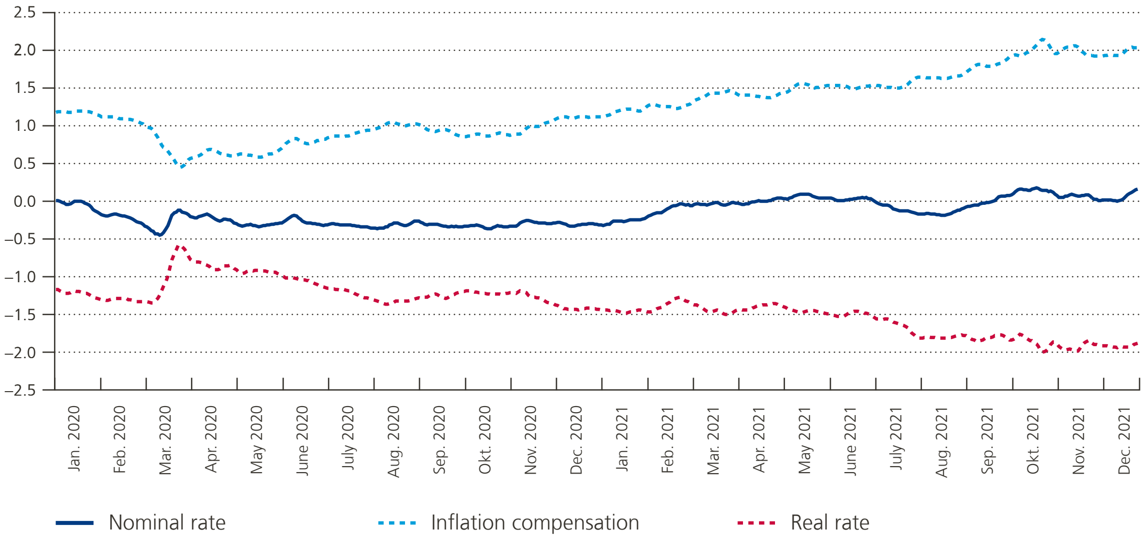
Inflation swaps contain risk premiums, which makes it harder to interpret them as an indication of inflation expectations, especially for longer maturities. Inflation expectations drawn from surveys of professional forecasters do not have this complication. They certainly have risen but have always remained below the target for longer horizons, unlike the compensation for inflation risk demanded on the market.

This pick-up in inflation and inflation expectations must be considered against the background of the strong recovery of the global and euro area economy. This upturn has been accompanied by a sharp rise in energy prices. On the one hand, this trend constitutes a base effect, given that prices had fallen back sharply over the previous year. On the other

Chart 2.5

The real interest rate in the euro area continued to fall in 2021

(breakdown of the ten-year risk-free nominal interest rate [1] in the euro area, percentages, 5-day moving averages)

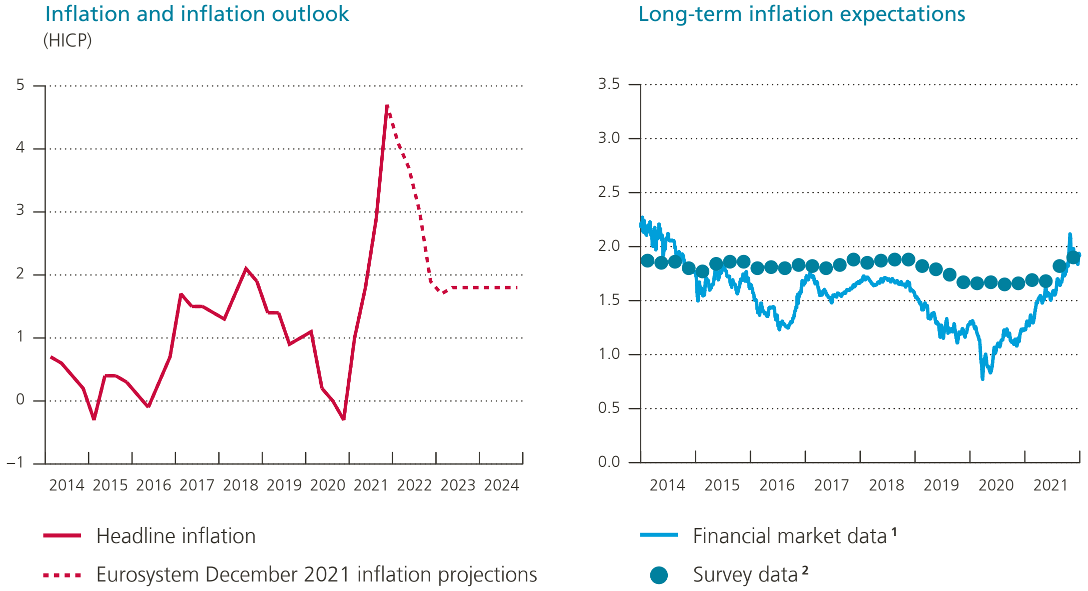


Source: Refinitiv (an LSEG company).
1 Ten-year Eonia swap rate.

Chart 2.6

Inflation and inflation expectations rose sharply in 2021

(in %)



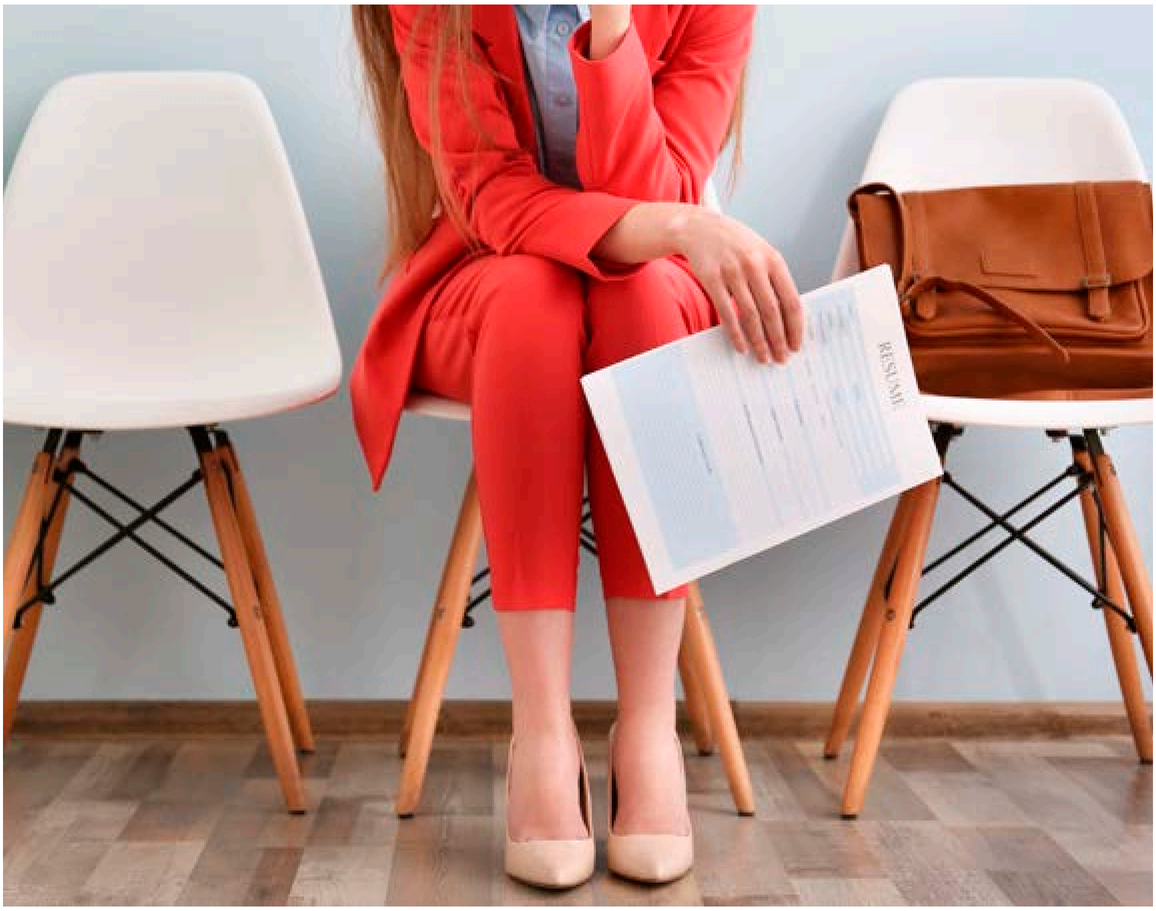
Sources: ECB, Refinitiv (an LSEG company).

1 Five-year-on-five-year inflation expectations, based on prices recorded by swap contracts, which hedge euro area inflation risk over a period of five years, starting five years after the contract is concluded.

2 Five-year inflation expectations based on the ECB's quarterly survey of professional forecasters (average of the aggregate probability distribution for this projection horizon).

hand, the rise in energy prices was much stronger than expected, owing to supply-related problems (chapter 1 deals with this aspect in more detail). Furthermore, base effects not only played a role in the case of energy inflation. Certain government decisions, such as the VAT reduction in Germany, also pushed prices downwards in 2020, to then exert a positive (base) effect on inflation in 2021, after the measure expired at the end of 2020. Supply chain disruptions constituted a second major factor explaining the rise in inflation. What is more, prices in services sectors, that had been particularly hard-hit by the crisis and were only able to open again after a long period of closure, also rose sharply. This combination of factors brought particularly strong upward pressure to bear on inflation in the euro area, which took off from the summer onwards, rising from 2.2 % in July to a peak of around 5 % in December.

According to the Eurosystem's December projections, inflation is nevertheless expected to slow down again in 2022, precisely because the factors fuelling it stem mainly from the reopening and recovery of the economy, so that their effects should gradually fade out. Beyond 2021, the base effects will also disappear from inflation rates and will cease to exert any upward force. However, so-called second-round effects could induce more persistent upward pressure on prices, if their increase starts to feed through to wages. Although there are indications of a slight increase in wage growth in the short to medium term, wage pressure is not likely to be strong enough, according to the Eurosystem projections, to push up inflation on a lasting basis. The fact that a fraction of the population has left the labour market in the last two years effectively explains in part why unemployment in the euro area is almost back to its pre-coronavirus level. In a continued economic recovery scenario, a strong return to employment is expected, thus helping to curb the upward pressure on wages. Consequently, the Eurosystem expects, in its December projections, that inflation will drop again, falling back to 1.8 %



in 2023 and 2024, after having reached 3.2 % in 2022. These inflation projections were significantly revised upwards from the September projections. This just goes to show the huge uncertainty clouding the forecasts, being highly dependent on future movements in energy prices and wages.

In view of the upward revision of inflation forecasts and the ongoing economic recovery, the Governing Council decided in December that a gradual exit from the crisis measures was possible. Nevertheless, in view of the considerable uncertainty surrounding the projections, it wanted to keep sufficient monetary support and a certain degree of flexibility in the conduct of monetary policy.

Against this background, the Governing Council decided, in December, to slow the pace of net asset purchases under the PEPP over the first three months of 2022 in comparison to the previous quarter, before suspending them altogether at the end of March 2022. In addition, the Governing Council postponed for a year, i.e. until at least the end of 2024, the horizon for full reinvestment of the principal payments from maturing securities purchased under the PEPP. To deal with any new pandemic-related risks of fragmentation, some latitude will also be given to the way in which this principal may be reinvested. During the pandemic, it has emerged that the flexibility allowed with the asset purchases has contributed to preserve the transmission of monetary policy in crisis situations. If necessary, the Governing Council will retain this flexibility by spreading out the reinvestments under the PEPP over time, between the different asset classes and between the euro area countries. As far as the latter are concerned, Greek government bonds, which are not eligible for the APP because they do not meet the quality requirements, will be able to be bought up over and above rollovers of redemptions. Finally, net purchases made under the PEPP themselves could be relaunched if the pandemic were again to trigger negative shocks.

Lastly, in order to be able to gradually reduce asset purchases while ensuring that inflation continues to converge towards the target, the pace of purchases made under the APP has also been changed. While they had been carried out at a rhythm of € 20 billion per month, they will rise to, respectively, € 40 and 30 billion per month in the second and third quarters of 2022. The ending of net purchases under the PEPP will therefore not cause any sudden nosedive in purchases of securities by the Eurosystem. As of October 2022, the total monthly amount of asset purchases will be brought down to its pre-crisis level of € 20 billion. Purchases under the APP are expected to end shortly before the first rise in policy rates.

2.4 Monetary policy is facing major challenges

The combination of fiscal, monetary and prudential policies has made it possible to react forcefully to the COVID-19 crisis, and the synergies between these different areas of action have led to a collective policy response going well beyond the cumulative individual results of these three policies. While monetary policy has largely produced its effects via fiscal policy, there has nevertheless not been any explicit coordination between the two. Nor should this exceptional situation imply that monetary policy is dictated by the degree of sustainability of public finances. Monetary policy has remained faithful to its mandate, which is to ensure price stability by steering total demand in the economy according to supply. It is therefore important to reconstitute buffers to be able to deal with unforeseen economic difficulties, all the more as inflation is accelerating. Inflationary pressures also show that a policy based solely on supporting demand has its limits. The supply side of the economy needs to be reinforced; Belgium's priorities in this regard are set out in chapter 7 of this Report.

As regards monetary policy more specifically, the revised strategy and forward guidance suggest that the Governing Council will be more patient before going ahead with the first rise in interest rates – and likewise, before ending asset purchases under the APP. The conditions governing any policy tightening have effectively been reinforced. At the same time, the strategy mentions explicitly that financial stability is important for price stability. Moreover, the assessment of proportionality of the Governing Council's decisions and their potential side effects are expected to figure prominently in future.

The current low interest rates are not set in stone

Different scenarios may of course play out in the future. In the base scenario, inflation converges sustainably towards the 2 % target and the monetary support can be gradually relaxed. If inflation remains high and the inflation forecasts are no longer compatible with the ECB's objective, the monetary policy stance will have to be tightened more quickly. Any such sudden and unexpected rise in interest rates may uncover hidden vulnerabilities, for example for financial stability or sustainability of public finances. A soft landing will thus depend heavily on the various economic stakeholders' resilience and their ability to adapt.

Inflation may also drop and remain below target for an extended period of time. In this case, the accommodative policy should in principle be maintained indefinitely. In the face of such a situation, it is increasingly likely that the assessment of proportionality, which weighs up the costs and benefits of the policy, becomes binding.

This scenario effectively raises questions about the advantages or effectiveness of the policy followed to stimulate inflation: the sensitivity of economic activity to interest rates may, for instance, weaken when rates are very low for a long time. At the same time, the costs of the policy followed may rise themselves. A prolonged period of low interest rates can disrupt the sound functioning of the financial sector, affect savers or help keep otherwise unviable companies in business. Apart from these undesirable side effects, the persistence of the low interest rate policy also has its risks that are mainly evident in the financial sector and on the fiscal policy front. Existing vulnerabilities are thus likely to get worse.

While low interest rates have opened up wide budgetary margins for the national public authorities in the euro area, not all countries have used them to build up reserves. The current low interest rates are nevertheless not set in stone. If inflation expectations eventually rise, interest rates will follow. The risk premium paid by governments on their debt may also go up : the Eurosystem stands ready to alleviate governments' liquidity problems, but it is powerless if the debt is basically unsustainable. The central bank therefore must have the assurance that governments are able to cope with a heavier debt burden, without which it risks not being able to fulfill its price stability mandate. Chapter 7 of this Report describes the challenges facing the sustainability of the Belgian public debt in a European context.

The persistently low interest rates may also encourage excessive risk-taking, building up bubbles in certain market segments, such as stocks or real estate. These developments fall largely under prudential policy, which has targeted instruments to tackle specific financial vulnerabilities. It must, however, be borne in mind that there are limits to what this policy can accomplish, something which justifies close monitoring by the Governing Council.

In this context, the Governing Council will systematically weigh up the costs and benefits of its policy. If the cost of a policy choice starts to outweigh its benefits, the Governing Council will adjust it, drawing for example on the flexibility that the medium-term orientation of its policy offers.

3. Economic activity and the labour market in Belgium

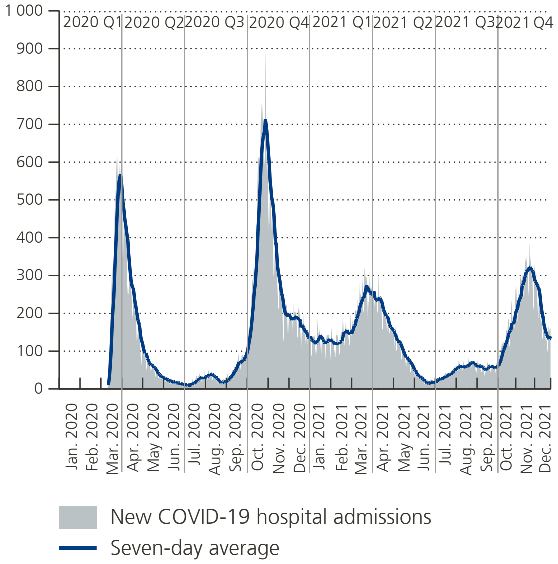
3.1 Belgian economy stages robust recovery despite ongoing COVID-19 pandemic

In 2021, the COVID-19 pandemic continued to weigh down the Belgian economy, if less so than in 2020. When public health conditions took a turn for the worse in the autumn of 2020, fresh measures were implemented to contain the number of new cases. Most of these measures remained in place in the first six months of 2021, following which a number were gradually phased out as public health conditions little by little returned to normal, thanks in the main to vaccination campaign progress. However, in the autumn, COVID-19 case numbers surged back up and public health measures were tightened once again to combat the pandemic. But this time, measures did not entail a lockdown for the population or the closure of large parts of the economy as in the previous year, whereas other regions of the world facing a pandemic flare-up did have to implement these. Tighter measures in Belgium were rather more about stricter observance of social distancing and needing a Covid Safe Ticket to access certain

Chart 3.1

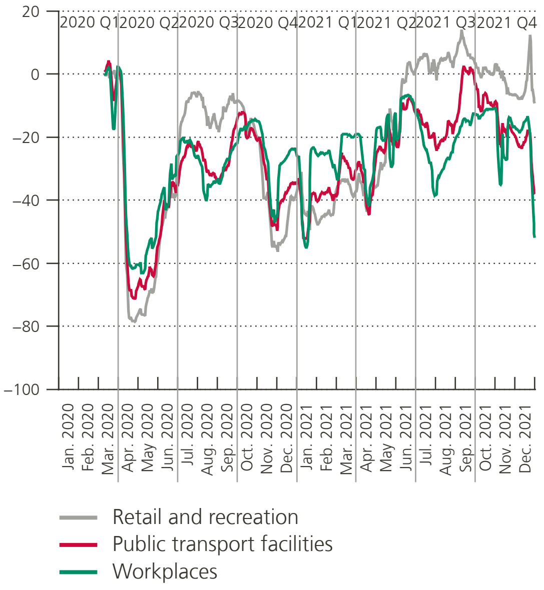
Impact of COVID-19 pandemic particularly noticeable in first and final quarters of 2021

Hospital admissions caused by COVID-19



Google mobility data

(trend in visits to various places and length of time spent compared with a reference value [1], averages for the previous seven days)



Sources: Google, Sciensano.

1 Median value for a given day calculated over the period between 3 January and 6 February 2020.

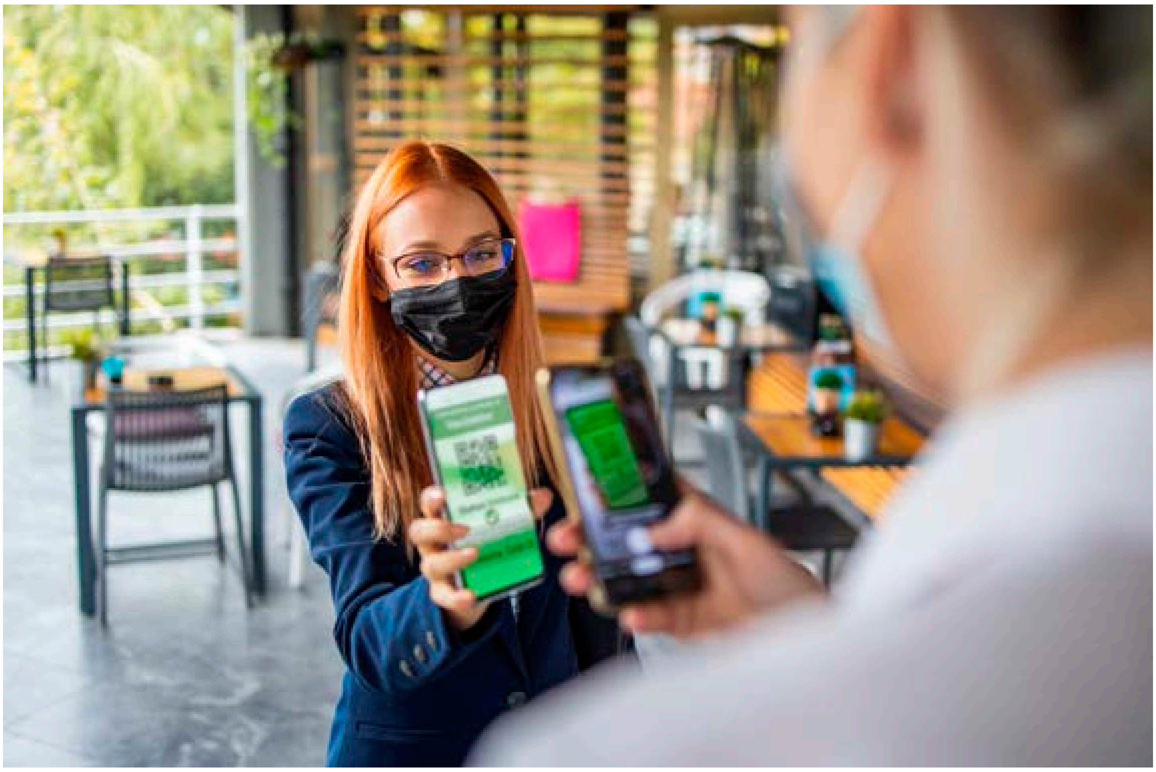
places. However, the mere announcement of worsening public health conditions caused the country's consumers to scale down their mobility voluntarily even before these measures were laid out. This put economic activity under pressure.

After its record downturn in 2020, GDP barrelled past pre-crisis levels in 2021

In the first few months of 2021, measures to combat the COVID-19 pandemic were tightened or relaxed as the situation required. At the end of March, for instance, high-contact professions were compelled to stop their business activities altogether. Non-essential shops had to cease part of their activities. This lasted about a month. Compared with the year-earlier period, however, the economy was less curtailed by restrictions, as industry and construction were relatively unscathed. What is more, previous experience made many companies – in all sectors – better prepared to handle these fresh restrictions. Vaccination campaign progress and the reduced population spread of COVID-19 soon allowed for relaxation of the public health measures. In May 2021, the night-time curfew was lifted and the hospitality industry in particular was able to resume business after six months of closures. Despite the restrictions, overall GDP was up by 1.2 % and 1.7 % in the first and second quarters of 2021 respectively, compared with the previous quarters.

The gradually improving epidemic situation over the summer, combined with high vaccination rates to bring a medical solution to the crisis closer, enabled the government to further lift public health measures. Most private and public events once again got the green light, subject to certain conditions. Pacing ahead at 2 % in the third quarter – i.e. a third consecutive step-up in growth – GDP first touched the pre-pandemic level and then exceeded it by 0.5 %.

Towards the end of 2021, coronavirus was once again spreading rapidly and fresh restrictions were being imposed. High country-wide vaccination rates, which cushioned some of the impact for the health sector, helped to prevent another lockdown for the population and closures of large sections of the economy as in the previous year. The new measures mainly involved stricter observance of some basic rules, such as wearing a face mask and social distancing, as well as the obligation – from November – to produce a Covid Safe Ticket when entering selected venues.



That said, catering establishments were ordered to close earlier, while supply constraints – in terms of a shortage or workers, materials and stocks as well as higher input costs – had a heavy impact on economic activity from the summer onwards, which slowed steeply or was hampered across many businesses. As a result, GDP growth ran out of steam in the fourth quarter, but still stayed in positive territory with a 0.5 % rise on the previous quarter.

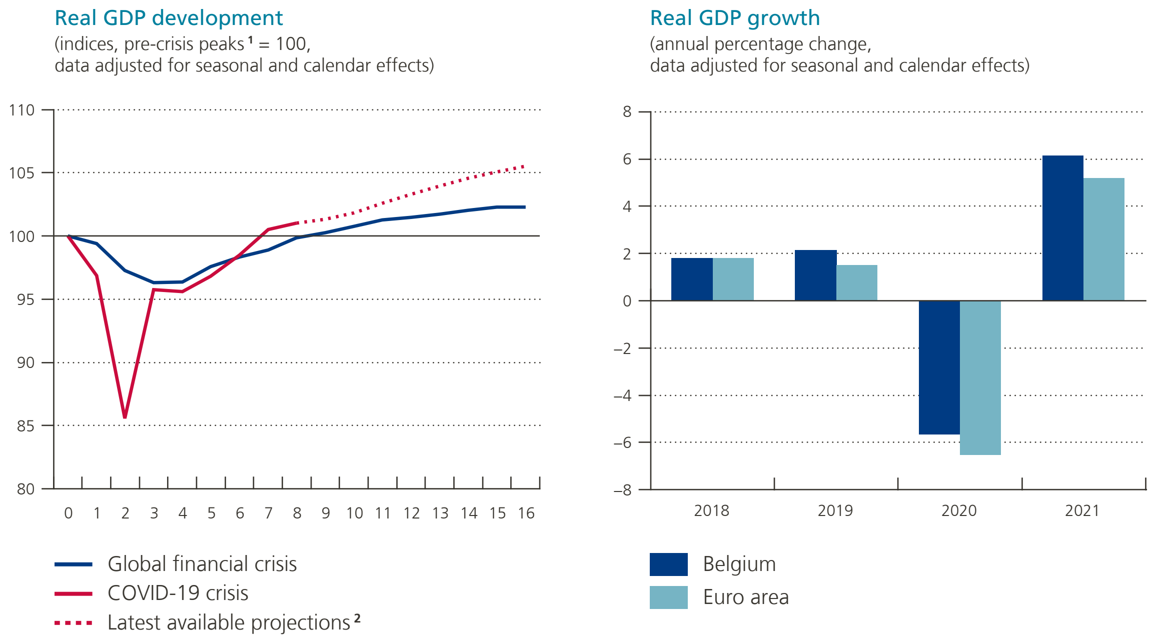
GDP staged exceptional growth of over 6 % in 2021

In 2021, real GDP grew a total 6.1 % on the previous year – one of the highest average annual rises in Belgium since the Second World War. Admittedly, this followed hot on the heels of the biggest negative shock recorded in the same period, but it was still a remarkable recovery, not just compared with expectations but also with the biggest previous economic recession in recent history, i.e. the 2008-2009 global financial crisis. The initial shock caused by COVID-19 may have been four times as big, but GDP was back to its pre-pandemic levels in as little as seven quarters, whereas this had taken nine quarters post-financial crisis. The nature of these two recessions explains the difference, of course: the 2008-2009 global financial crisis was triggered by financial imbalances, including a burst real estate bubble in the United States, causing a massive drop in foreign demand and an overall crisis of confidence in Belgium, whereas the COVID-19 pandemic is a fully exogenous shock. The 2021 recovery was fast and furious on the back of massive government support to safeguard the incomes of numerous households, companies and self-employed people. This protection made it easy for economic activity to bounce back as soon as circumstances improved.

In 2021, GDP growth in Belgium was 0.9 of a percentage point higher than in the euro area, where it advanced by 5.2 %. The difference is mostly down to a more resilient Belgian economy in the face of the public health measures taken from the autumn of 2020. As already noted, GDP in Belgium rose by

Chart 3.2

Rising sharply, economic activity exceeded its pre-pandemic levels from the third quarter of 2021



Sources: ECB, NAI, NBB.
1 The pre-crisis peaks (t = 0) reflect the second quarter of 2008 and the fourth quarter of 2019 respectively.
2 December 2021 economic projections by the Bank.

1.2 % in the first quarter in the teeth of stricter restrictions, whereas GDP for the euro area as a whole continued to decline, by 0.3 %.

Industry and construction were gradually bogged down by supply constraints, while services became the main growth driver

The coronavirus crisis affected different sectors in different ways. Although its impact was negative across the board, service activities were hit the hardest by measures taken to combat the spread of COVID-19, particularly where these involved close contact between people. Being a key contributor to total value added generated in Belgium, services were also a significant factor in the hit to GDP. The repercussions of the COVID-19 pandemic had an unequal effect on the various branches of activity in 2021 as well.

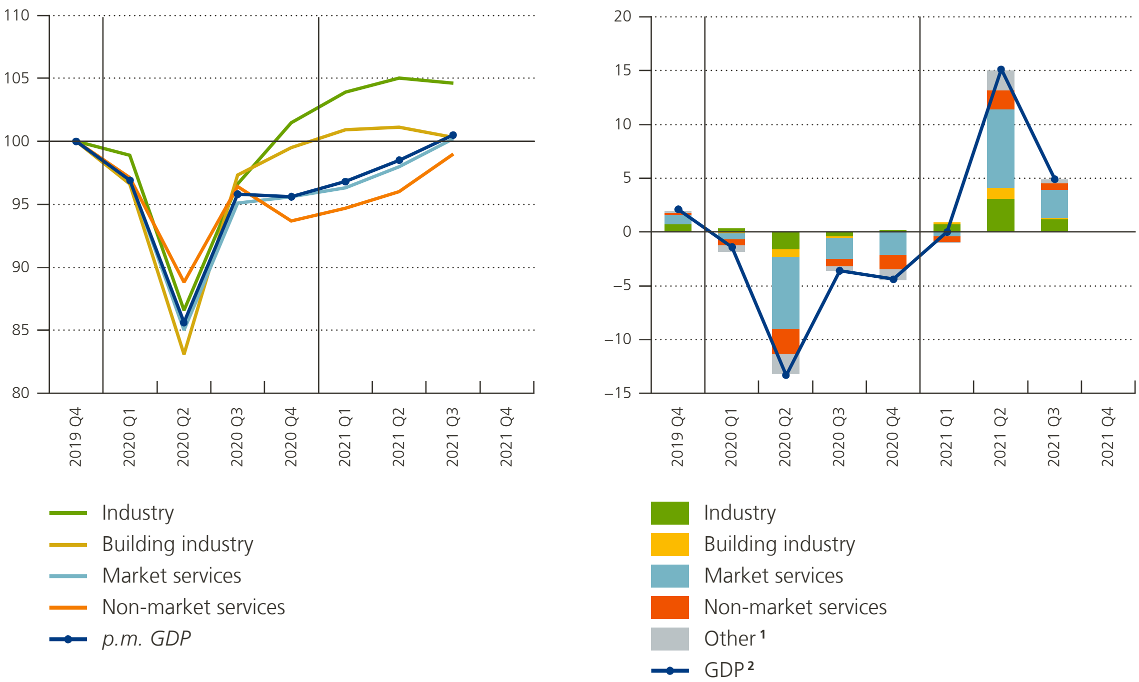
Typically more sensitive to cyclical fluctuations, industry fully benefited from the economic recovery from the third quarter of 2020 and proved pretty resilient to worsening public health conditions towards the end of that year. It continued its recovery into 2021 – albeit at a slightly less pronounced pace – and its value added was up by 11.2 % in the course of the first three quarters when compared with the corresponding period of the previous year. Compared with the early stages of the pandemic in 2020, the sector was less directly affected by public health measures and not compelled to suspend its activities, even temporarily. But its recovery also drew on previous experience and the implementation of

Chart 3.3

Market services activities a major factor underpinning growth from second quarter

Value added, by volume
(indices, 2019 Q4 = 100,
data adjusted for seasonal and calendar effects)

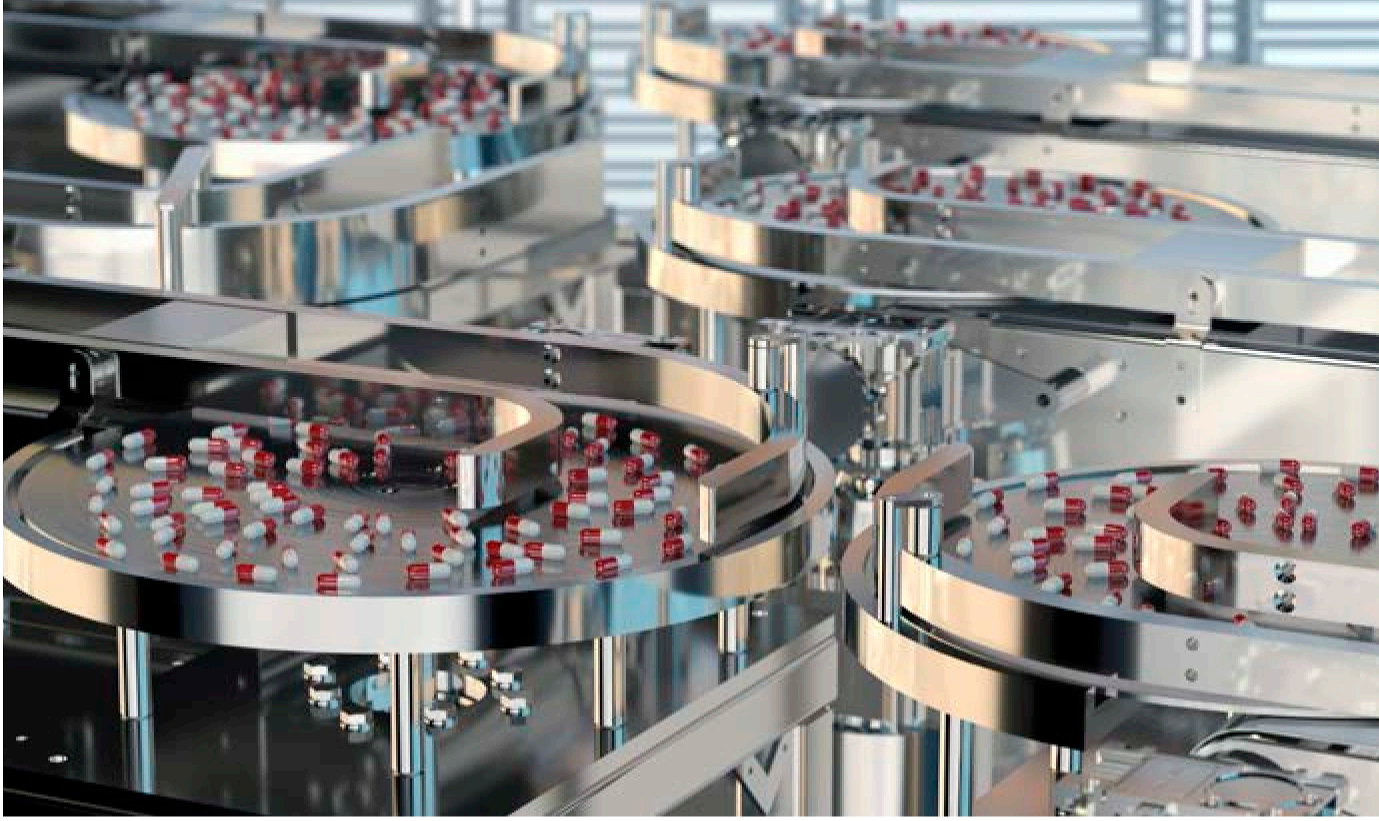
Contribution to annual GDP growth, by volume
(in percentage points unless otherwise stated, data adjusted for seasonal and calendar effects)



Source : NAI.

1 Notably “agriculture, forestry and fisheries” and taxes on production, excluding subsidies.

2 Percentage change compared with the corresponding period of the previous year.



protocols that helped to organise business activity more efficiently in these circumstances. Yet, value added growth, which had still been robust at the start of 2021 (at 2.3 % in the first quarter) slowed, halving in the second quarter (1.1 %) before turning slightly negative in the third (–0.4 %), as industrial activity was hobbled by supply constraints. And these started to really bite as the year drew on. A survey by the Bank in October revealed that nearly 65 % of the respondent industrial companies were struggling with staff shortages and over 80 % with supply issues. Companies estimated the negative impact on production of these two sets of problems at 4 % and 6 % respectively. In a separate development, many industrial companies reported clear increases in input costs, to which the sector is very sensitive.

Services activities have been the main driver of growth

Not all branches of industry benefited from the economic recovery to the same degree after the initial shock. Of the most important industrial sectors in the Belgian economy, pharmaceuticals – which accounts for around 20 % of manufacturing industry – notched up very remarkable results in the first three quarters of the year. Thanks to its specialisation, this branch of industry benefited from high demand for vaccines by exporting its production massively, making for a GDP growth contribution totalling around 0.15 percentage point in the first nine months of the year. The metals industry, by contrast, which accounts for nearly 10 % of Belgian manufacturing, was really struggling with the supply constraints already mentioned and saw its value added slide in the first nine months of the year.

Construction also saw its value added surge in the first three quarters of 2021 : up 9.1 % compared with the corresponding period of the previous year. Construction and renovation / refurbishment activities continued to benefit from the ongoing low interest rate environment and, compared with 2020, the branch of activity was less affected by the public health situation and the measures taken. To a degree, this also reflected previous experience and the implementation of protocols that helped to organise activity more efficiently. Just as in industry, three-month value added growth gradually declined in construction, from 1.4 % in the first quarter to a negative 0.9 % in the third. And here, too, supply shortages were increasingly beginning to bite. Around 70 % of construction companies surveyed by the Bank faced labour shortages and a little over 80 % reported supply issues. Companies estimated the negative impact on production of these two sets of problems at 9 % and 7 % respectively. Incidentally, construction was one of the key industries reporting a significant increase in input costs.

Chart 3.4

Many companies facing supply constraints

(in % of respondent companies facing supply constraints, by intensity of the constraints, October 2021)

Source : *La reprise a été vigoureuse mais elle est de plus en plus entravée par les contraintes d'offre*, NBB, 8 November 2021.

1 Self-employed workers excepted.

2 Other than price rises.

And lastly, whereas the value added generated by market and non-market services activities traipsed the steep advances enjoyed by these two large branches of activity – i.e. up 6.3 % and 2.7 % respectively – in the first three quarters compared with the corresponding period in 2020, it did accelerate sharply as the year progressed and ended up becoming the leading driver for growth. The sector's growth was supported by the gradual lifting of public health measures and in particular the reopening of contact professions at the end of the first quarter, gradual normalisation by the hospitality industry from April, and the go-ahead for public events from the third quarter. As a result, value added in the hospitality industry and in art, entertainment and recreation rose significantly from the second quarter. What is more, service activities were relatively less prone to labour shortages and supply issues, with the exception of the wholesale sector, where supply problems were crippling.

In the fourth quarter, the Bank's business surveys generally pointed to a loss of business confidence across Belgium compared with the previous quarter. The deterioration in the business climate doubtless reflects concerns about rising energy prices and a continuation of this trend in the short term, while the turn for the worse in public health conditions and successive tightening of restrictive measures towards the end of the year may have played into it as well. After all, it has become less likely that vaccinations will prove a complete solution to the COVID-19 pandemic, and this is making companies unsure about their business returning to normal in the immediate future.

Chart 3.5

Business confidence deteriorated in second half

(balance of responses to the Bank's survey[1] for the 1995-2021 period)

Source: NBB.

1 All observations are reduced by the empirical average of the data and divided by their standard deviation. As a result, the long-term average (1995-2021) for all data series is nil.

3.2 Ongoing employment growth in a labour market under pressure

Following the shock of the health crisis in 2020, the economic activity rebound came with sharply higher numbers of hires and hours worked. A hefty 88 000 new jobs were created in 2021 (+1.8 %), which is comparable to pre-crisis numbers and contrasts with virtually stalling employment in 2020. Meanwhile, every employee also increased their average working hours by 4.8 %, a recovery from 2020 – mostly the result of furlough schemes – even if the number of hours worked per person is still 4.1 % below the figure for 2019. The Belgian economy's volume of labour rose by a total 6.7 % in 2021 but stuck at 2.4 % below pre-crisis levels.

The furlough and bridging allowances continued to provide protection, as restrictions were gradually lifted. In the first eleven months of 2021, an average 267 000 employees were on the furlough scheme every month, while 69 000 self-employed workers needed the bridging allowance. Although a downward trend had been visible from May 2021, the figures edged back up towards the end of year in the wake of the fresh restrictions imposed in November.

Employment dynamics were driven both by employees (+68 000) and the self-employed (+19 000).

Chart 3.6

Recovery accompanied by dynamic net employment creation

(seasonally adjusted data, changes in thousands of people compared with previous quarter)

Sources : NAI, NBB.

For self-employed workers, this was partly down to the preservation of the coronavirus bridging allowance and the various support measures at federal, regional and local level during the health crisis. Between them, these factors dampened an already subtle relationship between self-employment trends and cyclical fluctuations. This group typically comprises highly-educated people in the liberal professions or management jobs.

The net increase in the number of self-employed was due more to the fact that – compared with previous years – fewer of them ceased trading in 2020 and not so much because there were more start-ups. Statistics on start-ups from the National Institute for Health and Disability Insurance (NIHDI-INAMI-RIZIV) even show a drop in the number of people who set up as self-employed. The number of recorded bankruptcies, by contrast, was exceptionally low at around 1 800 in 2020, compared with 2 200 in 2019. Bankruptcy numbers gradually normalised as 2021 drew on, to a little over 2 100. There is currently no sign of any catch-up in bankruptcies that failed to materialise in 2020, making for positive net job creation – and this despite the moratorium on bankruptcies being lifted at the start of the year, the double bridging allowance being scrapped and access requirements for a single bridging allowance being tightened up from October (a turnover drop of 65 % compared with 40 % previously). The labour force survey suggests that the number of self-employed workers in 2021 predominantly grew in the information and communication, human health and social work, and transport sectors.

Job-rich recovery for both employees and the self-employed

After significant losses in 2020, salaried workers enjoyed net employment creation, mostly in sectors sensitive to the business cycle (+45 000 compared with a net loss of 29 000 in the previous year). Employment in public administration and education, as well as in other services also outpaced 2020, with net job creation at 12 000 and 11 000 respectively.

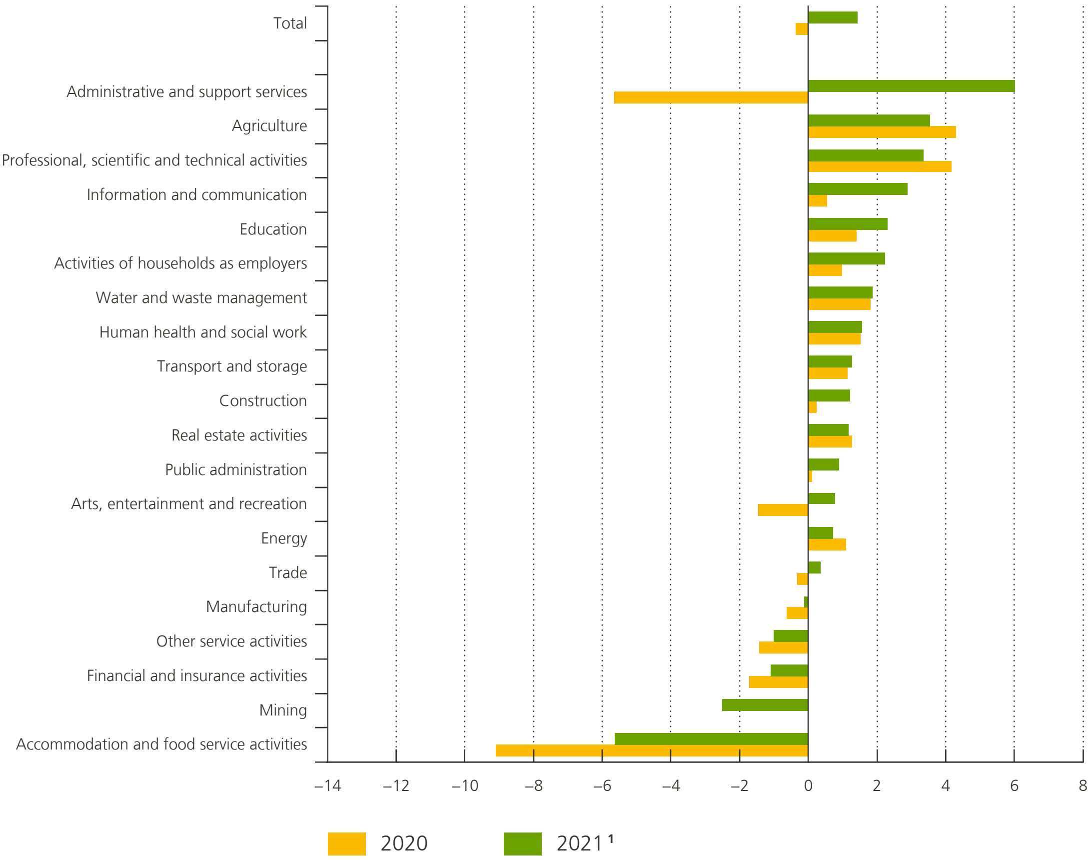
A breakdown of the data at more detailed sector level for private sector employees – available for the first three quarters of the year – shows a continued loss of jobs in the hospitality industry (–5.6 % compared with the average for the first three quarters of 2020, i.e. 6 600 jobs), although the third quarter recorded a recovery to pre-health crisis levels. Job losses were likewise recorded in other services activities[1] (–1 %, or 700 jobs), and to a limited degree in manufacturing (–0.1 %, or 500 jobs) and in mining (–2.5 %, a mere 60 jobs given the industry's small size in Belgium). Financial and insurance activities saw job numbers reduced further, although this reflects a long-term trend that had been visible before. Having suffered massive declines in job numbers during the health crisis, administrative and support services recorded the biggest gains in 2021 (+6 %, or 24 400 jobs). The sectors enjoying the biggest net employment creation included education (+2.3 %, i.e. 9 400 jobs), human health and social work (+1.6 %, i.e. 8 900 jobs), the professional, scientific and

1 This includes associations' activities, repair of computers, personal and household goods, and other personal services to individuals, such as hairdressers.

Chart 3.7

Some sectors are still seeing job losses

(percentage changes compared with the previous year)



Source: NAI.
1 Average for the first three quarters.

technical activities (+3.4 %, i.e. 6 300 jobs), information and communication (+2.9 %, i.e. 3 300 jobs) and to a lesser degree also agriculture (+3.5 %, or nearly 1 000 jobs).

The health crisis had a relatively limited impact on labour market participation: the activity rate of the 15-64 age group fell between 2019 and 2020 to 68.6 % from 69 %. In the past year, by contrast, the previous upward trend was resumed and the activity rate ended up at 69.5 % (average for the first three quarters of 2021).

This pronounced rise in employment – although coupled with a greater number of active persons in the labour market – coincided with a significant drop in joblessness numbers. Few of the workers on furlough slid into classic unemployment and most returned to the labour market. Based on figures from the Crossroads Bank for Social Security Datawarehouse, not quite 4.3 % of the people temporarily laid off in the first quarter of 2020 were job-seekers in the subsequent two quarters. In 2021, Belgium had an average 29 600 fewer unemployed job-seekers than in 2020. At a total 464 100 people, the number of unemployed job-seekers was 12 100 below the figure for 2019, i.e. before the health crisis. That said, the unemployment breakdown is different this time. In the years prior to the health crisis, the fall in the number of unemployed job-seekers was recorded in all categories of job-seekers, including the long-term unemployed. The crisis years have broken the trend, with the number of people out of work for longer than a year up by nearly 8 000 in 2020 and again in 2021, by 8 400 additional people. Whereas previously the numbers of both short-term and long-term unemployed were falling, this is now only the case for people who have been jobless for under a year (–38 000).

Coupled with fierce company demand for workers, these trends in the number of job-seekers and their composition are causing major tensions in the labour market. In the third quarter of 2021, the job vacancy rate, (i.e. the ratio between the number of vacancies and the total number of available jobs, given by the sum of jobs taken and vacant) reached levels never seen before since these statistics first became available in 2012, at 4.7 % or 196 000 of vacant jobs. Although these tensions are a structural phenomenon in most sectors[1], the hospitality industry is the odd one out. Paradoxically, while numerous jobs were scrapped when restrictions were imposed to combat the COVID-19 pandemic, a large number of positions remain unfilled: around 13 500 jobs, which boils down to an 11.4 % vacancy rate. Whereas employment in this sector had been steadily rising by around 1 % per annum between 2014 and 2019, countless people lost their jobs during the pandemic and would appear to have left the industry since it began – as suggested by an analysis of transitions between sectors based on the labour force survey. In 2020, people in work may have had less inclination than usual to leave their sectors on average (2.3 % compared with 2.9 % in 2019), but the hospitality industry saw a larger proportion leave: 6.4 % (compared with 4.3 % in 2019), with most of them switching to trade. What is more, in 2019 4.2 % of hospitality workers had transitioned from other sectors, but in 2020 this applied to only 3.4 %.

1 See also Chapter 7 of this report.

Because of its asymmetrical sector impact, COVID-19 hit some sections of the population harder in terms of employment and loss of income. Some were barely affected as they were able to work from home or were essential workers, while others faced furlough, lost their jobs altogether, saw their hours cut or their employment opportunities reduced, causing some households to tip into financial difficulties. The young (aged 15 to 24), low- and medium-skilled workers and people of non-European descent work temporary or atypical contracts comparatively often and are over-represented in the sectors that were hit hardest. As a result, the repercussions of the health crisis for the labour market affected them the most. At the

Chart 3.8

Significant drop in unemployed job-seeker numbers masks higher long-term unemployment

(changes in thousands of people)

Source: NEO.

same time, there were fewer employment opportunities for them than is usually the case, making it harder to swap joblessness or inactivity for a job.

Although the employment rate was nearly back at its pre-crisis levels in 2021 – an average 70.3 % of the 20 to 64 age group in the course of the first three quarters of 2021 – the people hit hardest by the pandemic were not necessarily those benefiting from the recovery, as the employment rates of the vulnerable groups listed above still languish below 2019 levels. Conversely, higher or similar employment rates were recorded for the 55 to 64 age group, for people of EU descent and for the highly-educated. Those with higher education diplomas were able – most often and more frequently than before – to trade in joblessness or inactivity for jobs. Nearly six out of ten highly-educated workers who had been out of work in 2020 were able to find jobs in 2021. In 2018, the number had been four out of ten. In 2021, 22 % of the highly-educated went from inactivity to work, compared with 13 % in 2019.

Not everyone benefited equally from employment growth

The recession caused by the health crisis is internationally known as a "she-cession" because of the significant impact it has had on women. And Belgium is no exception: women more often work in the hardest-hit sectors, such as the hospitality industry, trade or contact professions, and are at a higher risk of losing their jobs – more than in previous economic crises. Also, the health crisis has only exacerbated the imbalance in the division of labour in the home, particularly in terms of childcare. School closures, whether during lockdown or as a result of high numbers of COVID-19 cases, and longer school holidays have forced numerous parents to take on the care of their children much more than usual. More widespread adoption of working from home or taking coronavirus-related parental leave made it easier to strike a work/life balance. However, it was mostly women who availed themselves of these options, potentially to the detriment of their careers going forward. The 2021 recovery in employment benefited women and men alike. One difference, though, was that a larger proportion of these new female employees had been in the "inactive" rather than "jobless" categories. The upward trend in women's labour market participation rate – temporarily interrupted during the health crisis – continued in 2021. It touched an all-time high of 70.6 % in 2021 and thus further closed the gap with the male participation rate, which has remained relatively stable in the past few years.

Although the health crisis caused a drop in the transition from joblessness to work in the country's three Regions (by 4.9 percentage points in Brussels, 3.3 percentage points in Flanders and 2.5 percentage points in Wallonia), regional recovery was not evenly balanced. In the Flemish Region, over half of those jobless in 2020 were able to get back into the workforce in 2021, adding up to an employment rate 12 percentage points up on 2019. Fewer were able to make the transition in the Brussels-Capital Region – around 31 %. This still exceeds the pre-crisis figure by 5.5 percentage points. In Wallonia, by contrast, the transition from unemployment to work did not rise (24 %) and stayed below the level recorded in 2019 (25 %). These differences in the transition from unemployment to work were recorded against a backdrop of unemployment rates that varied markedly between the Regions. In Flanders, unemployment stood at 4.1 %, in Wallonia at 9 % and in the Brussels-Capital Region at 12.9 % (averages for the first three quarters of 2021).

3.3 After its exceptional fall in 2020, domestic demand became the main driver of economic recovery in 2021

The outbreak of the COVID-19 pandemic in 2020 triggered a historic fall in domestic demand. In 2021, by contrast, all domestic demand components staged a clear rise and between them (with the exception of inventories) made an amply positive contribution to growth of around 6.5 percentage points. Private consumption, which accounts for around half of GDP in Belgium, rose by 6.3 % and did not exceed the pre-crisis level until the third quarter, which was later than the other domestic demand components. Private investment, which accounts for some 20 % of GDP, recorded a spectacular increase and surged ahead of pre-crisis levels from the first quarter. Households invested 10.4 % more, while companies upped their capital spending by 9.2 %. Meanwhile, the government also contributed to growth : public consumption and investment were up by 4.5 % and 10.9 % respectively.

Net exports made a slightly positive contribution to GDP growth (of 0.5 percentage point) on the back of a marginally more pronounced climb in exports (9 %) compared with imports (8.5 %). By contrast, the change in inventories was a negative contributor to GDP (–0.9 percentage point).

Table 3.1

GDP and main expenditure categories

(calendar adjusted volume data; percentage changes compared to the previous year, unless otherwise stated)

	2017	2018	2019	2020	2021 e
Private consumption	1.9	1.9	1.8	−8.2	6.3
Public consumption	0.2	1.3	1.7	0.2	4.5
Gross fixed capital formation	1.4	3.0	4.5	−6.2	9.6
Housing	1.0	1.5	5.1	−6.8	10.4
Enterprises	1.6	2.4	4.8	−7.0	9.2
General government	1.1	10.2	1.7	0.6	10.9
p.m. Final domestic expenditure [1,2]	*1.3*	*2.0*	*2.4*	*−5.7*	*6.5*
Change in inventories [2]	0.0	0.4	−0.5	−0.3	−0.9
Net exports of goods and services [2]	0.3	−0.6	0.3	0.4	0.5
Exports of goods and services	5.5	0.6	2.0	−5.5	9.0
Imports of goods and services	5.2	1.4	1.6	−5.9	8.5
GDP	1.6	1.8	2.1	−5.7	6.1

Sources: NAI, NBB.
1 Excluding the change in inventories.
2 Contributions to the change in GDP compared to the previous year, in percentage points.

Private consumption recovery ultra-sensitive to coronavirus measures

The public health situation and its repercussions continued to influence households' consumption behaviour, particularly at the start of the year. As noted above, compared with the public health measures imposed at the early stages of the pandemic, those taken in the autumn of 2020 and still in place in the first few months of 2021 were not equally restrictive for consumers. That said, some types of spending were still impossible at the start of the year. Personal services activities were suspended on several occasions and the hospitality industry did not reopen until the beginning of May – and then only partially. As a result, private consumption gradually grew more robust as the quarters progressed – as did consumer confidence – and recorded an advance from 1.3 % to 6.1 % between the first and third quarters, beating pre-crisis levels. When the epidemic situation rapidly deteriorated towards the end of the year, fresh public health restrictions were implemented. Unlike previously, access to trade was unhindered, but some venues – particularly cultural institutions and the hospitality industry – could only be visited with a Covid Safe Ticket. Consequently, private consumption growth in the fourth quarter remained positive, but the Bank's projections suggest it had significantly slowed.

Selected consumer spending repeatedly hobbled by pandemic

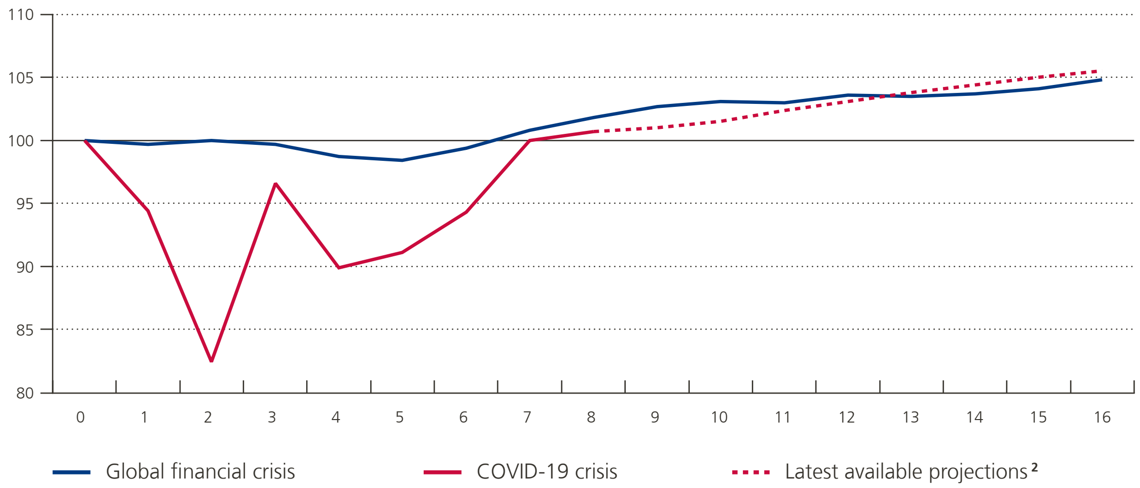
Consumer spending was also depressed by the impact on disposable income and the concern caused by rising energy prices at the end of 2021, particularly for households on the lowest incomes. Consumption was also affected by growing supply restrictions, which influenced the degree to which consumer demand could be met.

Altogether, private consumption in Belgium rose by 6.3 % in 2021, following a drop of 8.2 % in the previous year. Although not the most cyclically sensitive component of demand, private consumption does typically reflect the first signs of recovery, as it did after the 2008-2009 financial crisis. The shock for private consumption did not last very long and proved relatively marginal as it did not trigger a decline for the whole year of 2009 but rather just a slowdown to 0.6 %. Recovery was faster after the financial crisis,

Chart 3.9

Private consumption recovery was uneven and moved up and down in tandem with the waves of tightened and eased coronavirus measures

(indices, pre-crisis peaks[1] = 100, data adjusted for seasonal and calendar effects)



Sources: NAI, Statbel, NBB.
1 Pre-crisis peaks (t = 0) are the second quarter of 2008 and the fourth quarter of 2019 respectively.
2 December 2021 economic projections by the Bank.

too, with private consumption back to its pre-crisis levels in under a year, whereas it took seven quarters during the COVID-19 pandemic. The difference between these two most recent and devastating recessions matches their individual features: while the financial crisis sparked great uncertainty and hence a sharp rise in precautionary savings, the COVID-19 pandemic mostly forced people to save as they were unable to spend on particular goods or services multiple times.

The measures to combat the COVID-19 pandemic have also brought about a change in the breakdown of consumer spending by households, bringing a shift from services to goods, and particularly non-durable goods. Similarly, in 2021, internet-search-based indicators reveal a continuation of this trend, with search volumes for certain types of services categories having plummeted due to stricter public health measures, much more so than searches for durable and non-durable consumer goods.

Inflation squeezed households' purchasing power and some saw their financial vulnerability increase

Because of general price trends – which were pushed up by their energy component in particular – purchasing power rose by only 1.1 % in 2021, a relatively minor contribution to higher private consumption. After all, purchasing power captures households' real disposable income. Admittedly, incomes in Belgium are index-linked to keep up with inflation, but only after a selected period of time and only partly.

In nominal terms, household disposable income was up by 3.2 %. One of the key components was the rise in wages – of both employees and self-employed workers – because of higher numbers of hours worked, particularly in sectors that had been hit by COVID-19 pandemic in 2020. Despite a persistent low interest rate environment, net capital income was also up, supported by a recovery in dividends paid by companies.

The transfers paid by households to other sectors – mainly involving taxation – grew faster than their incomes. Transfers received from the public sector, by contrast, moved a lot more slowly, as a lot less use was made of furlough schemes for employees and bridging allowances for the self‑employed than in the year before.

Real disposable incomes grew less than consumer spending did, reducing the savings rate. This fell by 4.1 percentage points between 2020 and 2021, from 20.2 % to 16.1 %, even though this was still higher than the 12.4 % recorded in 2019. It once again shows how impossible it was to make certain expenditure during part of the year, causing a savings surplus to arise.

Such an accrual of savings would appear to have happened in households that are financially better off, though. And more investment in less liquid assets also seems to suggest an asymmetrical distribution of savings.

Higher gross disposable income at a macroeconomic level hides the financial vulnerability of a proportion of households. Despite measures being extended – such as higher replacement rates for temporary lay‑offs, double bridging allowances and the freezing of the degressive nature of unemployment benefits – 2021 once again saw some households face significant income losses in the wake of the COVID‑19 crisis. In 2021 (data only available for the first ten months), an average 13 % of NBB consumer survey respondents still reported a crisis‑related loss of income in excess of 10 %. That is a significant proportion of respondents, although lower than the 21 % reported in 2020, which incidentally did come down over the course of 2021 as more and more sectors were able to operate on fewer or even no restrictions. Broken down by position in the labour market, it is worth noting that, in 2021 as well, loss of income continued to be much more pronounced for self‑employed workers. Compared with employees, an average 3.5 times more self‑employed workers reported facing a serious loss of income in 2021 (> 30 %). As explained in chapter 5, households hit by significant loss of income also saw their opportunities to save vanish and their often meagre savings buffer gradually eroded.

For households such as these, on low incomes and with little in the way of savings, even a slight loss of income can soon turn into a big problem. And it

Table 3.2

Determinants of the gross disposable income of individuals, at current prices

(percentage changes compared to the previous year, unless otherwise stated)

						p.m. In € billion
	2017	**2018**	**2019**	**2020**	**2021 e**	***2021 e***
Gross primary income [1]	3.9	3.3	3.3	–3.5	5.6	*274.1*
Gross wages [1]	3.7	3.8	3.7	–2.1	5.5	*187.0*
Gross operating surplus and gross mixed income	3.8	2.9	3.0	–3.1	4.1	*60.8*
Capital income [2]	5.1	0.9	0.7	–13.1	10.1	*26.4*
Current transfers received	3.6	3.1	3.2	13.5	0.8	*119.5*
Current transfers paid [1]	3.4	3.3	0.8	0.4	6.7	*103.3*
Gross disposable income	3.9	3.2	4.1	1.6	3.2	*290.3*
p.m. In real terms [3]	*2.0*	*1.2*	*2.7*	*0.9*	*1.1*	–
Savings rate [4]	12.2	11.6	12.4	20.2	16.1	–

Sources: NAI, NBB.
1 Wages received or current transfers paid, excluding social contributions payable by employers.
2 These are net amounts, i.e. the difference between incomes received from other sectors and those paid to other sectors.
3 Data deflated by the household final consumption expenditure deflator.
4 In % of disposable income in the broad sense, i.e. including changes in households' supplementary pension entitlements accruing as a result of an occupational activity.

was precisely these households that most often faced coronavirus-related temporary lay-offs, termination of contracts – temporary or otherwise – or reduced chances of finding new work, and that therefore suffered a loss of income[1]. Also, not everyone is able to benefit from the social security system, e.g. those in some types of jobs or on some types of contract (student jobs, for instance), with insufficient time on the payroll, or with incomes earned in the informal economy.

Some households remain financially vulnerable, despite the recovery

In fact, quite a few people had nowhere to turn for support except for public social welfare centres or charities. According to a Federal Public Service for Social Integration (FPS SI) survey, the number of people in receipt of integration incomes reached a peak of over 160 000 early in 2021, following a steady increase in 2020. As more and more sectors in the economy were able to operate freely and loss of income became more limited, integration income recipients also became fewer in number over the summer of 2021 and ended the year at a level slightly higher than before the pandemic. It is too early to draw any conclusions, though, as the number of people entitled to such income is also influenced by seasonal changes, and their number traditionally falls during the summer months.

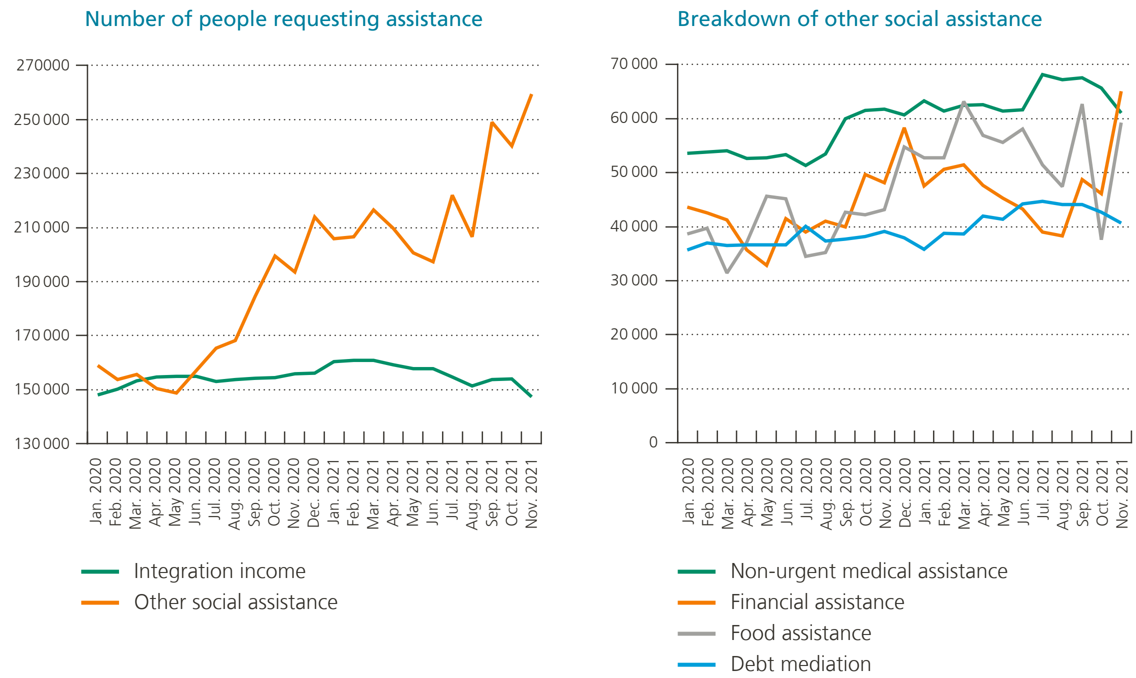
Unlike integration income, the demand for other types of social assistance provided by the country's public social welfare centres stayed significantly higher in 2021 than before the crisis. Most notable, however, is the change the crisis has caused in the type of assistance being sought. In 2020, such assistance was mostly in response to acute issues, such as emergency food supplies, which systematically peaked around or after lockdowns, and financial assistance (for instance, rent rebates or advances on benefit payments). Demand for these types of assistance clearly dropped off with the reopening of the economy in the spring of 2021. Since the start of 2021, however, people have increasingly been seeking debt mediation services and these numbers look set to keep rising. This may suggest that the persistent COVID-19 crisis is turning into such a major financial problem for some households that they increasingly feel compelled to ask for help to manage their finances and debts. In addition, the number of people that have appealed to Belgium's public social welfare centres for non-urgent medical help was much higher in 2021 than before the pandemic. This may also reflect the fact that various non-COVID-related medical treatments were initially postponed and that 2021 saw some catching up.

1 See Coppens B., Minne G, Piton C. and Warisse Ch (2021), "The Belgian economy in the wake of the COVID-19 shock", NBB, Economic Review, September.

Chart 3.10

Pandemic causes social assistance demand on public social welfare centres to change shape

(number of recipients)



Sources: Survey on Social Impact of COVID-19, FPS Social Integration & Working Group on Social Impact COVID-19 (last update 17/01/2022).

Despite the steep rise in requests for social assistance, initial projections suggest that, in global terms, Belgium's COVID-19 crisis did not have a significant impact on poverty risk in 2020[1]. However, some households were deeply affected. In addition to the immediate impact of the crisis, the country's financially most vulnerable households have also been up against rising energy prices since the autumn of 2021. This has hit these households proportionally harder (as explained in chapter 4) and puts their already precarious finances under even greater pressure.

Residential property investment benefited from growing real estate activity

While investment in housing had plunged by 6.8 % in 2020, this reversed to a 10.4 % uptick in 2021 and pre-crisis levels were exceeded from the first quarter of the year. In fact, by the final quarter, residential property investment was an estimated nearly 4 % higher than before the pandemic. This was a remarkable recovery, especially when compared with the aftermath of the 2008-2009 financial crisis, when such investment was broadly down for a period of well over five years. It is worth noting that residential property investment was the sharpest rising component of demand in 2021, increasing by over € 3 billion in total compared with the previous year.

In 2021, the persistent low interest rate environment continued to support the real estate market, as borrowing conditions remained favourable and weighted average mortgage rates fell to 1.45 % in the first eleven months of 2021, i.e. 0.11 of a percentage point below the level for the entire previous year. Once again, investment in housing was considered an attractive investment opportunity.

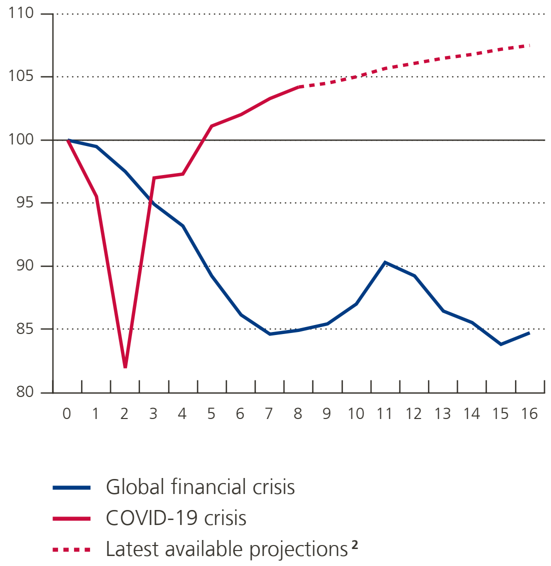
The construction of new housing and the renovation of existing buildings, which together account for the

1 Eurostat (2021), "Early estimates of income and poverty in 2020", Eurostat News, July 2021.

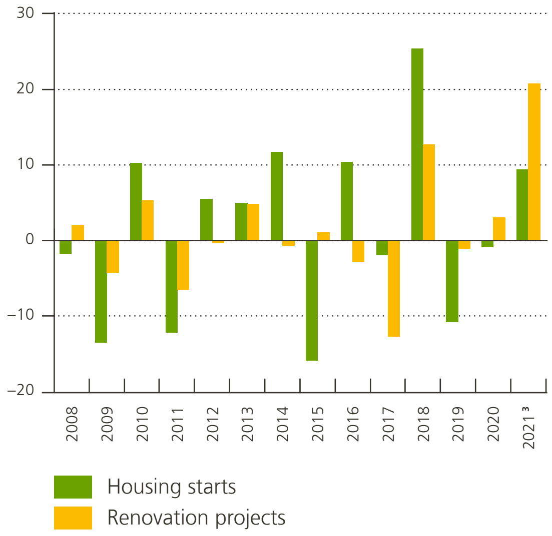
Chart 3.11

Investment in housing staged an exceptionally strong rise and was back at pre-crisis levels from early 2021

Residential property investment volume
(indices, pre-crisis peaks [1] = 100,
data adjusted for seasonal and calendar effects)



Number of houses for which
a building permit was issued
(percentage changes compared with previous year)



Sources: NAI, Statbel, NBB.
1 Pre-crisis peaks (t = 0) are the fourth quarter of 2007 and the fourth quarter of 2019 respectively.
2 December 2021 economic projections by the Bank.
3 First nine months of the year.

core of investment in housing, benefited from construction coming back on stream, a branch of activity that had been deeply affected by the COVID-19 pandemic and its consequences. There was a surge in the issue of building permits in the first nine months of 2021, particularly for renovation projects. The latter type of activity rose by 21 % compared with the corresponding period of the previous year, the steepest rise in 25 years. New builds also contributed to the revival of housing investment, as evidenced by a rise of over 9 % in the number of building permits issued.

Registration duties on property transactions serve to complete the housing investment picture – and also showed growth. Real estate activity in 2021 clearly accelerated when compared with the previous year. In 2020, by contrast, it had been hit hard by both the COVID-19 pandemic and the end to the mortgage relief scheme for new loans in the Flemish Region (see chapter 5).

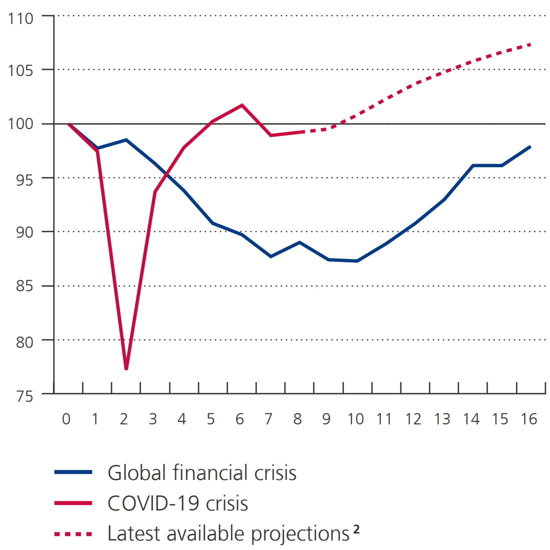
Business investment was clearly up, in keeping with higher demand and income

Business investment for the year 2021 as a whole advanced by 9.2 %, after recording a historic fall of 7 % in the previous year, as restrictions and the virtually complete standstill of all industrial and building activity triggered sharp declines in the second quarter of 2020. Remarkably, after this companies continued to invest up to and including the first six months of 2021, with investment coming down a little in the second half of the year. The second-half drop reflected a temporary deterioration in the business climate from the summer, the Bank's business barometer surveys suggest, particularly in manufacturing – a major player in investment in Belgium. The sector's production capacity utilisation rate – an indicator of the degree of investment needed to keep expanding production – grew sharply early in the year and then also

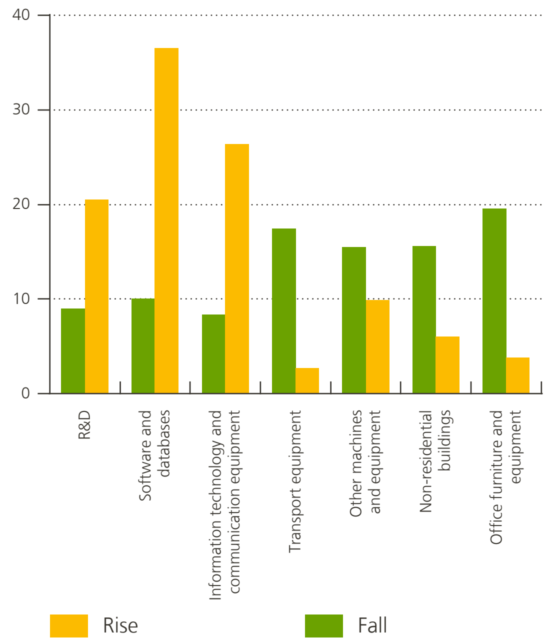
Chart 3.12

Business investment – the composition of which has changed – was exceedingly resilient

Business investment volume
(indices, pre-crisis peaks [1] = 100, data adjusted for seasonal and calendar effects)



Changes in the breakdown of investment due to the COVID-19 crisis
(in % of companies surveyed employing more than 50, multiple answers possible, April 2021)



Sources: ERMG, NAI, NBB.
1 Pre-crisis peaks (t = 0) are the second quarter of 2008 and the fourth quarter of 2019 respectively.
2 December 2021 economic projections by the Bank.

came down in the second half. The fact is that companies were up against supply issues from the summer, hampering production, and also faced an increase in the number of COVID-19 cases, prompting uncertainty.

The resilience of business investment during the COVID-19 pandemic is all the more notable for its contrast with earlier recessions. The 2008-2009 financial crisis, for instance, resulted in a downward trend in business investment for ten quarters before this gradually went back up, and it did not return to its pre-crisis level until 2014. The shock caused by the COVID-19 pandemic may have triggered a significant drop in business investment, but really only for two quarters, after which it recovered rapidly and was back to its pre-crisis levels from the first quarter of 2021, i.e. five quarters after the pandemic first struck.

Companies faced supply issues from the summer

Surveys run by the Economic Risk Management Group (ERMG) – a group of leading experts established by the Belgian government in 2020 to closely monitor the impact of the crisis on the economy – and the European Investment Bank have suggested a change in the composition of business investment, driven by the pandemic. In response to certain changes directly related to the restrictions, particularly wider use of e-commerce, investment partly shifted to information technologies and digitalisation. Conversely, companies surveyed reported that they have cut down on investment in commercial property, particularly in office property, whose use may become less necessary as people increasingly work from home.

Table 3.3

Determinants of companies' gross operating surplus[1], at current prices

(percentage changes compared to the previous year, unless otherwise stated)

	2017	2018	2019	2020	2021 e
Gross operating surplus per unit sold[2]	−0.3	2.0	3.5	1.5	12.3
Unit selling price	**2.5**	**2.4**	**0.9**	**−0.6**	**6.4**
On the domestic market	2.0	2.0	1.5	0.9	2.4
Exports	2.7	2.6	0.9	−1.6	7.7
Unit sales costs	**3.0**	**2.4**	**0.4**	**−1.0**	**5.3**
Imported goods and services	3.3	3.4	0.1	−2.1	8.2
Costs of domestic origin per unit of output[2, 3]	1.8	1.1	0.6	−0.5	−0.1
of which:					
Unit labour costs[4]	1.8	1.2	0.9	3.3	−2.1
Unit net indirect taxes	2.2	1.5	−0.4	−14.1	12.1
Final sales at constant prices	3.5	1.7	2.0	−6.6	8.0
Companies' gross operating surplus	3.2	3.7	5.6	−5.2	21.2

Sources: NAI, NBB.
1 Private and public companies.
2 Including the change in inventories.
3 In addition to wages, this category includes indirect taxes less subsidies, and gross mixed income of self-employed people.
4 Unit labour costs are expressed in units of value added of the business sector and are not calendar adjusted.

Incidentally, a proportion of the rise in business spending in 2021 was driven by the pharmaceuticals sector, which makes up around 20 % of Belgian manufacturing industry and accounted for a little over 4 % of gross fixed capital formation. This particular industry had, of course, recorded a significant rise in business investment in 2020, by some 23 % compared with the preceding year. The exceptional circumstances of the health crisis undoubtedly also worked to the advantage of the pharmaceuticals sector in 2021 and required major capital layouts, particularly to achieve vaccination targets to combat the pandemic.

Companies' gross operating surplus, i.e. the revenues they generate with their business activities, surged by 21 %, the steepest rise ever recorded in the national accounts and about twice the size of the recovery that took place after the 2008-2009 economic and financial crisis. This clear upward trend after the 5.2 % plunge in 2020 was driven by a higher volume of sales – in both the domestic and export markets – and most of all by a clear widening in gross margins. These margins, in turn, were underpinned by a rise in unit selling prices, especially in exports, which exceeded that of unit sales costs. The costs of imported goods and services were up, mostly fuelled by much higher energy prices at the end of the year, whereas the costs of goods and services of domestic origin stabilised on the back of falling labour costs. It is worth noting that the strong rise in net unit indirect taxes is primarily due to the phasing out of subsidies paid by the government to the health sector to offset income losses resulting from postponing non-urgent treatments at the height of the pandemic.

Public consumption and investment rose significantly

Higher public consumption expenditure in 2021 (up by around 4.5 %) was mostly attributable to the impact of the COVID-19 pandemic. In addition to the costs of the vaccination campaign, this item includes health spending for surgery and medical consultations unrelated to COVID-19 that had been postponed in 2020 to ensure sufficient capacity in intensive care units. In addition, public employment went up temporarily in the first half of 2021 in the wake of the exceptional increase in the number of teachers on sick leave.

Government investment rose by 10.9 % in 2021. Although construction started feeling the pain of capacity constraints as the year progressed, government investment was boosted by the implementation of recovery plans – as well as by the delivery of several military transport aircraft. It should be observed that this transaction was import-based and did not therefore influence GDP.

BOX 2

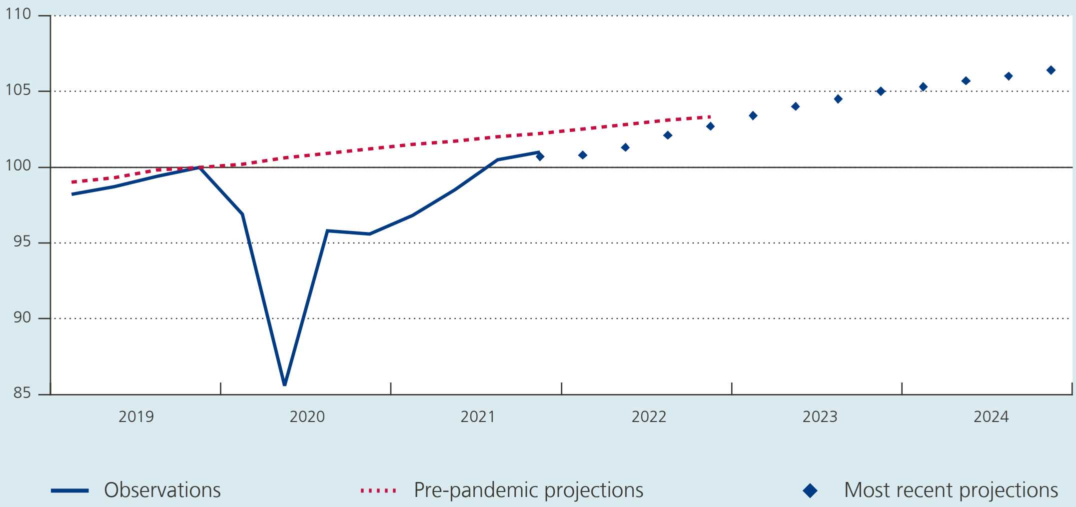
Did the 2020 recession create supply shortages that could leave an indelible mark on economic activity ?

The COVID-19 pandemic set off an historic slump in Belgian GDP, but recovery was swift on its heels – from the third quarter of 2020 – and very robust too. In fact, economic activity had not grown at this clip since the end of the Second World War. But although GDP has already touched and exceeded pre-crisis levels, it remains below the levels that had been expected before the pandemic hit. Economic growth appears to be hobbled by supply constraints, including commodity shortages (timber, metals, natural gas and oil, etc.), semi-manufactures (plastics, semiconductors, etc.) and logistics services (sea freight, etc.). What is more, many companies are reporting people shortages.

Economic research – and particularly research carried out after the 2008-2009 financial crisis – suggests that cyclical fluctuations can affect supply and may cause lingering or scarring effects on

Despite the robust recovery, GDP in 2021 stuck below the level expected before the pandemic

(real GDP adjusted for seasonal and calendar effects, indices 2019 Q4 = 100)



Sources: NAI, NBB.
Note: The pre-pandemic projections for GDP growth are those that the Bank released in December 2019. The most recent projections are from December 2021.

GDP. It is a distinct possibility that the deep recession of 2020 has changed the growth path of economic activity. In Belgium, many businesses across all sectors reported facing supply constraints in 2021. A Bank survey conducted in October revealed that over 80 % of companies in wholesale, retail (both food and non-food), industry and construction grappled with supply issues, primarily shortages at their suppliers and transport problems. Coupled with steeply higher energy prices, inputs became a lot more expensive, and even more so in sectors highly dependent on them.

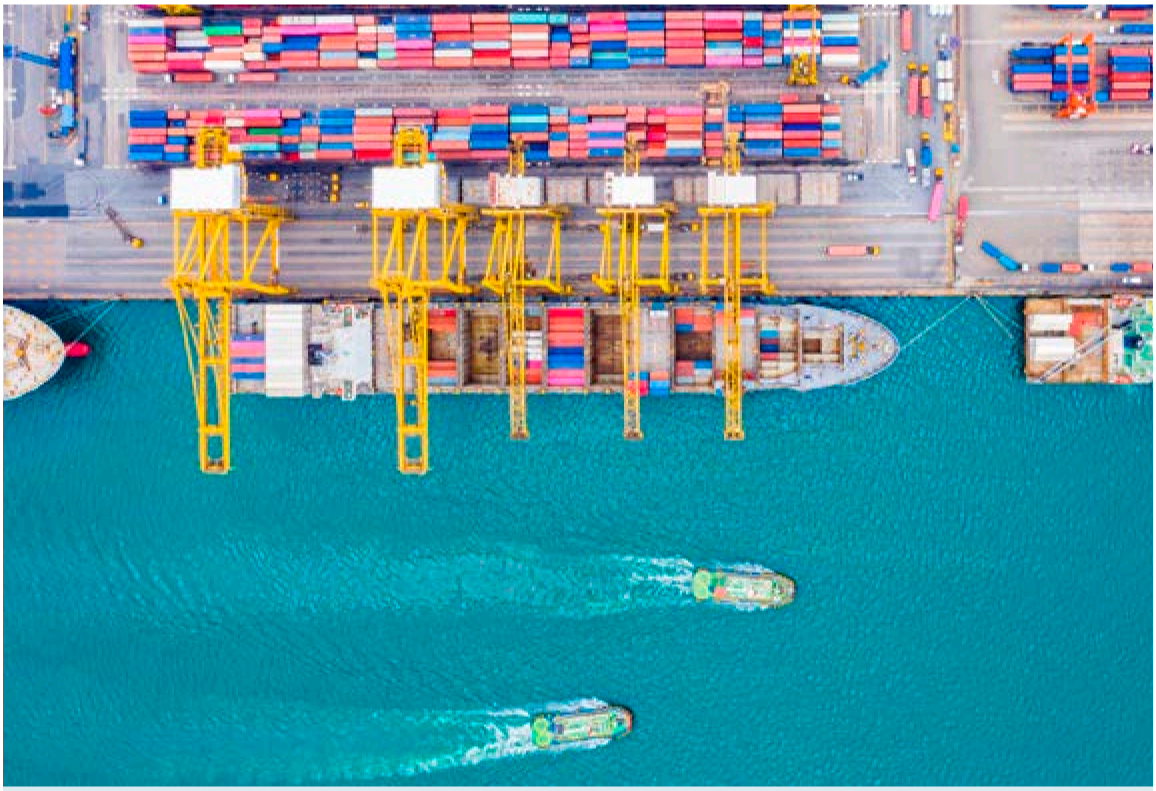
The causes of these supply constraints are many and not specific to Belgium, as PMI indicators for delivery terms and input prices suggest. Both have got significantly worse across the world, and particularly in the euro area (see chapter 1 of this Report). The global economy bounced back with a vengeance, especially compared with previous periods of recession. As a result, it has been a strongly goods-intensive period, much more than services. Consumption of services, by contrast, remained a prisoner of concerns over the public health situation and the restrictions, but also reflected changing preferences. As a result, demand rose for industrial goods – whose manufacture typically ties into global value chains – and led to a sharp increase in demand for commodities and sea freight. The literature uses the term "bottleneck" to refer to the scarcity arising when demand for a factor of production suddenly and significantly exceeds the maximum that can be produced or delivered.

The COVID-19 pandemic was also a key factor in the sense that many relationships between suppliers and producers were disrupted or hampered by public health measures and were not always easily and swiftly restored – as aspect made even worse by the lack of synchronicity in restrictions across the world.

To make matters worse, some sectors – transport and distribution, but mining as well – had been facing a lack of investment even prior to the pandemic, eroding their ability to cope with a sudden increase in demand.

All that said, supply constraints and their impact on economic activity are expected to ease steadily, with the nature of the constraints determining the speed at which this will happen. Where these are mainly attributable to the sheer strength of the recovery, the impact of which may be further fuelled by stock-building in supply chains, the so-called bullwhip effect, these constraints should be quick to disappear. If, by contrast, they reflect major changes in the composition of demand, such as increased digitalisation of the economy, they will require investment that will take time. Most Belgian companies that responded to the above-cited survey, including those in supply-sensitive lines of business, emphasised the temporary nature of the supply constraints, and reckoned these should ease and then disappear in the second half of 2022. And this is exactly the scenario that informed the Bank's macroeconomic projections in the autumn : these assumed that growth would accelerate from the spring of 2022, taking GDP close to the levels that had been expected before the outbreak of the pandemic and then certainly beyond.

As for the labour markets, the crisis has served to intensify specific trends that had featured previously, such as the challenge of recruiting employees with varying profiles. Specialists in information and communication technology had been hard to find for quite a few years and now there is also a shortage of people in construction, the hospitality industry, and transport and logistics, to mention but a few sectors.



The way people work within companies has likewise undergone a major transformation, particularly because of the much wider recourse to working from home, which has led to a willingness on the part of companies to offer hybrid arrangements. Against this particular backdrop, it is becoming increasingly important for workers to develop and nurture digital skills in both their initial and lifelong training.

It is reasonable to assume that employment – which already surged by a net 88 000 new jobs – would have staged exceptional growth in 2021 if it had not been for these recruitment issues. This job creation came at a time of swelling labour supply, as new people entered the labour market, while unemployment fell significantly at the same time. In 2021, Belgium had 29 600 fewer unemployed job-seekers than in 2020. That said, the data does show a rise in structural unemployment, as 8 400 more people have now been out of work for a year or longer. This poses a major challenge, as we are dealing with a group of people who find it harder to find work again. In fact, the transition from unemployment to work has always been relatively tough in Belgium compared with partner countries, whose labour markets have proved less rigid. Recent developments are pointing to some improvement, however, and suggest that more favourable outcomes are possible. Provided that appropriate policy measures are taken and that the supply chain bottlenecks do indeed prove temporary, the shock caused by the COVID-19 pandemic will probably not cause any lasting damage to supply.

Belgium's trade flows recovered quickly

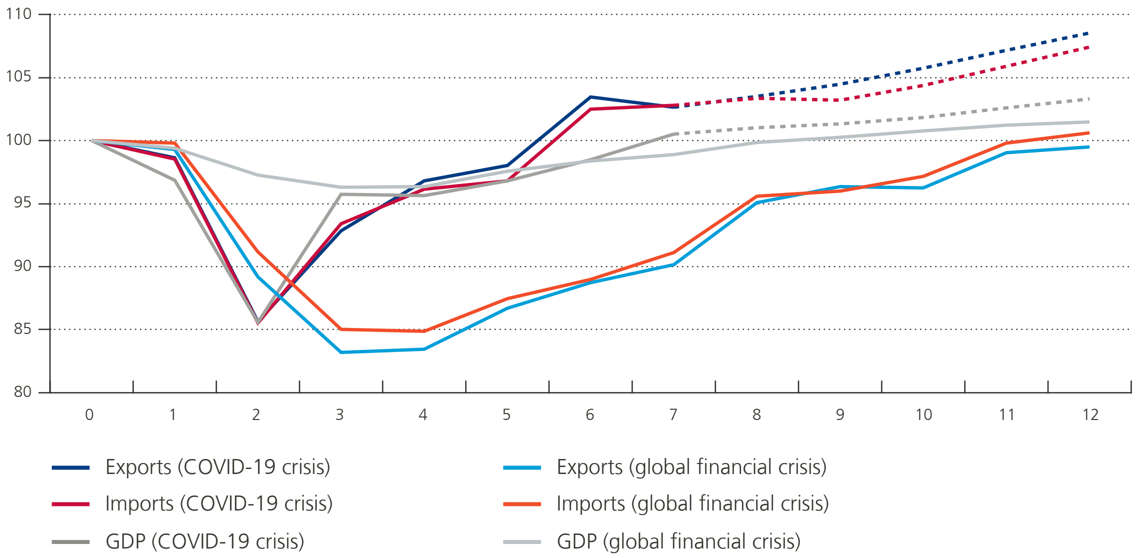
In terms of foreign trade, Belgium was unable to sidestep a deteriorating global economy and the drop in international trade in 2020. Still, after the slump in the second quarter of 2020, trade in Belgian goods and services with the rest of the world recovered sharply from the third quarter of that year, in line with the trend in GDP. In fact, foreign goods and services trade reached higher levels than before the crisis from the second quarter of 2021, slightly more quickly than the broader economy. One reason for this can be explained by the massive impact of a range of pandemic-related public health measures on services activities, which have not yet returned to their pre-crisis levels and whose weight in Belgian GDP is higher than that of foreign trade. Just as with all the other components of demand – with the exception of private consumption – the recovery in trade flows was swift when compared with the 2008-2009 crisis: pre-crisis levels were scaled as early as six quarters after the initial shock, as against twelve after the global financial crisis.

At annualised increases of 9.0 % and 8.5 % respectively compared with 2020, outgoing and incoming trade flows, as expressed in constant prices, recorded pretty similar trends and made, as they did last year, a slightly positive net contribution to economic activity growth in 2021. Meanwhile, sharply higher energy and production costs pushed down Belgium's terms of trade (i.e. the relationship between the export price index and the import price index) in 2021 when compared with the previous year (–0.5 %). The 2021 energy price surge, for gas and oil in particular, was all the more significant because those same prices had been at exceedingly low levels in 2020. Although oil prices were high in 2021 (averaging around € 71.8 per barrel in the year), prices per barrel are close to those recorded in 2018 (€ 71.0 on average) and remain firmly below those seen in the years after the 2008-2009 crisis (€ 102 on average in the 2010-2014 period). Gas prices, by contrast, were historically high in full-year 2021 and higher still in the second half. Coupled with higher demand for these mostly imported products, these prices widened the Belgian trade deficit for energy products with the rest of the world. This deficit stood at around € 9.8 billion in the first nine months of 2021, i.e. € 3.5 billion more than in

Chart 3.13

Imports and exports of goods and services rapidly recovered

Foreign trade and economic activity
(volume data, pre-crisis = 100 [1,2])



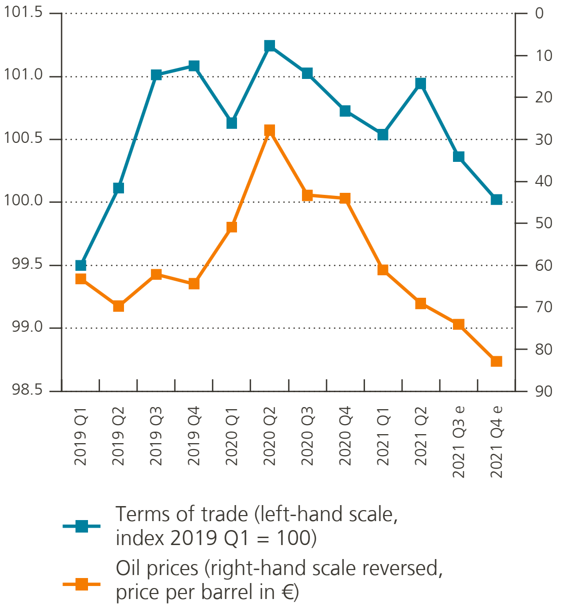
Sources: NAI, NBB.
1 The dotted lines reflect the Bank's economic projections dated December 2021.
2 The pre-crisis peaks (t = 0) reflect the second quarter of 2008 and the fourth quarter of 2019 respectively.

the corresponding period of 2020, but less than in the first nine months of 2018 and less than the average in the corresponding period of 2010-2014, when the deficit worked out at € 12.5 billion and € 12.6 billion, respectively. The surge in energy prices also had a significant impact on a broad range of domestic

Chart 3.14

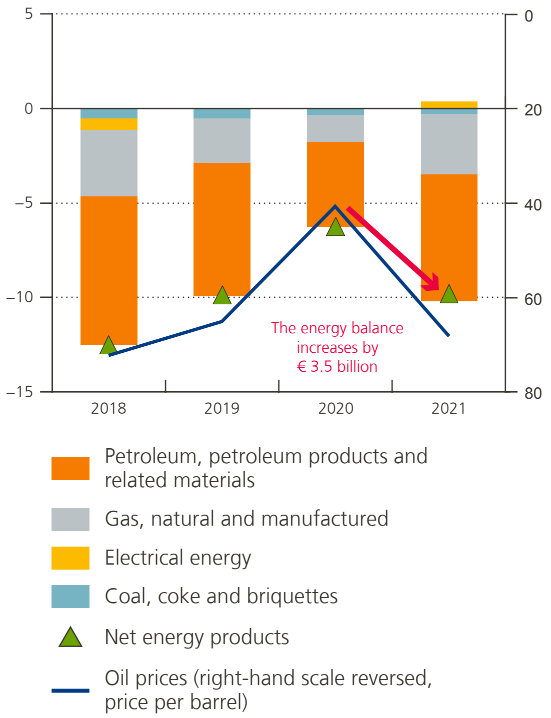
Rising energy prices adversely affected the terms of trade and Belgium's net energy bill

Terms of trade and oil prices



Energy balance relative to the rest of the world

(balance in € billion, first three quarters of the year, unless otherwise stated)



Sources: ECB, NAI, NBB.

sectors of the Belgian economy in 2021. For one thing, households saw their consumer spending grow at the expense of their savings, while companies faced higher production costs. For the government, these higher energy prices led to temporarily higher income in 2021, due to higher VAT revenues from these products. Overall, surging energy prices somewhat reduced the Belgian economy's financing capacity for the year.

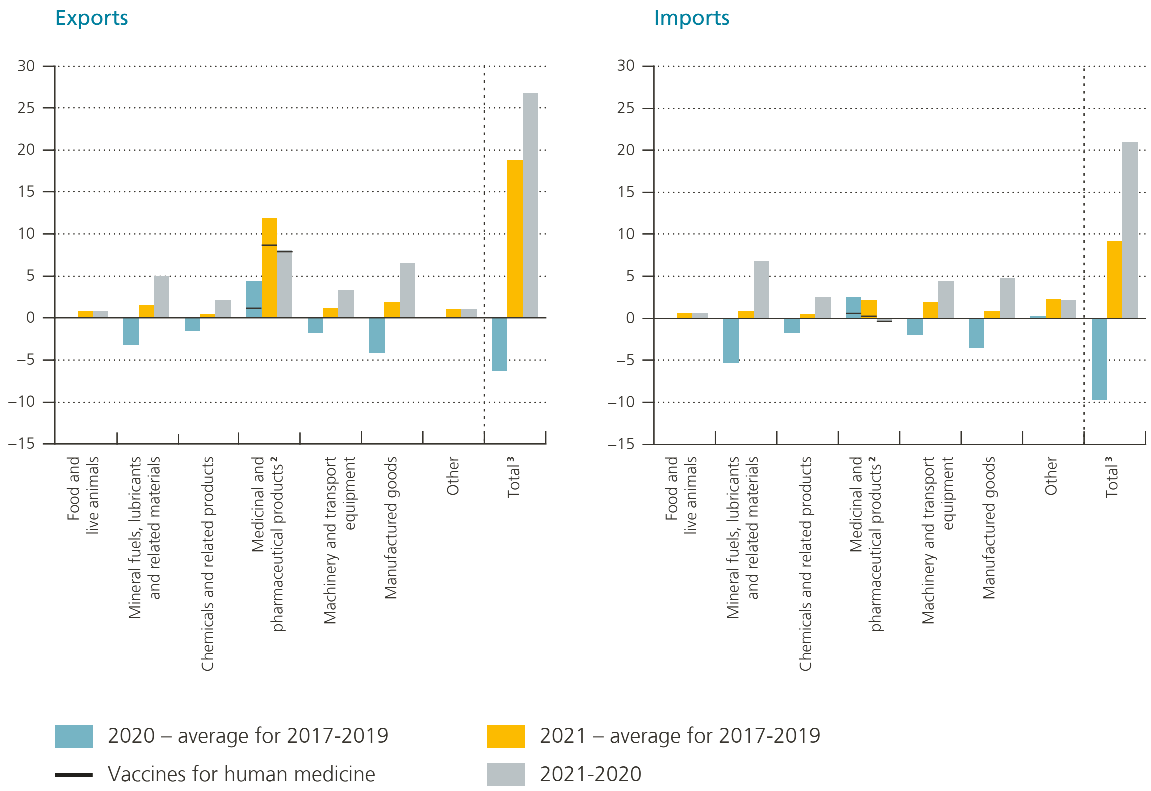
Beyond the larger deficit in energy product trade, the decline and subsequent recovery of trade in goods were uneven, much as was global trade. From the end of 2020 and particularly in 2021, Belgium benefited from the size of the pharmaceuticals sector on its territory in terms of the massive exports of medical material, particularly COVID-19 vaccines. This category of products was one of the few positive contributors to Belgian export growth in 2020, and to a lesser extent to imports, and in 2021 – the year in which the adoption of vaccines accelerated across the globe – the contribution of this type of goods to Belgian trade sharply increased. Vaccines against SARS-related coronaviruses, in particular, accounted for around € 15.4 billion in exports in the first nine months of 2021 (69 % of total exports of vaccines for human medicine), compared with a mere € 0.9 billion in imports (18 % of total imports of vaccines for human medicine) – a net result of around € 14.5 billion for the Belgian economy. However, inputs useful for

Manufacture of COVID-19 vaccines supported Belgian exports

Chart 3.15

Pharmaceuticals sector drove Belgian goods exports

(contributions to growth; first three quarters of the year; in percentage points, unless otherwise stated[1])



Source: NAI.

1 Data according to the foreign trade statistics, national concept.

2 The black line reflects the contributions of vaccines for human medicine – which include vaccines against SARS-related coronaviruses (SARS-CoV species) – to growth of trade flows in goods.

3 Percentage changes compared with the corresponding period of the previous year.

the manufacture of these vaccines are also imported, but are classed as other categories of goods, resulting in an artificially high net figure for this specific category of products. In the first nine months of 2021, the other goods categories – with the exception of manufactured and energy products – only made a limited or even negative contribution to exports and imports growth.

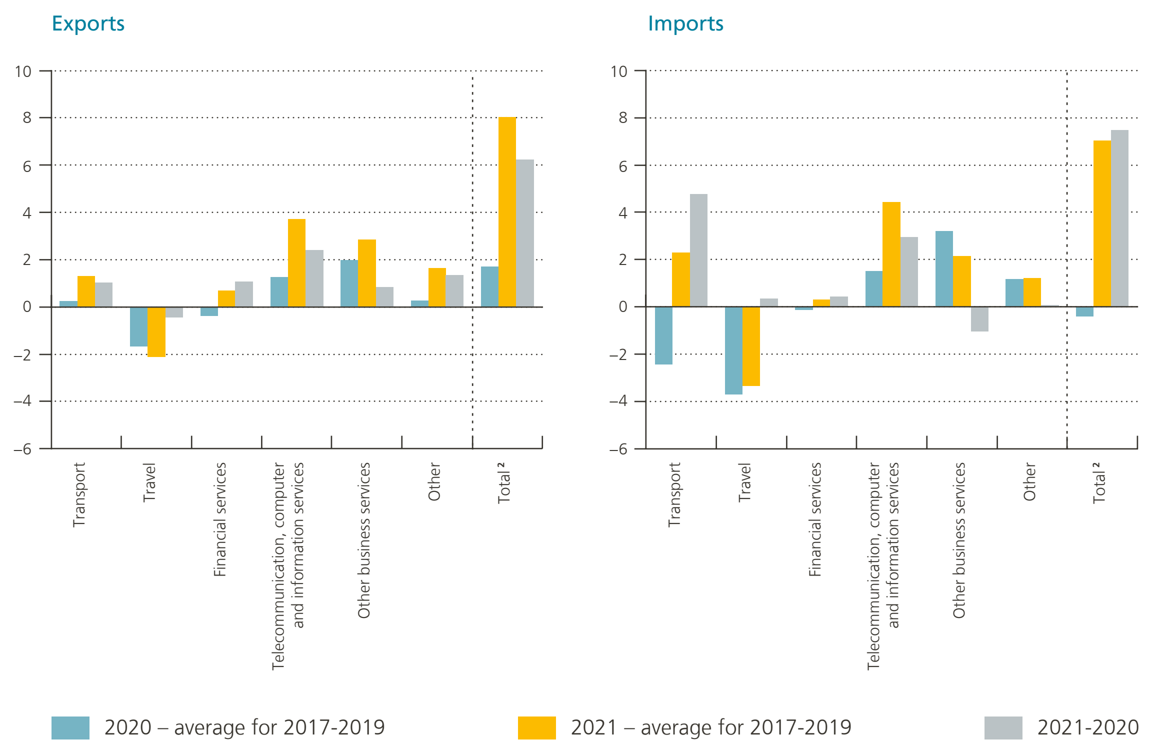
In trade in services, both exports and imports rose in the first three quarters of 2021, making for a net surplus below that for 2020 but still larger than the average recorded in the 2017-2019 period. This state of affairs was mostly down to services categories transport and travel, the net figure for which turned more strongly negative in 2021, as there were fewer lockdowns or other restrictions on economic activity and travel than had been the case in 2020. The year was also marked by a significant rise in exports and imports of communication, information technology and information services, mainly explained by the business activity of a company in this sector related to a new IT software development.

Belgium's trade flows in goods and services with the rest of the world were also influenced by the United Kingdom's departure from the European Union at the beginning of 2021. Whereas 2020 trade flows in goods to and from the United Kingdom developed pretty much in line with that recorded with the rest of the world – with the exception of the last quarter of the year when a "stock" effect was noted – trade with the UK became less dynamic at the beginning of 2021, particularly in terms of imports. Over the second and third quarters of 2021, goods imports declined further, whereas the exports of many categories of goods, particularly pharmaceuticals products, shot up. As for trade in services, both exports to and imports from the UK fell in the first

Chart 3.16

Trade in services recovered

(contributions to growth; first three quarters of the year; in percentage points unless otherwise stated [1])



Source: NBB.

1 Data according to the balance of payments statistics.

2 Percentage change compared with the corresponding period of the previous year.

six months of 2021, dragged down particularly by transport services, travel, financial services and other business services, four key sectors of trade with the UK. Unlike imports, the export of services to the UK revived in the course of the third quarter. Overall and despite major fluctuations – which would probably have been even bigger if there had not been a Trade and Cooperation Agreement between the EU and the UK – the balance of trade between Belgium and the United Kingdom shows a surplus for the first nine months of 2021, to a stronger degree than the average of the three preceding years, as a result of the fall in goods imports.

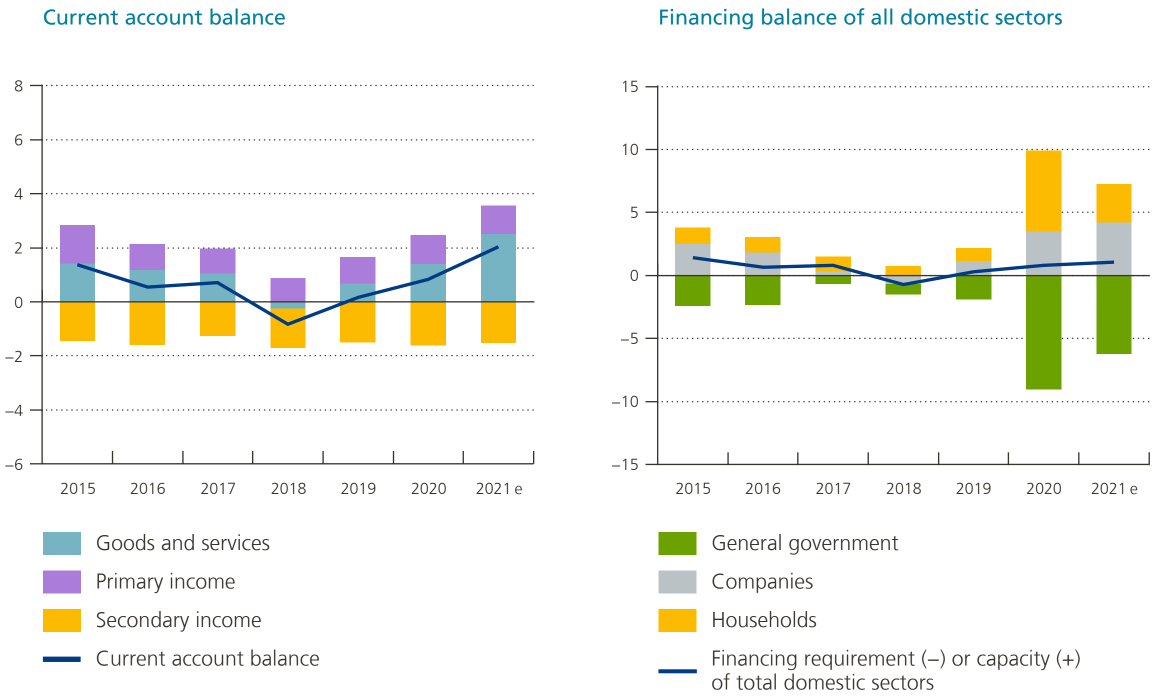
Slightly higher financing capacity for the Belgian economy

All things considered and taking account of the fact that there has been only a minor change in net primary income (which includes earned and investment paid to and received from the rest of the world) and net secondary income (mainly transfers from households and government) to or from the rest of the world as a percentage of GDP, Belgium's current account surplus grew from around 0.8 % of GDP in 2020 to 2 % in 2021. This overall trend is also visible in the Belgian economy's slightly higher financing capacity vis-à-vis the rest of the world, as the country's general government borrowing requirement has come down from its all-time high in 2020, although in a historical perspective it remains considerable (6.2 % of GDP). Companies' increased financing capacity has also provided a positive impetus to this position relative to the rest of the world, as their disposable income grew in 2021 on the back of a higher gross operating surplus offsetting higher investment. Taken together, this lower foreign financing requirement of companies and general government has made it possible to offset the lower borrowing capacity of households, whose savings have contracted – even if their savings rate remains substantial – and whose investment in housing has started to rise again after having fallen in 2020.

Chart 3.17

Borrowing and current account surpluses both up

(in % of GDP, unless otherwise stated)



Sources : NAI, NBB.


20
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4. Prices and labour costs in Belgium

4.1 Higher energy prices fuel inflation

In 2021, inflation rose to highs unprecedented since the harmonised index of consumer prices (HICP) began in 1997, working out at 7.1 % in November and at 6.6 % by the end of the year. The second half of the year, in particular, saw inflation climb, largely driven by energy prices. Average inflation jumped from 0.4 % in 2020 to 3.2 % in 2021. Inflation excluding energy contracted overall in 2021 but accelerated as the year progressed and economic activity recovered.

On average over the year, price growth in Belgium exceeded the average of its three main neighbouring countries (Germany, France, Netherlands), where it amounted to 2.8 %. In fact, by the end of the year, Belgian inflation was even 1.7 percentage points higher. On the whole, energy inflation in Belgium exceeded the numbers in its neighbouring countries, whereas core inflation was lower. The latter was highest in Germany, powering ahead in January 2021 when the basic VAT rate returned from 16 % to 19 %.

In 2021, prices for all energy products rose in Belgium, compared with generally negative inflation rates in 2020: 15.2 % for fuels, 36.4 % for heating oil, 39.6 % for gas and 16.2 % for electricity.

Table 4.1

Harmonised index of consumer prices (HICP)

(percentage changes compared to the previous year)

					Average for three neighboring countries
	2018	2019	2020	2021	2021
Total	2.3	1.2	0.4	3.2	2.8
Energy products	8.9	–0.8	–11.0	22.4	11.0
Motor fuels	10.7	0.0	–8.5	15.2	18.3
Heating oil	19.4	–1.6	–28.2	36.4	17.9
Gas	9.6	–5.8	–13.9	39.6	11.4
Electricity	2.2	1.6	–6.4	16.2	4.1
Unprocessed food	1.8	–0.4	4.7	–2.2	2.3
Processed food	2.9	1.7	2.1	1.7	2.1
Core inflation	1.3	1.5	1.4	1.3	1.8
Services	1.6	1.8	1.8	1.6	1.8
Non-energy industrial goods	0.8	1.0	0.7	0.8	1.9
p.m. National index	*2.1*	*1.4*	*0.7*	*2.4*	–

Sources: Eurostat, Statbel.

On the one hand, this reflects base effects. After oil prices collapsed in the spring of 2020 triggered by the pandemic and first lockdowns, prices for heating oil and fuels fell sharply, causing nearly as big a drop in energy inflation as during the financial crisis in 2009. This massive fall has had major base effects on monthly inflation figures (year-on-year) since the spring of 2021, as annual comparisons are based on exceptionally low energy prices in 2020.

On the other hand, the combination of a range of supply and demand factors has rapidly pushed up prices for oil and other commodities, as well as sparking an upsurge in wholesale gas prices and to a lesser extent also electricity. Further background to these factors is provided in chapter 1.

Belgium's neighbouring countries are facing similar pressures in their wholesale markets, but the impact of these on households differs between countries.

Overall, energy inflation in Belgium (22.4 %) was twice as high as in its neighbouring countries in 2021. The same phenomenon had been visible in 2020, if in the reverse direction: energy inflation fell twice as hard in Belgium (–11 %, compared with –5.6 %). Several factors inform these differences, including the composition of energy in the consumption basket, taxation and the types of energy contracts on offer or selected by households.

Energy inflation rose faster in Belgium than in neighbouring countries

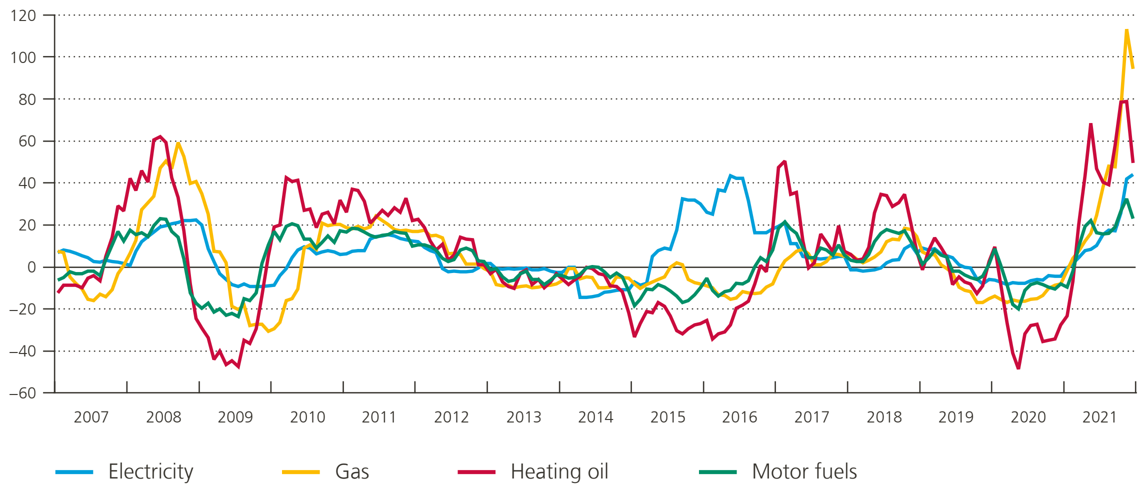
Energy product prices turn out to be more sensitive to global oil price fluctuations in Belgium, mainly because of very low excise duties on heating oil. With flat-rate taxes accounting for only a small proportion of prices (€ 19 per 1 000 litres compared with € 156 in France and € 61 in Germany), these taxes also constitute less of a cushion than is the case in neighbouring countries when crude oil price fluctuations percolate through to consumer prices. Besides, heating oil accounts for a higher proportion of energy use in Belgium (13 % of energy products, compared with an average 8 % in its neighbouring countries). By contrast, profiles and inflation levels for motor fuels were comparable between Belgium and its three main neighbouring countries.

In addition, changes in wholesale prices are typically passed on faster to Belgian electricity and gas bills, because of the higher number of variable energy contracts and more rapid adjustment to market prices, whereas consumers in Belgium's neighbours tend to opt for fixed-rate contracts more often. Consumer energy prices break down into an energy component,

Chart 4.1

Inflation rates accelerated for all energy products

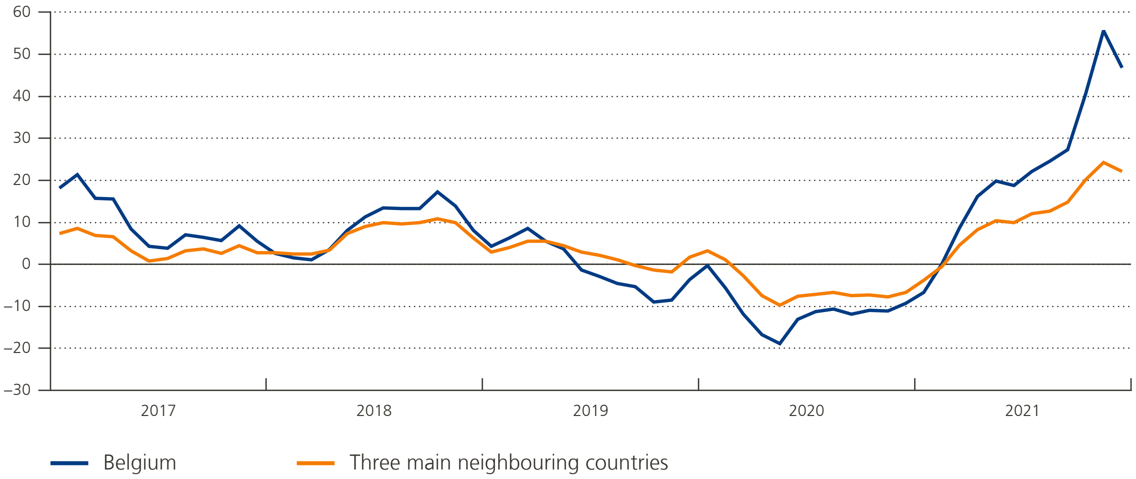
(HICP: percentage changes compared with the previous year)



Source: Eurostat.

Chart 4.2

2021 energy inflation was higher in Belgium than in neighbouring countries
(HICP: percentage changes compared with the previous year)



Source: Eurostat.

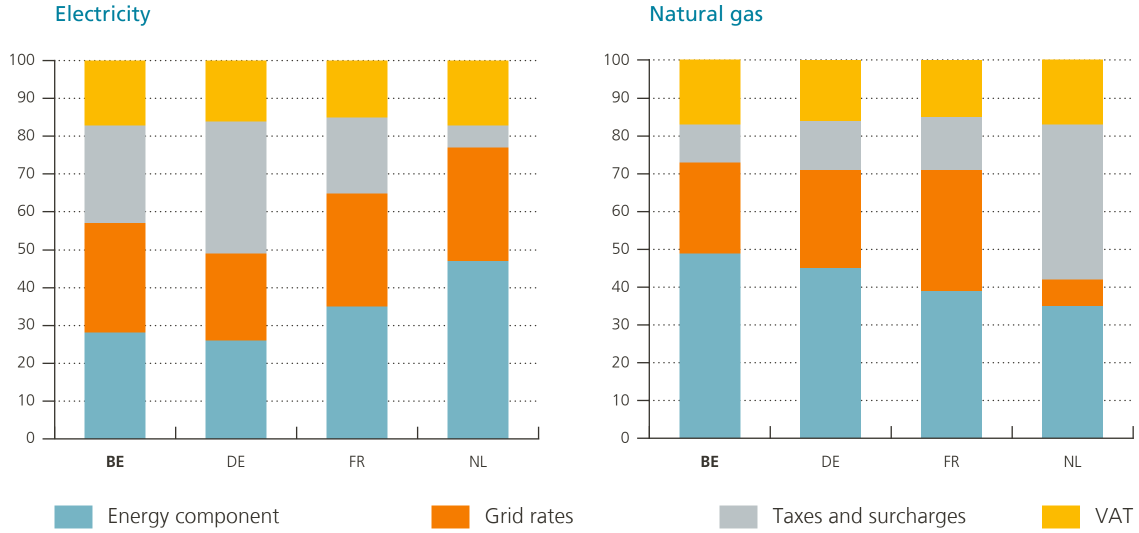
grid rates, taxes and surcharges, plus VAT. It is the energy component cost that explains the swift advance in electricity and gas prices in Belgium since the summer of 2021.

Inflation figures for gas were at all-time highs. In November, for instance, gas prices surged by a year-on-year 113 %, a percentage that had not been recorded since the harmonised price index was first launched. The share of the energy component in overall gas prices in Belgium was higher than the average for its neighbouring countries, making consumer prices more sensitive to changes in wholesale prices. Although the relative weight of gas in Belgium is lower than in its neighbouring countries (18 % compared with 23 %), contract prices have risen so much that this component has put Belgium at a disadvantage, widening the energy inflation gap. As for

Chart 4.3

Breakdown of electricity and natural gas prices [1]

(in % of total prices, averages for 2019-2021)



Source: CREG.

1 Electricity: average consumption of 3 500 kWh a year using a standard meter.
Natural gas: average consumption of 23 260 kWh a year.

electricity, if the return to 21 % VAT levied on electricity in September 2015 is disregarded, inflation on this energy product also touched its highest level since HICP records began, reaching 42 % in November. In Germany, the fact that recent price rises in the electricity market are barely making a dent in the energy component of consumer bills is explained by early purchases tied in by suppliers, among other factors. In France, the relative inertia of prices charged to households is underpinned by a high degree of price regulation and nuclear power generation, which have protected consumers from a number of elements that have caused prices to spike (including higher prices for carbon allowances). Electricity accounts for a larger share of Belgium's energy consumption than in its neighbouring countries (37 % compared with 30 % in neighbouring countries), making for a bigger impact on total energy inflation.

4.2 Core inflation rose in the second half of the year

Economies reopened at a rapid pace as restrictions were phased out, such as those on travelling and going out to restaurants. Some purchases of goods and services had been put off to 2021, boosted by forced savings during the lockdowns, and after reopening, companies found it easier to raise their prices without losing customers.

Production costs drive up core inflation

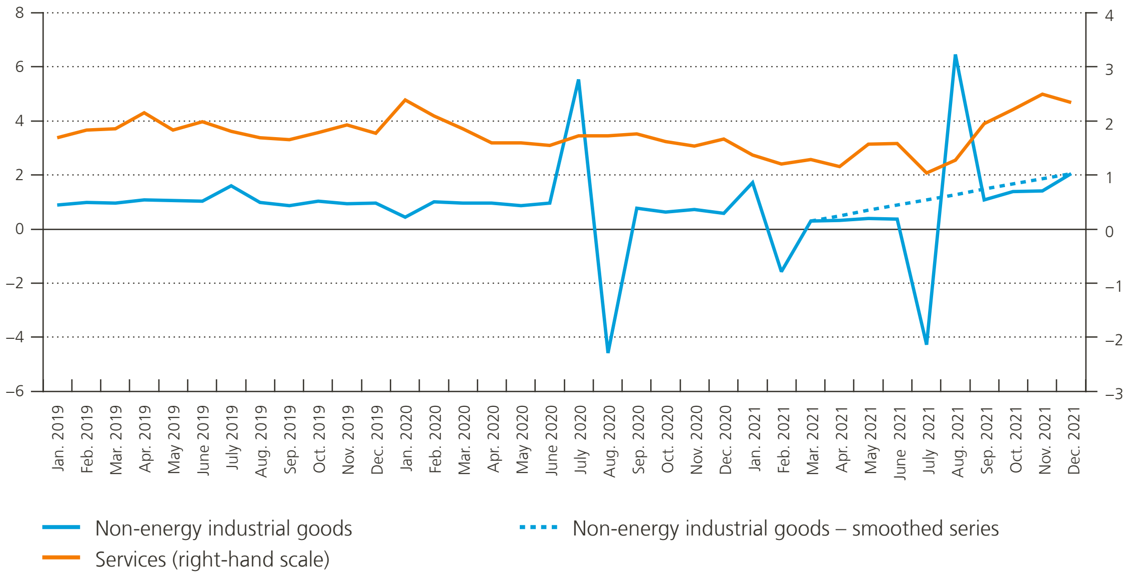
Yet core inflation inched down on average between 2020 and 2021, to 1.3 % from 1.4 %, for two reasons: a base effect and the fact that various activities did not restart at the beginning of the year, keeping the inflation percentage low at that point.

In the absence of price data for a number of services that were suspended during the lockdowns, statistics offices were compelled to extend some rates in 2020 and early in 2021. The pace of price increases for services slowed in 2021 (to 1.6 %). Tax deductions for the purchase of service vouchers in Flanders were cut in January 2020, pushing up inflation (households are now paying more for these services). This effect disappeared after 12 months. Following the reopening of cafés and restaurants, inflation in the hospitality industry picked up to 4 % by the end of the year, and the temporary VAT cut to 6 % for selected restaurant and catering

Chart 4.4

Inflation in services and industrial goods rose as the year progressed

(HICP: percentage changes compared with the previous year)

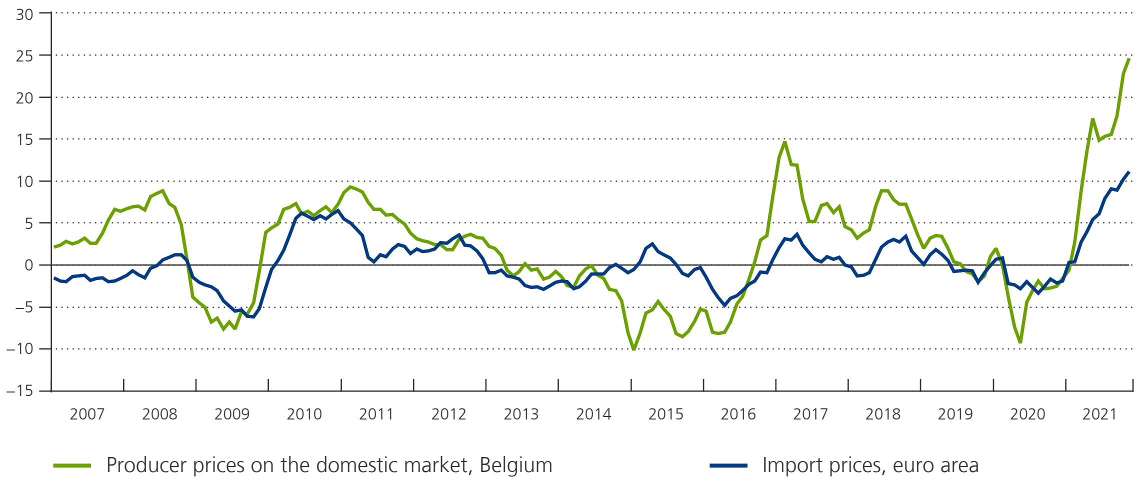


Source: Eurostat.

Chart 4.5

Producer and import prices in the manufacturing industry jumped [1]

(percentage changes compared with the previous year for the price indices)



Source: Eurostat.

1 Excluding the energy and construction sectors.

services between 8 May and 30 September 2021 has had no visible impact on consumer prices. This had anyway not been the aim of the cut, as it was primarily meant to support the industry's recovery. Cultural and recreational services and high-contact professions such as hairdressers recorded steeply higher rates than in the previous year, although the weight of these services in the consumption basket remains limited. These price increases probably reflect certain costs for reopening business (virus protection measures) as well as an attempt to make up for losses incurred during lockdown. After months of declines, prices for package holidays were on the rise again in July 2021 and contributed to accelerated services inflation in the second half of the year.

At the same time, many businesses found it hard to meet rapidly rising demand, as they needed to shore up their supply chains, which had been hit hard by the pandemic. Shortages emerged in the manufacture of selected goods, for which essential parts – such as semiconductors – rapidly ran out. Shipment of goods became harder and more expensive as a result of problems in the transport sector.

These cost pressures are visible in the index of manufacturing import prices in the euro area, which rose steadily from the start of the year, with growth touching an all-time high of 11 % in November. The same was true for producer prices in the Belgian domestic market's manufacturing industry: a record 25 % jump, an increase on a scale not seen since the early 1980s. More expensive inputs have pushed up consumer prices, while selected imported end-products also became more expensive.

For non-energy industrial goods, the other component of core inflation, price changes in 2020 and 2021 were very volatile, as sales periods were delayed and extended. In 2020, the country's summer sales were moved from July to August, but those in 2021 were back to their usual July schedule. The year-on-year inflation figure for non-energy industrial goods dropped, as a period of lower prices was now being compared with a time of 'normal' prices (July 2020). The following month, the figure was back up – normal prices in August 2021 being compared with reduced prices in August 2020. In February 2021, winter sales were – exceptionally – extended, and inflation figures once again plumbed lows. This movement was not observed in the national consumer price index – which the health index draws on – as seasonal sales are smoothed across the year.

Ignoring these atypical movements, we note that industrial goods inflation was climbing in the second

half of the year and particularly towards the end, when inflation for these products stood at 2.1 %. Supply and delivery issues combined with steeper commodity prices to drive up prices for a whole host of goods, including household equipment, furniture and furnishings, and second-hand cars. Delays in the delivery and manufacture of new vehicles galvanised demand in the used car market and prices kept rising (buyers had been taking refuge in this category of vehicles as early as 2020), staging 15 % growth in December.

And lastly, food inflation declined from 2.6 % to 0.9 % between 2020 and 2021, predominantly because of negative inflation for unprocessed food. Base effects are at play here, as – unrelated to the pandemic – food markets had faced a range of supply issues in 2020 that were responsible for driving up prices (e.g. weather conditions causing harvests to fail, African swine fever in Asia resulting in higher demand for meat from Europe) or were related to them, e.g. labour shortages in some sectors causing supply issues, a temporary ban on special offers at the start of the pandemic.

Inflationary pressures have not become wide-ranging and mainly reflect significant movements in some sectors. Ignoring typically highly volatile product categories (and particularly in 2021), such as energy products and fruit and vegetables, the share of products (defined at four-digit COICOP level [1]) with an inflation percentage in excess of long-term inflation (1.8 % in the 2011-2021 period), stood at 27 % in 2021, compared with 38 % in 2020. This confirms that core inflation – in the wider sense – remained moderate in 2021.

1 The Classification of Individual Consumption by Purpose (COICOP) captures household consumption. Its four-digit level refers, for instance, to “bread and grains” or “clothing”.

4.3 Health index also sharply up

Automatic indexation in Belgium of wages and social benefits helps to prevent purchasing power from being eroded by inflation. But any worsening in the terms of trade – due to higher oil prices, for instance – makes the entire economy poorer and hence has to be absorbed by all economic actors. This is why indexation has been calculated on the basis of an adjusted index figure instead of total index figures since 1994. The health index reflects the national consumer price index excluding motor fuels, alcohol and tobacco, with these exclusions ensuring that the effects of oil price shocks and indirect taxes on health-damaging products do not get fully passed on to wages, containing the risk of a wage-price spiral (see box 3).

Non-motor-fuel energy products, i.e. electricity, gas and heating oil, do feature in the health index basket. Although these account for only 6 % of the index, their high volatility levels may speed up or slow down the pace of indexation. In 2021, energy inflation shot up so fast that the public sector's trigger index was breached twice: in August for the first time and once more in December. The Bank's June projections, by contrast, had posited a single such breach in 2021, in October.

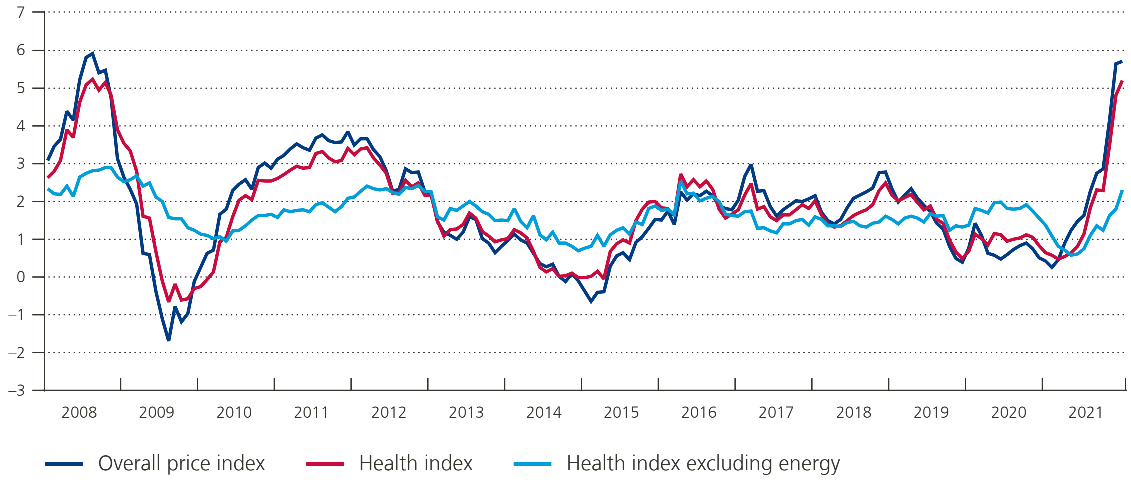
While the growth of the total national price index reached 2.4 % in 2021[1], growth of the health index was on average 2.0 %. In other words, the health index undershot inflation by 0.4 of a percentage point. If all energy products were stripped out of

1 Methodologies differ between the national price index and the harmonised index, which are mainly related to the origins of the index weightings.

Chart 4.6

Energy prices pushed up health index as well

(percentage changes compared with the previous year for the price indices)



Sources: Statbel, own calculations.

the health index, it would have gone up by 1.2 % in 2021 – 0.8 of a percentage point less than recorded by the index as actually constituted.

This is not the first time that energy has had such a major impact on the way the health index develops. In 2008, for instance, total inflation stood at 4.5 %, while energy prices rose by 19.9 %. The rise in the health index, then at 4.2 %, undershot inflation by 0.3 of a percentage point. Stripping out all energy products, the health index would have gone up by 2.6 %, a clear reflection of the impact of energy on the wage indexation mechanism.

The consumer price index is based on an average Belgian household's consumption basket. However, what is in the basket differs depending on income, and price developments in goods and services do not impact all sections of the population equally. The country's household budget survey revealed that gas, electricity and heating oil account for double the share of income for the lowest-income households (interdecile difference [1]). It is possible to calculate an inflation rate for a type of household on the basis of the relative weight of consumption per income quartile. According to these calculations, the least well-off households face an overall inflation rate above the average (2.5 %) and 0.3 of a percentage point higher than households on the largest incomes, with the gap even wider by the end of the year. However, these calculations ignore any measures taken to ease the energy bills for certain sections of the population. To provide immediate relief to households struggling in energy poverty (more than one in five households in 2019, according to the King Baudouin Foundation), the government expanded subsidised rates (the so-called "social tariff") in February 2021, with a million householders seeing their energy bills reduced. In October 2021, the government decided to extend this measure until the end of March 2022. In addition, people on such rates should receive an additional one-off payment of around € 80 in 2022.

1 The interdecile difference can only be calculated on the basis of the 2010 household budget survey, as only income quartiles have been published since then.

4.4 Inflation movements show up in wages after time lag

Inflation trends typically percolate through to wages with some time lag, partly because any adjustments reflect the health index's four-month moving average (the smoothed health index), but also because changes are implemented by way of different indexation mechanisms – with adjustments spread over time as a result. Indexation formulae differ between public and private sectors and, within the private sector, between joint committees. In the medium term, however, any increases in the smoothed health index are fully reflected in wages.

This wide range of indexation methods breaks down into two broad categories. The first sees indexation happen after the health index's four-month moving average has exceeded a trigger index figure, typically in increments of 2 %. This is the general rule for wage indexation applied in the public sector. In the second category, wages are indexed at set intervals, e.g. every month, two, three, four or six months, or every year. Annual adjustment is the most common mechanism for this category.

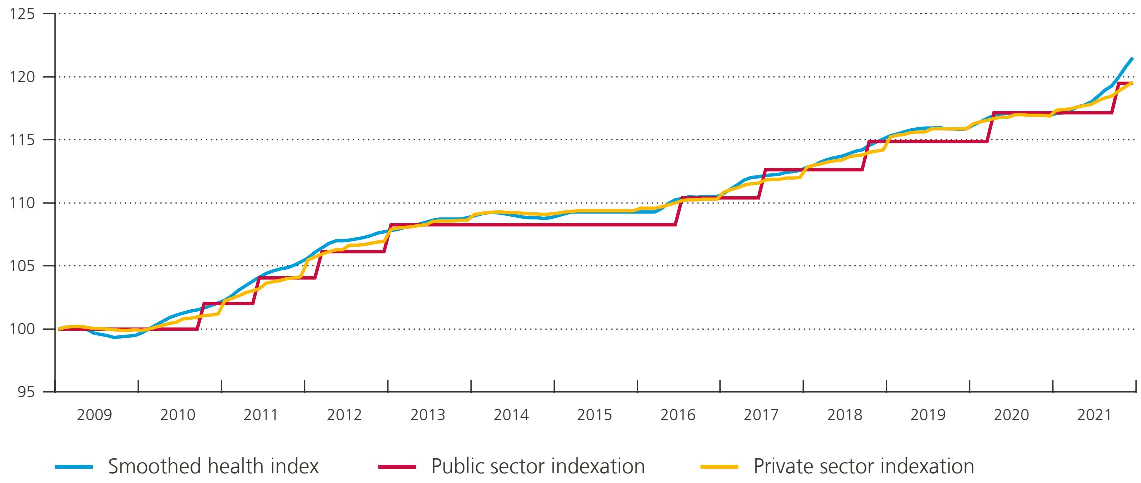
In 2021, wages of over 48 % of private sector employees were indexed when a trigger index was passed – 38 % of them through annual indexation and around 9 % once every three months. Other set-ups are less frequent.

Much as in the public sector, indexation was the biggest contributor to gross hourly wage developments in the private sector, which amounted to 1.1 %, a slight increase on 2020. The traditional time lag in the adjustment of wages to the cost of living – caused

Chart 4.7

Wage indexation in public and private sectors follows health index developments

(indices, January 2009 = 100)



Sources: FPS ELSD, NBB.

Table 4.2

Labour costs

(percentage changes compared with the previous year, unless otherwise stated; data adjusted for seasonal and calendar effects)

	2018	2019	2020	2021 e
Hourly wage costs in the private sector	1.5	2.2	5.3	–0.6
Gross hourly wages	2.1	2.3	4.8	–0.2
Collectively agreed wages [1]	2.1	2.5	1.7	1.4
Real agreed adjustments	0.4	0.7	0.6	0.4
Indexation	1.7	1.8	1.0	1.1
Wage drift [2]	0.0	–0.2	3.1	–1.7
Employers' social contributions [3]	–0.6	–0.1	0.5	–0.3
p.m. Hourly wage costs in the private sector according to the economic concept [4]	*1.4*	*2.1*	*4.3*	*–0.9*
Hourly wage costs in the public sector	1.8	2.2	3.1	0.7
of which: Indexation	1.5	1.5	1.5	1.0
Hourly wage costs in the economy as a whole	1.5	2.2	5.0	–0.4

Sources: FPS ELSD, NAI, NSSO, NBB.

1 Wage rises set by joint committees.

2 Increases and bonuses granted by companies over and above those under interprofessional and sectoral collective agreements; wage drift resulting from changes in the structure of employment, and errors and omissions; contribution to the change in labour costs, in percentage points.

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

4 Hourly wage costs according to the economic concept take account of the reduction in employers' contributions for target groups, the reduction in payroll tax, and other wage subsidies (particularly the COVID-19 measures). This concept gives a more accurate idea of the real labour costs for firms.

by the various indexation mechanisms – explains why wage indexation is bound to be particularly steep in 2022. Based on its December projections, the Bank now forecasts indexation in excess of 4 % in 2022. An increase of this nature has an immediate impact on social partner dialogues, under the 19 March 2017 Law amending the 1996 Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness, whose purpose is to prevent wage indexation from eroding companies' competitiveness (see box 3).

The return to work by the temporarily laid-off squeezed wage growth in 2021

Trends in gross hourly wages were strongly influenced by the public health situation in 2021, as in 2020. That year's steep wage growth of 4.8 % was largely explained by the extent to which companies drew on the furlough scheme. The scheme's beneficiaries typically worked in sectors and jobs on low or medium pay. As they were no longer paid by their employers, but from the public purse, their wages disappeared from the total wage bill, automatically pushing up average gross wages and precipitating a strong increase in the net wage drift (3.1 %). The reverse happened in 2021 on the back of a generally favourable development in the public health situation, as employers were now able to offer jobs to the majority of their furloughed staff. Statistically, this dampened aggregate hourly wages, contributing to a lower wage drift, to –1.7 %. As a result, gross hourly wages barely grew in 2021.

People working in essential sectors, particularly in health care, received extra pay for their performance in challenging pandemic conditions. Such payments took the shape of bonuses, overtime payments or consumption vouchers and contributed to the wage drift dynamics in 2020. Fundamental upgrading of wages and working conditions in health care had been on the cards anyway, but the health crisis facilitated swifter social agreements, which came into force in 2021. The structural wage rises implemented under these agreements were factored into collectively agreed wages. With these rises wholly financed by government through wage subsidies, they should be budget-neutral for the employers involved.

The social partners were unable to agree on the maximum margin for hourly wage costs in the 2021-2022 period and the federal government turned to the law to set them at 0.4 % by Royal Decree, matching the maximum margin as determined by the January 2021 technical report issued by the Central Economic Council (CEC). Also, the law was amended to include in the list of elements not used to calculate margins selected COVID-19-related measures, including consumption vouchers in the health care sector. June 2021 saw the social partners reach an interprofessional agreement after all, which included an increase in guaranteed average minimum monthly income with effect from April 2022.

Although the interprofessional level is a key part of wage-setting, consultations in the sectoral joint committees remain essential. Within these committees, sectoral realities shape not just the outcomes of interprofessional talks on wage margins but also inform negotiations on other key elements, such as hours worked, training and the indexation mechanism. Sector-based minimum wages are also set at this level – an important springboard for wage differentiation between joint committees.

In 2021, sectors or companies also discussed the option of companies that are doing well granting an additional COVID-19 payment of up to € 500 per employee on top of the 0.4 % margin. Sectoral collective agreements were concluded in food trade, large retailers, department stores, transport and logistics, cleaning, funeral services, as well as in food, chemicals, metals, construction, banking services and other sectors covered by the supplementary joint committee for white collar workers – which alone represents around 500 000 employees. The payment amount agreed varied between € 125 and € 500 per employee.

By the end of the summer, not all sector-based negotiations had been completed and the bulk of the increase in real negotiated wages was not yet included in the data in terms of the wage margin. These sector agreements stood to bring negotiated increases in the fourth quarter of 2021, and even more in 2022.

4.5 Wage gap is an area for concern

The Central Economic Council is tasked with estimating the gap in hourly wage costs that has been created in Belgium's private sector since 1996 relative to its three most important partner countries. The 2020 wage gap was difficult to gauge because of the health crisis's statistical effects on labour costs. Even though all four countries used furlough schemes to address the issue, the statistical consequences were not identical because of the specific characteristics of the scheme in each country. Labour costs in 2021 were also influenced by pandemic-related composition effects. In the absence of data from which the purely statistical effects of the crisis could be stripped out, the CEC opted to adopt projection smoothing on the assumption that upward and downward effects would cancel each other out.

BOX 3

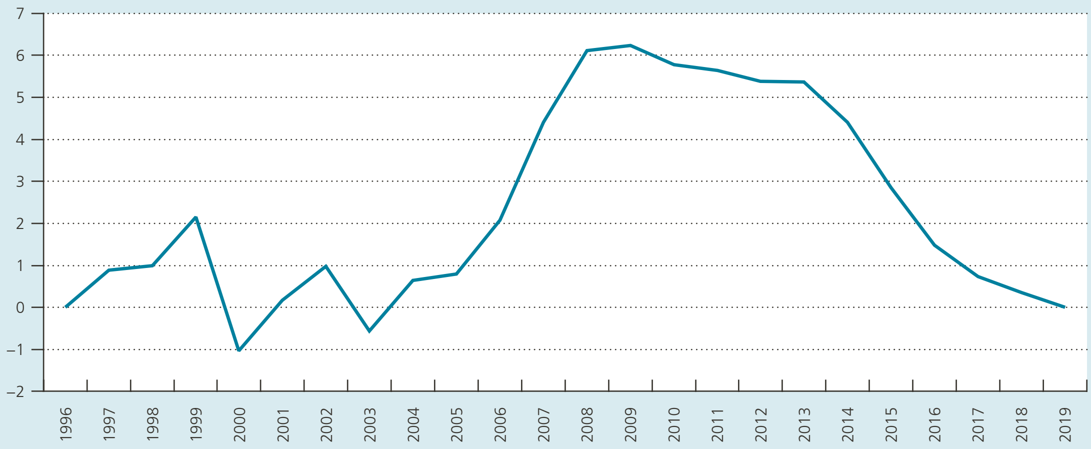
Business competitiveness and wage indexation

Belgium is a small, open economy integrated into international trade. With the advent of the single currency, it lost its exchange rate as a tool to ensure the competitiveness of its businesses. This dimension then had to be incorporated into the social dialogue and more generally by better taking into account the trade-off between wages and jobs.

Belgium remains one of the few euro area economies where cost of living expenses are automatically reflected in wages. Indexation is deeply embedded in the way its economy operates, but this mechanism inevitably also contributes to the rigidity of real wages. To ensure that indexation does not erode the country's relative competitiveness, a scheme was devised to embed the effects of indexation on wage-setting. The Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness was enacted in 1996, with the aim of aligning hourly labour cost developments in Belgium with expected trends at its three main trading partners, i.e. Germany, France and the Netherlands. In practice, however, the Law was unable to prevent labour costs from going off the rails, with the wage gap having widened since 2006 and peaking at 6.1 % in 2009. It took until 2017 before the gap was fully closed after a range of wage moderation measures, an index jump and additional cuts in social security contributions.

The enactment of the March 2017 Law amending the 1996 Law brought in a series of relevant adjustments, without prejudice to the basic principles of the 1996 Law. For one thing, expected growth in nominal wages in the three main neighbouring countries continued to serve as the benchmark for

Belgium's labour cost gap[1]



Source: CEC.
1 Compared with the three main neighbouring countries, weighted average by relative size of GDP.

determining the maximum margin for wage growth: the social partners still negotiate the (real) wage cap and the automatic indexation mechanism is in principle guaranteed.

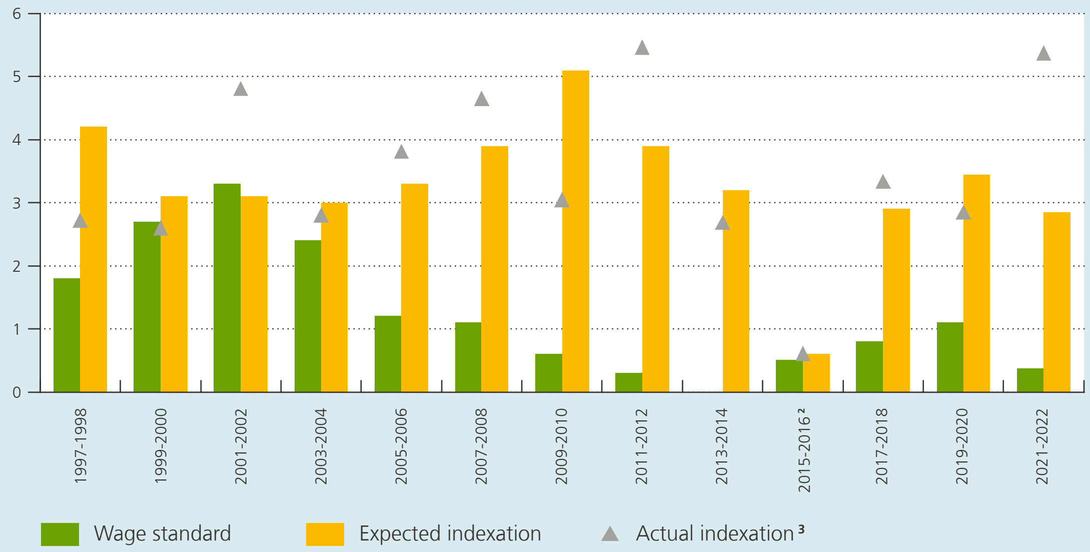
The big change introduced by the 2017 Law is the way in which the maximum available margin for real wage costs growth is calculated once every two years. The Central Economic Council is now required to allow for an adjustment factor and a safety margin in addition to expected nominal labour cost developments in Belgium's neighbouring countries and projected indexation in Belgium. As its name suggests, the adjustment factor is meant to factor in the past in order to adjust for any gap, e.g. when cumulative hourly wage costs in Belgium have been rising faster since 1996 than those in its neighbouring countries. The safety margin was put into the mix to allow for any projection errors relating to the expected trend in nominal labour costs in the neighbouring countries and indexation in Belgium. This margin is a minimum 0.5 percentage point for these two years, serves a preventative purpose only, and adds to the next available maximum margin if wholly or partly unused.

Ever since the Law came into force in 1996, upward and downward projection errors on indexation have been major in some years, because of the volatile components underpinning them.

The Law also specifies that, if the labour cost gap grows so wide as not to allow for its elimination within two years based on the prevailing outlook at the time, the government can take measures to safeguard competitiveness after seeking the advice of the social partners.

Since the 2017 amendment of the Law, the CEC has also been calculating other indicators for the competitiveness of Belgian companies, such as the absolute wage costs gap, both including and excluding productivity. The amended Law also stipulates that any calculation of the maximum available margin must also factor in an historical wage gap by way of the adjustment factor, i.e. the gap remaining after

Wage standard [1], expected and actual indexation



Sources: CEC, NBB.
1 Up until 2016: indicative wage standard for gross wage increases, excluding indexation. From 2017: binding maximum margin.
2 2015-2016: 0.5 % gross + 0.3 % of net compensation.
3 For 2021-2022, NBB projection dated December 2021.

addressing the one built up since 1996. To date, no agreement has been reached on the methodology to be used for calculating the historical wage gap. Although the social partners are unable to ignore these other gaps in their negotiations, the difference in hourly wage cost growth since 1996 continues to serve as the key reference.

Once agreed by the social partners, the maximum available margin for wage growth will be turned into the standard in a collective labour agreement by the National Labour Board before sector negotiations commence. If no agreement is reached, the federal government may set this margin by Royal Decree, and in both cases this maximum margin has legal force, and any breaches will incur a fine under the amended Law.

Inflation trends sparked a significant adjustment in the indexation figures for Belgium compared with the data available on the release of the CEC's technical report in January 2021, which had served as the basis for negotiation. With the wage margin already set for 2021-2022 and sector negotiations nearly complete, the review meant that labour costs for the period may have been underestimated. Based on an identical source for all four countries, i.e. the Eurosystem's macroeconomic projections, which draw on a joint framework and were all completed on 1 December 2021, cumulative wage cost growth between the start of the pandemic and the end of 2021 was less pronounced in Belgium than in the other countries. That said, Belgium's indexation mechanisms ensure that inflation rises are passed on more quickly than in its neighbouring countries, where nominal wage trends are the subject of negotiations between social partners. As this might affect the competitiveness of Belgian companies in 2022, it is up to the CEC to assess any such loss of competitiveness and to calculate expected nominal wage developments in the three neighbouring countries under the Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness, in order to establish whether any such a gap may be eliminated within the space of two years. If this is found to be impossible, the Law provides for appropriate measures to repair competitiveness (see box 1) in consultation with the social partners.

Cost of living trends quicker to be reflected in wages than in neighbouring countries

5. Financial developments

5.1 So far, businesses have managed to overcome the shock of the COVID-19 crisis

Imposed in March 2020 to contain the spread of coronavirus, the first business closures had triggered fears of a wave of bankruptcies and numerous job losses in the hardest-hit sectors. The main concern was not so much the resulting loss of turnover but rather the cash reserves that firms held at that point, which might be insufficient to cope with a prolonged absence of income streams. In fact, many firms still had to cover a range of expenses such as paying rent and suppliers' invoices, employees' remuneration, insurance premiums or the servicing of loans previously obtained from banks.

In a study already mentioned in its Report on the year 2020[1], the Bank estimated that around one in four Belgian firms could face a cash shortage at some point during the first wave of the pandemic, albeit to varying degrees. In practice, this means that those firms had to either obtain additional funds or negotiate payment deferrals with their suppliers or other creditors, in order to avoid a cash deficit which would have prevented them from meeting their short-term commitments.

More than a year after the coronavirus appeared in Belgium, and after the year 2021 had begun with a number of sectors of activity still closed down, the extensive government measures have thus far substantially limited firms' losses and cash flow problems, so that bankruptcies recorded in 2020 and 2021 actually dropped to historically low levels. Although corporate debt levels have not risen significantly overall, a number of firms – particularly those operating in the sectors most affected by the lockdowns – have seen their financial health deteriorate since the start of the COVID-19 crisis. The federal and regional authorities therefore set up various schemes to strengthen their balance sheets.

1 See Tielens J., Ch. Piette and O. De Jonghe (2021), "Belgian corporate sector liquidity and solvency in the COVID-19 crisis: a post-first-wave assessment", NBB, *Economic Review*, June.

The support measures continued to play a key role in 2021

Public authorities were very quick to realise the problems that the lack of cash could cause, and hence the threat facing a broad swathe of the economy. They therefore speedily introduced various support measures to enable firms to stay afloat.

As well as facilitating furlough arrangements for staff, some of these measures consisted in the grant of flat-rate allowances for firms suffering a substantial reduction in their turnover as a result of the lockdowns. Paid by the regional authorities, these allowances were granted tax exemption by the federal government. Other federal and regional aid, similarly in the form of allowances or tax exemptions, was targeted more at the sectors most affected by the lockdowns. For example, restaurateurs were granted a temporarily reduced rate of 6 % VAT on their purchases of food supplies, exemption from social security contributions, and corporation tax reductions. In addition, a number of general tax exemptions were introduced at federal level, such as the deduction of anticipated losses for 2020 from corporation tax, the investment deduction (to remain active until 2022), and tax concessions for landlords waiving their rent.

The financial sector also helped to attenuate the risks of cessation of payment due to the closure of some economic activities. In particular, it put in place a moratorium on the repayment of loans granted for an initial term of six months, which was extended several times before finally coming to an end on

30 June 2021. Apart from this moratorium, which was widely used by firms, the banks also provided businesses with liquidity simply by fulfilling their traditional role, either via credit facilities that already existed before the start of the pandemic or by granting new loans. Some of the latter were covered by two guarantee schemes set up by the federal government. The first automatically covered loans with a maximum term of twelve months, granted to viable businesses between March and December 2020. The second, activated in July 2020 and remaining in operation until 31 December 2021, concerned loans for a term of between 12 and 36 months (and up to five years with effect from January 2021). Under the second scheme, in contrast to the first, it was for the banks to decide whether to back the loan with a State guarantee. However, little use was made of these two guarantee schemes, probably because the cash flow problems of firms likely to use them had already been resolved in other ways. The banks also demonstrated some flexibility in relation to their debtors by allowing the rescheduling of repayment dates for a number of credit agreements.

While the repayment moratoria and State guarantees were conditional upon certain viability criteria, that was not the case for all the support measures. As already stated, the lump-sum allowances were essentially allocated to firms on the basis of the reduction in their turnover and/or the fact that they belonged to a branch of activity particularly badly affected by the lockdowns. Various reasons justify this government strategy, such as the prevention of escalating defaults on bank loans and excessive numbers of job losses, with the latter's potential implications for demand. However, it does have two drawbacks. First, it may create windfall effects, in that public funds may have been allocated to firms that did not need them to survive a temporary halt in their activities. That is the case, for example, if they could easily adjust their costs in line with the fall in sales, or if their business model enabled them to continue their business activity during the lockdowns. Also, it could hamper the "creative destruction" process by facilitating the survival of failing businesses. In the study mentioned above, it had been considered that, at the end of the first wave of the pandemic, 2 % of non-financial corporations were not viable before the pandemic erupted but had managed to make a profit at the end of the first wave thanks to the support measures (at least those for which the impact could be quantified). The annual accounts for 2020 which are now available seem to bear this out, because – as shown in box 1 – the impact of the COVID-19 crisis on firms' results and balance sheets was ultimately limited in that year. But the impact was greater on some businesses, notably those operating in the sectors most affected by the lockdowns.

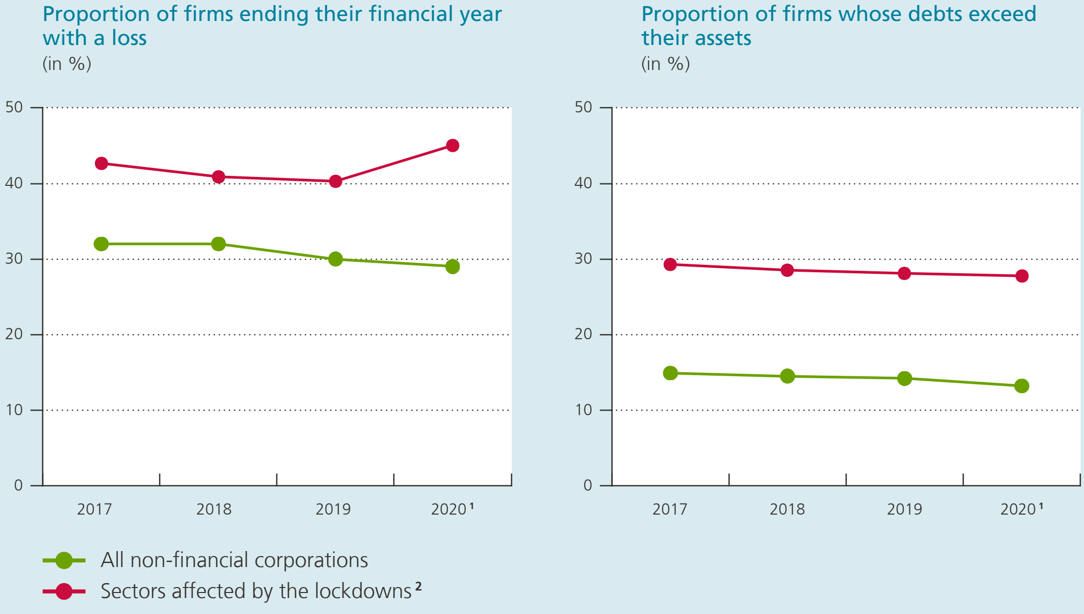
BOX 4

The impact of the COVID-19 crisis on the financial health of firms: an initial assessment

While the COVID-19 pandemic had a substantial impact on the turnover and gross operating surplus of many firms, its effect on the balance sheets of non-financial corporations still seems to be relatively modest overall. That is one of the lessons to be derived from an analysis of the corporate accounts drawn up for the year 2020.

Although many firms saw their profits shrink as a result of the interruption in their activities during the lockdowns, or in some cases owing to supply problems, the percentage that actually ended the year 2020 with a loss was not noticeably different from the figure for previous years. Estimated at 29 %, that proportion was actually slightly lower than in 2019. Moreover, as more firms were able to carry forward gains in their equity, that also had the effect of boosting their solvency. The proportion of firms whose debts exceed the value of their assets therefore also declined from 14 % in 2019 to 13 % in 2020.

The COVID-19 crisis did not cause any serious damage to firms' profitability and solvency



Source: NBB.
1 Provisional figures based on around 374 000 sets of annual accounts filed by non-financial corporations. For 2019, the population covered totals 431 000 companies.
2 Hospitality, personal services, transport, travel agencies, miscellaneous creative, cultural and sporting activities.

This situation, which may appear paradoxical in a crisis context, is probably due in part to the allowances and tax exemptions that businesses received in 2020, since the compensation paid in respect of the loss of turnover was recorded as operating revenue. Yet, it conceals wide disparities, particularly between branches of activity. Taken separately, the results of firms operating in the sectors hit hardest by the lockdowns definitely deteriorated in 2020 : 45 % of them ended the year with a loss, compared to 40 % in 2019. However, the proportion of firms facing a solvency problem remained stable.

As shown by Dhyne and Duprez (2021)[1], the impact of the COVID-19 crisis on firms' results not only varied from one sector to another but was also, and above all, heterogeneous between firms, even within a given branch of activity. While some firms saw their turnover fall dramatically in 2020, others recorded a much more moderate decline. There are also firms which saw their revenue increase, probably because their business model – e.g. specialising in online sales or in a specific category of products – enabled them to prosper. Another factor explaining the disparate impact of the crisis is that, despite easier recourse to furlough, the firms suffering a loss of turnover were not all able to reduce their consumption of intermediate goods and services proportionately.

1 See Dhyne E. and C. Duprez (2021), "Belgian firms and the COVID-19 crisis", NBB, Economic Review, September.

The combined impact of the various support measures on firms' cash flow and profitability was therefore also reflected in the number of bankruptcies recorded in Belgium. Compared to the average figures over the past ten years, there have been very few bankruptcies since the start of the COVID-19 crisis. Apart from the level of support – most of which continued to be granted during the third wave of the pandemic, i.e. in the first half of 2021 – that is also due largely to the moratorium on bankruptcies which was first introduced in April 2020 for a period up to 17 June in that year, and was then reinstated in November 2020 until January 2021. After that date, the tax authorities and the NSSO applied *de facto* moratoria on the payment of taxes and social contributions due. The NSSO waited until the autumn before again starting insolvency proceedings in the case of firms which failed to meet their obligations in that regard.

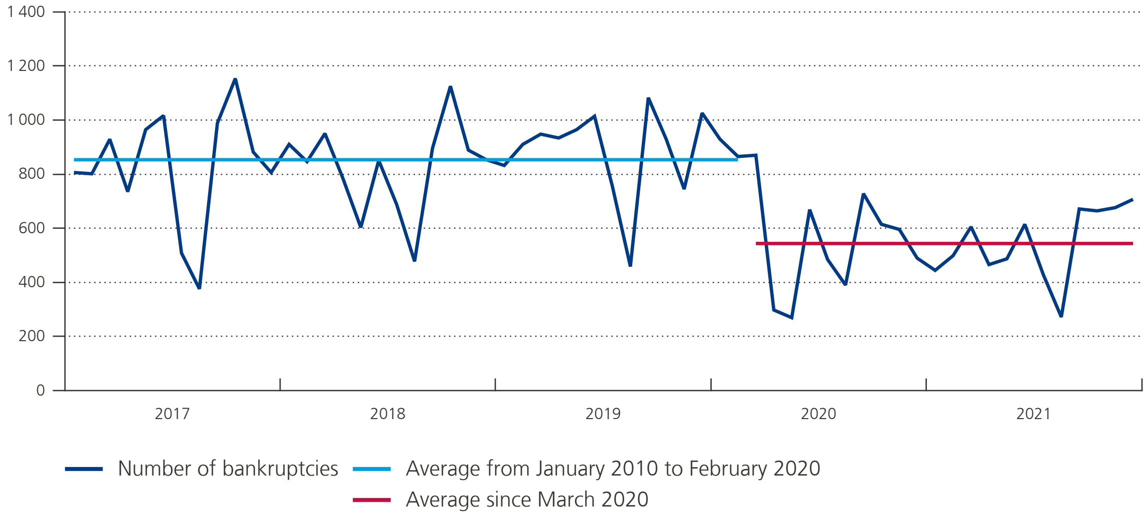
There have been very few bankruptcies since the start of the COVID-19 crisis

Although the various forms of government intervention undeniably enabled many businesses to survive the successive lockdowns, the amounts of the various allowances and tax exemptions were not always sufficient to cover the cash deficits in the case of some firms. They therefore needed to be able to rely on recapitalisation or medium- or long-term loans, to give them time to restore normal profitability and generate sufficient financial revenues to pay off their borrowings, while still having the resources needed to continue growing their business. To meet these needs, the government took steps to increase the supply of long-term finance. In 2020, the regional investment companies set up subordinated loan systems within the limits authorised by the temporary framework adopted by the EU. One of the latter's requirements is that certain viability criteria must be taken into account when granting funds to businesses affected by the crisis. Subordinated loans will also be granted by the Belgian Recovery Fund, the establishment of which was announced by the federal government in September 2021. That fund is co-financed by the Federal Holding and Investment Company and by institutional investors. The federal government also introduced tax incentives to encourage strengthening of the

Chart 5.1

The number of bankruptcies is still below the pre-pandemic levels

(monthly bankruptcy declarations [1])



Source: Statbel.

1 The data cover declarations of bankruptcy for individuals pursuing an occupation on a self-employed basis, legal persons, and organisations without legal personality.

capital of firms hit by the crisis. These include a tax exemption equivalent to the losses incurred in 2020 on revenues generated between 2021 and 2023 if they are allocated to the reserve. In addition, a "tax shelter" type of personal income tax reduction was granted for investment in share capital in firms suffering a loss of at least 30 % of their turnover between mid-March and the end of April 2020. In view of the persistence of the pandemic, the federal government decided to extend this last measure adopted in April 2020, widening its scope to include firms whose turnover contracted by 30 % or more between mid-March 2020 and the end of August 2021.

Nevertheless, whether granted by the financial sector or by public investment companies, long-term loans are not accessible to all businesses. That is the case, for example, if firms do not meet certain viability criteria, as that could cast doubt on their ability to service a new loan. It is also possible that such a loan might push their debt to a level detrimental to their solvency, for example if they do not have sufficient assets to pledge as security for potential lenders. In such cases, financing needs have to be resolved via funds contributed in the form of current account advances by the directors, partners or shareholders of the undertakings concerned.

Long-term loans are not accessible to all businesses

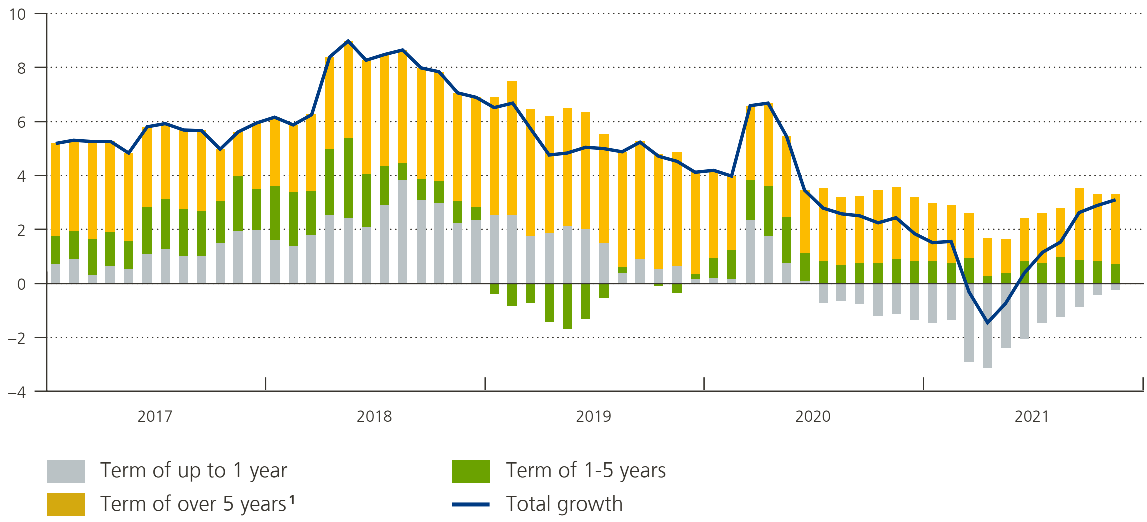
The growth of bank lending picked up at the end of the year

Lending to businesses continued to decline during the initial months of 2021, maintaining the trend which had emerged at the beginning of the summer in 2020. According to the results of the bank lending survey (BLS) covering the four largest banks active in Belgium, that trend was due partly to the decline in investment and, to a lesser extent, to a reduction in working capital requirements. The latter also meant that loans of up to one year made a negative contribution to the total growth of bank lending. Another factor which may have affected lending to businesses concerns loan criteria, which have become progressively stricter since the start

Chart 5.2

The growth of business loans picked up in the second half of 2021

(growth of loans by resident banks to non-financial corporations, annual percentage change and contributions)



Sources: ECB, NBB.

1 Including loans securitised or otherwise transferred.

of the COVID-19 crisis, owing to the increase in credit risks and lower credit risk[1]. In addition, credit growth fell to a low point between March and April 2021, owing to a base effect. This concerns the distorting effect of the peak which had occurred in the corresponding period of 2020, as credit growth rates are usually expressed in year-on-year terms. That growth peak was due to the temporary use of credit lines by a small number of large companies which were trying to boost their liquidity position at that time.

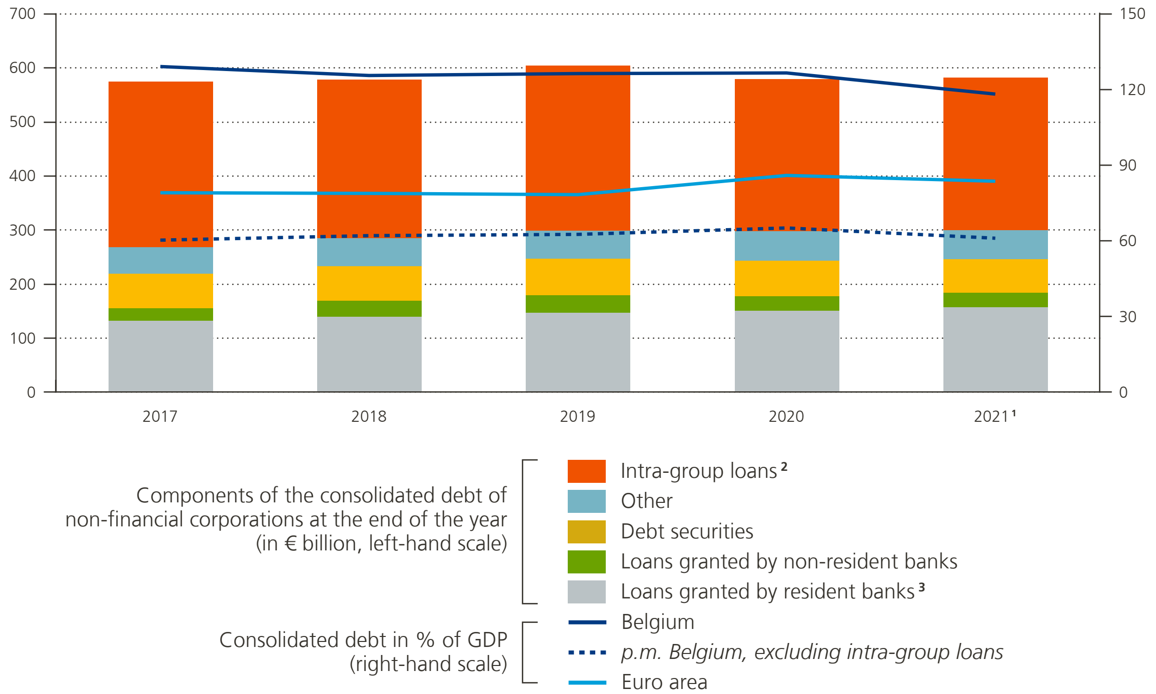
The growth of lending to businesses became positive again from June 2021. In November, it came to 3.1 % year-on-year. This can be viewed in the context of the revival in activity during the year which, according to the BLS findings, gave rise to additional demand for loans to finance new investment, stocks and working capital needs. Nonetheless, the credit growth recorded at the end of 2021 falls short of what was seen in the two years preceding the outbreak of the COVID-19 pandemic.

Overall, according to the financial accounts data, the debt of Belgian non-financial corporations to resident banks increased by € 6.7 billion in the first nine months of 2021, to reach € 157.9 billion at the end of September (including securitised loans). The outstanding amount of loans obtained from non-resident banks expanded by € 160 million over the same period. This year, the amount of debt securities repaid at maturity far exceeded the level of new issues, so that the outstanding amount was down by € 4 billion. Intra-group financing obtained from non-resident entities or non-institutional lenders expanded by € 744 million. If loans by other financial intermediaries and the government are included, the total consolidated debt of Belgian non-financial corporations came to € 582.1 billion at the end of the third quarter of 2021, or 118.2 % of GDP, compared to € 578.5 billion (126,6 % of GDP) at the end of 2020. Taking account of the level of intra-group financing in Belgium, that is still well above the figure for the euro area as a whole. If that component is excluded, the consolidated debt came to 61.1 % of GDP at the end of September 2021.

1 The tightening of conditions for accessing bank lending since the beginning of 2020 is also confirmed by the Bank's quarterly survey of firms' assessment of credit conditions.

Chart 5.3

The total debt of non-financial corporations remained relatively stable



Sources: ECB, NBB.

1 Data relating to the situation on 30 September 2021.

2 Intra-group loans are defined as loans granted by captive money lenders and by the foreign non-financial sector. The debts of resident non-financial corporations to other resident non-financial corporations are disregarded.

3 Including loans recorded as assets on the balance sheet of securitisation vehicles.

5.2 The situation of households is mixed, with some facing greater insecurity while others have to decide between financial investment or investment in property

While the crisis took a heavy toll on some groups of households (which suffered loss of income combined with the erosion of their savings), others – having less opportunities for consumption – were able to build up their assets and invest in the financial markets and property. Staging a strong recovery, the Belgian property market, like that in other European countries, experienced a boom in prices which made housing less affordable. At the same time, household debt – though still rising – seems to be under control (improvement in loan quality and low default rates).

The vulnerability of some groups has increased …

The public health crisis has varied in its repercussions from one household category to another. Not all households have emerged in a stronger financial position after the months of lockdown or restrictions. The aggregate data obtained from the financial accounts mask that reality. The use of data from surveys, such as the Bank's monthly consumer survey, which was supplemented by questions designed to measure the impact of the COVID-19 crisis on households' financial situation, can therefore shed light on questions concerning the differing real-life situations [1].

While a large proportion of households experienced little (less than 10 %) or no loss of income as a result of the crisis, a certain section of the population did suffer in that way, though the number has fallen as the months go by (for more details, see chapter 3). In particular, the survey data (variables available only since the start of the crisis) reveal that, for those households, opportunities for saving steadily disappeared and their savings buffer collapsed. Thus, since April 2021, a stable proportion of one in twenty households (compared to one in ten at the start of the pandemic) stated that they still had to contend with a loss of income in excess of 10 % and only had enough savings to cover current expenses for a maximum of three months. The gradual exhaustion of their savings has therefore made these households particularly vulnerable and increased their risk of hardship.

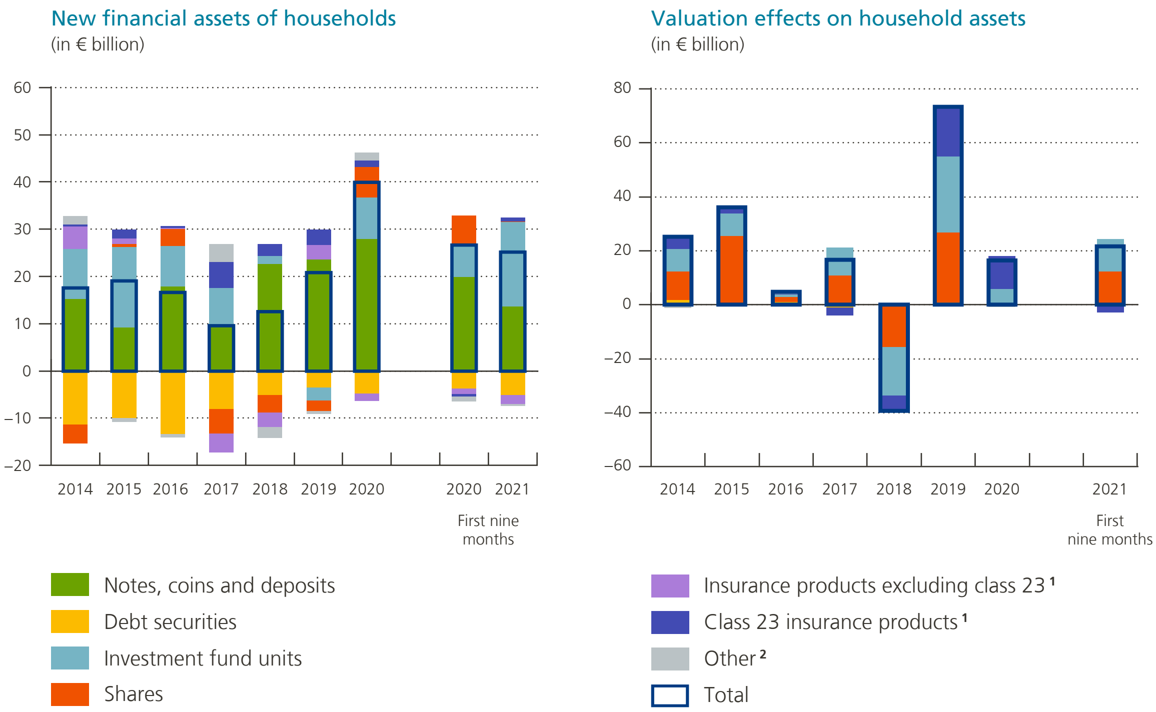
… although the financial position is better overall

However, in overall terms, after the health crisis had been going on some for months, the financial position of Belgians was better than before. The lack of opportunities for spending during the lockdowns or in periods of travel restrictions due to the COVID-19 pandemic led to a substantial rise in financial assets in 2020. That trend continued during the first nine months of 2021, with new financial investment during that period practically matching the volume increase recorded in the first three quarters of 2020.

1 For more details, see Statistical Focus (2021), "Impact of the COVID-19 crisis on household incomes and savings: results after one year in the light of the consumer survey", NBB, April.

Chart 5.4

Households continued to display an interest in medium-risk investments, which also went up in value in 2021



Source : NBB.
1 This item includes the net claims of households on technical insurance reserves, pension funds and standard guarantee reserves.
2 In the left-hand section of the chart, this item comprises, in so far as they have been recorded, trade credit as well as miscellaneous assets of general government and financial institutions. In the right-hand section of the chart, this item also covers notes, coins and deposits and insurance products not ranked under class 23.

Households also put part of their savings into riskier financial assets, to a greater extent than in the previous year : while money was still placed in accounts and deposits, Belgians also favoured investment funds in 2021, in contrast to debt securities and insurance products without a capital guarantee (class 23). The continuing deep-seated preference for liquid assets may also reflect a propensity for precautionary savings in the context of escalating prices of consumer goods, particularly energy.

Some household savings went into riskier financial products

Apart from new investment, existing financial assets benefited from positive valuation effects in the first nine months of 2021 as a result of rising prices on the financial markets. Households owning equities and investment funds thus made an extra € 22 billion approximately.

Taking account of transactions and valuations, the financial assets (excluding debts) of households in Belgium therefore rose by almost € 46 billion between January and September 2021, climbing to € 1 507 billion (+3.1 %), which is more or less stable in real terms. Apart from the financial component, household wealth also includes property assets which, according to the available data, reached almost € 1 800 billion at the end of the third quarter of 2021. Over the first three quarters of 2021, that represents a rise of 8.5 % compared to the corresponding period of the previous year. The escalating value of property assets is due to both the new investment made by individuals and the rapid rise in house prices.

House prices rose steeply

In 2021, the housing market saw a strong revival in activity after the number of transactions had fallen sharply at the beginning of 2020 owing to the COVID-19 pandemic, but also the abolition of the housing bonus in the Flemish Region on 1 January in that year. The growth of real estate activity which began in the second quarter of 2020 continued overall during the first three quarters of 2021, with a bounce of 36.2 % compared to the corresponding period of the previous year. In addition, in the third quarter of 2021, the number of transactions was 8.6 % higher than the level of activity recorded two years previously, i.e. before the COVID-19 pandemic and the impact of the aforesaid tax reform.

Price growth accelerated again in 2021, reaching 8.5 % over the first three quarters compared to the corresponding period of the previous year. The price rise therefore exceeds that seen in 2020 (5.8 %) but is also above the average for the three previous years (3.7 %). This is in fact the strongest rise since 2007. Taking account of inflation, the real rise in house prices is still significant, with a year-on-year increase of 7.1 % over the first three quarters of 2021.

This rise in house prices was general, in that it was evident in all three Regions of the country on a similar scale: over the first three quarters of 2021, the year-on-year increase came to 8.6 % in the Flemish Region, 8.7 % in the Walloon Region and 6.6 % in the Brussels-Capital Region. It also concerned all types of housing, with prices of ordinary homes rising by 8.9 % over the same period, while villas and apartments went up by 9.1 % and 7.4 % respectively.

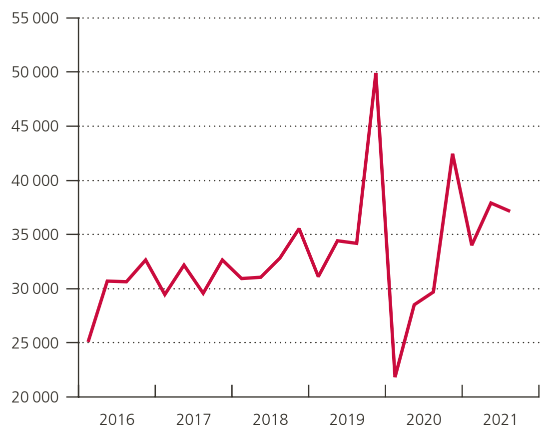
Except in a few countries, particularly Spain and Italy, property prices also displayed a marked rise in the euro area. On average, they increased by 6.3 % during the first three quarters of 2021, exceeding the rise in previous years. Although prices in Belgium went up by more than the euro area average, the rise was still smaller than that recorded in many European countries over the same period, such as Germany (9.9 %), Austria (10.8 %), the Netherlands (12.2 %) and Luxembourg (15.3 %).

Apart from the fall in mortgage interest rates which, all other things being equal, boosts demand for housing, the persistence of the general low yield environment and the associated search for yield also bolstered the property market in 2021

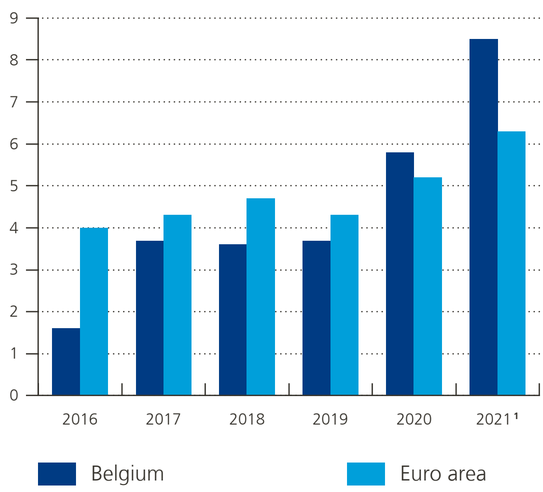
Chart 5.5

In 2021, the growth of real estate activity and house prices continued

Number of transactions on the secondary market



Residential property prices
(percentage annual change)



Sources: Statbel, NBB.
1 First three quarters.

and contributed to the rise in property prices, especially as the tax rules on securities accounts were amended in Belgium, reducing the attractiveness of that type of investment. More specifically in the case of the primary market, the price of new builds was propelled higher by the rising cost of building materials, with the ABEX index up by 4.6 % in 2021, the biggest rise in 13 years and more than one percentage point higher than the average for the three preceding years.

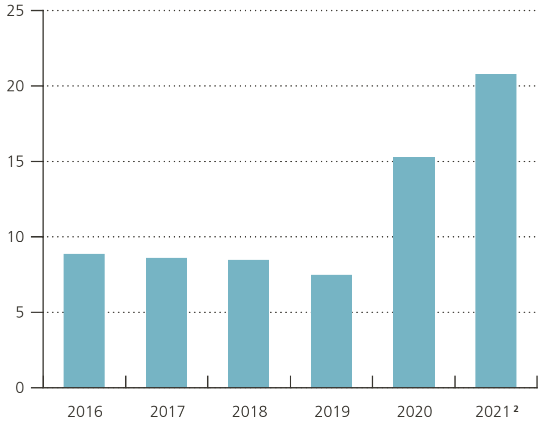
However, the 2021 rise in property prices cannot be explained entirely by the main market determinants, namely average household disposable income, mortgage interest rates, demographics and changes in property taxes. In 2021, the degree to which market prices deviated from their reference value – i.e. the value determined by the said factors – rose to an average of 20.8 % during the first three quarters. It is also worth noting that the house price boom is not attributable to a change in the composition of the transactions since the COVID-19 pandemic, as the share represented by detached houses and the average size of gardens, the average habitable area and the average energy efficiency of the buildings have expanded very little since the revival of real estate activity in the third quarter of 2020, and that is in line with a pre-existing trend.

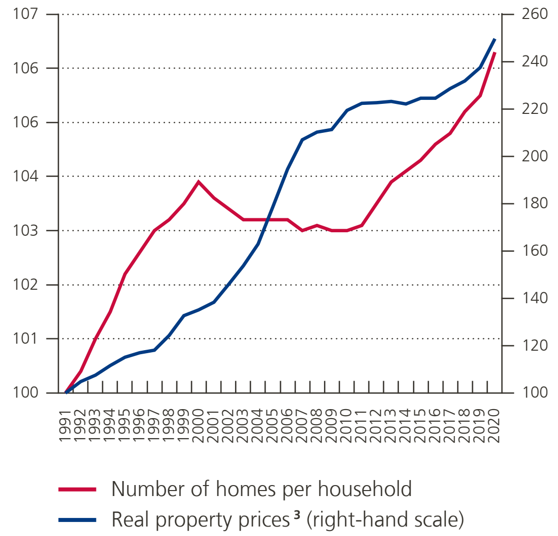
Growth of property prices accelerated again in 2021

On the supply side, all the statistics point to a further expansion of the housing stock in 2021, as residential investment and value added in the construction industry recorded a marked rise. In fact, conditions have generally been favourable to investment in property and the construction of new housing : mortgage interest rates have remained at historically low levels, keeping down the cost of financing such investment, and – as property prices

Chart 5.6

The rise in property prices cannot be attributed entirely to the main market determinants





Sources: Statbel, NBB and own calculations.

1 See Warisse Ch. (2017), "Analysis of the developments in residential property prices: is the Belgian market overvalued?", NBB, *Economic Review*, June, 61-77.

2 Average of the first three quarters.

3 Deflated by the private consumption deflator.

have outpaced the rise in construction costs – the apparent profitability of investing in new housing has again improved.

While the expansion of the housing stock is a factor that may moderate the rise in property prices, particularly if it outstrips the increase in the number of households as was the case at the beginning of this century, the recent increase in supply has instead been accompanied by a marked rise in house prices, suggesting that it is mainly demand factors that are driving the property price boom.

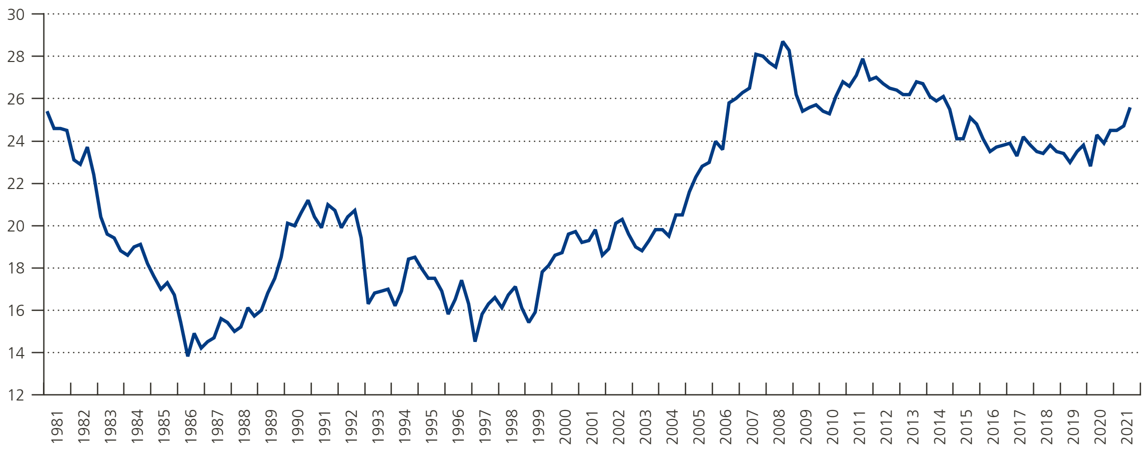
The affordability of property has diminished somewhat

The surge in property prices has also made property somewhat less affordable. The estimated share of households' net disposable income that has to be spent on repaying a new mortgage loan – with a loan-to-value ratio of 80 % and a term of 20 years – amounted on average to 24.9 % during the first three quarters of 2021. Although that is higher than the peak reached in 2020 (23.9 %), it is still below the peak of 28.7 % recorded in the third quarter of 2008, just before the eruption of the global financial crisis. The recent increase in house prices has therefore had a greater impact on households' ability to repay a mortgage loan than the rise in incomes and the maintenance of low interest rates.

Chart 5.7

The rise in house prices has reduced affordability to some extent

(share of households' net disposable income spent on repaying a new mortgage loan[1], in %)



Source: NBB.

1 This indicator is based on the assumptions that a mortgage loan has an average term of 20 years and that it is granted to finance 80 % of the value of the property purchased. Repayment is assumed to take the form of annual instalments and takes no account of any tax deductibility of the loan.

Debt levels have increased but remain under control

The growth rate of household lending has continued to rise, and that trend has been accentuated as the months go by, propelled by home loans. These developments were facilitated by the accumulation of capital during the health crisis, which also permitted investment expenditure financed by borrowing. In addition, reflecting the surge in property prices, the average amount borrowed for the purchase of a home increased significantly, and at a faster pace than in previous years, rising from € 135 100 at the end of 2020 to € 144 300 in November 2021. Overall, taking new investment and price rises together, the annual rate of change in home loans, which came to 4.4 % at the end of 2020, peaked at 6.4 % in September 2021, before subsiding slightly to 6.1 % in November. Between January and November, new loans had been issued for a net total of € 12.5 billion.

The historically low interest rates – rates on ten-year mortgage loans remained below 1.40 % throughout the year – undoubtedly helped to stimulate demand, as stated by the banks in the BLS, while considering that other factors probably also played a role, such as the outlook for the property market and consumer confidence.

Credit conditions remaining relatively strict contributed to the improvement in the overall quality of mortgage loans

At the same time, defaults on both mortgage loans and consumer loans have remained low. Default rates on home loans which benefited from the moratorium introduced by the banks on account of the COVID-19 pandemic up to the end of June 2021 continued falling until then before stabilising at 0.7 % in the ensuing months. Default rates were similarly restrained in the case of other types of loans to households.

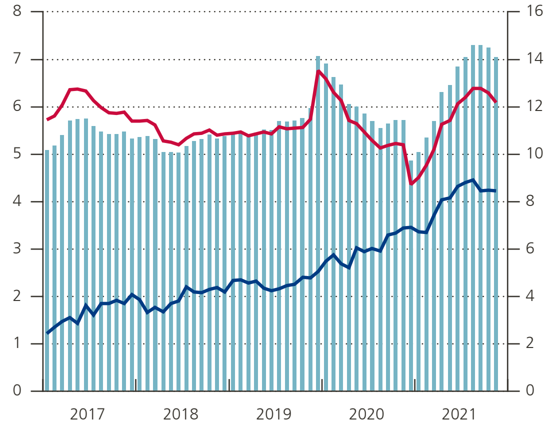
The rise in amounts borrowed by households coinciding with the decline in default rates may reflect preventive behaviour on the part of banks, more willing to lend to households with better collateral and borrowing capacity. That trend had already been apparent in 2020.

On the credit supply side, at the beginning of the year, the banks polled in the BLS reported a slight easing of their mortgage loan conditions, owing to a downward revision of the risk perception. That essentially took the form of a reduction in the margins

Chart 5.8

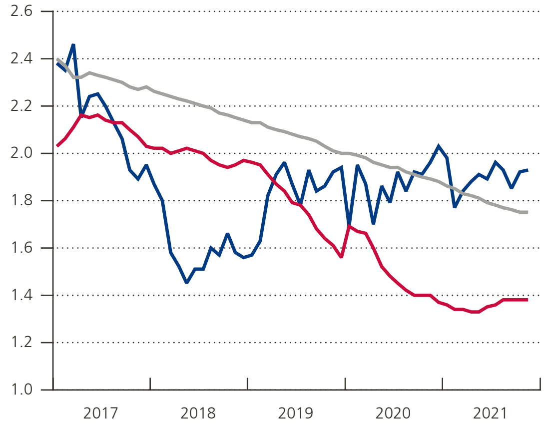
Household debt increased, driven up by mortgage borrowing

Growth rate of mortgage loans
(in %, unless otherwise stated)



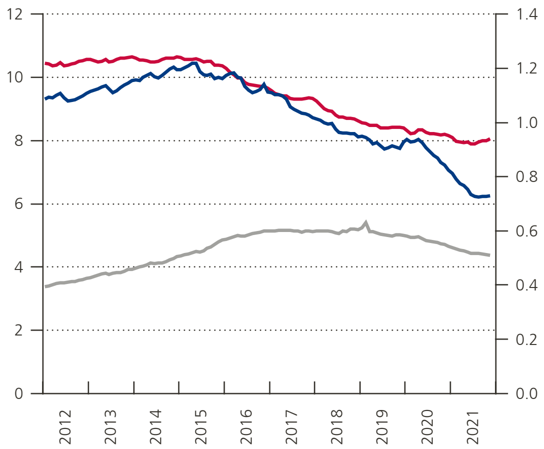
Cumulative net monthly flows over 12 months (in € billion) (right-hand scale)
Annual growth rate – Belgium
Annual growth rate – euro area

Interest rate on mortgage loans
(in %)



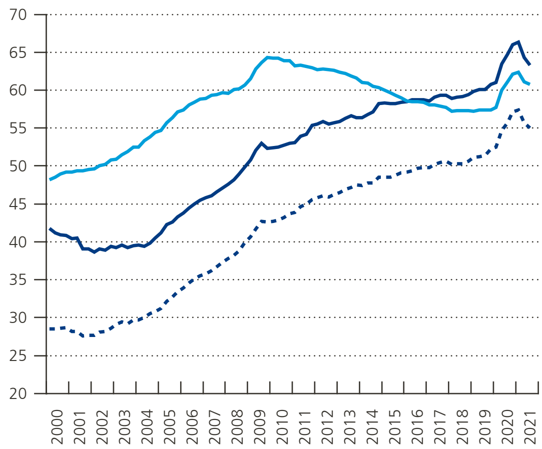
Variable rate, initial rate fixed for less than 1 year
Initial rate fixed for longer than 10 years
Average interest rate on current loans with a residual term of more than 5 years

Default rate on household loans
(in %)



Instalment plans
Credit lines
Mortgage loans (right-hand scale)

Household debt
(in % of GDP)



Belgium
Of which: mortgage debt
Euro area

Sources: ECB, NBB.

on standard loans while the other credit conditions (maturity, collateral, loan volume and charges other than interest) remained unchanged. After that, lending conditions remained unchanged during the following three quarters. Over the year as a whole, they were therefore still relatively strict, taking account of the repeated tightening in 2019 and 2020. In practical terms, the result was an improvement in the loan-to-value (LTV) ratio which relates the amount borrowed to the value of the property purchased.

The banks' tightening of credit conditions relating to the LTV ratio of new mortgage loans is due to the prudential expectations announced by the Bank at the end of 2019 (see also box 5). In comparison with previous years, far fewer loans with a high LTV ratio were therefore concluded in 2020 and in the first half of 2021. In introducing these measures, the Bank aims to protect new borrowers from excessive debt and to ensure that the risks in the mortgage loan portfolios of financial institutions do not continue to rise.

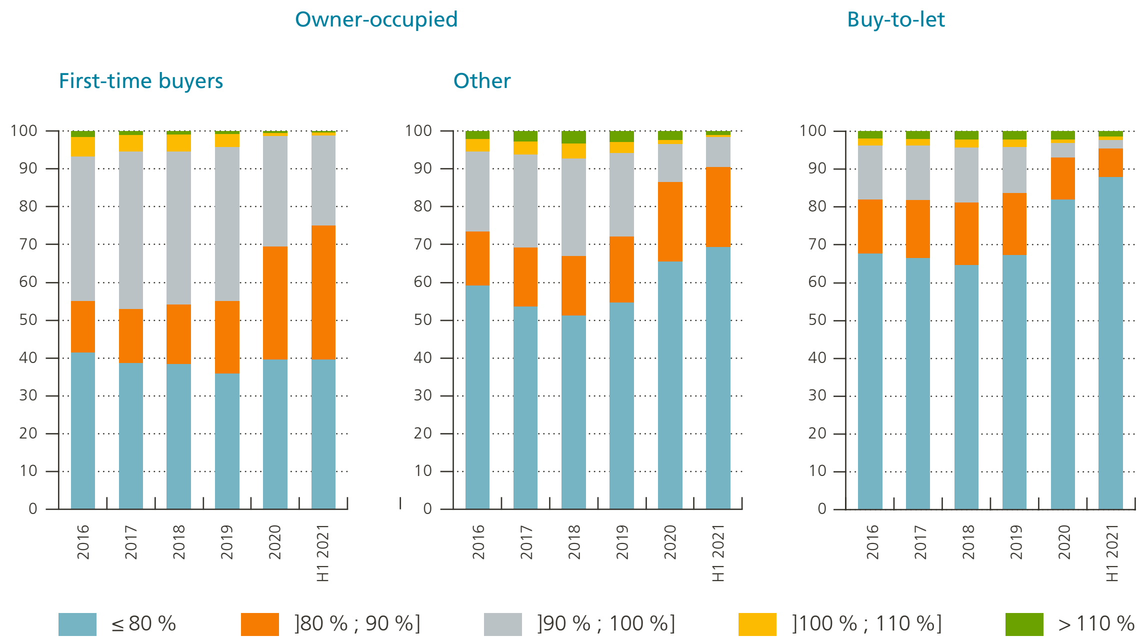
The Bank's recommendations distinguish between loans granted for the purchase of an owner-occupied property and those for the purchase of a buy-to-let property. In the latter – riskiest – category, only 12 % of new loans concluded in the first half of 2021 still had an LTV ratio of more than 80 % (the reference value applied by the Bank for this type of loan). In 2018, that proportion had still amounted to 35 %. In the case of new owner-occupied loans (except to first-time buyers), only 9 % still had an LTV ratio of more than 90 % (reference value), compared to 33 % in 2018. In the case of first-time buyers, the proportion of loans with an LTV ratio of more than 90 % dropped from 46 % in 2018 to 25 % in the first half of 2021. According to the Bank's recommendations, which are less strict for first-time buyers, 35 % of these loans can exceed the LTV limit of 90 %. The fact that institutions did not make full use of the available tolerance margins for granting loans with a high LTV ratio also indicates that demand for such loans has fallen since the measures were introduced. Also, the Central Individual Credit Register figures show that the proportion of young borrowers (under the age of 35 years) has been stable at around 35 % in recent years. These findings together with the loan dynamics therefore show that the Bank's prudential expectations are sufficiently flexible for the mortgage market to remain accessible to first-time buyers.

While household debt does not show any particular signs of fragility overall, it peaked at € 326.6 billion

Chart 5.9

Fewer loans with a high LTV ratio in 2020 and in the first half of 2021 than in previous years

(breakdown of new mortgage loans according to the LTV ratio, in % of the total)



Source : NBB.

in September 2021, representing a 3.5 % increase against the end of 2020. Mortgage debt made up the bulk of lending to individuals (86.9 %). Although debt levels declined in relative terms as a result of the recovery of GDP in the first two quarters of 2021, they nevertheless remained above the euro area average. Thus, household debt in Belgium fell from 66.0 % of GDP at the end of 2020 to 63.3 % at the end of September 2021, while in the euro area it averaged 60.8 % of GDP at that time. In Belgium, debt also remained at a level well above the plateau reached in 2018 and 2019 (average of 59.7 % of GDP).

BOX 5

Macroprudential measures

In March 2020, in its capacity as macroprudential authority, the Bank decided to release the countercyclical capital buffer. That buffer is built up in times of dynamic lending to give banks sufficient room for manoeuvre when economic conditions deteriorate. The macroprudential policy stance thus switched from a phase of preventive build-up of capital buffers to crisis mode in which some buffers were released. Since the outbreak of the COVID-19 crisis, it has been important for the supervisory authorities to safeguard the resilience of the banking sector and to ensure that the banks can continue to perform their role of lending to businesses and households. In addition, to make sure that the available bank buffers are used primarily to support the economy, the importance of a prudent dividend distribution policy was emphasised from the macroprudential perspective, in addition to the microprudential recommendations on that subject.

Although the economic conditions improved during the year under review, the Bank has not yet decided to rebuild the countercyclical capital buffer. Furthermore, it has stated that it has no plans to do so before the second quarter of 2022, so long as there are no major deviations from the current expectations concerning loan losses and credit growth, in particular. The Bank is keeping a close watch on these developments.

The Bank also closely monitors developments on the housing market. For some years now, it has required the Belgian banking sector to maintain a specific macroprudential capital buffer for real estate risks, owing to the banks' substantial exposure to that market in the form of mortgage loans. In May 2021, that measure was extended for a further year. In the event of problems on the property market, banks can use the buffer – amounting to around € 2 billion for the sector as a whole – to absorb losses due to default and to be proactive in proposing sustainable solutions for borrowers facing payment difficulties. That reduces the risk of a housing market crisis erupting in the wake of a substantial rise in the number of defaults and evictions. So long as the vulnerabilities on the market persist and there is no sign of the risks materialising, e.g. via increasing payment difficulties, the Bank will maintain this buffer for real estate risks.

At the beginning of 2020, alongside this capital buffer, the Bank issued prudential expectations for institutions granting mortgage loans. Those recommendations were also maintained following the outbreak of the COVID-19 crisis. They aim to improve the average credit quality of new mortgage loans because, in recent years, the proportion of risky loans has risen significantly, and that may lead to substantial loan losses in the event of a negative shock. In 2021, for the first time, institutions had to report to the Bank on their compliance with the recommendations for any new mortgage loans granted in 2020. The sharp fall in the percentage of loans with a high LTV ratio (see chart 5.9) indicates that the recommendations were indeed complied with overall. At the same time, the persistent dynamism of mortgage lending and the fact that the available tolerance margins for granting loans with a high LTV ratio has not been fully used, show that these recommendations leave sufficient room for manoeuvre so that the mortgage market remains accessible to solvent borrowers, including young purchasers and first-time buyers (for whom the recommendations are the most flexible).

5.3 In 2021, the COVID-19 crisis had a more limited impact on the banking sector than initially expected

So far, the Belgian banking sector has stood up well to the challenges which it has faced following the eruption of the COVID-19 pandemic. At the start of the crisis, it was expected that the sector would have to contend with a wave of defaults, but up to now those fears have not been borne out. The reason lies mainly in the effectiveness of the various support measures and the improvement in economic conditions. In addition, the banking sector's robust financial situation has enabled it to provide support to the economy by lending to businesses and households and by granting payment deferrals or other forms of loan restructuring for borrowers encountering financial problems. The sector thus helped to absorb the shock and was not itself the source of the problems, as it had been at the time of the 2008-2009 financial crisis. However, the risks have not entirely gone away. New waves of the pandemic are creating uncertainty over the speed and strength of the economic recovery, so that credit risk remains a point of attention. Moreover, the banking sector still faces some pre-existing challenges, such as the low interest rate environment, business model sustainability, and digitalisation.

The Belgian banking sector was able to support the economy

During the first nine months of 2021, the outstanding volume of loans in the Belgian banking sector increased by € 7 billion in the case of businesses and € 15 billion for households [1]. Most of these are loans to Belgian counterparties, but they also include loans to borrowers on banks' main foreign markets.

1 Excluding some one-off movements occurring in certain banks, such as those due to a change in one bank's prudential consolidation scope, and those resulting from the sale of a loan portfolio by another bank.

At the end of September 2021, the sector therefore recorded an outstanding total of € 333 billion in loans to households and € 265 billion in loans to businesses, representing 50 % of the total assets on its balance sheet.

This new credit growth in uncertain economic circumstances was possible thanks to the ample amount of buffers available in the Belgian banking sector. Those buffers, which were already high at the start of the COVID-19 crisis, have expanded further as a result of the measures introduced since then. The prudential measures, such as the restrictions on dividend distribution or the release of accumulated buffers, boosted the available capital buffers while the monetary policy measures – particularly the easing and expansion of the TLTRO programme – led to an increase in the banking sector's funding resources and liquidity buffers. In September 2021, the average core capital ratio (CET 1 ratio) in the banking sector came to 17.7 % and the liquidity coverage ratio (LCR) stood at 180 %, compared to 15.6 % and 141 % respectively at the end of 2019. The size of these buffers offers the banks greater room for manoeuvre, enabling them among other things to absorb loan losses and be proactive in proposing debt restructuring without having to make drastic cuts in their lending.

The banking sector was not only able to continue granting new loans but could also grant payment deferrals in the case of existing loans to borrowers facing (temporary) financial difficulties. Some of these deferrals came under the agreement concluded by the sector with the federal government which, after having been extended several times, came to an end in June 2021. The banks also offered specific payment deferrals on an individual basis and other types of debt restructuring. This largely avoided defaults resulting from a temporary loss of income for businesses and households.

So far there have been fewer defaults than feared …

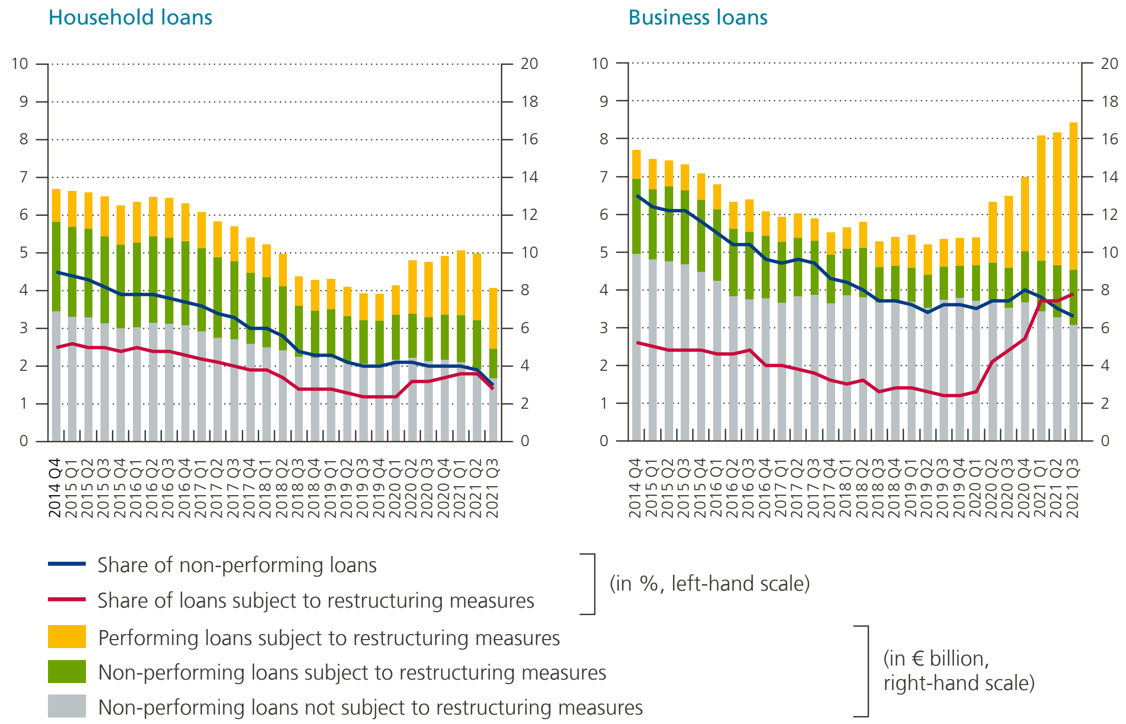
At the start of the crisis, the expectation was that banks would face a wave of defaults on their outstanding loans as a result of an increase in the number of bankruptcies and the unemployment rate. So far, those fears have not materialised. In the last quarter of 2020, it must be said that business loans presenting existing or expected payment arrears (known as non-performing loans) had risen to € 10.1 billion, or 4 % of total business loans. Nevertheless, that rise did not continue in the first nine months of the year under review, as non-performing loans subsided to € 9.1 billion (or 3.4 %) in September 2021. Households' non-performing loans remained relatively stable at around € 6.7 billion, or 2 % of all loans to households. Their sudden fall in September 2021 – to € 4.9 billion, or 1.5 % – is due to the sale of a (foreign) portfolio of non-performing loans by a Belgian bank.

Conversely, since the start of the COVID-19 crisis, the number of loans granted a specific repayment deferral on an individual basis or an extension of the term on account of the borrower's financial difficulties has risen sharply. These restructuring measures can be applied to (non-) performing loans if that is likely to help enable borrowers to honour their payment obligations (again). In September 2021, such measures were applicable to € 4.8 billion of

Chart 5.10

Fewer non-performing loans [1], but more loans subject to restructuring measures [2]

(in % of total outstanding loans on the left-hand scale ; in € billion on the right-hand scale)



Source : NBB.

1 Non-performing loans are loans which will probably not be repaid owing to the borrower's financial problems, or loans which are already in arrears of payment.

2 Loans subject to restructuring measures are loans for which the banks have granted concessions (e.g. in the form of repayment deferral or an extended term to maturity) to debtors facing financial difficulties. According to the EBA guidelines on payment moratoria, a general postponement of payment (moratorium) which meets the criteria is not regarded as a renegotiation or restructuring measure (EBA/GL/2020/02, amended by EBA/GL/2020/08 and EBA/GL/2020/15).

household loans (1.4 % of the total) and € 10.7 billion of business loans (4 %). Before the crisis broke out, they only applied, respectively, to € 3.7 billion (1.2 %) and € 3.1 billion (1.2 %) of these loans (at the end of 2019). The increase in restructured loans mainly concerned borrowings on which there were as yet no (long-term) arrears of payment. This shows that the banks were proactive in offering this type of solution to borrowers facing (temporary) financial problems in order to limit the losses and avoid defaults. Combined with the general deferral of payment (moratorium), these measures have so far helped to curb the expected steep rise in non-performing loans, so that loan losses should be lower than initially expected.

… but the possibility of credit risks materialising is still not ruled out

Nonetheless, some borrowers and sub-segments of outstanding loans still display vulnerabilities. Firms and workers in the sectors hardest hit by the measures to contain the pandemic or currently confronted by structural changes, such as accelerating e-commerce or the spread of remote working, present a greater risk of default. Moreover, new waves of the pandemic are causing some uncertainty over the speed and vigour of the economic recovery, so that the possibility of a future materialisation of credit risk for vulnerable borrowers cannot be ruled out.

The picture for each branch of activity shows that the hospitality sector and the events sector are where non-performing loans have risen the most. In hospitality, in particular, the proportion of loans with existing or expected arrears of payments remained high in September 2021 (8.9 %), after having risen more or less continuously since the end of 2019 (5.9 %). In the events sector, too, non-performing loans have increased from 4.1 % at the end of 2019 to 5.1 % in March 2021. Nevertheless, they have since subsided, dropping to 4.5 % in September 2021. In the Belgian banking sector, the outstanding total of loans to these two branches is admittedly fairly small. In September 2021, it stood at € 6.3 billion, or barely 2 % of all business loans.

The banking sector still has a substantial and growing exposure to the Belgian residential and commercial real estate markets. In September 2021, the banks' balance sheets showed € 243 billion in Belgian mortgage loans and € 48 billion in loans to Belgian businesses operating in the construction and real estate sectors, together representing no less than 25 % of their total assets. A shock to this market caused, for example, by a rise in unemployment or a fall in house prices or commercial property prices, could trigger substantial loan losses for the banks. That is why the Bank keeps a close eye on the property market situation (see also box 5).

Profitability restored …

Over the first nine months of the year, the Belgian banking sector made a net profit of € 5.3 billion, representing a return on equity of 9.2 %. In the previous year, profitability in the corresponding period had been considerably lower (a net profit of € 2.7 billion and a return on equity of 5.0 %), mainly because of the additional provisions that the banks had built up to cover the expected increase in loan losses in the aftermath of the COVID-19 crisis.

However, as payment defaults have so far been fewer than feared, the banks only recorded minor additional provisions over the first nine months of 2021. Some of them have actually already reversed part of their previously booked provisions, and that has had a favourable impact on the profit and loss account. The net volume of impairments and provisions therefore came to just € 0.2 billion, compared to € 2.5 billion in the corresponding period of the previous year. Consequently, the loan loss rate – which corresponds to the ratio between new loan loss provisions and the total volume of loans – fell sharply, dropping to 2.3 basis points. In 2020, this rate still came to 35 basis points.

The banks only recorded minor additional provisions and have even already begun to reverse part of the previously booked provisions

The gross operating result before impairments and provisions remained stable compared to 2020, at € 6.3 billion. However, there were several differences in its composition. The net result on fees and commissions came to € 4.8 billion, up sharply against the corresponding period of the previous year (€ 4.1 billion), thanks to the higher fees received by banks for their asset

Table 5.1

Income statement of Belgian credit institutions

(consolidated data, in € billion)

					First nine months[3]	
	2017	2018	2019	2020	2020	2021
Net interest income	14.1	14.4	14.6	14.2	10.7	10.8
Non-interest income	8.9	8.3	8.5	7.9	6.0	5.7
Net fee and commission income[1]	5.6	5.6	5.6	5.6	4.1	4.8
Net realised gains and losses on financial instruments	0.9	1.2	0.5	0.0	−0.2	0.5
Other non-interest income	2.5	1.5	2.4	2.3	2.1	0.4
Operating income	23.0	22.7	23.1	22.1	16.7	16.5
Operating expenses	−13.4	−13.9	−13.7	−13.5	−10.5	−10.1
Gross operating result (before impairments and provisions)	9.6	8.8	9.4	8.6	6.2	6.3
Impairments and provisions	−0.7	−0.8	−1.3	−3.1	−2.5	−0.2
Other components of the income statement[2]	−3.0	−2.3	−2.0	−1.2	−1.0	−0.9
Net profit or loss	5.9	5.6	6.1	4.3	2.7	5.3

Source: NBB.

1 Including commission paid to bank agents.

2 This item includes taxes, extraordinary results, negative goodwill recognised in profit or loss, and the share in the profit or loss of investment in subsidiaries and joint ventures.

3 For the data for the first nine months of 2020 and 2021, an adjustment in the reporting was taken into account, as a result of which there was a shift of certain costs between parts of the income statement at some banks. The figures for the full year 2020 have been adjusted to make them comparable with the years before.

management activities and payment services. In addition, the results on financial instruments made a positive contribution (€ 0.5 billion over the first nine months of 2021) owing to the improved conditions prevailing on the financial markets. In the previous year, that item still showed a loss (of € 0.2 billion). Various other movements such as the fall in other non-interest income, but also the decline in operating expenses, are attributable in part to a change in the prudential consolidation scope of one Belgian bank. Net interest income came to € 10.8 billion, comparable to the figure for the corresponding period of the previous year.

… but still under pressure in the longer term

As net interest income is their biggest source of revenue, the low interest rate environment remains one of the main challenges facing Belgian banks. The difference between the average interest that banks receive on loans and bonds and the interest that they have to pay on sight accounts and savings accounts (i.e. the net interest margin) has clearly narrowed in recent years. Nevertheless, net interest income has stood up relatively well, as banks have managed to offset the narrower margins by boosting the volume of lending. Interest income has also benefited slightly from the fall in (net) interest charges on derivatives, which could perhaps point to changes in the banks' hedging policies. In 2020 and during the first nine months of 2021, net interest income was also underpinned by, on the one hand, the generous conditions applied to substantial amounts of financing made available by the central bank, which the banks made use of under the TLTRO programme, and on the other hand by the application of a zero rate instead of a negative interest rate on part of the reserves that they hold at the central bank.

The banks are also increasingly trying to pass on, to the liabilities side of their balance sheet, the low or even negative interest rates recorded on the assets side. For instance, they have therefore begun to convert regulated savings accounts into non-regulated savings accounts (which are not subject to the statutory minimum interest rate of 11 basis points) and to apply negative interest rates on (large) deposits of other financial institutions, firms and non-profit organisations. The overall effect of these initiatives on the net interest income has been rather meagre so far, notably because the majority of (savings) deposits are held by households to which negative interest rates are not applied (except in certain cases concerning wealthy customers).

Some banks are also trying to further diversify their income sources, e.g. by increasing the fees on traditional banking activities (such as bank accounts and investment and insurance products) or by activating some of the savings deposits via asset management. They are also striving to increase cross-selling and customer loyalty, e.g. by offering non-financial services on their banking applications. The cost reduction programmes implemented in recent years should support profitability by reducing the banking sector's traditionally heavy costs, but despite everything the cost/income ratio remained high at 62 % during the first nine months of 2021. That can be ascribed in part to the IT investment necessary for pursuing the digitalisation of services and internal processes. Even if this investment should ultimately lead to better cost efficiency, digitalisation also implies additional risks, e.g. in regard to data security and vulnerability to cyber attacks.

The challenges relating to low interest rates, cost efficiency and the digital transformation are more acute for small and medium-sized banks whose business model is geared to retail activities. In comparison with the large universal banks, their income model is often less diversified, being centred on activities particularly affected by the impact of the low interest rate environment, and they cannot take advantage of economies of scale, for instance, by spreading over a broader asset base the cost of IT investment made in the course of their digital transition. Also, according to a recent analysis conducted by the Bank on FinTech and digitalisation (see the section on *Prudential regulation and supervision* in this Report, section D.1.5), it is evident that these small and medium-sized banks are often the least advanced in developing digital applications, implying the risk of their business model coming under pressure, because the bigger banks can often respond more appropriately to customers' wishes, setting the bar higher for all players in the sector.

Finally, some major challenges related to climate risk are in store for the banking sector in the near future, as climate change and the climate transition could accentuate a number of traditional risks in the banking sector. For instance, banks could experience an increased credit risk owing to their exposure to certain sectors, regions or markets which feel the direct impact of climate change or which are affected by the measures taken to bring about the transition to a more sustainable economy.

5.4 The insurance sector is in a sound and robust starting position to cope with the impact of the floods that the country suffered in July

During 2020, the insurance sector's solvency level remained relatively high, despite dipping slightly in the second quarter as a result of the double hit caused by the impact of the COVID-19 crisis on the financial markets. That shock had affected the value of both the assets and the liabilities on insurance companies' balance sheets (on that subject, see the Annual Report 2020).

At the end of December 2020, the solvency capital requirement (SCR) coverage rate had reverted to its pre-crisis level and stood at 202 %, or about double the level required by the regulations. The year 2021 therefore began with a strong solvency position. In the first quarter of 2021, the solvency level climbed higher, supported by the rise in risk-free rates which drove down the discounted market value of commitments to policy-holders and by the upturn on the financial markets, boosted by the predictions of economic recovery and the anti-coronavirus vaccination campaigns. The sector's solvency level then declined slightly in the second and third quarters of 2021, reaching 205 % at the end of September 2021.

Claims resulting from climate events have increased in recent years

As far as profitability is concerned, the insurance sector posted a net profit of € 2.6 billion at the end of 2020. Despite the pandemic-induced crisis, that surpassed the figure recorded at the end of 2019, which was in the region of € 2.3 billion. Two factors account for this: first, the net result of the non-life insurance segment improved as a result of the lockdowns, which in general led to a decline in claims, whereas the level of premium income remained stable. Second, the non-technical result, a volatile component of the net result, exceeded the 2019 figure.

Although the information on the sector's profitability in 2021 is not yet available, a negative impact will certainly be apparent as a result of the floods that the country suffered last July. The claims burden due to those floods is borne by various public and private players, including insurance companies. On the basis of the latest data collected, the material damage caused by those floods comes to around € 2.1 billion. However, those estimates could change as the claims for compensation are processed.

However, the effect of the flooding is already apparent in the higher level of claims recorded in the third quarter of 2021. The combined ratio of the non-life segment, which expresses the relationship between outgoing and incoming payments, began rising in September 2021, reaching 96 %.

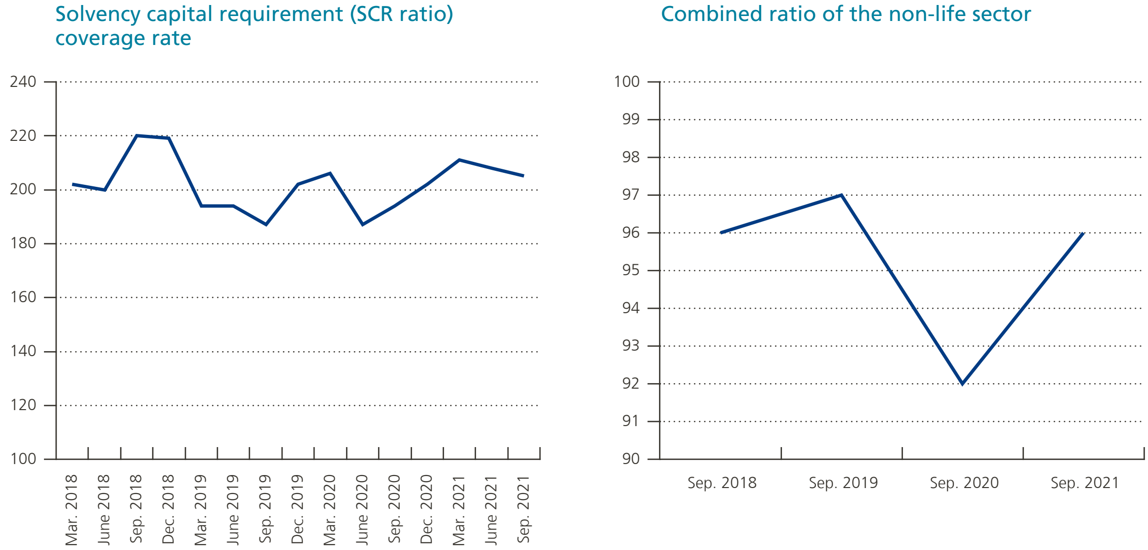
But, according to simulations conducted by the Bank, the negative impact of the flood-related claims on the sector's solvency should remain relatively limited.

In general, it must be borne in mind that claims caused by climate events have increased in recent years and that they could become even more frequent and serious in the future. That is likely to put pressure on pricing in some branches of the non-life insurance segment.

Chart 5.11

The sector's solvency remained relatively good in 2021 while the impact of the flooding drove up the combined ratio of the non-life segment

(in %)



Source: NBB.

Investment portfolio: the search for yield continued in 2021 in the context of low interest rates

The low interest rate environment is a particular problem for life insurers offering cover at guaranteed rates (class 21). They have to make sufficient margins to honour contracts concluded in the past which sometimes guaranteed high yields which have become difficult to sustain in the low interest rate context which has prevailed for a number of years.

Nonetheless, these insurance companies continue to demonstrate their ability to adapt: on the one hand, they are continuing to reduce the average guaranteed rate on their stock of existing contracts (notably by steering customers towards class 23 with no guaranteed rates) while they are also securing returns by redirecting their investments towards more lucrative – but riskier and less liquid – assets.

Between 2019 and 2020, the returns on assets held to cover class 21 contracts remained relatively stable at around 3.12 %, while the average guaranteed rate on the stock of life contracts dropped from 2.16 % to 2.00 %.

Up to now, the return generated by these assets therefore seems to have suffered little from the impact of the health crisis. That is probably due to two factors. First, the support measures for the economy and households performed their role as stabilisers, and in particular averted a spate of immediate bankruptcies. Also, insurance companies' investment proved to have little exposure to the sectors most affected by the impact of the health crisis.

With the low interest rate environment persisting in 2021, the search for yield continued, as can be seen from the expanding investment in funds (particularly equity and real estate funds) and in the residential and commercial real estate sector. In that regard, the insurance sector's direct and indirect exposures to the residential and commercial real estate sector respectively represented 6 % and 10.9 % of the investment portfolio at the end of September 2021 (or € 16.5 and € 31.6 billion).

This shift in investment is at the expense of assets offering lower returns in the low interest rate environment, such as government and corporate bonds. Although these still account for a considerable share of the investment portfolio of the sector taken as a whole, exposures to these financial securities have maintained their downward trend, dropping from 72.9 % in September 2016 to 64.8 % in the corresponding period of 2021 (or € 188.5 billion).

Climate risk remains significant, while the pandemic has highlighted the growing cyber risk

The financial risks resulting from both physical climate change and the climate transition are considerable for insurance companies. While the level of claims due to damage caused by climate change is rising, the insurance companies' investment portfolio is itself exposed to climate risk via its constituent assets.

According to the recent mapping carried out by the Bank, around 48 % of the corporate bond portfolio, 54 % of the equities portfolio and 36 % of the commercial loans portfolio held by the insurance sector are exposed to industries likely to suffer from the risks associated with the transition to a low-carbon economy. Some of the sectors that issue securities are in fact more sensitive to a sudden, unexpected transition to a greener, more sustainable economy. At individual level, climate risk exposures vary widely and may sometimes be at a high level in some insurance companies.

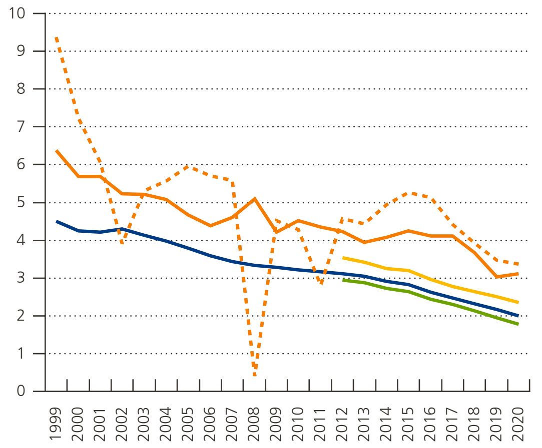
The COVID-19 crisis also highlighted the growing cyber risk. With the widespread recourse to remote working and the increasing digitalisation

Chart 5.12

Returns on assets held to cover class 21 contracts still exceed the average guaranteed rate, thanks in particular to the reallocation of the investment portfolio

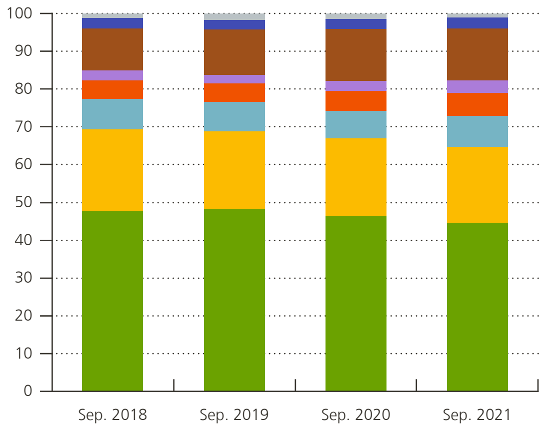
(in %)

Average guaranteed returns on class 21 contracts and returns on assets held to cover them



- Average guaranteed return on existing contracts
- Of which : group contracts
- Of which : individual contracts
- Estimated annual return on assets covering guaranteed return contracts excluding gains and losses
- Annual return on assets covering guaranteed return contracts

The sector's investment portfolio (excluding class 23), by asset type



- Government bonds
- Corporate bonds
- Shares and other equity
- Investment funds
- Deposits (cash)
- Loans and mortgages
- Real estate properties
- Other investment

Source : NBB.

accompanying online consumption habits, the frequency and scale of cyber attacks have escalated, particularly in the financial sector.

In regard to the insurance sector, the Bank took a number of measures on this subject, aiming in particular to encourage companies to take better account of cyber risk, not only from an operational angle but also in their insurance policies (silent cyber risk). The Prudential regulation and supervision section of this Report gives a detailed overview of those measures.

6. Fiscal policy and public finances

6.1 Public finances in the euro area remained under the coronavirus spell in 2021

Fiscal policy continued to play a key role in supporting the economy and health care

Just as in 2020, governments across the euro area drew heavily on fiscal policies to curb the economic and social impact of the pandemic. This was both a necessary and appropriate response, given that the health crisis was still raging and economic recovery far from complete. For one thing, the automatic stabilisers – i.e. lower tax receipts and higher employment benefits in the event of an economic downturn – had a further stabilising effect on the economy. In addition, and particularly in the first six months of 2021, discretionary measures remained in place, or new ones were introduced, to provide temporary and targeted support to health care and households and companies. These were increasingly combined with recovery measures, which bolstered total demand and should enhance the full potential of the economy.

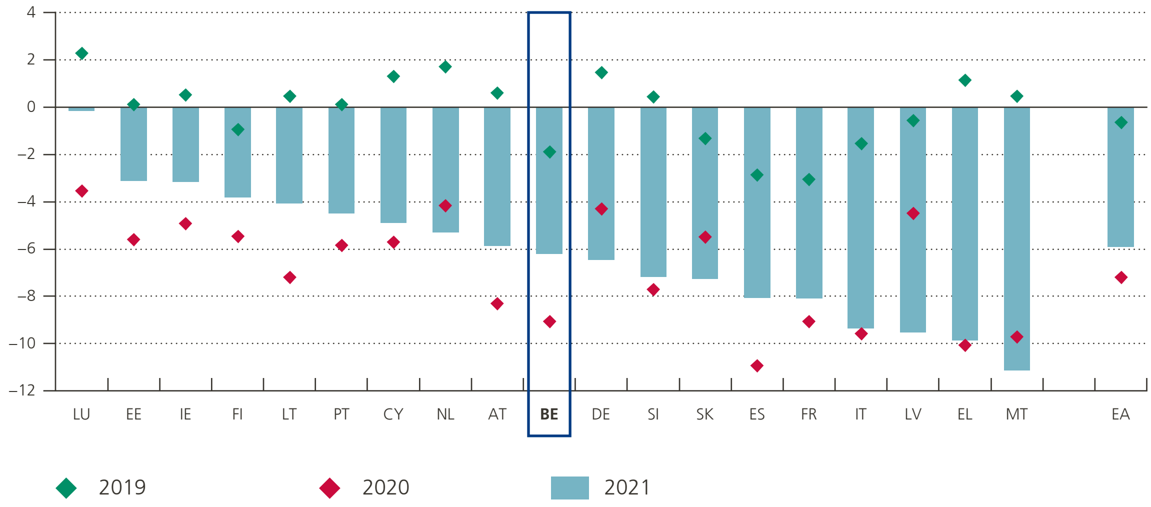
Fiscal policy in euro area remained strongly accommodative in 2021

Fiscal policies across the euro area remained highly accommodative, if slightly less so than in 2020. The euro area's nominal overall balance showed a deficit of 5.9 % of GDP in 2021. Although better than for 2020, this remains much worse than levels recorded in 2019. The budget deficit was still particularly high in countries whose balances had been less favourable even before the COVID-19 crisis. In 2021, developments varied between Member States, with balances deteriorating further in some. The Netherlands and Germany are cases in point, although both have more fiscal scope than most. By contrast, most Member States, including Belgium, saw their balances improve on the back of economic recovery and the partial wind-down of support and recovery measures. In fact, Belgium was among the countries that recorded a major improvement, as did Spain and Austria. In most euro area countries, support and recovery measures were as significant in 2021 as they had been in 2020. France and Italy, for instance, implemented sizeable recovery measures.

Chart 6.1

Public deficit stayed high in the euro area

(budget balances, in % of GDP)



Sources: EC, ESCB, NBB.

Application of general escape clause extended in Europe

Early in March, the European Commission released an important Communication with general guidance for EU Member States on fiscal policy. Its focus was mostly on the further application of the general escape clause and the impact of the EU Recovery Plan.

The general escape clause, activated in March 2020, remained in force throughout 2021 and was a key influence on the fiscal policies of the Member States, as the clause enabled them to temporarily deviate from their medium-term budgetary objectives or from the paths towards that goal, with the proviso that this should not jeopardise the sustainability of public finances in the medium term. With the activation of the clause, EU Member States were able to initiate broad-based fiscal stimulus. Early in June, the Commission indicated that the clause would remain in force in 2022 and would be deactivated from 2023. This conclusion resulted from a general assessment of the economic situation based on quantitative criteria. More specifically, the Commission proposed to deactivate the general escape clause the year after economic activity is back to pre-crisis levels in the EU or euro area. Spring projections in 2021 suggested this will happen in 2023. This conclusion was confirmed in November with the release of the European Semester's autumn package.

The general escape clause remained in place and is not set to be deactivated until 2023

The activation of the general escape clause has eased the application of European fiscal rules, but Stability and Growth Pact procedures remained in place, and the annual cycle of budgetary surveillance proceeded as normal. When reviewing stability programmes in June, the Commission felt unable to make any decisions about initiating excessive deficit procedures in view of continued uncertainty over the COVID-19 crisis. Additionally, country-specific recommendations remained relatively qualitative. In contrast to its 2020 recommendations, the Commission called for more differentiated fiscal policies. It drew a distinction between countries with high debt ratios (Belgium, France, Italy, Greece, Portugal and Spain) and the others. The first group of countries was advised to channel resources from the Recovery and Resilience Facility (RRF) featuring in the European Recovery Plan towards additional investment to bolster the recovery, while at the same time pursuing a cautious fiscal policy. This same group of countries was also advised to restrict any nationally financed growth in current spending. In keeping with these recommendations, the Commission's autumn assessment of the draft budgets noted that it is important for highly indebted countries to continue to pursue cautious fiscal policies when devising accommodative fiscal measures, given major sustainability issues in the longer term even before the outbreak of the COVID-19 pandemic.

The European Recovery Plan got underway

In 2021, the Next Generation EU Recovery Plan (NGEU), for which € 750 billion had been earmarked (at 2018 prices), became operational. Accounting for some 90 % of this amount, the main element of the plan, the Recovery and Resilience Facility (RRF), will support investment and reforms. Countries must at least spend 37 % of their allocated RRF funds towards the green transition and 20 % towards the digital transition. The facility is a mix of loans and grants, with the latter providing key support to the EU's least developed countries and so contributing to economic convergence in the European Union. In addition, the RFF grants will provide support to a few more developed countries that have been particularly hard hit by the coronavirus crisis, such as Spain and Italy. On initial calculations, Belgium's share of this support works out at € 5.9 billion [1], i.e. 1.2 % of GDP spread over the 2021-2026 period.

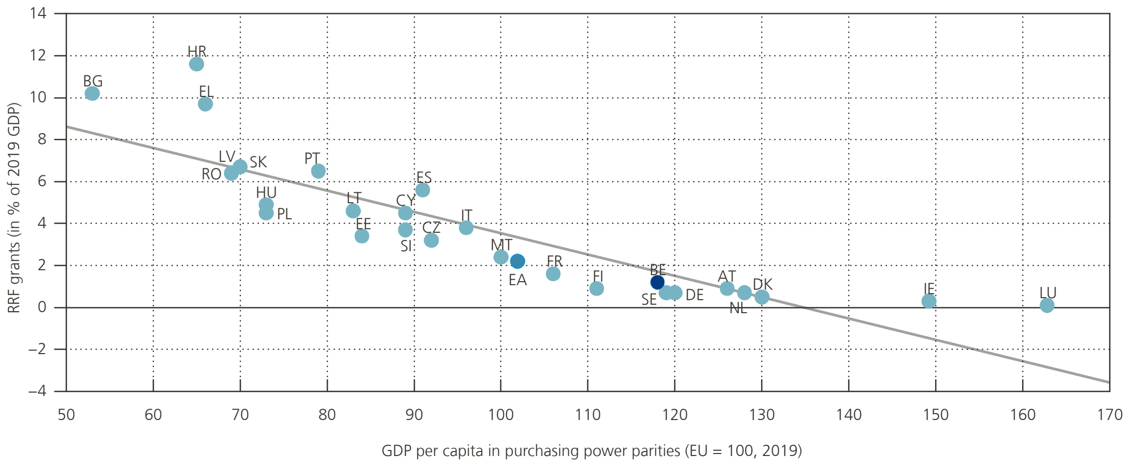
To tap into the facility, countries have to draw up and submit a Recovery and Resilience Plan (RRP), specifying the investments and reforms they are seeking to carry out. By the end of the year, all EU countries except the Netherlands had submitted their plans and 22 of them had seen these plans approved. Box 6 describes Belgium's plan. RRF resources are released when the plans' milestones and objectives have been achieved.

Government measures funded by RRF grants are booked as fiscally neutral at the level of the individual Member State. In keeping with the ESA methodology used in the national accounts, RRF grants are booked at the same time as the expenditure – or tax cuts – they finance, irrespective of when the country receives the actual cash. If such a cash receipt and the relevant expense or tax cut do not coincide or match, a temporary impact on the debt

1 This preliminary amount will be reviewed in June 2022 as soon as the first official GDP numbers for 2021 have been published. The most recent estimates suggest that the amount for Belgium will be revised downwards.

Chart 6.2

RRF grants should foster economic convergence in the EU [1,2]



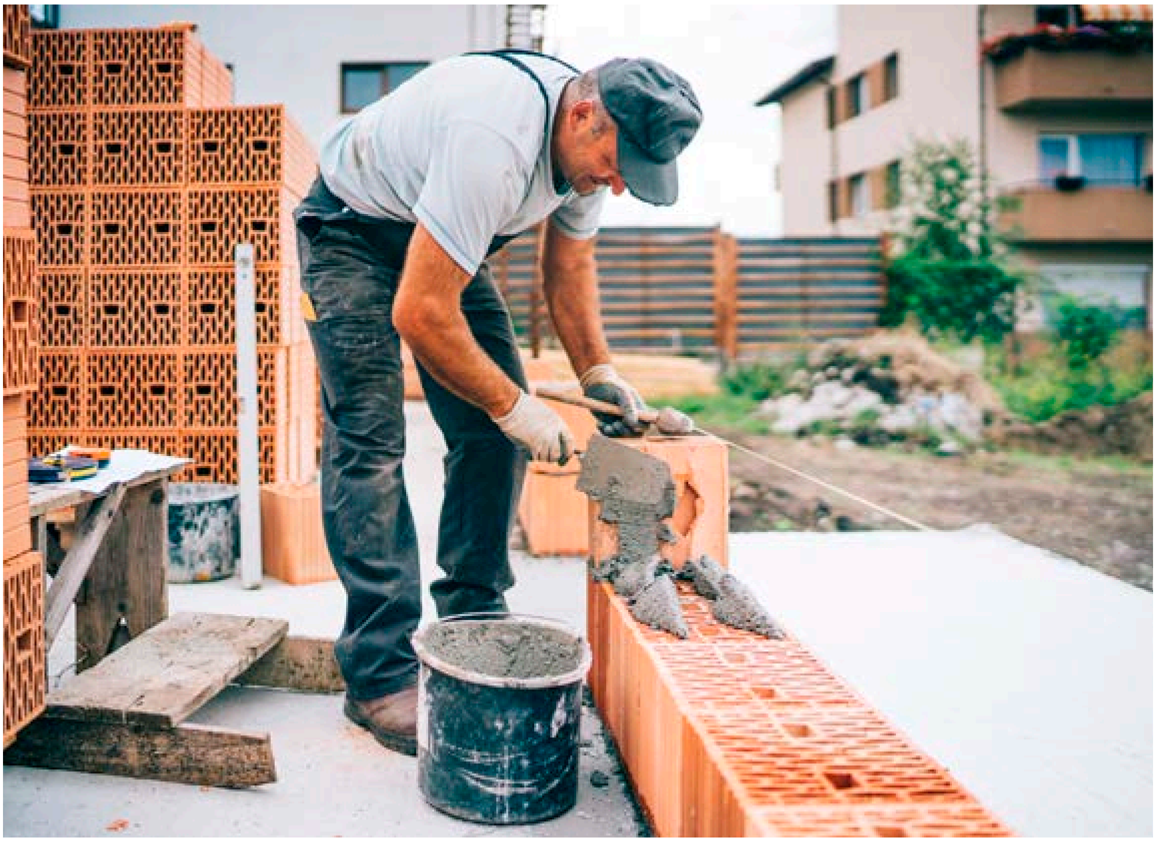
Sources: EC, NBB.
1 RRF grants only, no loans. The amounts will be spread over the 2021-2026 period.
2 For IE and LU: gross national income (GNI) per capita in purchasing power parities.

position will apply. As a matter of fact, in the year under review, pre-financing to the tune of 13 % of maximum grants was paid to those countries whose RRPs had been given the go-ahead. For Belgium, this involved a sum of € 770 million, which exceeded the spending it had made until that date and so temporarily reduced public debt for the difference. While RRF-financed policies are budget-neutral for Member States, these grants are making the fiscal stance of the EU as a whole more expansive. Lastly, any loans granted to Member States under the RRF are considered as national debt.

To fund the NGEU plan, the Commission launched a programme in June 2021 to borrow money in the financial markets on behalf of the EU, the first time it had tapped the markets for such a large amount (around € 800 billion at current prices). The money borrowed in this way will be paid back between 2028 and 2058. The proportion of the RRF paid in grants will be repaid from fresh new EU resources and, where necessary, from contributions by Member States calculated on the basis of their gross national income. RRF loans will be paid back to the EU by the Member States.

Lastly and for the sake of completeness, it should be noted that most other measures taken in 2020 at the European level in terms of fiscal policy to combat the crisis remained in place or were extended. Examples include flexibility with state aid rules and safety nets in the shape of loans against favourable interest rates [1].

1 For a more detailed discussion, see box 3, "European institutions' budgetary and financial response to the COVID-19 crisis", in the 2020 NBB Annual Report.



6.2 Belgium's public finances propped up health care and the economy

Belgian budget deficit shrank but remained historically high

Belgium saw its budget deficit fall in 2021, although it stayed historically high at 6.2 % of GDP. Fiscal policy remained highly supportive in a society still very much held captive by the coronavirus crisis. The deficit improvement by 2.9 percentage points compared with 2020 was attributable to the robust economic recovery and some winding down of support measures. Both factors contributed to the sizeable fall in primary expenditure – i.e. expenditure excluding interest charges – relative to GDP, by around 3.2 percentage points. Interest charges themselves also helped to reduce the deficit by 0.3 percentage points of GDP. Meanwhile, revenue as a percentage of GDP recorded a temporary decline. Despite a still hefty budget deficit, the debt ratio slid to 108.6 % of GDP, on the back of a strong rise in nominal GDP.

The budget balance breaks down into various components. There is the denominator effect of primary expenditure, of course, which captures the difference between primary expenditure as a percentage of GDP and as a percentage of potential GDP. For one thing, the denominator effect highlights the impact of the business cycle on the spending ratio. If GDP languishes below its potential, the primary spending ratio goes up and the balance deteriorates. And then there is the impact on the budget balance of temporary discretionary coronavirus measures. For the sake of simplicity, these also include the exceptional expense of furlough schemes and the bridging allowance, even though these are cyclical in nature. And lastly, there are the other factors that influence the balance.

By way of primary expenditure's denominator effect, the economic revival of 2021 improved the budget balance by around 2.5 percentage points

Table 6.1

General government overall balance and debt

(in % of GDP)

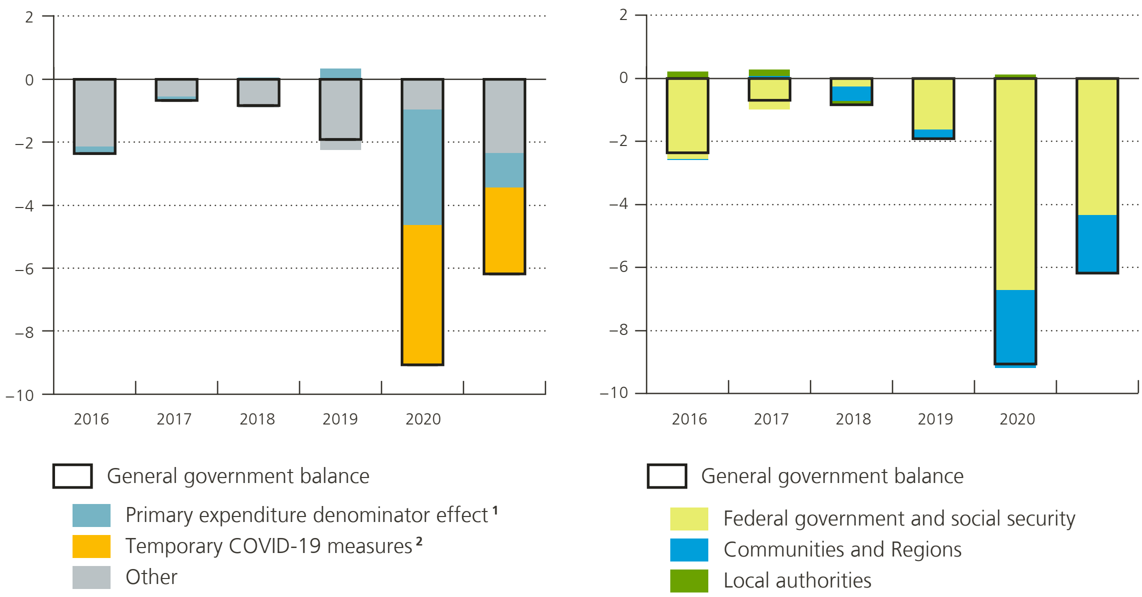
	2016	2017	2018	2019	2020	2021 e
Revenue	50.8	51.3	51.4	49.9	50.1	49.4
of which: Fiscal and parafiscal revenue	43.6	44.2	44.2	42.9	43.1	42.6
Primary expenditure	50.4	49.7	50.1	49.9	57.2	54.0
Primary balance	0.3	1.7	1.3	0.1	–7.1	–4.6
Interest charges	2.7	2.4	2.1	2.0	1.9	1.6
Overall balance	–2.4	–0.7	–0.8	–1.9	–9.1	–6.2
Public debt	105.0	102.0	99.9	97.7	112.8	108.6

Sources: NAI, NBB.

Chart 6.3

Budget deficit remained high despite economic revival – and highest at the federal level

(general government budget balance, in % of GDP)



Sources: NAI, NBB.

1 The denominator effect of primary expenditure is calculated as the difference between primary expenditure as a percentage of GDP and primary expenditure as a percentage of potential GDP.

2 Temporary COVID-19 measures also include spending on temporary lay-offs and the bridging allowance.

of GDP – as economic activity bounced back in 2021, having slumped well below its potential in 2020.

The reduced deficit also came on the back of the phasing out of temporary COVID-19 support measures, with the budgetary cost of these measures down by 1.7 percentage points of GDP in 2021, even if they remained substantial at 2.7 % of GDP. For one thing, employees and self-employed workers were still able to sign up to the furlough scheme and bridging allowance, while companies were still being propped up by a range of support measures, including regional allowances, and spending to address the health crisis remained high.

Improved balance mainly fuelled by economic revival

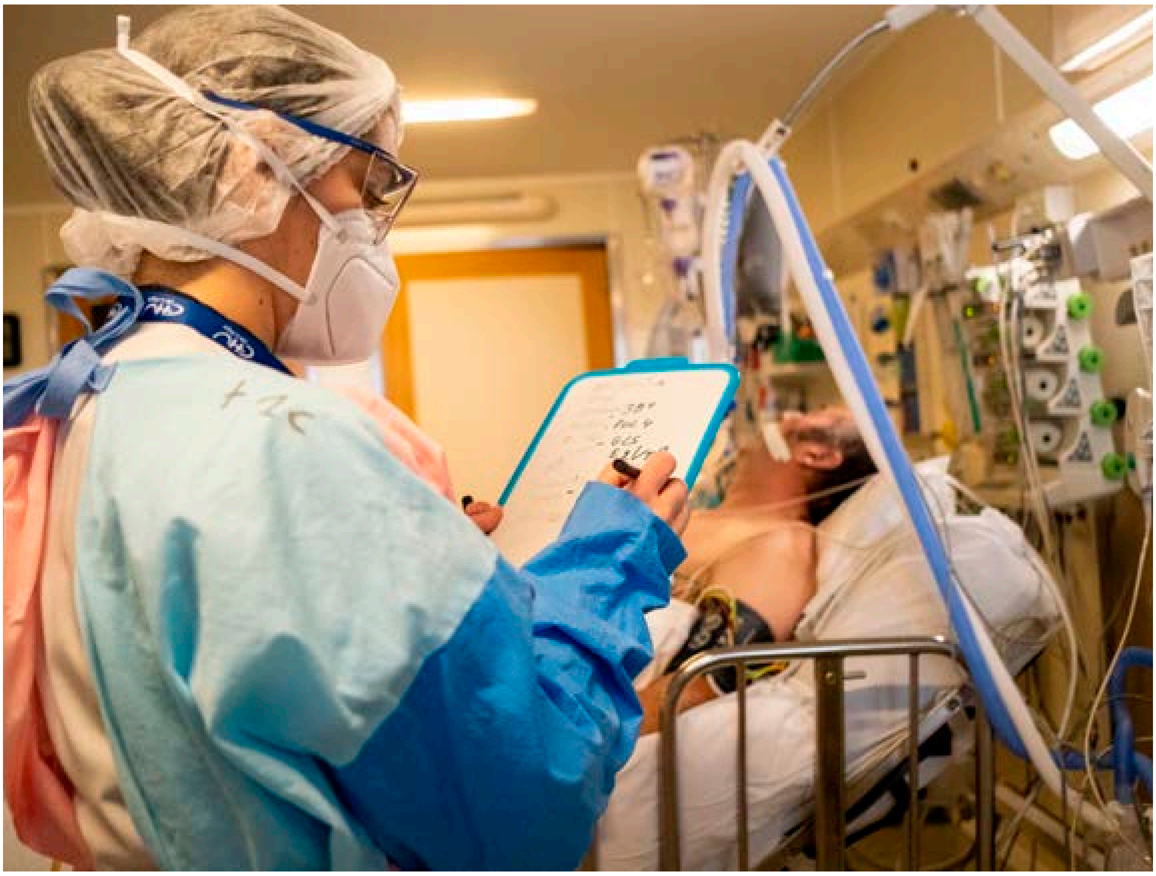
Broadly speaking, the other elements constituted more of a drag on the general government balance in 2021 than in 2020. The flooding in the summer of 2021 prompted the various authorities – and particularly in Wallonia – to engage in exceptional temporary spending. What is more, the regional authorities devised wide-ranging recovery plans to kick-start the economic recovery after COVID-19. Meanwhile, a number of structural measures came into effect, which will steadily push up expenditure in the future, such as higher wage subsidies in health care and minimum social benefits as decided by the federal government.

Lastly, interest charges were under no pressure from the financial markets. Additional and rollover debt was still funded free of charge and thus a lot cheaper than in the past. Continued asset purchasing by the Eurosystem helped to keep interest rates down.

The continuation of expansive fiscal policies in 2021 was imperative to absorb the ongoing repercussions of the pandemic. As economic activity reverts to its potential level, however, support measures will have to be wound down at an appropriate pace and Belgian public finances will need to be structurally consolidated (see section 7.4).

Improved balance mostly at federal level

The federal government's, social security's and Communities' and Regions' deficits declined but remained high. At 4.3 % of GDP, the federal deficit was significantly higher than in the Communities and Regions, which were 1.9 % of GDP in the red. That said, the federal government and social security did notch up a major improvement of 2.4 percentage points, as it is at this policy level that the bulk of the automatic stabilisers kick in, and so it was the federal government that benefited more from the economic revival. At the regional, level the deficit improvement was stymied by expenditure on the economic recovery and arising from the floods. And lastly, local government balanced its budget, as additional spending related to the coronavirus crisis and the floods was to a large degree offset by transfers from the Regions and the federal government.



6.3 Crisis-related support measures gradually wound down

In 2021, government authorities again implemented or extended temporary support measures to mitigate the impact of the health crisis. Though still significant, the overall amount was less sizeable than it had been in 2020: estimated at € 13.9 billion in 2021, compared with around € 20.4 billion in 2020.

A large number of measures was either extended or implemented in the first half of 2021, while subsequent months saw these gradually wound down as the public health situation improved and the green shoots of recovery spread across all sectors of the economy. Some sectors of activity that had faced more exacting restrictions than others received more support and for longer. As the public health situation took a turn for the worse towards the end of the year, a number of support measures were reactivated.

The federal government (and that includes social security) still assumed the bulk of the spending to

Table 6.2

Temporary measures[1] to mitigate the impact of the crisis have eased compared with 2020, but remained significant

(impact on general government budget balance; in € billion, unless otherwise stated)

	Federal government and social security		Communities and Regions		Total[1]		*p.m. In % of GDP*	
	2021	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Health crisis management	3.1	3.9	0.8	1.1	3.9	4.9	*0.8*	*1.1*
Income support to households	5.2	8.4	0.0	0.4	5.2	8.7	*1.0*	*1.9*
Furlough scheme benefits	1.9	3.9	0.0	0.0	1.9	3.9	*0.4*	*0.8*
Bridging allowance for self-employed	2.1	3.3	0.0	0.0	2.1	3.3	*0.4*	*0.7*
Other social benefits and premiums	1.3	1.1	0.0	0.4	1.3	1.5	*0.3*	*0.3*
Support to companies	2.4	2.6	2.4	4.2	4.8	6.8	*0.9*	*1.5*
Premiums for forced closures or massive revenue falls	0.3	0.7	1.9	2.7	2.3	3.4	*0.5*	*0.7*
Solvency-boosting tax measures	0.4	0.7	0.0	0.0	0.4	0.7	*0.1*	*0.1*
Support to specific sectors and other	1.7	1.3	0.4	1.5	2.1	2.8	*0.4*	*0.6*
Total	10.7	14.8	3.2	5.7	13.9	20.4	*2.7*	*4.5*
p.m. In % of GDP	*2.1*	*3.2*	*0.6*	*1.2*	*2.7*	*4.5*		

Sources: FPS Policy and Support, FPS Finance, FPS ELSD, FPB, Communities and Regions, NBB.

1 Excluding structural measures to provide additional funding for health care and the plan for the overall recovery.

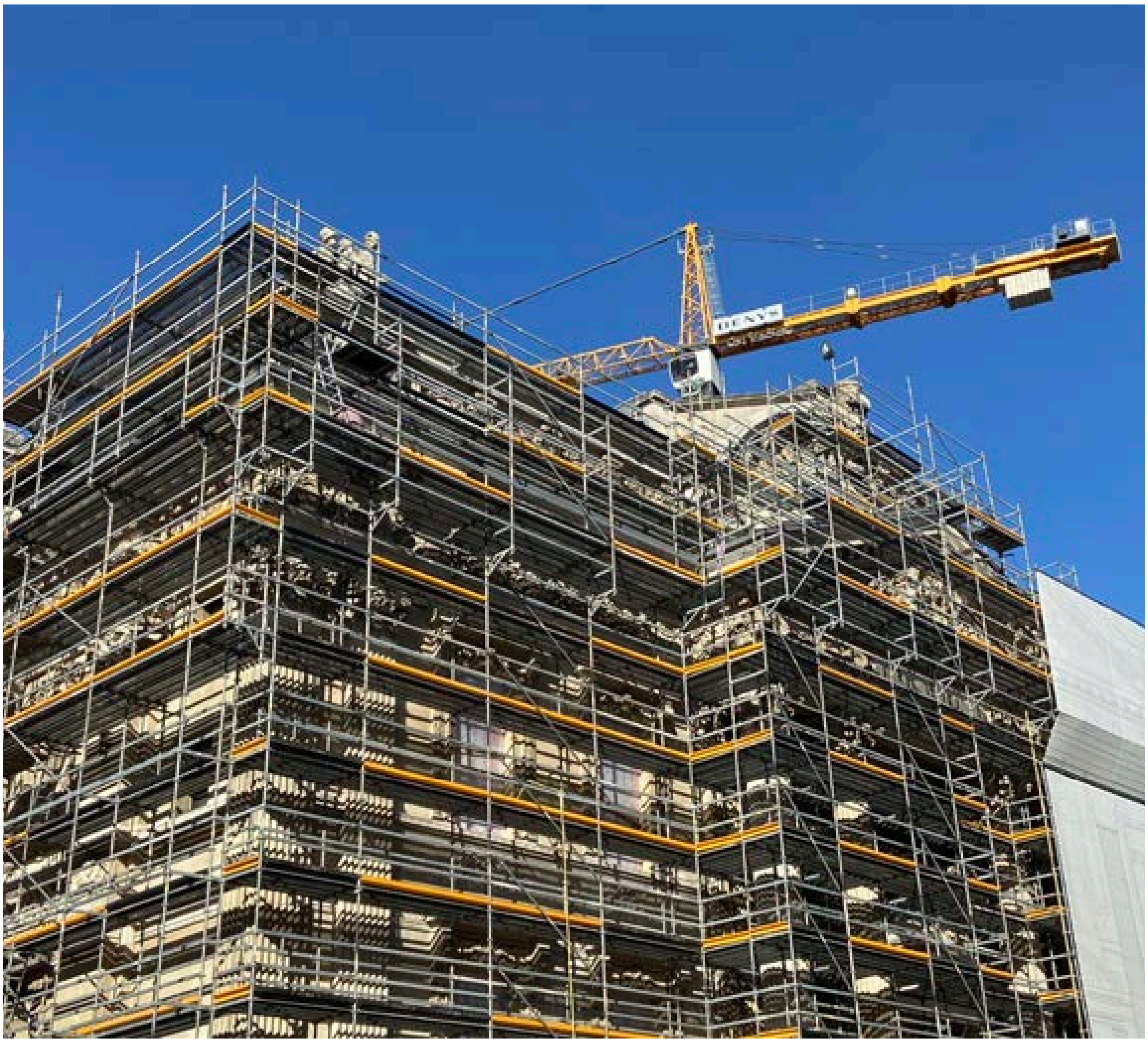
2 Excluding measures taken by local government. Some municipalities decided to abolish, reduce or suspend local taxes on businesses (on outdoor seating, tourist overnight stays, etc.) and/or handed out vouchers and other bonus payments.

mitigate the health crisis, not ignoring the key role the Communities and Regions were playing in contact tracing, testing, and establishing and running vaccination centres.

The federal government (and that includes social security) also propped up household purchasing power: throughout 2021, employees were still able to access furlough schemes, and self-employed workers could still benefit from the bridging allowance. The budgetary costs of both sharply declined in 2021, albeit less so for the bridging allowance, as at the end of 2020 self-employed workers had been offered a double bridging allowance if forced to stop trading. More specific assistance was also provided to vulnerable households in 2021, to the same degree as it had been in 2020. This served to freeze the tapering of unemployment benefits, while some social benefits – monthly payments to beneficiaries of integration incomes, old people's guaranteed income and disability benefits – were, in fact, adjusted upwards. At the end of 2020, the government also decided to extend its social energy rate, which came into force in 2021.

Temporary and focused support still necessary to get hard-hit companies and households through the crisis

In 2021, companies received help from both the federal government and the Regions. Support by the Communities and Regions to companies and self-employed workers nearly halved compared with 2020, whereas that extended by the federal government stayed closed to the levels estimated for 2020. Together, these discretionary support measures totalled € 4.8 billion in 2021.



Compared with the measures taken in 2020, the three Regions again granted allowances to companies that were still turning over significantly less than they had done before the health crisis and to those forced to close during part of the year. Most of these regional allowances were discontinued in the summer or in early autumn. Some payments had been lump sums and not systematically linked to actual losses incurred because of COVID-19 or consistent with companies' fixed costs. Meanwhile, any such regional allowances and assistance provided in the wake of the pandemic remained exempt from tax by the federal government, while a range of tax measures agreed in 2020 did not show up in the budget until after some time lag. Examples include tax carry-backs for company losses incurred in 2020, the reconstruction reserve and the investment allowance.

Lastly, certain sectors received targeted assistance if they were particularly hard hit by the public health measures, e.g. tourism, culture and events, as well as the hospitality businesses. As in 2020, when a similar measure was introduced, VAT rates were temporarily cut on restaurant services and the sale of alcoholic beverages. In a broader sense, the federal government waived employers' contributions towards annual holiday for employers who had put in place the furlough scheme. It also agreed reductions in social security contributions to encourage employers to stop using furlough and to put their staff back to work as soon as possible. To encourage entrepreneurs in construction, VAT rates on demolishing buildings and rebuilding residential property were lowered to 6 % until the end of 2022. And the country's national rail company SNCB received support to offset losses due to reduced train use.

Such support measures will gradually have to be replaced by structural policy measures to encourage transition to viable economic activity. Support measures are at their most effective when temporary, time-limited and targeted on households and companies that actually need them – and must be discontinued as soon as the economy is showing signs of sufficient recovery.

6.4 Other factors also determined how primary expenditure and revenue developed

Revenue and primary expenditure were driven by a number of factors other than temporary coronavirus measures. Disregarding the latter, primary expenditure recorded growth that – if taken together for the past two years – may be considered in line with potential nominal GDP. Revenue (in which coronavirus measures had a minor part to play) staged a robust recovery when compared with 2020, as did economic activity, although it is still lagging far behind the potential nominal GDP trend.

Consequently, factors other than temporary coronavirus measures and the economic recovery contributed to a deteriorating budget balance.

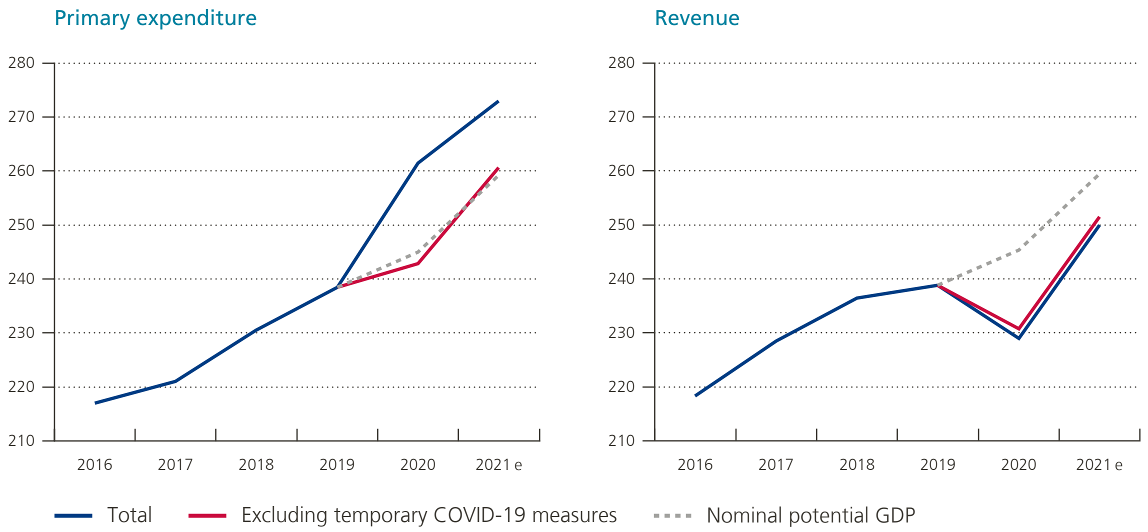
Primary expenditure driven by recovery plans and floods among other factors

To obtain a true picture of the impact of other factors on primary expenditure developments

Chart 6.4

Disregarding temporary coronavirus measures, primary expenditure grew about as rapidly as nominal potential GDP, while revenue recovery was strong but not complete

(in € billion)



1 Sources: NAI, NBB.

Table 6.3

Key primary expenditure categories[1]

(in % of potential GDP)

	2016	2017	2018	2019	2020	2021 e
Compensation of employees	12.4	12.4	12.4	12.3	12.4	12.4
Purchases of goods and services	4.1	4.0	4.1	4.1	4.1	4.1
Social benefits	24.6	24.5	24.6	24.6	26.3	26.4
Pensions	10.1	10.2	10.3	10.4	10.5	10.7
Health care	6.6	6.6	6.7	6.7	6.6	7.0
Sickness and disability	1.8	1.8	1.9	2.0	2.1	2.2
Unemployment[2]	1.3	1.2	1.1	1.0	2.6	1.9
Other	4.7	4.6	4.6	4.6	4.6	4.6
Subsidies to companies	3.7	3.6	3.7	3.8	4.6	4.3
Current transfers	2.2	1.8	2.0	2.0	2.8	2.7
Gross fixed capital formation	2.4	2.4	2.6	2.6	2.6	2.8
Other capital expenditure	0.9	0.8	0.8	0.8	0.8	1.2
Total	50.2	49.5	50.2	50.2	53.6	53.9
p.m. Total excluding temporary COVID-19 measures	*50.2*	*49.5*	*50.2*	*50.2*	*49.7*	*51.5*

Sources: NAI, NBB.

1 In 2021 primary expenditure is adjusted for the exceptional difference between GDP deflator developments and those of the automatic indexation of public sector pay and social benefits.

2 Including furlough schemes and bridging allowance.

in 2021, it is useful to strip out the temporary coronavirus measures and express the outcome as a percentage of potential GDP. It is also useful to adjust nominal primary expenditure that is automatically index-linked (such as the wages of public sector employees and social benefits) to take account of the difference between the GDP deflator and indexation based on the health index. In 2021, after all, indexation was way behind inflation as measured by the GDP deflator, temporarily keeping down the spending ratio. Following these adjustments, primary expenditure rose from 49.7 % of potential GDP in 2020 to 51.5 % of potential GDP in 2021, on the back of a range of temporary and structural factors.

The pandemic sparked various structural social agreements in the health care sector at federal, Community and regional level. These came into force in the course of the year under review and aim to raise wages and improve labour standards for people working in hospitals, nursing homes and other care facilities. In the government accounts, these pay rises are included under subsidies from the federal government and the various federated entities to the organisations under their respective authority. Adding in refinancing of mental health care, fully effective since this year, all these measures will total € 1.5 billion when fully operational.

Wage costs in the public sector likewise reflect the impact of the health crisis. In 2021, education saw an unprecedented rise in employment, partly to replace people on sick leave or in self-isolation, but also because of recruitment to offer educational and psychosocial support to students.

2021 was the first implementation year for a series of structural measures from the federal government agreement, one example being the gradual increase until 2024 of many social minimums, including old age pension, disability, unemployment and social assistance. This structural measure has no bearing on temporary monthly allowances for groups of people on benefits under COVID-19 support schemes.

The floods that hit Belgium in July had a varying impact on the public finances of the public administration sub-sectors. The federal government provided emergency assistance through civil protection and defence, while freeing up resources to help the public social welfare centres and the Red Cross. The bulk of the budgetary hit will be shouldered by the Walloon Region, as it is the Regions that are responsible for natural disasters and Wallonia faced the brunt of the disaster. In view of the caps on insurance pay-outs, the Walloon authorities soon announced they would pay for what remained of the estimated damage and so fully reimburse insured flood victims. There is also a significant, if partial, government compensation scheme in place for uninsured victims. Both schemes, totalling around € 1.5 billion for 2021 alone, are in the shape of capital transfers to households and companies. The proportion pre-funded by insurers but ultimately payable by the Region – estimated at € 1.1 billion – will be recognised as public spending in keeping with European accounting rules. Apart from these compensation payments, spending will mostly be on public infrastructure and may well be spread across multiple years.

Rebuilding infrastructure destroyed by the floods will take years

In 2021, Belgium also drew up its National Recovery and Resilience Plan, pulling together a great many recovery projects that are to be implemented in the short and medium term and that require government investment and other capital spending on the part of the federal government and the federated entities (see box 6). With this spending funded by European grants, there should be no direct implications for national budgets. That said, this spending will contribute to the government investment ratio, which the federal government is looking to raise to 3.5 % of GDP in 2024 and to 4 % of GDP by 2030.

In 2021, investment by all of Belgium's government authorities accounted for 2.8 % of potential GDP. Investment is driven by the implementation of a range of recovery plans, at the federal level as much as at the level of the Communities and Regions, and its overall scale exceeds the national plan submitted to the European authorities. The total budget for all these plans, known variously as the Federal Recovery and Investment Plan, *Vlaamse veerkracht* and *Plan de relance de la Wallonie*, adds up to around € 16 billion, of which € 5.9 billion is funded

by Europe and the rest by the entities concerned. The net effect of these plans on public finances has yet to be established, as they may include projects that were already on the drawing board and might have been implemented in normal times.

Success of recovery plans will be measured by the quality of the investment and reforms

The biggest chunk of recovery spending is supposed to be made by 2024, i.e. before the current governments' terms in office end. This schedule looks highly ambitious in view of the usual delays in construction – a problem made worse by the shortages of people and materials currently besetting the industry. The amounts actually spent in 2021, incidentally, were lower than those originally planned. Whatever the case may be, the success of these programmes will not be measured by the number of projects selected, nor by the resources committed. Whether or not these recovery plans succeed will in fact depend on the relevance of the projects that make the grade (selectivity and coherence between plans, coordination between federated entities, etc.), the efficacy of their implementation, their ability to promote corporate investment, etc.

BOX 6

The National Recovery and Resilience Plan [1]

On 30 April 2021, Belgium submitted its National Recovery and Resilience Plan, drawing on the assumption that the country stands to receive € 5.9 billion (1.2 % of GDP) in grants between 2021 and 2026. Belgium has not applied for any RRF loans.

Belgium's Recovery and Resilience Plan provides a list of planned investments and reforms towards which it wishes to put the grants it will receive. The breakdown between the various authorities is the outcome of a political agreement by the Consultative Committee, which settled on the largest portion going to the Flemish Community (38 %), followed by the Walloon Region (25 %) and then the Federal State (21 %).

The plan aims to accelerate Belgium's transition to a more sustainable, structurally stronger and more inclusive economy while at the same time to keep strengthening its social, economic and climate-related ambitions. It also supports boosting public investment and is structured around six axes of key challenges facing Belgium today. Together, the three biggest axes – Climate, sustainability and innovation, Mobility, and Economy of the future and productivity – account for over 80 % of total planned spending.

Most of the planned investment will go to renovating government buildings, improving cycling infrastructure, digital transformation of government bodies and education, and on enhancing research and development. To be eligible for the EU funds, EU Member States are required to pursue a number of ambitious reforms, including reforming pensions and end-of-career set-ups, promoting

1 For more details, see Bisciari P., W. Gelade and W. Melyn (2021), "Investment and reform in Germany, France, Italy, Spain and Belgium's National Recovery and Resilience Plans", NBB, Economic Review, December.

emissions-free transport, and spending reviews. To date, not much flesh has been put on the bones of these reforms. The plan clearly focuses on the first four years in which over 80 % of the total available grants are to be spent.

On 23 June 2021, the European Commission approved Belgium's Recovery and Resilience Plan, as formalised in a Decision adopted by the Ecofin Council on 13 July.

Belgian Recovery and Resilience Plan structured around six strategic axes

(in € billion)

Strategic axes	Planned spending		
	Total	Federal	Communities and Regions
1. Climate, sustainability and innovation	2.0	0.3	1.8
2. Digital transformation	0.8	0.4	0.4
3. Mobility	1.3	0.4	0.9
4. Social and living together	0.8	0.0	0.8
5. Economy of the future and productivity	1.0	0.1	0.9
6. Public finances	0.0	0.0	0.0
Total	**5.9**	**1.2**	**4.7**

Sources: Recovery and Resilience Plan, NBB.

Government revenues gradually returning to pre-crisis levels

After steep falls in 2020 – and the key role they had played as the economy's automatic shock absorber – government revenues bounced back in keeping with economic activity in 2021. The recovery was not quite complete, though, and neither was the recovery of economic activity, which still remained below its potential.

Also, revenue shrank by 0.7 of a percentage point relative to economic activity in 2021, a temporary disconnect fully attributable to relatively subdued growth of taxes on earned income and replacement incomes. First of all, the rise in income from employment smoothed in 2020 and 2021, as the drop in income from employment had been less pronounced than that in GDP in 2020 – which also happened to be the year when the tax base swelled through the massive uptake of the furlough schemes for employees and the bridging allowance for the self-employed. The flipside was that the total wage bill and replacement incomes lagged behind GDP growth in 2021. And the disconnect intensified even further in 2021, as wage indexation fell behind the growth in the price component of GDP – a temporary gap that is expected to close in the years ahead. Personal income tax being progressive, the overall tax take was still slightly ahead of the 2019 reference year. Social security contributions, by contrast, shrank by 0.2 percentage point of GDP compared with pre-pandemic levels.

Table 6.4

General government revenue [1]

(in % of GDP)

	2016	2017	2018	2019	2020	2021 e
Fiscal and parafiscal revenue	43.6	44.2	44.2	42.9	43.1	42.6
Levies applicable mainly to earned incomes	24.7	24.7	24.5	23.9	24.9	23.9
Personal income tax [2]	10.9	11.0	10.9	10.4	11.0	10.6
Social security contributions [3]	13.8	13.7	13.6	13.5	13.9	13.2
Corporate income taxs [4]	3.4	4.1	4.3	3.7	3.3	3.5
Levies on other incomes and on assets [5]	4.1	4.0	4.0	3.9	3.8	4.0
Taxes on goods and services	11.5	11.4	11.5	11.4	11.1	11.3
of which:						
VAT	6.7	6.7	6.8	6.6	6.4	6.6
Excise duties	2.7	2.7	2.7	2.6	2.5	2.5
Non-fiscal and non-parafiscal revenue [6]	7.1	7.2	7.1	7.0	7.1	6.8
Total revenue	50.8	51.3	51.4	49.9	50.1	49.4

Sources: NAI, NBB.

1 In accordance with the ESA 2010, general government revenues do not include the tax revenues transferred to the EU, nor revenues collected directly by the EU.

2 Mainly withholding tax on earned income, advance payments, assessments and proceeds of additional percentages on income tax.

3 Including the special social security contribution and the contributions of people not in work.

4 Mainly advance payments, assessments and the withholding tax on income from movable property payable by companies.

5 Mainly the withholding tax on income from movable property payable by households, the withholding tax on income from immovable property (including proceeds of additional percentages), inheritance taxes and registration fees.

6 Property incomes, imputed social security contributions, current and capital transfers from other sectors, and sales of produced goods and services, including revenues on guarantees granted by the State on interbank loans.

While wages displayed relative stability, corporate earnings have been more volatile than GDP in the past two years. 2021's robust demand for products and services triggered a comparatively sharp revival of corporate earnings, prompting corporation tax revenues to advance by 0.2 of a percentage point of GDP and thus normalising these as a percentage of GDP. The same applied to VAT takings, which also benefited from higher demand. Excise duties were virtually unchanged as a percentage of GDP, pushed up by higher tobacco duties but at the same time recording clearly lower tax-based growth relative to nominal GDP growth. Excise duties happen to be correlated with consumer volume movements, whereas nominal GDP in 2021 was pushed up higher by the price component as well.

Levies on other income and taxes on property grew by 0.1 of a percentage point on the introduction of a "solidarity contribution" on securities accounts to replace the previous Securities Account Tax that had been rendered void by the Constitutional Court. More specifically, the contribution amounts to a levy of 0.15 % on securities accounts with average values of over € 1 million during a reference period.

Lastly, non-fiscal and parafiscal revenue was down by 0.2 of a percentage point of GDP, mainly caused by the denominator effect. As noted, the GDP deflator increased by a lot more in 2021 than did consumer prices, which tend to co-determine the way sales develop. In addition, any resources left in the pension funds acquired since the early 2000s – of which Belgacom was by far the biggest – had been steadily depleted. These had been funding the retirement pensions of the relevant employees, paid out by the government and making for a neutral budget balance. Budget neutrality will end, though, as these pensions will continue to be paid. Grants received towards NGEU spending in 2021 exerted a positive effect on non-fiscal revenue to the tune of around 0.1 % of GDP.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6.5 Public debt and interest charges

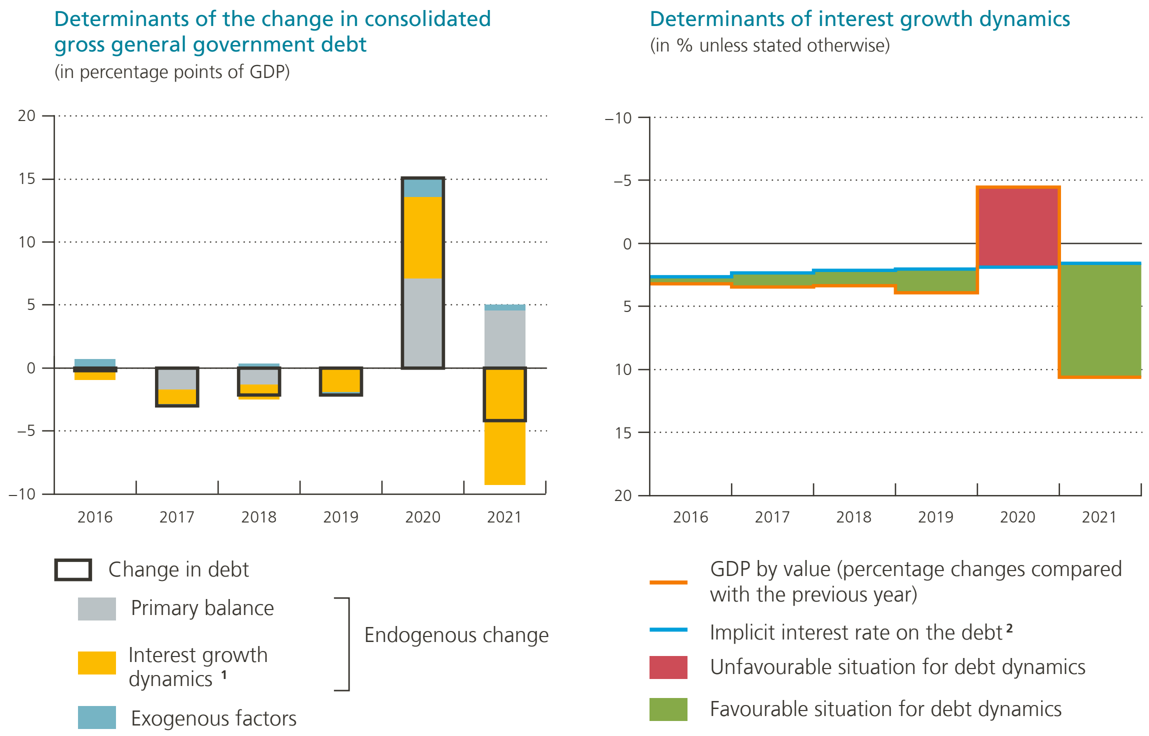
The fall in the debt ratio is only a temporary phenomenon on the back of reviving economic growth

By the end of 2021, the Belgian government's debt ratio stood at 108.6% of GDP. As a result, public debt shrank by 4.2 percentage points compared with the previous year, when the pandemic had fuelled an exceptional surge. Actual levels remain high, though: 10.9 percentage points up on the end of 2019 and nearly 12 percentage points higher than the euro area average (see chapter 7).

The 2021 drop is largely down to steep growth in nominal GDP on the back of a return to normal economic activity. This temporary effect strongly benefited the debt ratio denominator and was a major factor in growth exceeding the implicit

Chart 6.5

Debt ratio benefited from revived economic growth



Sources: NAI, NBB.

1 The difference between the implicit interest rate on the debt and nominal GDP growth, multiplied by the ratio between the debt at the end of the previous year and GDP in the period considered.

2 Ratio between interest charges in the current year and debt at the end of the previous year.

interest rate on public debt. The difference, which is further enhanced by historically low interest rates, currently constitutes the endogenous determinant causing a downward effect on debt ratio dynamics. Conversely, the primary balance – which is recording a significant deficit – is responsible for an upward effect on public debt.

Exogenous factors, which influence debt but do not affect the overall balance, pushed up debt by 0.5 of a percentage point. Some economic support measures taken because of the COVID-19 crisis, for instance, exerted an upward effect on the debt ratio, more specifically government loans and stakes in private companies and the discontinuation of the so-called December advance on payroll withholding tax. Under the ESA methodology used in the national accounts, such payment deferral does not affect the year's budget balance, as revenue postponed in this way will be recognised in the economic activity year in which it arises. However, this does mean that the government has to borrow more at the end of the year and that its debt is therefore temporarily higher.

Loans granted by the Flemish Region under its social housing policies also pushed up debt.

Other exogenous factors partly offset the upward effects described above : pre-funding of European grants for Belgium under the NGEU and the Brexit Adjustment Reserve (BAR) pushed down debt, for instance. The proportion of pre-funding received but not spent on projects in 2021 is not recognised in the balance, but does reduce the debt to be financed. This impact is only temporary, however, and will be neutralised in the years ahead as financed projects progress.

Another exogenous factor that helped push down government debt temporarily relates to the damages disbursed to flood victims, which are being paid by the Walloon Region. Although only a proportion of these payments had actually been made to these beneficiaries, the total estimated amount was already recognised in the 2021 budget balance. The difference between these two sums temporarily reduced government debt, as the government did not have to borrow this amount.

The exogenous factor that contributed most to the debt reduction was the accounting adjustment for debt instruments' issue premiums. The Belgian Debt Agency has issued multiple securities at issue values in excess of their nominal values. At maturity, investors will therefore be repaid a lower amount than they laid out in the first place. In the first year of issue, such premiums have a favourable effect on government debt, but this is offset by an upward effect on the debt ratio in subsequent years, until the debt instruments mature.

Interest charges continue their downward trend

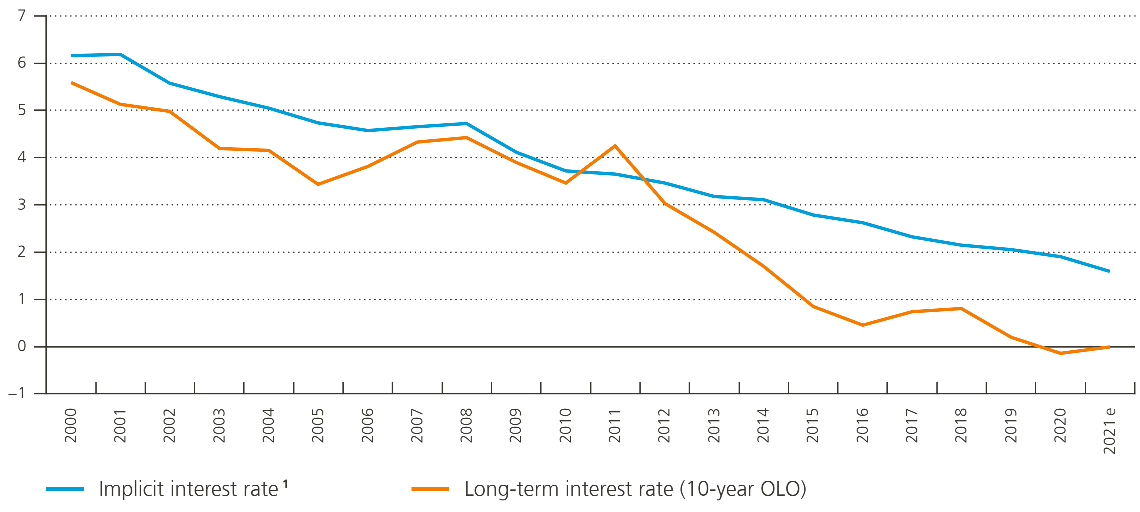
Interest charges kept moving down in 2021, narrowing by 0.3 percentage point of GDP compared with their 2020 levels. Financing conditions remained very favourable, with the reference rate on ten-year bonds at nil across the year, even if it edged up compared with 2020 (–0.1 %). By the end of December, long-term yields were found to be rising. In terms of short-term debt, 2021 yields on Treasury Certificates came down slightly from 2020, meaning that the federal government was again rewarded for short-dated issues as well as for various longer-dated issues in 2021. Three-month Treasury Certificates to the tune of around € 1 billion, for instance, were being financed at record negative rates of –0.93 % by December 2021.

The fall in interest rates in the past few years and their stabilisation at low levels has made it possible for the government to refinance its debt using issues at lower interest rates than those on maturing instruments, steadily reducing the public debt's implicit interest rate.

At a given level of debt, interest charges fall when market rates on new issues are below yields on instruments that are maturing. At the federal level, the OLOs that matured in 2021 and that will need to be rolled over in 2022 had still been issued at average interest rates of between 3.5 % and 4 %. Unless 2022 sees interest rates really take off, interest charges will continue to contract in 2022. However, if debt is not wound down, refinancing gains will start to fall, as instruments due for refinancing will be commanding lower rates from 2023.

Chart 6.6

Low interest rates continue to push down implicit interest rate

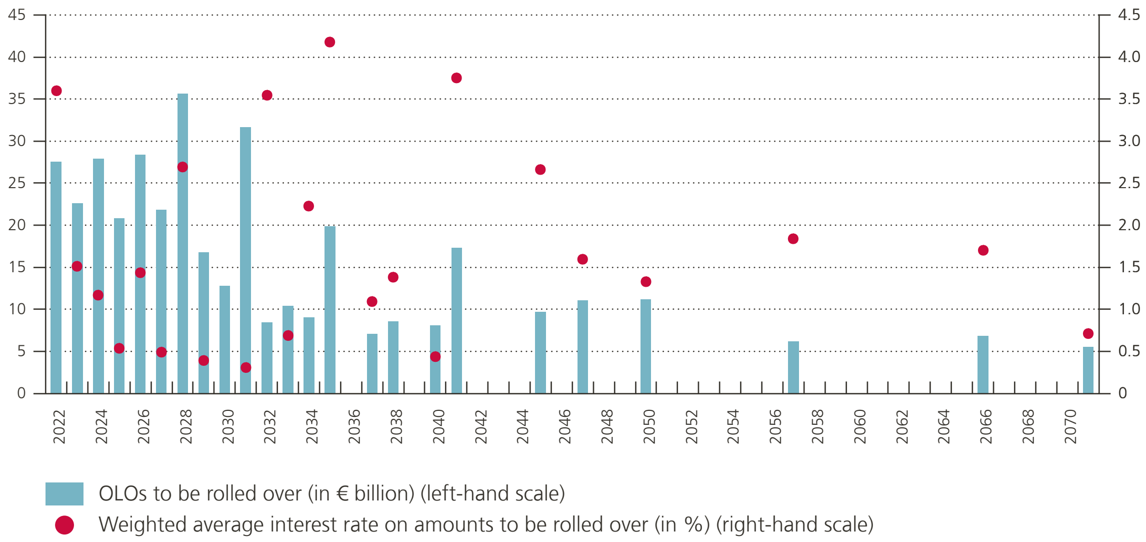


Sources: NAI, NBB.
1 Ratio between interest charges in the current year and general government debt at the end of the previous year.

Chart 6.7

Margins to reduce interest charges should narrow beyond 2022

(maturity of federal government's long-term debt (OLOs), end-2021)

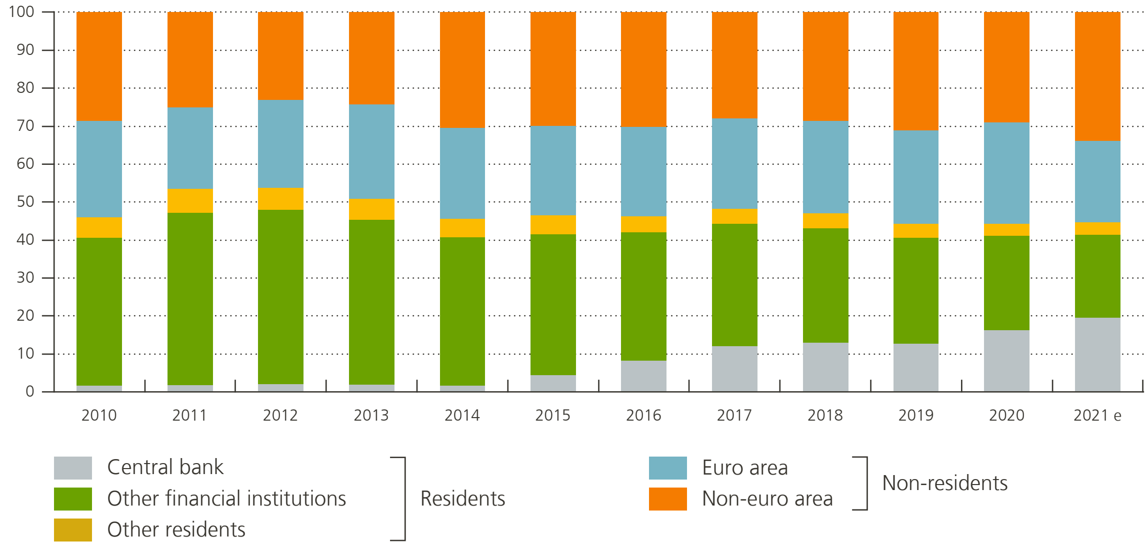


Sources: Belgian Debt Agency, NBB.

Chart 6.8

Proportion of NBB-held public debt on the rise

(breakdown of general government's consolidated gross debt by holder [1])



Source: NBB.
1 For 2021: estimate for situation as at 30 September.

Public debt maturity still rising

Debt issued by the Belgian Debt Agency in 2021 commanded an annual interest rate of 0.14 % and an initial maturity of 18 years, the longest ever. Once again, a range of very long-dated loans were issued, a number of which will mature in 2071. As a result, the remaining term to maturity of total federal debt increased further in 2021. The remaining term to maturity of government debt, which had stood at around six years by the end of 2010, had gone up to ten years and one month by the end of 2021, its highest level on record.

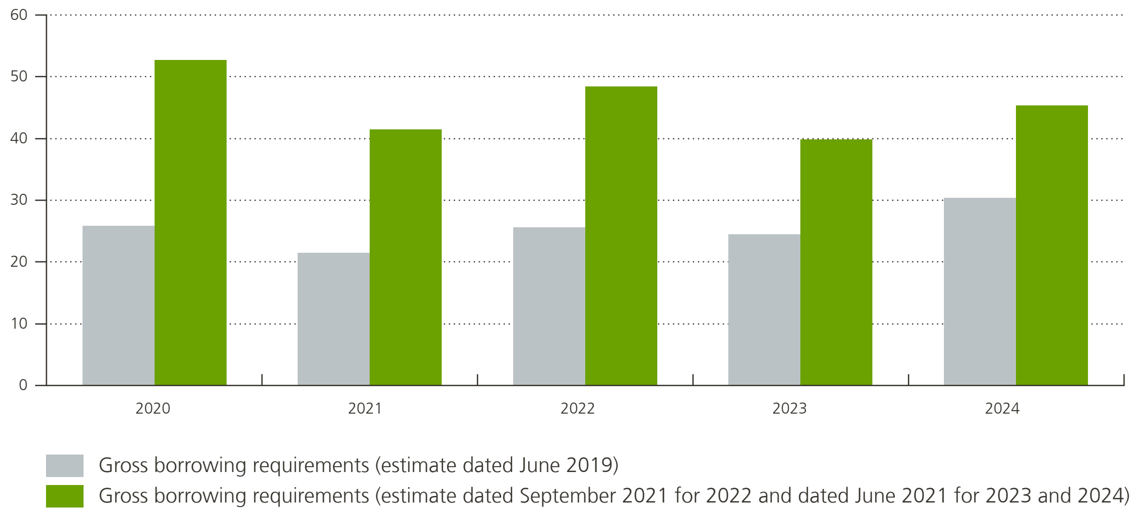
For a number of years now, those who manage government debt have viewed lower interest rates as an opportunity to reduce the refinancing risk at lower cost, a policy that was gradually deepened as market rates continued to fall. By staggering the maturity dates of long-dated debt, refinancing volumes falling due can be limited – and these volumes can be substantial in highly indebted countries such as Belgium.

In the secondary markets, the proportion of debt held by the Bank has been steadily growing since 2015 under the Eurosystem's asset purchasing programmes, taking up over 19 % in 2021 compared with less than 2 % of outstanding debt in 2014. The proportion of debt held by other Belgian residents – and particularly financial institutions – has fallen to the same degree. Over half of Belgian public debt is held by non-residents.

Chart 6.9

Gross borrowing requirement[1] on the rise since the start of the pandemic

(federal government, in € billion)



Source: Belgian Debt Agency.

1 The federal government's gross borrowing requirement covers, on the one hand, the current year's deficit and, on the other, early debt repayments and refinancing of debt reaching maturity.

Gross borrowing requirements raised since start of pandemic

Gross borrowing requirements include both funding of the current year's deficit and refinancing of maturing debt. These requirements are largely covered by OLO issues, which account for over 85 % of outstanding federal public debt.

Increased borrowing requirements are making Belgium more vulnerable to liquidity crisis

The COVID-19 crisis has had significant repercussions for the government budget since 2020, mostly because of the numerous support measures taken. In future, deficits are likely to stay higher than they were before the pandemic – and these deficits will also have to be financed in the markets.

Although extended debt maturity has enabled the Belgian government to better spread annual refinancing volumes, a large deficit does imply an upward revision of the gross borrowing requirements, making Belgium more vulnerable to a liquidity crisis event and potential interest rate rises. It is precisely for that reason that it started increasing the average maturity of government debt in 2010.

Asset purchases by the Eurosystem have had a downward effect on yields, but it would be unwise to base fiscal policy and debt management on the assumption that these favourable financing conditions will continue in the medium to longer term. Belgium's public finances should be consolidated and the country needs a sufficiently high primary balance to reduce future liquidity risks to public debt.

7. Towards a sustainable and resilient economy

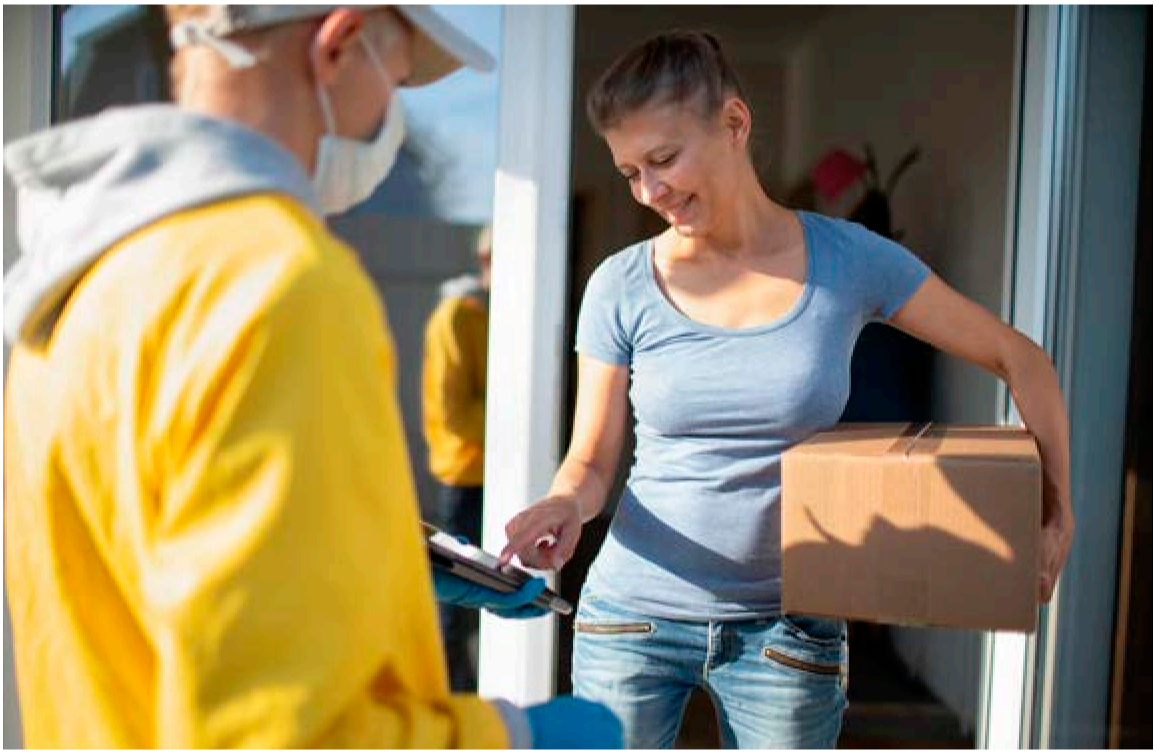
7.1 Major challenges remain beyond the coronavirus crisis

The COVID-19 pandemic hit Belgium's economy hard. In 2021, however, it recovered strongly on the back of massive government support bolstering the demand side of the economy across the world. This steep revival has ushered in rising inflation, suggesting that policy priorities must now shift from supporting demand to a greater focus on the supply side of the economy. Belgium is no stranger to supply-side issues: even before the pandemic, the country was in need of structural reform to secure sustainable and resilient growth.

Chart 7.1

The Belgian economy has strengths and weaknesses

Source: Eurostat.



Recovery should not be about a mere return to pre-coronavirus conditions. For one thing, the COVID-19 crisis has set in motion a range of fundamental changes and the Belgian economy is bound to look different post-crisis. Examples include wider digitalisation both at the consumer level (online shopping) and in corporate Belgium (working from home, for instance), and digital technology will undoubtedly be used more than before the crisis. And it is against this backdrop that economic actors will have to find new ways to conduct their business.

Belgium's economy had been facing major fundamental challenges even before the pandemic hit, and its economic fabric has to continually adjust to be able to create prosperity for the medium and long terms. It is therefore imperative that the economy grows sustainably and has the resilience to withstand any negative shocks that might occur.

The Belgian economy is marked by a series of favourable, but also some unfavourable structural factors. Its strengths definitely include its high level of prosperity, as traditionally measured by GDP per capita. This figure is significantly higher than the euro area average and slightly ahead of the average for Belgium's three main neighbouring countries, although it lags the average levels recorded in the three Nordic EU Member States (Denmark, Finland and Sweden). On a number of other indicators, Belgium outperforms all European reference areas mentioned above. For instance, the Belgian economy boasts high productivity levels as it adds more value per hour worked; it is more integrated into the global economy; and has a strongly positive net international investment position, indicating that it has significantly more external assets than liabilities.

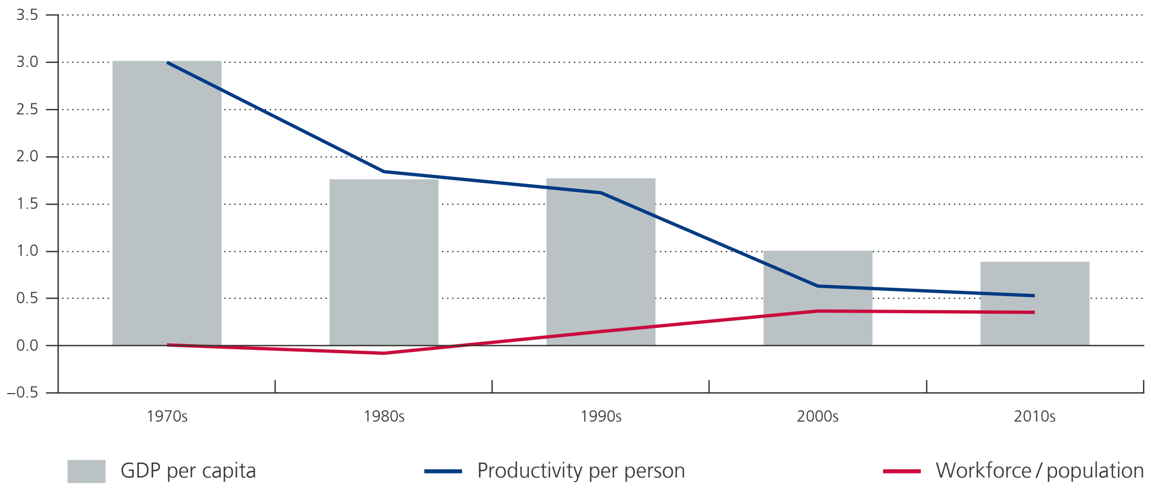
All that said, Belgium's public debt as a percentage of GDP is much higher than in other countries, leaving it with less fiscal margin to promote socially desirable initiatives and absorb negative shocks. Also, the Belgian economy is more emissions-intensive, as its businesses emit more greenhouse gases per unit of value added created than those in its reference zones. Consequently, the necessary transition to a low-carbon economy will involve much more effort in Belgium. And lastly, relatively fewer of its residents are in work, meaning that relatively smaller numbers of people are actively contributing to wealth creation, and productivity growth is also structurally lower than elsewhere in Europe.

Subdued productivity growth stems from a trend decline that is visible in most developed economies but markedly more pronounced in Belgium. In the

Chart 7.2

Drop in productivity growth slows prosperity growth

(average year-on-year change in relevant periods, in %)



Sources : OECD, NBB.

1970s, productivity per worker [1] was still growing by an average 3 % per annum, but the subsequent two decades saw rises of only 1.8 % and 1.6 % respectively. In fact, during the 2000s and 2010s, productivity growth shrank even further, to a little over 0.5 % per annum on average. Such subdued productivity growth is cause for concern. After all, productivity trends used to be the key source of prosperity, given systematically slow employment growth in Belgium. Over the past five decades, then, the pace of wealth creation has fallen significantly in the country.

To retain and grow economic prosperity, it is essential to get more people into the workforce and boost their productivity. And the climate challenge is making it important for Belgium to be able to make the transition to less carbon-intensive activities and to a renewable energy supply that is still reliable and affordable. These challenges can only be taken on properly if the sustainability of public debt is assured.

1 Data on the volume of labour and therefore also on productivity per hour worked have only been available since the 1990s, which is why productivity per person has been used for this long-term comparison. For the entire period for which data are available, particularly during the 2000s and 2010s, the conclusion still stands : productivity growth (per person and per hour worked) has persistently slowed.

These various challenges are discussed in more detail in this chapter.

All these goals are interlinked to some extent, and progress in one area may contribute to a favourable development of other factors. Measures to enhance productivity, such as training and education, can make work more attractive as real wages go up. When the low-educated join the workforce, this may temporarily reduce measured average productivity, but as they train and gain experience, long-term productivity may well go back up. Both higher employment and increased productivity benefit public finances, helping to bring public debt down to more sustainable levels. This, in turn, creates margins to absorb negative shocks, and to focus more government support on productivity-enhancing, inclusive and net-zero policy measures. Lastly, the greening of Belgium’s economy will undoubtedly require a reallocation of labour and capital. Although this may temporarily affect productivity, this does not need to lead to a permanently less dynamic productivity trajectory. Innovation is the key to align further economic growth with caring for our climate.

Belgium has many key advantages that need to be preserved and enhanced to make its economy more inclusive, more dynamic and carbon-neutral, while ensuring the sustainability of its public finances. The country has weaknesses, too, which need addressing.

Among Europe's innovation champions, with a few areas that need more focus

Its innovation capacity is one of the Belgian economy's key strengths and the country has been at the forefront of European innovation for years. During the health crisis, it reaped the benefits from its strong specialisation in pharmaceutical research and, in 2021, it joined the Nordic EU countries in the group of *innovation leaders* according to the European Commission's Innovation Scoreboard[1].

1 The group of innovation leaders consists of all countries whose Innovation Scoreboard rating exceeds 1.25 times the European average. When the scoreboard was first drawn up, Belgium ranked among the group of strongly innovative countries, with innovation performances between 1 to 1.25 times the European average.

Belgium has improved its performance since the Innovation Scoreboard was first launched, notching up a 20.7 point advance between 2014 and 2021, from 122.8 to 143.5 points. By contrast, the European average increased by a mere 12.5 points in the same period. Belgium's improvement ties in directly with its R&D spending, which has been on the up and up since 2005 on the back of some of the most generous direct and indirect government aid programmes within the EU. In fact, these accounted for nearly 3.2 % of GDP in 2019 and for the first time exceeded the 3 % target set down in the Europe 2020 strategy.

Belgium is one of the EU's innovation leaders

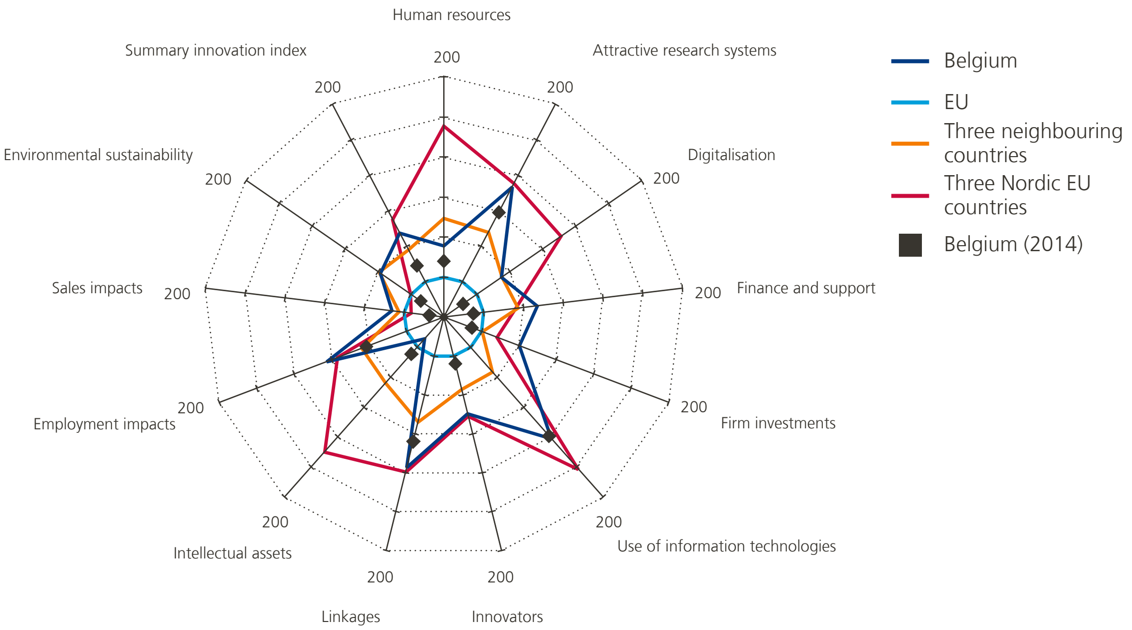
It may look hard to marry these generally excellent scores on innovation with the weak productivity growth that has been Belgium's bane for many decades now.

As argued in previous editions of this Report, these overall weak aggregate productivity growth figures mask a wide variety of very different performances indeed. Belgium's leading technology companies continue to innovate and lock in major productivity

Chart 7.3

Belgium among European innovation champions

(12 sub-indicators of the Innovation Scoreboard, data 2021, EU average = 100)



Source: Eurostat.

gains, whereas the technologically laggard invest little in R&D and merely succeed in keeping the gap from widening further in the best-case scenario.

So, the challenge is not so much to boost innovation efforts as to get more companies to innovate. A broader-based corporate innovation drive could enhance aggregate productivity growth as it could reduce the concentration of R&D on a limited number of sectors and businesses and the related concentration of specialisation in a number of innovation types (the intellectual assets dimension on the Innovation Scoreboard).

In addition, spreading innovation across the country's economic fabric should be enhanced and facilitated, and the digitalisation of whole segments of the economy – rapidly imposed by the health crisis – could bolster productivity. Companies will then have to make the additional effort to invest in tangible (IT equipment, robotisation, 3D printing, etc.) and intangible assets (software, data, etc.) as well as in training their workforce, so as to make the best possible use of the new organisation of production facilitated by such digitalisation.

And there are other weaknesses or potential bottlenecks in the innovation arena. For one thing, the Belgian innovation ecosystem would benefit from better performance on lifelong learning for employees (the human resources dimension), which would, in the main, have a positive impact on productivity and the employment rate (see section 7.2).

Lastly, Belgian production of innovations in environmental technologies is well below the European average, even if the country is sixth on the European ranking for ecological sustainability of the innovation ecosystem. To make a success of the transition to a low-carbon economy and actually play a leading role, Belgium will have to create additional incentives to increase production of green innovations.

An economy that is digitalised to a large degree, but still has some gaps to close

The degree of digital transformation is another advantage for Belgium. Perhaps less striking than its innovation capacity, but in 2021 it came 12th among the 27 EU countries in the Commission's DESI ranking (Digital Economy and Society Index) and ended up 6th on the integration of digital tools in companies (online sales, social media presence, electronic information-sharing between businesses, etc.).

The shortage of ICT specialists in the labour market is depressing growth

That said, the DESI index also flagged a number of weaknesses in Belgium's digital transformation. More specifically, the country is trailing in its roll-out of 5G and of high-speed fibre-optic networks. Investment is planned to address these issues[1], including in Belgium's National Recovery and Resilience Plan.

Digital human capital is another area of concern. The percentage of the Belgian population with basic or advanced digital knowledge exceeds the European average, but the proportion of information and communication technology (ICT) graduates is lower, and this is reflected in significant shortages of ICT specialists in the labour market. A recent study[2] revealed that companies with a skilled workforce in science, technology, engineering & mathematics (STEM) benefit the most from digital transition and innovation. Businesses' innovation and digitalisation efforts therefore need to include training policies to ensure their people have, acquire and retain the necessary skills.

A final weakness is Belgium's underperformance relative to the EU average in terms of the digitalisation of government services, and particularly in terms of open data. To improve this situation, Belgium's

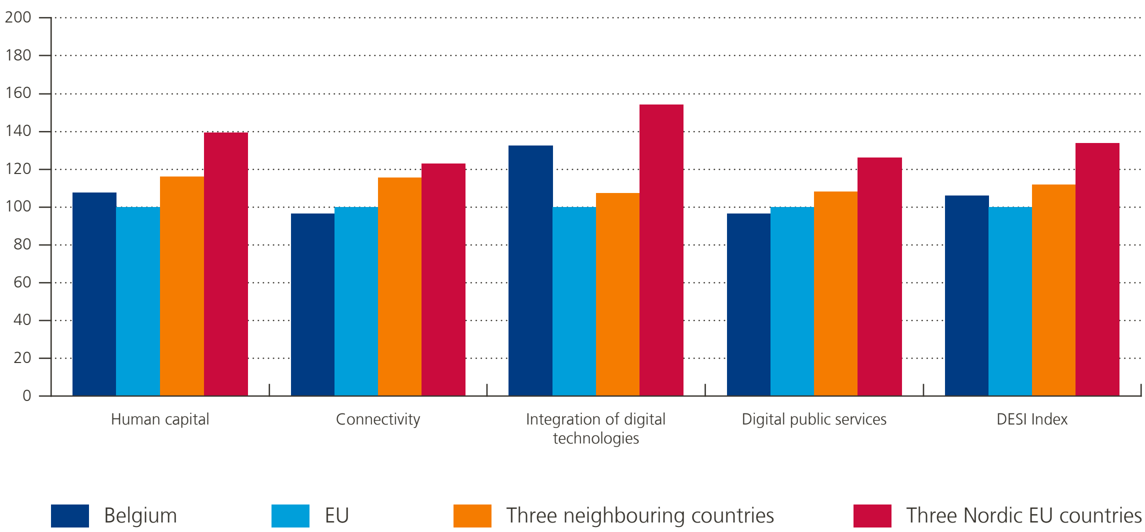
1 Historical operator Proximus is planning to have 70 % of households on its high-speed fibre-optic network by 2028.

2 See Bijnens G. and E. Dhyne (2021), The return on human (STEM) capital in Belgium, NBB Working Paper 401.

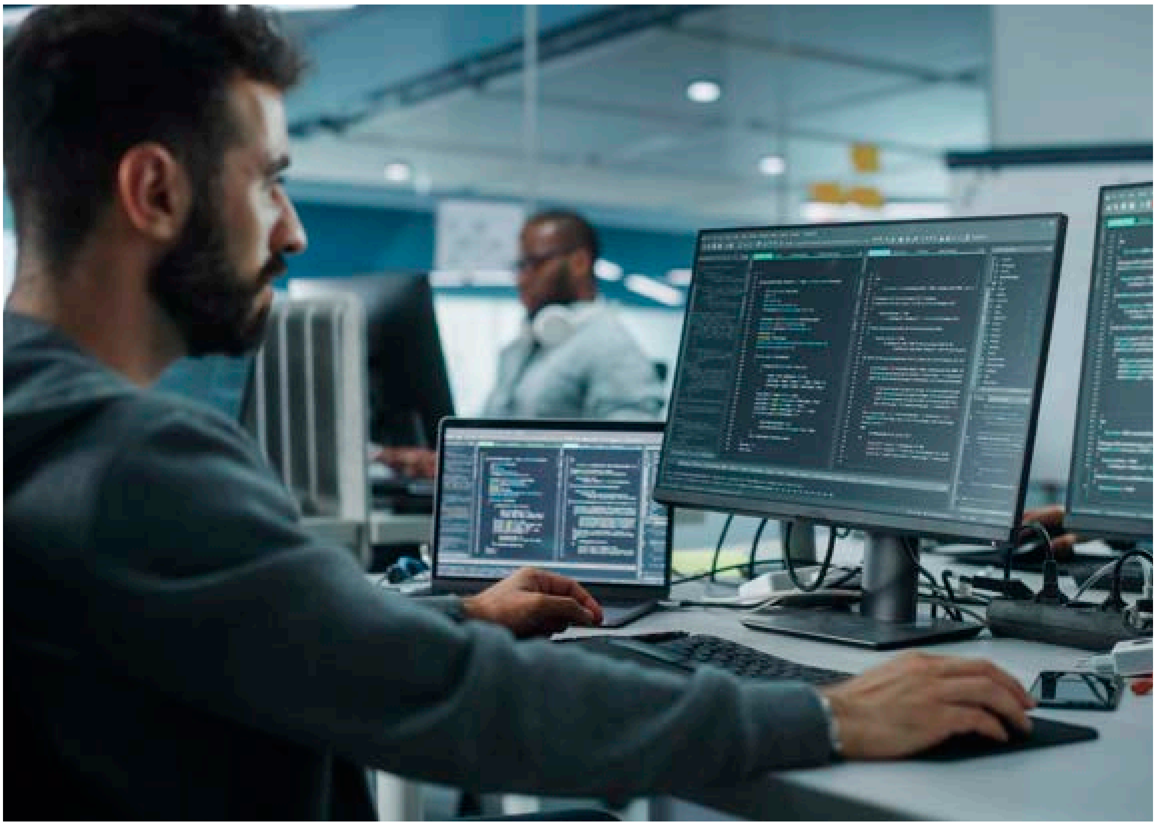
Chart 7.4

The Belgian economy is amply digitalised but still has weaknesses in fibre-optic connections and digitalisation of government services

(DESI index and components, 2020, EU average = 100)



Source: Eurostat.



National Recovery and Resilience Plan has earmarked € 796 million for capital spending on the digitalisation of government services.

Better rules and regulations for smoothly operating markets

A stable regulatory framework, setting out fair rules and sending clear signals to the various economic actors so as to allow them to make optimum investment and consumption decisions is essential for the recovery of productivity growth and the fight against global warming.

One particular aspect of regulations that influence productivity growth lies in the rules governing corporate demographics. However, the small numbers of companies starting or ceasing to trade in the past two decades may well have affected the process of reallocating resources. The post-2008-2009 financial crisis zombification of the Belgian economy described in numerous studies may have been partly due to excess protection of existing businesses and to cumbersome incorporation and liquidation procedures for companies – even if other factors may have come into play.

Reallocation of resources continued during the crisis

Low risk of zombification following the health crisis

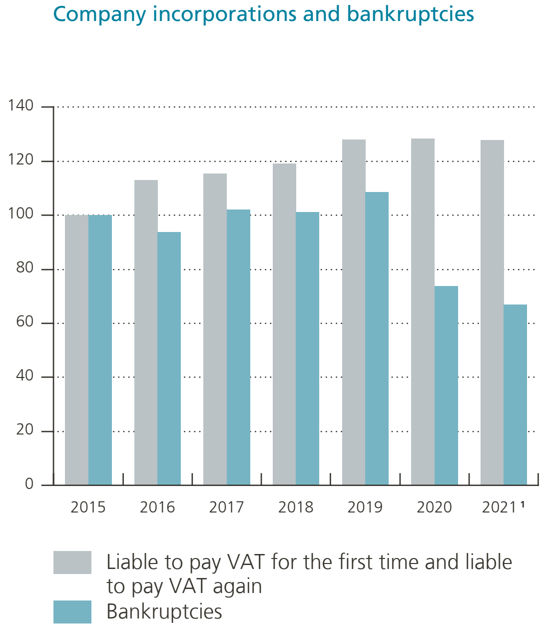
The historically low bankruptcy rates recorded in 2020 and 2021 might suggest that the COVID-19 pandemic could cause a fresh wave of zombification, but various factors appear to suggest that this risk is not as high as it was after the financial crisis.

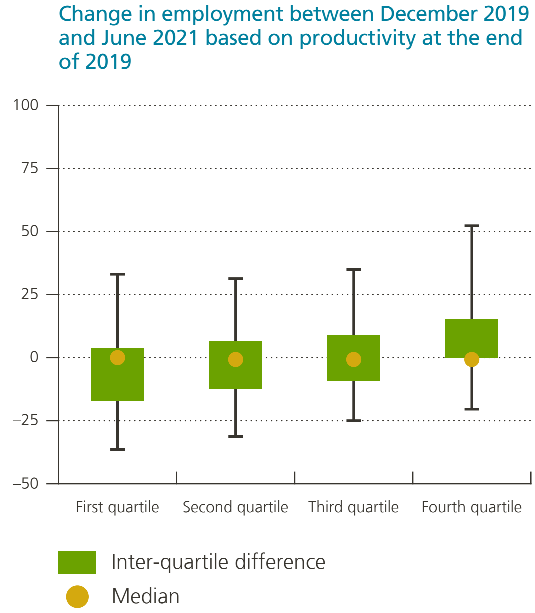
For one thing, a lot of new companies have been established in recent years, even throughout the health crisis. And, secondly, the forced disruption or closure of selected activities, which coincided with periods of moratorium on corporate bankruptcies, inspired many entrepreneurs – as

Chart 7.5

Dynamic business demography has gone hand in hand with efficient reallocation of resources, even in the midst of the crisis

(left-hand chart: index 2015 = 100, right-hand chart: in %)





Sources: Statbel, NBB.

1 Companies that became liable to pay VAT for the first time and those that became so again in the first ten months of 2021; bankruptcies in the twelve months of 2021.

noted in chapter 5 – to partly tap into their own money to get their business back on track and redefine their business models. This should fuel renewed growth.

Lastly, during the crisis, various Belgian governments have taken measures to protect businesses and employees to keep Belgium's manufacturing fabric from fraying. This would not appear to have hindered an efficient reallocation of resources. Companies that cut their workforces the hardest between December 2019 and June 2021 were precisely those that were performing at the bottom end of their sectors by the end of 2019, whereas the best-performing companies continued to grow and recruit people during the crisis.

BOX 7

Sustainable development indicators

By the Law of 14 March 2014 amending the Law of 21 December 1994 containing social and miscellaneous provisions, the Parliament instructed the Federal Planning Bureau (FPB) to devise a set of beyond-GDP indicators measuring quality of life, human development, social progress and the sustainability of the Belgian economy. To honour this, the FPB and the National Accounts Institute have, since 2016, published an annual report on beyond-GDP indicators. From 2022, to achieve greater consistency, these indicators will be joined with those measuring progress on the United Nations' sustainable development goals (SDGs). In keeping with the Law, what follows is a summary of this report under the title "Sustainable development indicators".

A broad selection of individual indicators

Since the 2019 edition, the individual indicators are also grouped around the 17 SDGs. The data for the 1990-2020 period will be exclusively available via www.indicators.be, together with notes on 81 indicators for the SDGs plus five supplementary beyond-GDP indicators.

The report also recounts the progress achieved on the indicators' transition to the SDGs, under the evaluation brief given to the FPB by the Law of 5 May 1997 on the coordination of federal policy for sustainable development. These evaluations are also reported online. In keeping with its brief, the FPB constantly updates the indicators of sustainable development and aligns them with developments in knowledge and public debate.

Evaluation of individual indicators

Progress made towards the goals – set at Belgian, European or global level – is evaluated depending on the indicators:

- For indicators that come with a targeted number and a deadline, the evaluation considers whether the target can be achieved within the timeframe set if current trends are continued over the 2015-2030 period. These targets are set by a range of programmes and agencies (SDGs, the Europe 2020 strategy, the National Reform Programme, the federal long-term view for sustainable development) or to reflect international commitments made by Belgium.

- For indicators that have qualitative targets only – e.g. up, down or stable in relation to the SDGs and the federal long-term vision for sustainable development – the evaluation determines whether the indicator's historical trend (since 2000) is moving in the right direction in a statistically significant manner. This evaluation is less pertinent, as no firm pronouncements can be made on its level and the speed at which it is changing.

Progress towards the SDGs

Out of the 86 indicators featuring in this year's edition, the FPB takes stock of progress made towards the SDGs, based on a selection of 51 indicators (three per SDG).

An evaluation on the available data in November 2021 does not throw up a clear trend: on current trends, 35 of the 51 indicators are rated as unfavourable or undetermined, with additional efforts needing to be made to achieve the SDGs. Out of the four components that make up sustainable development (social, environmental, economic and governance) the indicators for the environmental component (16 out of 51 indicators) received the most favourable evaluation, whereas those for the social component (23 indicators) are rated more unfavourably. The economic and governance components (7 and 5 indicators respectively) comprise too few indicators to arrive at any trends.

Considered by the various relevant categories of the population, the report finds that, for breakdowns by gender (40 indicators) many gaps are narrowing (life expectancy, unemployment rate, employment rate), with the exception of a small number of indicators (long-term incapacity for work, inactivity for family responsibility reasons, higher education graduates). Unsurprisingly, breakdowns by income levels (20 indicators) and education levels (11 indicators) are more favourable for those on higher incomes or higher levels of education – differences that typically increase, particularly in terms of poverty risk. Beyond age-related differences – on health, incapacity for work, employment rate and joblessness), no general trend may be ascertained when drawing distinctions based on age categories. Breakdowns by region (43 indicators) are also available but have not been analysed.

Composite well-being indicators

The synthetic well-being indicators developed by the FPB concern three dimensions of sustainable development: the development of society and well-being of the current generation in Belgium ("Here and now"), the well-being of future generations ("Later") and the impact of Belgian society on the well-being of the population of other countries ("Elsewhere"). Only the composite indicators of the "Here and now" and "Later" dimensions are evaluated for the period up to and including 2020, depending on data availability. Assessments of the recent situation have been made more complex as the health crisis has made it harder to gather the relevant data.

Current well-being between 2005 and 2019

The composite indicator devised for the "Well-being here and now" dimensions (W_{HN}) gauges trends in current well-being in Belgium and aims to capture any changes as adequately as possible. Between 2005 and 2019, this indicator recorded a major drop (see FPB, 2021 Report), attributable to a steeper deterioration in the population's general state of health – the key determinant of well-being in Belgium – relative to improvements at the social and economic levels (unemployment rate, severe material deprivation and school drop-out). Refining the analysis by category of the population, the decline in well-being is found to be statistically significant for men, the 16-24 and 50-64 age groups and the middle class (third income quintile). Only the indicator for those aged 65 and over rose significantly between 2005 and 2019.

The impact of the pandemic on well-being in 2020

On FPB projections in its 2021 report, Belgians' average well-being – already very low in 2019 – clearly deteriorated in 2020 and hit its lowest level since reporting started. In fact, in its last report, the FPB decided not to update the underlying indicators for measuring the composite well-being in 2020, as the indicators' comparability for these successive years was impacted by the pandemic, which has disrupted the collection of traditionally collected data. Instead, the FPB used *ad-hoc* surveys conducted over the course of the pandemic, in which respondents were asked about their life satisfaction, general health and mental health.

In terms of life satisfaction, these surveys point in the same direction, i.e. that satisfaction has been falling relative to past perceptions since March 2020, with variations depending on the societal health background (satisfaction went up when the pandemic slowed in the summer). Satisfaction rates remained lower than before 2020 – and by a very wide margin for some categories of people, such as women, young people, single people, students, unemployed or disabled people.

The pandemic also hit the key determinant of well-being: health. Belgians' perception of their state of health deteriorated and changed in tandem with the epidemiological situation. COVID-19 turns out to have affected the health of nearly one-third of Belgians, more particularly those in the 30-49 age group. The pandemic also damaged the mental health of the Belgian population, which had not been robust even before 2020, and caused psychological problems of varying intensity depending on people's situations during the health crisis. Anxiety and depression disorders remain at significantly higher levels than previously, affecting primarily women, young people and people who were already facing psychological difficulties even before the pandemic.

It is imperative for the future health condition of Belgians to be monitored, especially as so many treatments were postponed. The absence of any data on the pandemic's impact on children – who do

not feature in the surveys reviewed – is another point of concern, as well-being during one's childhood years impacts well-being as an adult.

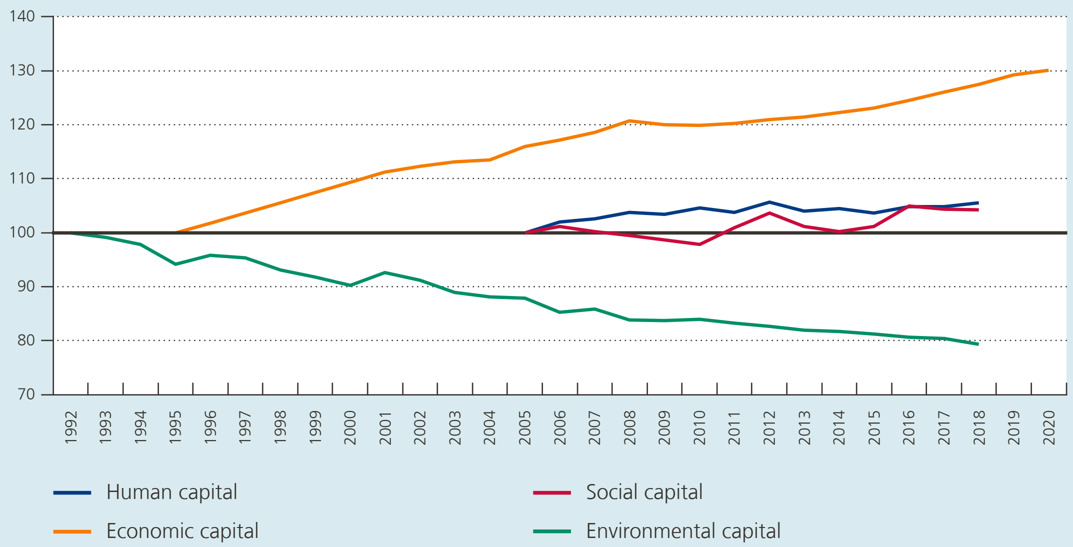
The well-being of future generations is eroded by environmental capital deterioration

A society's sustainable development implies that the lifestyle of the current generation should not come at the expense of the ability of future generations to meet their own needs. As it is impossible to predict what will constitute well-being for later generations or how such well-being will be achieved, the FPB uses an approach based on capital stocks to gauge this future well-being ("Later" dimension). This approach involves measuring changes in the stocks of resources necessary to create well-being for future generations and considers that a society is developing sustainably if it ensures that future generations can enjoy stocks of capital at least equivalent to the current level. In the conceptual framework used in this report, development is sustainable if it at least maintains all capital stocks at the same time.

Any assessment of the situation in 2020 is hampered by the limited availability of statistical data. Only the "economic capital" indicator, which captures all economic assets, could be updated. This indicator has surged since 1995 and reached an all-time high in 2020, with both physical stocks and knowledge capital contributing. The "human capital" indicator reflects individual health as well as qualifications and skills that contribute to employability and improved labour incomes. This gauge has significantly improved since 2005, thanks to the growing number of higher education graduates; by contrast, the

Composite indicators to measure sustainability of well-being

(100 = reference year [1])



Source: FPB.

1 Indicators have been standardised at 100 for the baseline year coinciding with the first year for which all components of the composite indicator are available. Capital types are not collated into a single indicator, as they are not interchangeable.

literacy and healthy life expectancy indicators have worsened. "Social capital" concerns the quality of relationships between people, at the level of both individuals and the community. It remained fairly stable in the 2005-2018 period. "Environmental capital" breaks down into air, water, land and biodiversity, all four of which contributed to the indicator's steep fall. This deterioration does not match the previously discussed favourable evaluation of the indicators for sustainable development's environment component. The assessment of progress made on the SDGs reflects a variety of indicators of favourably performing flow variables – such as the reduction in annual greenhouse gas emissions – and positive environmental policy effects, but these were not enough to halt the worsening picture in terms of environmental capital (environmental capital stock).

Based on these indicators and taking account of the deteriorating indicator for environmental capital, the FPB "Sustainable development indicators" report shows Belgium's current development to be not viable in the longer term, all the more so as other components of future well-being are liable to be adversely affected by the recent deterioration of various components of current well-being, such as education and healthy life expectancy.

7.2 Getting and keeping more people in the labour market

Structural tensions in Belgium's labour market

Every year, the country's regional public employment services review vacancies that are harder to fill and that require a lengthier recruitment process, known as bottleneck occupations. Jobs in technology, health care, trade and education are proving hard to fill across the country, but the three different Belgian Regions have their own peculiarities. In Brussels, Actiris has flagged specific recruitment issues for administrative posts, but also for ICT and technical positions. For the Flemish public employment service VDAB and its counterpart Forem in Wallonia, the greatest pressure is on professions in construction and industry.

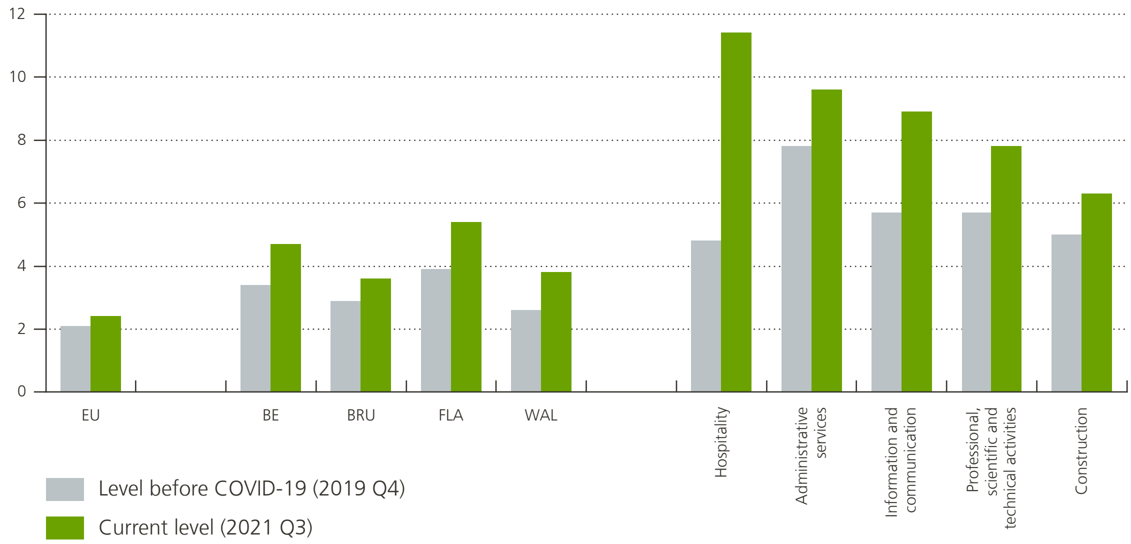
In the third quarter of 2021, a total of 196 000 jobs in Belgium were unfilled, adding up to an exceptionally high vacancy rate of 4.7 %, nearly double the EU average (2.4 %).

In Flanders, tensions are at their worst, resulting in a vacancy rate of 5.4 %, followed by Wallonia (3.8 %) and Brussels (3.6 %). Not all sectors are facing the same recruitment problems. The hospitality industry,

Chart 7.6

Exceptionally high vacancy rate [1]

(in %, seasonally adjusted data)



Source: Eurostat.

1 Ratio between the number of vacancies and the total number of filled and unfilled positions.

which lost a lot of people during the crisis and is now grappling with major recruitment issues, recorded the highest vacancy rate, at 11.4 %. Meanwhile, vacancy rates are also significant in administrative services (including agency work), information and communication, professional, scientific and technical activities, and in construction.

There are currently nearly 196 000 vacancies

The indicator's structurally high levels show up both quantitative and qualitative imbalances between the supply and demand of labour.

Too few workers who are immediately employable

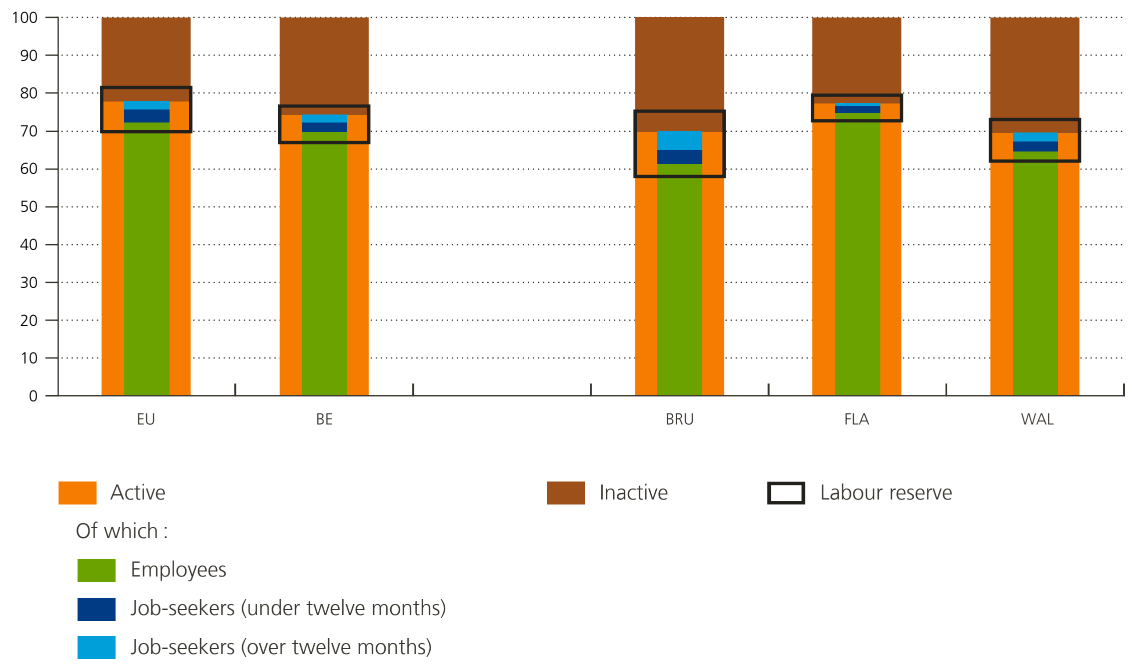
In quantitative terms and according to the International Labour Office definition, Belgium had an average of 332 000 job-seekers in the first two quarters of 2021 and its unemployment rate is therefore relatively low, at 6.5 % of the labour force compared with the European average of 7.4 %. Theoretically, if all these people could be put to work, the problem would be solved as there would be nearly two people for every job opening. However, 41 % of job-seekers have been out of work for 12 months or longer and are considered less easily employable. What is more, not all of them have the skills that today's labour market demands.

The number of people able to meet the demand for workers is not limited to these job-seekers alone, of course, as the definition of available workers can be expanded to include part-time workers that would like to work more, people who are available to work but not actively looking, and people looking for work who are not immediately available. All these people add up to the concept of the labour reserve that the Commission uses to gauge the so-called labour market slack. In the course of the first half of 2021 this

Chart 7.7

Few workers rapidly employable in Belgium, particularly in Flanders

(breakdown of the population aged 20-64 by socio-economic status, in %, average of the first two quarters of 2021 for the EU and Belgium, 2020 for the three Regions)



Source: Eurostat.

was 646 000 people in Belgium, i.e. 12.6 % of the extended labour force, which is below the EU average of 14.3 %.

The situation is not the same in all three Regions of the country. In the first two quarters of 2021, joblessness in Flanders averaged 4.1 %, virtually equal to the floor of frictional unemployment, whereas Wallonia and Brussels are still dealing with massive joblessness of 9 % and 12.4 % respectively. Allowing for the extended labour reserve, the labour market slack was at 8.8 % in Flanders in 2020, at 15.2 % in Wallonia and at 23.1 % in Brussels.

It is important that this labour reserve is matched with vacancies so as to lessen the tensions in the Belgian labour market. To a degree, this may be achieved by encouraging Brussels and Walloon job-seekers to apply for vacancies in Flanders – an essential action point in the mobility policies of the public employment services, which share vacancies and ensure basic language training. All that said, just getting job-seekers into work will not be enough.

Matching labour supply and demand must be improved if Belgium is to contribute to European employment targets[1] and, most of all, if the federal government's employment rate of 80 % by 2030 is to be achieved. This means that an additional 660 000 or so people in the 20-64 age group will need to find work.

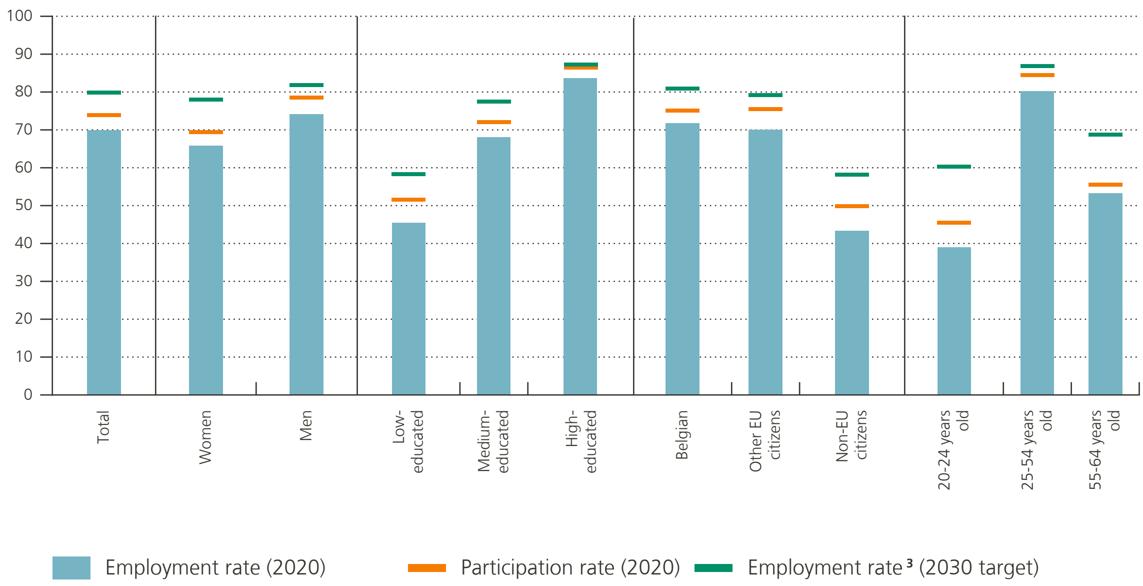
The 80 % target can only be met if the number of people in work increases for all categories of the population. An exercise by the High Council for Employment (HCE) suggests that the employment rate of particularly the 20-24 and the 55-64 age groups,

1 The European Pillar of Social Rights Action Plan envisages an employment target of 78 % for the 20-64 age group by 2030. To make an adequate contribution to this overall target, the Commission reckons that Belgium should achieve an employment target of 76.5 %.

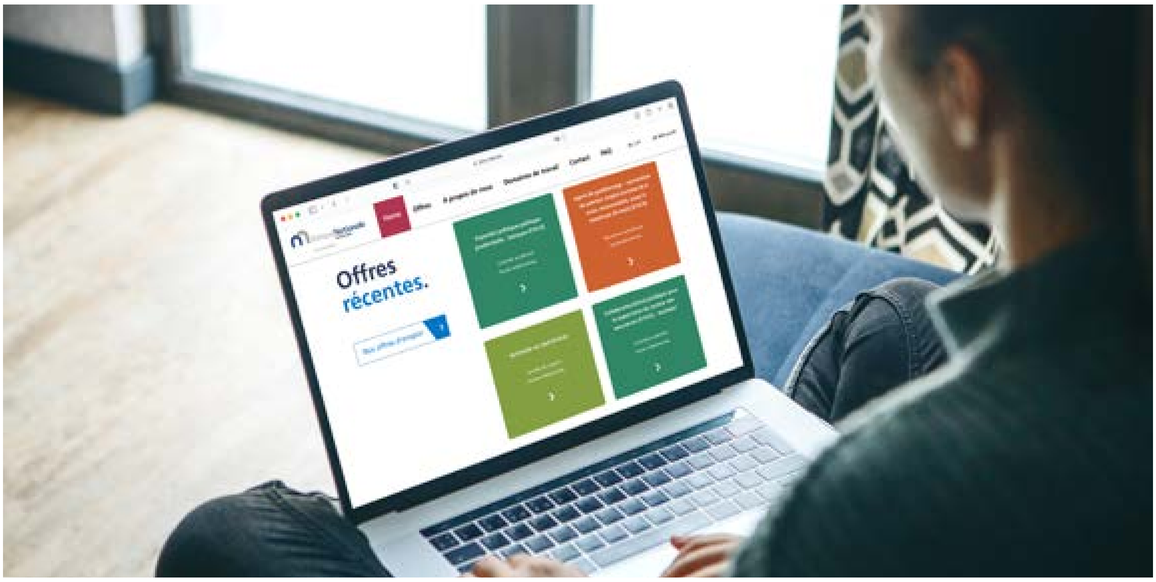
Chart 7.8

To achieve the 80 % employment target in 2030, Belgium will also have to raise its participation rate

(employment rate[1] and participation rate[2] of 20-64 age group, in %)



Sources: Eurostat, HCE.
1 People in work as a % of the working-age population between 20 and 64.
2 Labour force, i.e. people in work plus job-seekers, in % of the working-age population between 20 and 64.
3 Target per population group needed to achieve overall employment rate of 80 % for 20-64 age group, based on an HCE exercise.



as well as that of non-EU citizens, the low-educated and women will have to go up very sharply indeed[1]. Of course, there are different ways to achieve the target but less of an increase in one category must then be offset by bigger ones in others.

Women could help boost Belgium's employment numbers significantly. Although their employment rate has been rising for years now, it is still below that for men, even if their levels of education are typically higher on average. The gap is even wider if the employment rate is considered in full-time equivalents (FTEs). A recent analysis[2] shows that becoming a mother still has a negative impact on female employment and increases women's tendency to work part-time.

The inactive will also have to be mobilised if the shortage of workers is to be addressed

Even before the federal target was set, the various regional authorities had been on a mission to raise their employment rates. The Flemish government agreement, for instance, also set its target at 80 % by 2030, while Wallonia is aiming for 68.7 % by 2025. With regional employment rates widely different at this point in time – 75.1 % in Flanders, 64.7 % in Wallonia and 61.5 % in Brussels – the Regions with the lowest ratios will have to make the biggest efforts, even if all three of them will have to achieve a major advance if targets are to be met.

Incidentally, if it is to achieve its 80 % target, Belgium will also have to sharply push up labour market participation. The HCE exercise clearly showed that all sections of the population would have to see their employment target exceed current participation rates by 2030, often by a wide margin, meaning that the target is unachievable even if all the unemployed were to step into jobs. What this boils down to, then, is that a significant proportion of the currently inactive working-age population needs to be mobilised – and that goes for all the Regions, even in Flanders, which has the lowest proportion of inactive people.

A mismatch between required and acquired skills

In qualitative terms, one of Belgium's key advantages is its very highly educated population. Between 2000 and 2020, the proportion of low-educated people fell to 20 % among the 20-64 age group, from 39 %. Meanwhile, the proportion of highly-educated rose in the same period, to 41 % from 26 %.

1 The exercise compared Belgium's employment rate for all sections of the population with the figures for Germany, France, the Netherlands, Denmark, Sweden and Finland. This scenario saw the employment gap between men and women in Belgium halve and saw some of the difference with the employment rate of the best-performing reference country erased for all groups, taking the country's total employment rate to 80 % (HCE, 2021).

2 See Nautet M. and C. Piton (2021), "How does parenthood affect the careers of women and men?", NBB, Economic Review, December.

Higher levels of education typically also mean higher labour market participation: not only are the highly-educated more frequently active, their integration in the workforce also tends to stick more. Diploma levels are not everything, though: it is the choice of fields of study that determines matching between the demand and supply of workers. In Belgium, STEM studies attract relatively few students, while there is massive labour market demand for graduates in these fields. Meanwhile, hardly 2 % of graduates opted for ICT, compared with an average 4 % in the EU. This may explain why no less than 11 % of Belgian companies report having difficulty recruiting such experts – the highest percentage in the EU, where the average is below 5 %.

Digitalisation and the greening of the economy are also impacting labour markets. Some professions are disappearing, new positions are emerging and most if not all jobs are changing. The changes are causing businesses to look for different skillsets – not merely new technical skills, the so-called hard skills, that these new types of jobs require, but increasingly also soft skills, such as relationship competences and communication skills, innovation capabilities and adaptability.

First lever: activation

To meet workers' needs and create an inclusive growth dynamic, it is not enough just to keep people in work, as happened during the health crisis. The country also requires an efficient system of activation and reallocation of resources based on recruitment incentives, assistance when seeking jobs and training programmes for frequently sought positions and bottleneck occupations.

When drawing up the 2022 budget, the government took a wide range of measures aimed at greater activation of workers, by aiming to make work financially more attractive and encouraging lifelong learning (see below), but also by addressing labour shortages, reintegrating people in disability schemes and facilitating greater flexibility in terms of working time.

Belgium's recently approved National Recovery and Resilience Plan also includes activation measures. These longer-term reforms are looking to encourage a combination of part-time work and unemployment payments or integration income, stamp out discrimination and provide better assistance and guidance to job-seekers from vulnerable groups. For many of these reforms, including the announced overhaul of the pensions system, the actual impact on the labour market will greatly depend on real-world implementation.

All that said, any such measures are very welcome indeed, as the Belgian labour market is excessively rigid, with a range of structural rigidity factors also getting in the way of any optimum allocation or reallocation of resources – e.g. the lack of occupational and geographical mobility, too strong a link between wages and seniority instead of productivity, high taxes on wages and financial unemployment traps, to name but a few.

Second lever: making work more financially attractive

Accepting a job should always be financially more attractive than joblessness or inactivity. Gross wages, social charges and tax on earned income are not the only factors that come into play, so does the fact that social advantages such as unemployment benefits or integration income cease when people move into work. Despite a wide range of reforms in recent years – including the introduction of a social and fiscal employment bonus, tapering unemployment payments and the 2016-2020 tax shift – unemployment or inactivity traps continue to exist, making it non-viable for some people to work. With the lowest benefit payments in Belgium below poverty level, an undesirable course of action would be to cut benefits further just to make work more attractive. In fact, to combat poverty, the federal government started to raise a number of social benefits in 2021, including integration income[1]. The lowest benefits will be ratcheted up further up to and including 2024, with such increases coming on top of indexation and through the allocation of the so-called "welfare envelope". Such adjustments, although advisable from a societal perspective, do increase the danger of the low-educated on low wages stumbling into a joblessness or inactivity trap. To get and keep these people active, financial incentives must be adequate, for instance by way of higher gross wages or less of a fiscal and/or parafiscal burden on labour.

1 Including indexation and the welfare adjustment, integrated income was raised by 4.7 % on 1 January 2021, followed by a further increase of 8.9 % on 1 January 2022.

The 2021 agreement by the social partners on a phased increase in the average guaranteed minimum monthly income should make work more financially attractive even for the lowest-paid jobs. The increase, which is on top of automatic indexation, will be the first real such raise of the national minimum wage since the 2007-2008 inter-professional agreement. In real-world terms, the minimum wage should go up in 2022, 2024 and 2026, while a further 2028 raise is a possibility based on a comparison with Belgium's neighbouring countries[1]. To ensure that higher national gross minimum wages also lead to higher net wages, cut-off amounts for the social and fiscal employment bonuses will go up as well. Employers will be compensated for higher wage bills through an adjustment of their structural contribution reductions for low wages.

Work must be made more (financially) attractive to mobilise the labour force

The number of employees with wages close to the national minimum wage is small in Belgium. In fact, the proportion of employees on wages that outstrip the national minimum wage by up to 5 % came down from 3 % in 2000 to 2.1 % in 2015[2]. All that said, a higher minimum wage should at least

1 The average guaranteed minimum monthly income currently stands at € 1 691 a month for an 18-year-old without any seniority in a company. In April 2022, that will go up by € 76 gross a month, and by further increments of € 35 in both April 2024 and April 2026.

2 See Vandekerckhove S., Desiere S. and K. Lenaerts (2020), Minimum wages and wage compression in Belgian industries, NBB Working Paper Research 387, July.

Chart 7.9

The financial advantages of being in work remain small in Belgium and tax on labour quickly rises

(in %, 2020, for a single person with no children)

Source: OECD.

1 This indicator captures the degree to which net income goes up when an unemployed person or beneficiary of integration income finds work, factoring in tax on labour and loss of benefits payment. Calculations based on the assumption that annual income consists of twelve times the payment of wages and, in the event of joblessness, that the new wage equals the last income earned.

contribute to the relative attraction of work, as the absolute floor for wages in Belgium will go up as a result and the risk of unemployment or inactivity traps become slighter.

Lastly, fiscal and parafiscal levies are the key determinants of whether being in work is worthwhile, as any decision to work is not based on gross but on net wages. The 2016-2020 tax shift has reduced tax on labour in Belgium for all wage levels in recent years, with the contraction the highest at the lower wage end. Despite this, fiscal and parafiscal levies on labour remain significantly higher in Belgium than in its three main neighbouring countries. What is more, tax on labour rapidly rises when gross wages go up, which is related in particular to personal income tax and employee contributions to social security. This not only increases the chances of unemployment or inactivity traps, but may set up a promotion trap as well. In the latter case, a higher gross wage does not – or not sufficiently – translate into higher net wages, reducing the financial incentive to work more hours or to seek promotion.

Various Belgian authorities have devised measures to address this issue. The federal government, for one, is looking to reduce the special social security contribution percentage in 2022, helping employees to keep more in the way of net wages. As this contribution rises along with gross wages, this adjustment should also stem the risk of a promotion trap for people on low and average wages. Likewise, the Flemish authorities want to make work more attractive for people on low incomes by introducing an allowance in 2022 – the Flemish job bonus – of € 600 a year for the lowest of wages and steadily falling to zero for gross monthly wages in excess of € 2 500. Meanwhile, the federal government is also planning to introduce broad tax reform to help further reduce the tax burden on labour.

More training is needed to better align skills with requirements

In this context, it should not be forgotten that any decision to actively join the labour market is not merely a matter of financial considerations, but also factors in working conditions, household situation, state of health and various other social and cultural considerations. To encourage labour market activity, government authorities should not focus their attention exclusively on financial aspects, but also consider these numerous other obstacles.

Government action is key to making work more attractive while at the same time combating the risk of poverty and preserving companies' competitiveness. However, this does come at a direct price for public finances, which can only be offset by a sustainably higher employment rate.

Third lever: education

Initial training and lifelong learning help to reduce qualitative mismatches in the labour market. As noted, students' choices of study or professions do not always match what companies need – and this does not just affect the highly educated. Numerous bottleneck occupations do not require high qualifications, and technical studies coupled with the system of apprenticeships ("alternative learning") offer countless employment opportunities and should therefore be encouraged. Addressing school drop-outs could reduce the problem of integration in the labour market and the need to learn new professional skills in later life. In 2020, 8 % of Belgium's young left school without a secondary school diploma or the equivalent. Although better than the EU average (10 %), the percentages differ between the Regions: 7 % in Flanders, while Wallonia and Brussels both report 10 %.

Lifelong learning means that workers remain employable throughout their careers and allows them, where appropriate, to expand or adapt their skills to developments on the labour market.

The latest available Eurostat survey findings about adult education (AES, 2016) revealed that, despite a whole range of measures and resources, only 54 % of employees in Belgium had taken part in any kind of lifelong learning in the preceding year, a slightly higher ratio than the EU average of 52 %. Participation in lifelong learning tends to be lower for job-seekers, but in Belgium this still worked out at 42 %, compared with an average 28 % in the EU, thanks to a very comprehensive training offering from the country's public employment services. The situation is less favourable for the inactive, with involvement in lifelong learning amounting to 20 %, compared with 22 % in the EU.

EU agency Cedefop noted that 40 % of Belgian employees require training to stay in work or to be able to reorient professionally. This group primarily but not exclusively comprises the low-educated. Medium-educated and high educated people with weak digital skills or who lack selected general competencies – such as communication and organisational skills or personal resilience – would likewise benefit from such training.

People do not sufficiently grasp the necessity and purpose of lifelong learning, and the 2016 AES survey found that four out of ten adults have no desire to do any training whatsoever, mostly because they feel they do not need it. Practical obstacles are also cited, including lack of time, distance, scheduling of training programmes, health and cost.

Participation in lifelong learning diverges widely, with the low-educated and over-55s the least involved.

All that said, the vast majority of Belgian companies (84 %, as against an average 71 % in the EU) are facilitating education and training for their employees, even if strategies differ per sector. Some sectors are trailing behind – such as the hospitality industry and retail – while others are ahead of the pack, such as financial services. Company size is a key determinant of training intensity. On average, small businesses offer less in the way of education and training, although efforts in this area vary hugely depending on the company's activities. It has also been observed that more productive companies also boast the highest training intensity, without this necessarily being a matter of cause and effect.

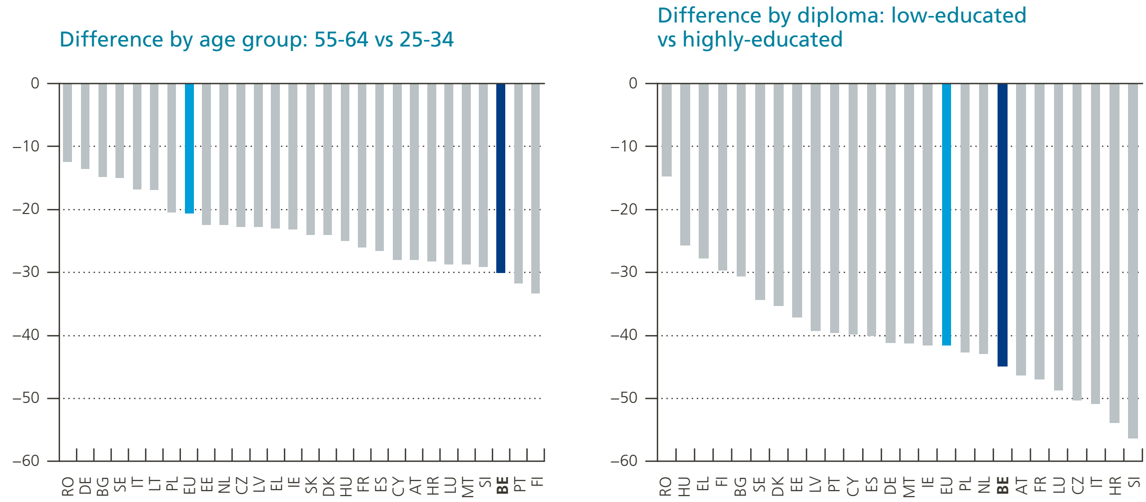
The lifelong learning system has many players from the public and private sectors, as well as associations. The country's federal structure and the division of authorities between the various policy levels do make it more complex to arrive at a comprehensive policy of lifelong learning. Having dedicated its 2021 report to lifelong learning, the HCE[1] has drawn up a series

1 HCE (2021), *Lifelong learning for employees : investing in the future*, November.

Chart 7.10

Low-educated and over-55s less involved in lifelong learning

(differences in rates of participation in formal and non-formal training over a period of one year, in percentage points, 2016)



Source: Eurostat.

of recommendations relating to (1) coordinating the various players and simplifying the system, (2) as well as to the necessity for a forward-looking vision and to match training and education with labour market needs and (3) increase the participation of underrepresented groups, and (4) to the importance of better statistics and an evaluation of policies.

7.3 The climate challenge and the energy transition

Global warming is a very serious long-term risk for economic activity and for life on Earth. For Belgium, too, its consequences may be very significant indeed, as was visible from the devastation caused by the floods in July. To limit climate warming to 1.5 degrees Celsius, as set out in the 2015 Paris Climate Agreement, global emissions of greenhouse gases must be cut swiftly and significantly [1]. However, the current trend is still clearly upwards: following a slight fall in 2020 in the wake of the COVID-19 crisis, worldwide emissions went right back up in 2021.

Against this backdrop, the European Union has committed to cut emissions hard. The Commission launched its "Fit for 55" package in July 2021, whose purpose is to achieve climate neutrality by 2050. Its interim target for 2030, meanwhile, has been set at a 55 % reduction in greenhouse gas emissions when compared with 1990. These targets still have to be translated into reduction figures for the EU's various Member States, but even without knowing the precise arrangements it will undoubtedly be a major challenge to cut Belgian greenhouse gas emissions sufficiently. After all, the Belgian economy emits more greenhouse gases than other European countries per euro of value added created, and household consumer patterns also cause more emissions per head of the population.

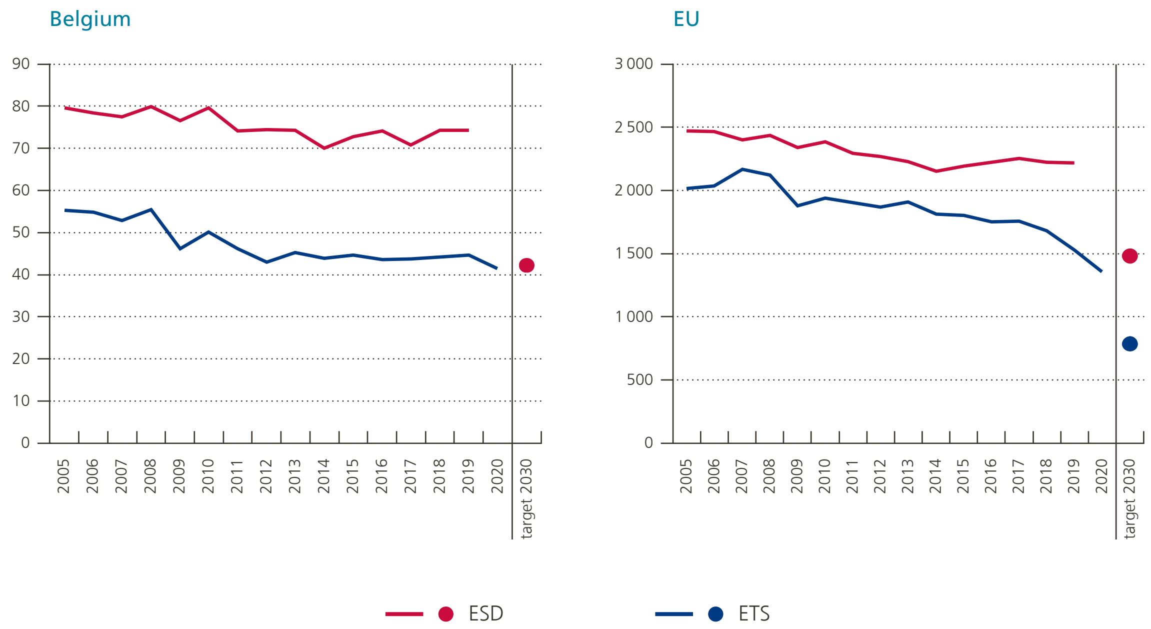
The EU has opted for a two-pronged approach to emissions. Emissions by highly energy-intensive companies in selected sectors – such as power generation, oil refining, the steel, cement and metals industries, chemicals and aviation within Europe – are regulated by the EU Emissions Trading System (EU-ETS). The system (see box 8), which covers around 40 % of emissions in the EU, operates fully within the European sphere, and ETS sectors are governed by

1 Swift emission reductions are imperative, as the planet heats up from the total amounts of greenhouse gases emitted into the atmosphere and as these diminish only very slowly.

Chart 7.11

Ambitious emission reduction targets [1]

(emissions of greenhouse gases, in million tonnes CO_2 equivalent)



Sources: EC, EEA.

1 The EU Emissions Trading System (ETS) governs the emissions of the EU's most energy-intensive businesses, while the effort-sharing decision (ESD) scheme governs all emissions that are not part of ETS.

European targets. All other emissions [1] are subject to the effort-sharing decision (ESD) arrangement, which sees an EU-set emission target translated into goals at the level of the Member States, which then have to take necessary measures to achieve the targeted reduction.

The Commission has translated the total targeted emissions reduction goal of 55 % into separate targets for ETS and ESD sectors, with emissions of greenhouse gases expected to be, respectively, 61 % and 40 % below their 2005 numbers by 2030. Compared with 2019 – the most recent year for which available data are not distorted by the coronavirus crisis – this means that emissions will have to come down by around half and one-third respectively. To help get ESD sectors emissions down by 40 % at the European level, the Commission proposes that this reduction should be pegged at 47 % for Belgium. In view of the very minor cuts Belgium has achieved since 2005, this implies that emissions must come down by 43 % compared with 2019.

A clear price signal for all greenhouse gas emissions would be useful

In view of the little time that remains, these targets are highly ambitious. In keeping with the allocation of responsibilities in Belgium, it is mostly left to the Regions to take the requisite measures. Unlike ETS, for which a price signal was chosen – more precisely, the implicit carbon price arising from trading a limited and diminishing number of emission allowances – the various Belgian authorities have, to date, mostly opted to regulate in order to cut ESD sectors' emissions, for instance by imposing minimum insulation requirements for housing or gradual phase-outs of cars driving on fossil fuels. But even for these sectors, a price signal would be useful. Taxation levied based on the carbon content of the type of energy would make fossil fuels relatively more expensive

1 With the exception of "land use, land-use changes and forestry". In net terms, this sector does not emit carbon in Belgium but rather (slightly) absorbs it (around 1 % of total emissions in 2019).

than renewable energy sources. Provided the future development of such taxation is announced in a timely fashion, such carbon prices could strongly steer businesses and households towards the most cost-efficient way to help achieve the target. Also, a carbon tax, announced well ahead of time, would result in much less price volatility, in contrast to ETS, which pins down the quantity of emission allowances.

Even if the authorities in Belgium decided not to go down the carbon tax route in the non-ETS sector, a whole range of fiscal instruments still result in an indirect tax on emissions. That said, the implicit carbon prices these reveal are very wide-ranging indeed. For example, the effective carbon rate is currently close to zero for heating family homes while company cars enjoy very favourable tax treatment, which means that – particularly coupled with fuel cards supplied by companies – the pollution costs of these cars are not shouldered by users[1]. In contrast, emissions by other road users is relatively highly taxed, with implicit prices much higher than current ETS prices for Belgian industrial companies. Belgium could massively improve the efficiency of carbon taxation by making these levies more emission-neutral, with such a tax shift actually encouraging the most efficient emission-reducing technologies[2].

Taxing fossil fuels means that gas, oil and gas and oil-derived products and services become more expensive. Such policies do not, however, imply an instant repeat of the 2021 energy crisis, when energy suddenly became much more expensive. For one thing, that particular surge was not driven by taxation related to climate policies, but by steeply higher prices for the energy component itself. As energy commodities are largely imported, these higher prices flew out of the country and impoverished the Belgian economy. A carbon tax, by contrast, generates additional tax revenues that may be invested in the economy, or redistributed to absorb some of the consequences for more vulnerable groups. Secondly, energy price increases in 2021 were brutal and unexpected, while an optimum carbon tax should tick up gradually and in keeping with a previously communicated trajectory, allowing all actors to adapt their investment decisions accordingly and fostering a permanent change in behaviour. Note that predictability and a sufficiently long transition period are just as important for other climate-related measures – such as regulation – to guide choices in the right direction. In fact, 2021's high energy prices are not needed to make investing in green energy financially attractive, as alternative energy sources are already competitive and viable at notably less steep prices for fossil fuels, and will be even more so if and when the cost of green technologies declines further.

Carbon prices do not imply a repeat of the 2021 energy crisis

Technological progress and economies of scale at wind and solar energy facilities have pushed down the average levelised cost of electricity (LCOE) for the relevant technologies. According to a study commissioned by the EC, in 2018, these costs for plants operational in the EU were estimated at € 59 and € 84 per MWh for onshore and offshore wind energy, € 87 per MWh for large-scale solar photovoltaic (PV) energy projects and € 133 per MWh for individual solar PV installations. Various options, in fact, have levelised costs that are below those for combined cycle gas turbines (€ 98 per MWh) and well below electricity prices observed in the markets in the final quarter of 2021, i.e. around € 152 per MWh for delivery in 2022. That said, such estimates do not take into account the cost arising from the intermittent nature of these power generation options. But these cost levels suggest that electricity prices following the transition would still be lower than levels observed at the end of 2021.

All things considered, the transition to a low-carbon economy would involve a smaller[3] and more gradual rise in energy costs than in 2021, making it easier for households and businesses to change their behaviour.

Appropriate climate-related policies also require devising an intelligent accompanying energy policy to help integrate intermittent renewable sources in an efficient way. Abruptly higher prices as in 2021 and dependence on the rest of the world could be limited that way as well.

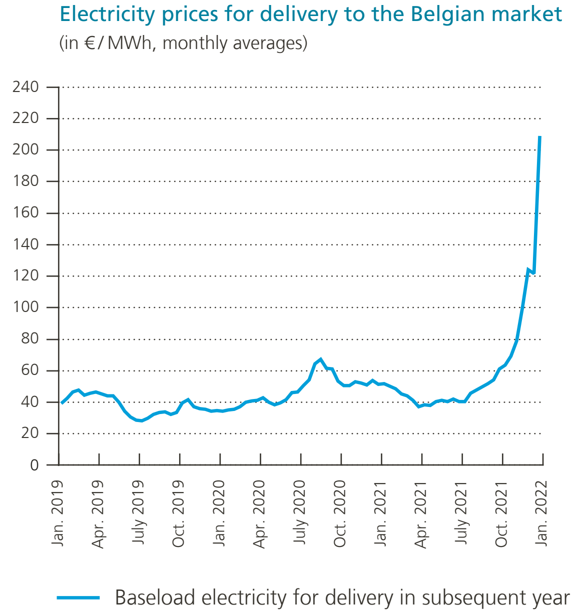
1 As discussed later in this chapter, the federal government has decided to wind down the favourable tax treatment for company vehicles running on fossil fuels.

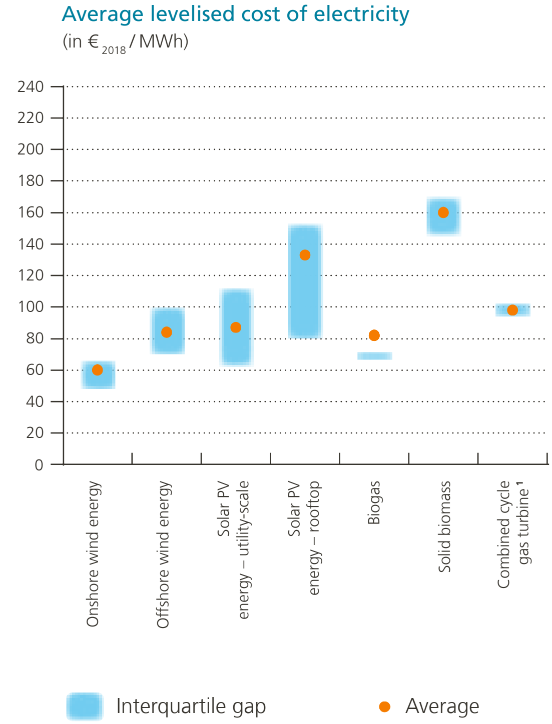
2 For more details, see Cornille D., R. Schoonackers, P. Stinglhamber and S. Van Parys (2021), "Fiscal policy instruments to mitigate climate change – A Belgian perspective", NBB, Economic Review, December.

3 See, for instance, EC (2021), "Impact assessment report", Commission Staff Working Document.

Chart 7.12

Production costs for green electricity increasingly competitive





Sources: Refinitiv (an LSEG company) – own calculations; Altmann M., T. Badouard, D. Moreira de Oliveira, P. Torres and J. Yearwood (2020), Final Report – Cost of Energy (LCOE): Energy costs, taxes and the impact of government interventions on investments.

1 Based on fuel costs for natural gas of $€_{2018}$ 25/MWh in 2019 to around $€_{2018}$ 40/MWh in 2040.

BOX 8

The case for carbon pricing

Some choices by economic actors cause environmental costs that do not automatically show up in fossil energy sources' market prices. These costs may be internalised in the shape of a carbon price that forces economic actors to always include the cost of their ecological footprint when deciding on their consumption and investment. To achieve the capital spending inherently needed in the transition, and particularly on energy projects, it is essential that uncertainty is reduced by providing a clear, predictable and credible view of the medium- and long-term developments in this price.

Carbon prices may come about either by imposing them via a carbon tax or by setting an emission allowance that will then throw up an implicit price through a market-based mechanism. In the European arena, the choice was made in 2005 to implement indirect carbon pricing in selected high-emitting sectors. To this end, a limited number of greenhouse gas emission allowances is allocated that may be traded on a European-wide market, essentially curbing the emission amounts permitted to the relevant sectors. The system imposes an ever-lower ceiling on the emissions of these sectors and emission allowances in the amount of this maximum are allocated via auctions. A limited proportion is allocated free of charge to sectors competing outside the EU-ETS. Emission allowances can then be traded between companies with excess allowances and companies that emit more than the allowances they hold – so-called cap-and-trade system that is designed to leverage planned scarcity of allowances. This approach actually pinpoints the sectors' emission volumes and emission prices are determined endogenously in the markets. Over the short term, then, this type of carbon price can be highly volatile.

EU-ETS has been expanded at various stages. Up until March 2018, carbon prices under the scheme were at € 10 per tonne of CO_2 – not exactly a price level that promotes investment in the technologies needed to work efficiently towards reducing emissions in the long term, especially as these still require a great deal of innovation. However, EU-ETS prices have been advancing steadily in the past three years and nudged an average € 69/tonne CO_2 in the final quarter of 2021.

Prices for EU-ETS emission allowances

(in € per tonne CO_2 equivalent)

Source: Refinitiv (an LSEG company).

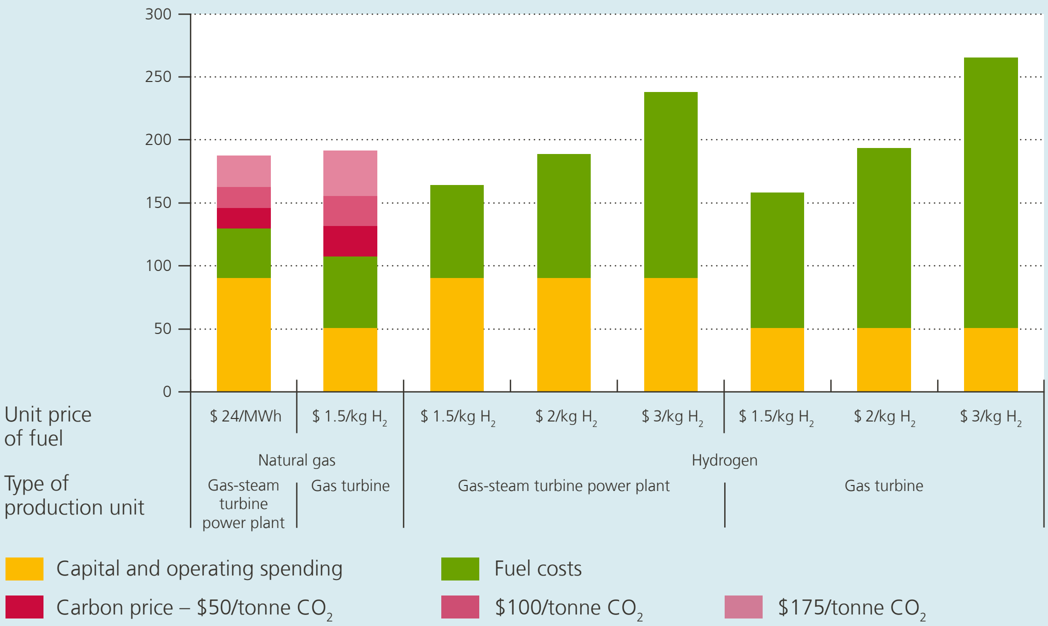
Following the EU's more ambitious climate-related commitments, the Commission tabled a proposal in July 2021 to overhaul EU-ETS in order to accelerate the emission reduction efforts of the relevant sectors. The Commission would be looking to recalibrate various components of the scheme, including a steeper reduction of the ceiling on emission allowances by 2030 – by 61 % compared with 2005, instead of the previously envisaged 43 % – by speeding up annual cuts to 4.2 % from 2.2 %. Free allowances would also be cut back and allocated on the basis of more restrictive criteria, while the system would be expanded to include shipping, buildings and road transport. New conditions for the use of the income from the auctions would be put in place to encourage innovation and to address the redistribution effects, so as not to endanger the societal acceptance of these ambitious commitments. And lastly, the Commission proposes the introduction of a carbon border adjustment mechanism (CBAM) to factor in carbon content in imported goods prices, so as to prevent leakage of polluting activities to countries outside the EU.

By tightening up the European market for emission allowances, the authorities are sending a clear signal of rising carbon prices in the years ahead, which should encourage investment in low-carbon options as well as the development of innovative technologies. Technologies such as carbon capture and storage, the production of green hydrogen through electrolysis and power from renewable energy sources should all benefit from higher carbon prices. With higher costs for projects using fossil energy sources, carbon-free technologies – which are currently not very profitable – should become sufficiently viable in technical and economic terms to be permanently adopted.

Hydrogen could replace fossil fuels in a range of processes. Usage of local electrolysis units, for instance, could help support the flexibility of the electricity system – i.e. power generation for load balancing and peak load generation. Data from the International Energy Agency (IEA) suggest that, at natural gas prices of $ 24/MWh – comparable to average prices in the 2010s – a price of $ 100/tonne of CO_2 would be needed to make the technology competitive if the hydrogen price is at $ 1.5/kg. The profitability

Levelised electricity generation costs for load balancing with natural gas or hydrogen [1]

(in $ per MWh)



Source: IEA (2019), *The Future of Hydrogen*. All rights reserved; adapted by NBB.

1 Average levelised electricity generation costs focused on load balancing – at a load factor of 15 % – according to various fuel cost scenarios: for a natural gas price of $ 7/MBtu, i.e. $ 24/MWh, and for hydrogen prices of $ 1.5, $ 2 and $ 3/kg respectively. For information on the scenarios underpinning the chart, see IEA (2019), The Future of Hydrogen.

threshold increases in tandem with the price of hydrogen: at a hydrogen price of $ 2/kg the price of a tonne CO_2 should go up to $ 175. That said, hydrogen-based production units should be competitive at the current cost of carbon and hydrogen ($ 3/kg) in view of the natural gas prices being charged in the final quarter of 2021 ($ 73/MWh for delivery to the European market in 2022).

Safeguarding reliable and affordable low-carbon power supply

The transition to a low-carbon energy system requires adaptation to new environmental requirements for both demand and supply of energy.

For energy demand, such adaptation implies greater energy efficiency and more electrification of applications. After all, if consumption is better managed by measures for rational energy use and energy-efficient equipment, this helps to reduce energy costs, boosts security of supply and reduces emissions of greenhouse gases in the proportion of power in the electricity mix that is still generated using fossil fuels. How the demand for electricity develops also depends on the pace of electrification of applications. Electricity is likely to replace fossil energy sources in both transport (electric vehicles), the heating of buildings (heat pumps) and even in some industrial processes.

Evolution and (r)evolution in electricity demand

In Belgium electrification is supported by government measures such as limiting access to a growing number of city centres for cars with internal combustion engines, or, more broadly, promoting electric vehicles through a greener tax system: Flanders has scrapped registration and road tax for electric vehicles, while Wallonia and Brussels have sharply cut these levies. At the federal level, tax relief will gradually be phased out for corporate cars with internal combustion engines, currently at 50 % to 100 % depending on carbon emissions and the type of fuel; such relief will no longer apply to any new cars bought from 2026. For cars not emitting carbon, relief will initially be kept at 100 % and from 2027 reduced to 67.5 % in 2031.

Tax incentives – applicable for three years and subject to conditions – were put in place on 1 September 2021 for private individuals and companies installing smart charging points: a tax cut of up to € 1 500 for private individuals and a higher deduction of investment costs for companies if the charging point is publicly accessible. The three Regions are also looking to install more public charging points – a necessity if the sale of cars with internal combustion engines is prohibited from 2035, as proposed by the Commission.

In terms of energy supply, the change must be supported by electricity production that is as neutral as possible in terms of greenhouse gas emissions. At this point, Belgium's electricity system is largely underpinned by gas and nuclear power plants. Power generated by solar and wind energy is on the rise – as is appropriate for a transition to low-carbon energy – but the government's decision to get out of nuclear power will require a fast and deep adjustment of the country's electricity system. After all, nuclear energy still accounts for nearly 40 % of electricity generation.

Guaranteeing affordable low-carbon power supply

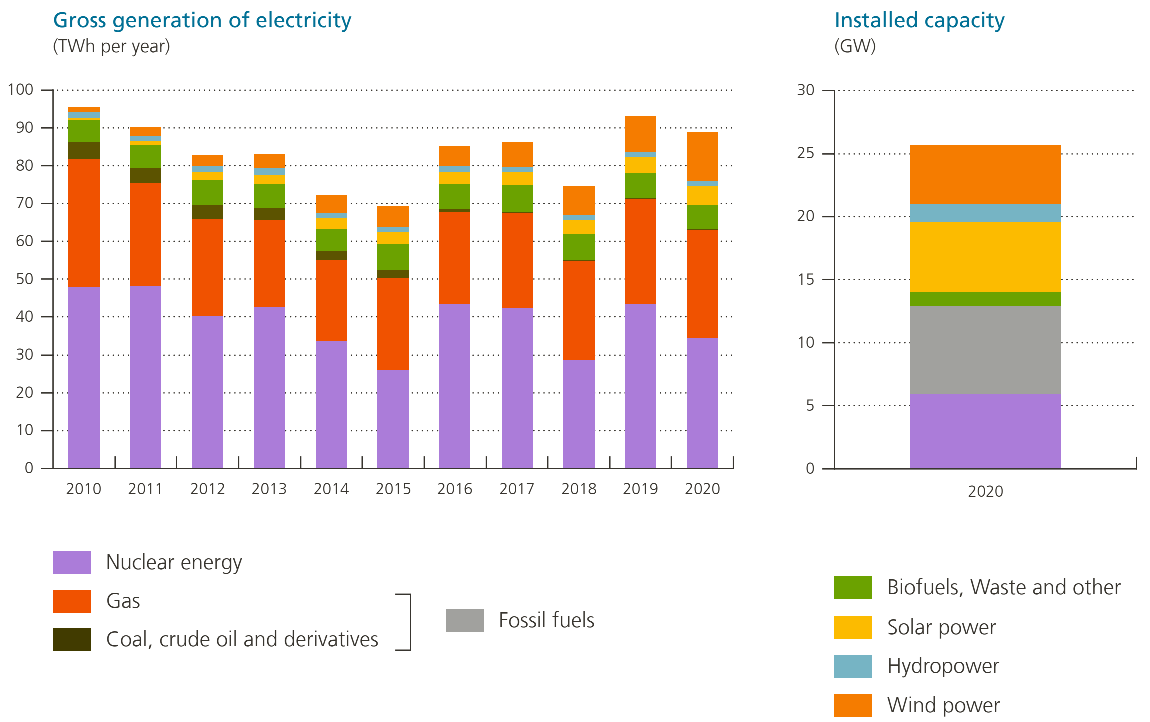
This change should not come at the expense of the security of energy supply needed to keep the economy attractive and guarantee the comfort of households. The federal government has committed to both by guaranteeing a sustainable and affordable supply.

To offset the dismantling between 2022 and 2025 of 5.9 GW in nuclear power, the government has introduced a capacity remuneration mechanism (CRM) with the aim to spark replacement capacity until the country has enough renewable energy sources and flexibility mechanisms, i.e. demand-side management solutions and/or storage capacity. Under this mechanism, the government pays remuneration for the maintenance of production capacity – as well as for the energy produced – to suppliers selected on the basis of two auctions, held four years and one year before the year of actual supply.

At the first auction for supply in 2025-26, capacity to the tune of around 4 450 MW was selected, at a cost price of € 141 million. Eligible bids to a large extent involved existing generation units – 56 % of capacity on offer, including mostly existing gas power plants – plus demand-side management installations and some new storage capacity. Two new gas power plants – in Vilvoorde and Les Awirs, each around 800 MW – were also qualified. Their licence applications are being processed.

Chart 7.13

The electricity mix must change in the years ahead



Sources: Eurostat, FPS Economy.

In 2024, a second auction will be held for the same term to help refine contractual volumes and ensure a wide diversity of available technologies, and it will also be open to non-Belgian capacity. When approving the procedure and the regulatory framework, the government paid very close attention to the CRM cost management to ensure this would not result in additional charges for citizens and companies.

The federal government is also aiming for more production from renewable energy sources by further developing wind farms in the North Sea. It is aiming to grant a new concession for 3.2–3.5 GW in additional wind energy capacity by 2030, taking total offshore wind energy capacity to between 5.4 and 5.8 GW.

Under Belgium's National Recovery and Resilience Plan, this will be supplemented with the construction of an offshore energy island that will be hooked up to other offshore production zones, as recently started with Denmark. Belgium's rather limited offshore production potential will be boosted by integration into the European network of offshore connections.

Similar aspirations are visible in proposed infrastructure for onshore transport (Boucle du Hainaut and the Ventilus projects), which should enhance the high-voltage grid to transport the power so generated to consumption centres in Belgium and the EU. Distribution networks will also have to be adapted to the ever higher share of decentralised renewable energy sources and to demand-side management solutions, requiring bi-directional flows and increased digitalisation of equipment.

By better matching the profiles of electricity consumption and generation, it should be possible to use the generation potential through renewable energy sources, despite their higher variability, as well as to limit the need for back-up capacity. It is not enough to encourage consumers to display appropriate behaviour – both through awareness and information campaigns and through pricing that encourage active participation – it is also essential to develop the infrastructure and energy services that enable them to make the most suitable choices. The platform for the exchange of information between distribution network operators, suppliers and regulators, which came on stream in November 2021, is an important step in creating an environment better adjusted to developments in the market, such as the use of smart meters, the ongoing integration of prosumers (i.e. those who both consume and produce) and dynamic pricing.

A coherent and credible energy policy to attract the requisite investment

Ensuring adequate supply that meets long-term targets requires efforts from both private actors and the political authorities. The government should establish a stable and credible regulatory framework for the energy market without delay, to reduce uncertainty and thus support much-needed private investment. Realisation of such investment is underpinned by rules devised and enforced by the various levels of government. A coherent approach and efficient coordination between the various authorities are thus absolutely essential to facilitate as affordable a transition as possible for both citizens and companies.

7.4 Ensuring the sustainability of public debt

No prosperity without sustainable public debt

Even though government debt can make economic and societal sense, certain boundaries should not be overstepped. After all, the smooth operation of the financial system is based on the confidence of lenders that borrowers are able to meet their obligations – in their solvency, in other words. In the case of governments, solvency implies that they are able to meet their current and future financial commitments, without resorting to dire economic or socially untenable policy measures. If they were incapable of doing so, lenders would charge insurmountable risk premiums or even discontinue their lending.

The pandemic and the floods have proven the need for fiscal buffers

The likelihood of a government losing control of debt dynamics increases the higher public debt gets. To be safe, the government's debt ratio must be sufficiently low for negative shocks to be able to be absorbed and the government to be able to keep control of debt dynamics. The coronavirus crisis and the floods have proven the need for fiscal buffers to handle crises. Structural challenges, such as an ageing population and climate risks, are also easier to address when public debt is lower.

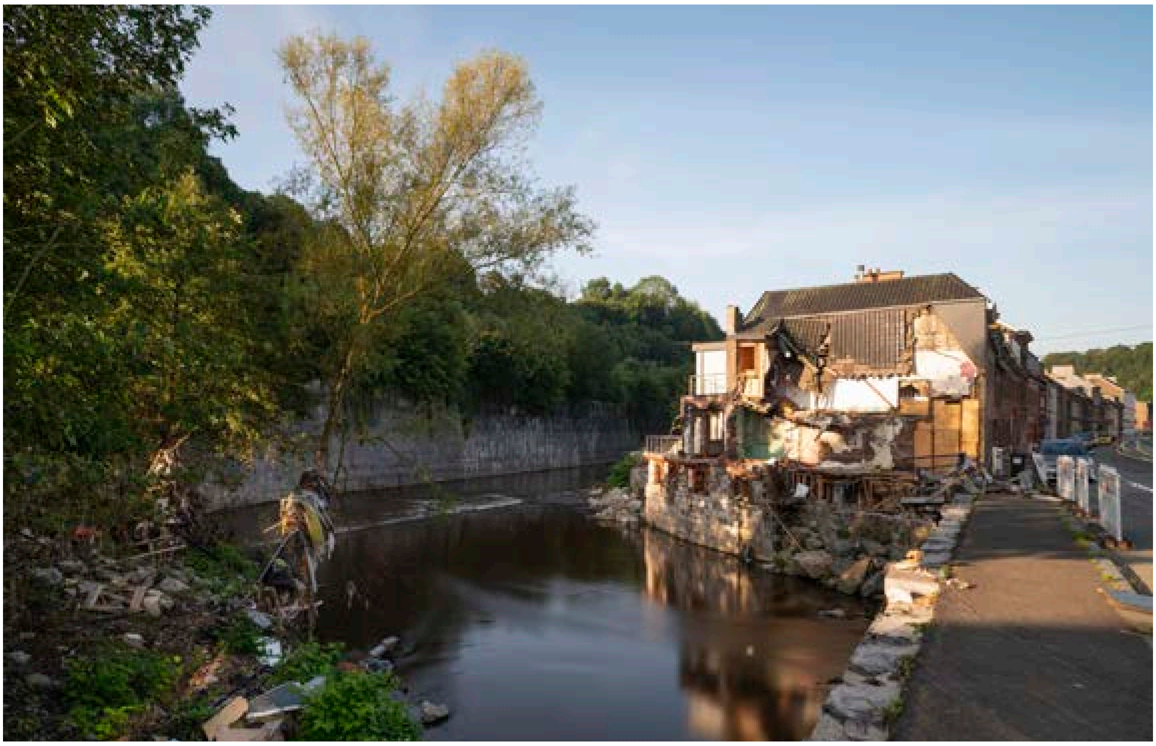
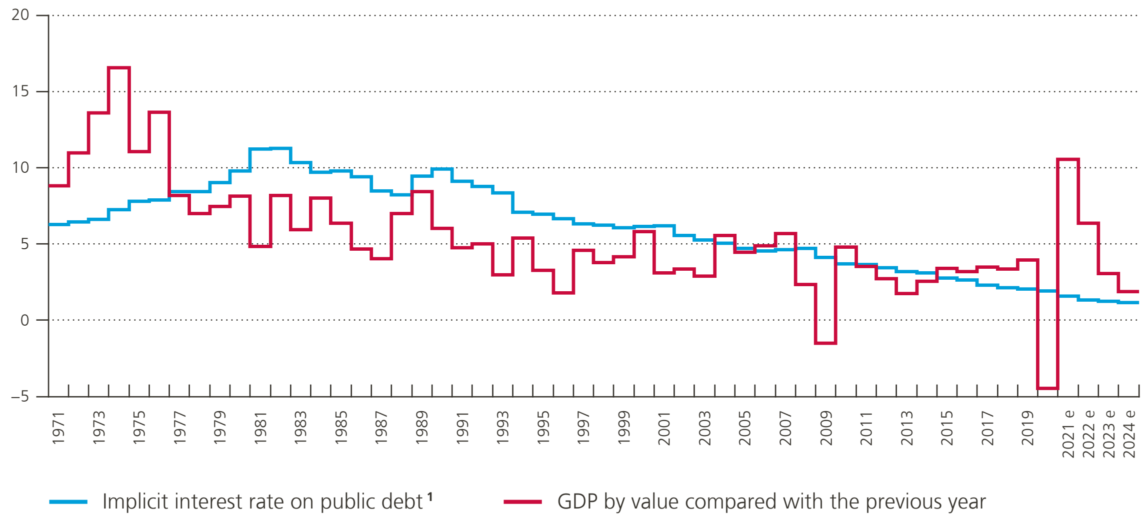


Chart 7.14

Favourable interest growth dynamic: a recent phenomenon in Belgium

(in %)



Sources: NAI, NBB.
1 Ratio between interest charges in the current year and debt at the end of the previous year.

To keep the development of public debt under control, the government must keep a tight rein on the budget balance at any interest rate level. That is less of a challenge when economic activity is growing fast and interest rates are low. After all, when GDP growth exceeds interest rates – as has been the case for a while now – a minor primary deficit [1] will not cause an increase in the public debt ratio. However, when interest rates exceed GDP growth – a more familiar phenomenon in the past – a primary deficit causes the public debt ratio to explode and primary surpluses are needed to stabilise the debt ratio.

Although current market funding conditions are enabling the government to take on deficits needed to manage the coronavirus crisis, it is unwise to consistently keep deficits high, as favourable conditions are never forever. History suggests that interest hikes can suddenly be triggered by risk premiums and that low interest rates offer no protection against debt crises, even if they last for a long time.

1 The primary budget balance is the balance excluding interest charges.

The sustainability of individual countries' public finances sets the tone for the euro area's financial stability and price stability: what therefore matters is how strong the weakest link is. And whereas monetary policy has been unified, budgetary policies remain the exclusive remit of the Member States and only they are responsible for the sustainability of their public debt.

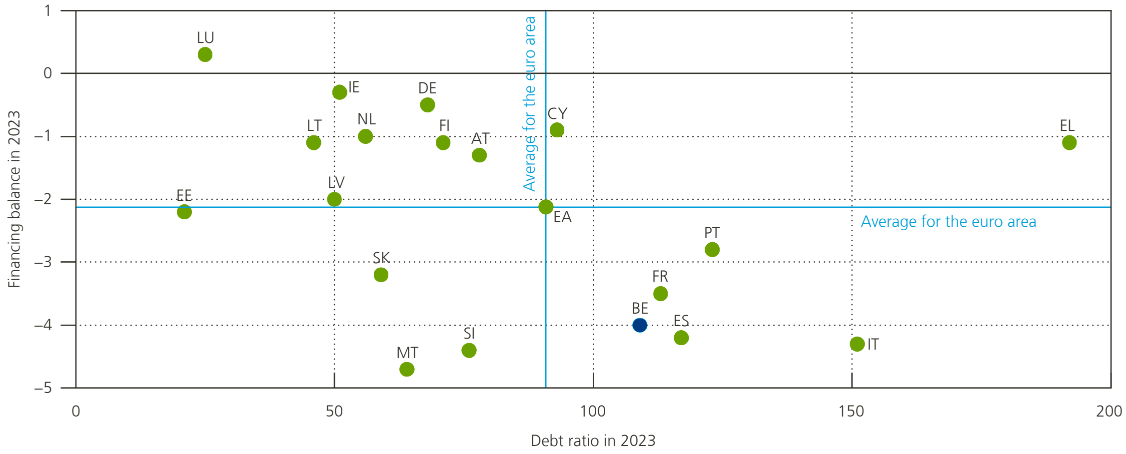
High and growing public debt jeopardises sustainability of public finances

Fiscal policy undoubtedly proved its use during the COVID-19 crisis, but it also left its mark in the shape of an exceedingly steep debt ratio and more heterogeneity between euro area Member States. Even before the pandemic, Belgium had been among the group of countries with high debt ratios and it was one of the Member States that saw their public debt rise the steepest. Extremely worryingly, the Belgian debt ratio is set to continue on this upward path, on the Bank's autumn projections, despite historically very favourable interest growth dynamics. This state of affairs reflects a significant

Chart 7.15

Public debt ratio and deficit structurally high in Belgium

(in % of GDP)



Sources: EC, ESCB, NBB.

budget deficit, which, in the absence of a change in policy, will remain systematically above 4 % of GDP in the years ahead.

In a federal state such as Belgium, we should look at the sustainability of public debt for each of the government subsectors. Normally, public debt is expressed as a percentage of GDP, which serves as a good gauge for a country's potential tax base. However, a comparison of the sustainability of public debt between the various government subsectors requires a more specific indicator for the resilience of each subsector. The relationship between gross debt and revenues is a relevant measure of public debt. This ratio's denominator is consciously restricted to available revenues, i.e. less any transfers to other government subsectors, to prevent the same resources being allocated to various entities. This approach makes very plain the heterogeneity of the budgetary situations.

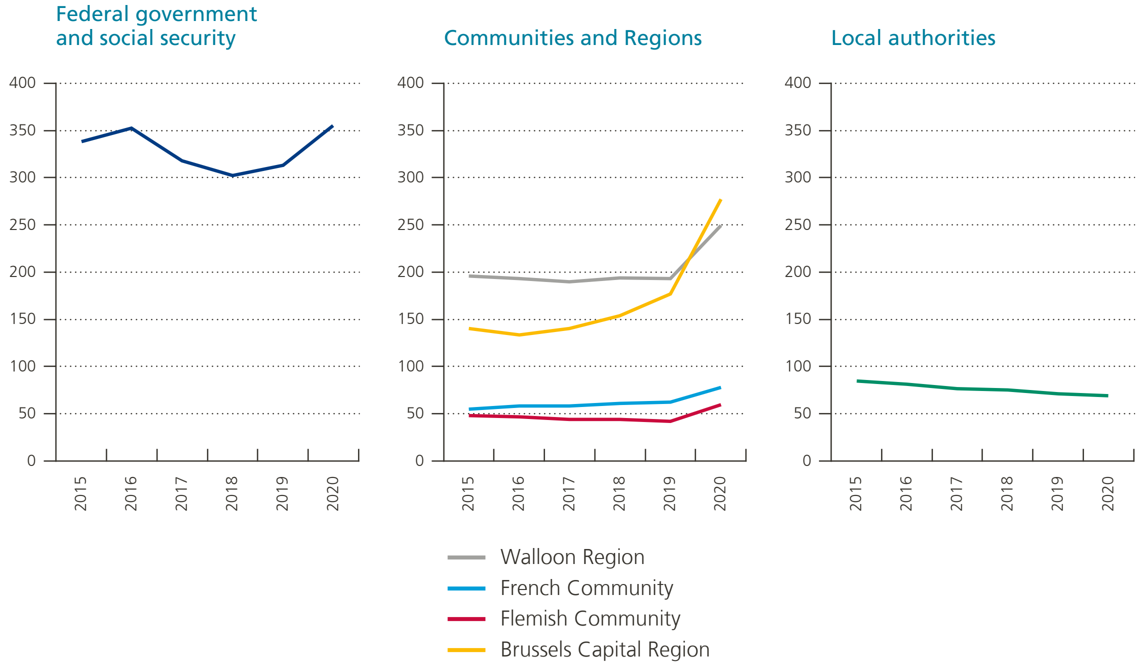
At the end of 2020, the public debt ratio of the federal government and social security together accounted for the highest level, at 3.5 times their annual revenues. However, the federal level has full fiscal autonomy, giving it a powerful lever to change its budget path when necessary. Within the Belgian institutional framework, the Regions have less scope in terms of revenues, as a large proportion is furnished in the shape of transfers from the federal government. This margin is insignificant for the communities, whose revenues derive almost exclusively from federal resources.

Among the federated entities, the Walloon Region is displaying worrying dynamics. Its public debt rose to 2.5 times its annual revenues in 2020. Walloon public finances had been in sizeable deficit even before the health crisis, but the aftermath of the crisis for revenues and spending, the budgetary consequences of the floods and Wallonia's highly ambitious recovery plan will conspire to sharply push up its public debt in the years ahead. The fiscal state of affairs in the Brussels Capital Region is equally disturbing. The Region has seen its budget balance deteriorate persistently in the past few years and it now has the dubious honour of having the highest debt ratio: 280 % of its revenues. Meanwhile, the French Community's sustainability of public debt (80 % of its revenues) would appear less problematic, but it has no sources of own revenues and relies almost completely on revenues provided by the federal government. At a little over half of its revenues, the public debt of the Flemish Community is less of a concern, provided it manages to halt the upward trend that started in 2020.

Chart 7.16

Level and dynamics of public debt worrying in some government sub-sectors

(gross debt in % of revenues less transfers to other government sub-sectors)



Sources: NAI, NBB.

To return public debt ratios to sustainable levels requires tremendous effort

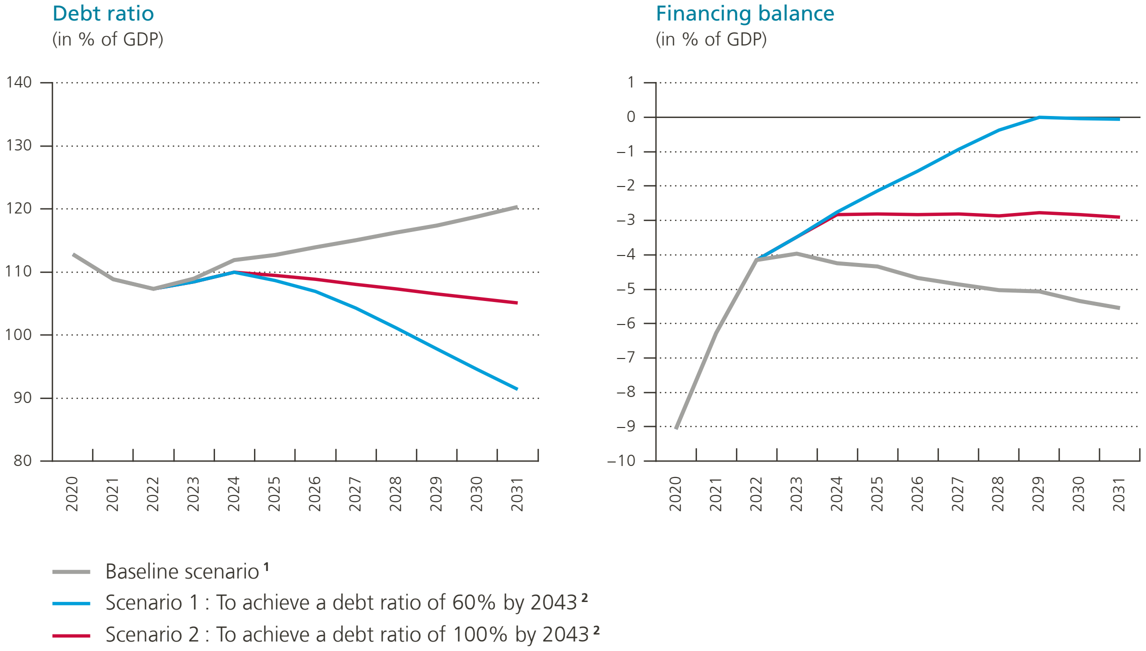
To get an idea of the sheer budgetary effort that will be required to turn around general government's public debt ratio, it is useful to simulate a range of scenarios for public debt and the financing balance. In the absence of any change in policy, the baseline scenario sees the budget deficit go up further, falling in with the Bank's December 2021 projections until 2024. Then, from 2025 onwards, assuming an average real GDP growth of 1.3 % per annum, the situation would deteriorate year-on-year in the wake of steadily rising population ageing costs (based on the latest report by the Study Committee on Ageing or SCA). Under this scenario, the deficit would widen to around 6 % of GDP by 2031, pushing the public debt ratio to above 120 % of GDP. This analysis does not take into account the possible occurrence of negative shocks nor their resulting budget balance deterioration.

The alternative scenarios envisage public finances being consolidated by linking the financing balance path to a target for the public debt ratio. A first scenario sees the financing balance improve from 2023 and, all other things being equal, achieve the targeted debt ratio of 60 % of GDP within a period of 20 years – the current debt criterion of the Stability and Growth Pact. In accordance with the guidelines of the Pact's preventive arm, the annual additional budget effort is pegged at up to 0.6 percentage point of GDP and continues until a deficit is achieved that meets the scenario target. Under this scenario, the balance should reach equilibrium from around 2028. Another, less demanding scenario applies the same mechanism to financing balance improvement to arrive at a debt ratio of 100 % of GDP within 20 years. At a normal rhythm, the deficit should then be reduced to a maximum of 2.8 % of GDP.

The analysis shows that achieving a debt ratio of 60 % of GDP in 20 years' time would require a significant and consistent effort to achieve a balanced budget.

Chart 7.17

Significant fiscal restructuring needed to reduce general government debt ratio



Sources: NAI, NBB.

1 The baseline scenario reflects the Bank's December 2021 macroeconomic projections, which ran until 2024. For the 2025-43 period, it is working on the 2024 primary balance and factoring in the ageing population costs and GDP hypotheses underpinning the July 2021 SCA report. Nominal interest rates reflect market expectations at the end of November 2021, with inflation – here the same as the GDP deflator – amounting to 2 % from 2025. Other hypotheses include the term to maturity of public debt remaining stable at an average ten years and the public debt ratio not being influenced by exogenous factors.

2 From 2023, the annual additional consolidation effort compared with the previous year is limited to 0.6 percentage point of GDP, until the deficit reaches the level required for the target.

This would be difficult to pull off in view of the rising costs of an ageing population and climate policy challenges. Such a scenario in keeping with current European fiscal rules appears very or even too ambitious and would become even more so if interest rates and growth were to develop less favourably than the baseline scenario envisages. In that case, the primary balance would have even more improving to do.

The more moderate scenario, which sees the public debt ratio first stabilise before very gradually reverting to 100 % of GDP, may be considered the minimum scenario for the sustainability of public debt. Even this scenario still requires a substantial consolidation effort to get the deficit at or just below 3 % of GDP. And here too, a negative economic shock could cause a further deterioration in the financing balance. To build margins that could help absorb such shocks or interest rate rises, a much lower deficit than the reference value of 3 % of GDP will be essential in the medium term.

Government spending should come down or economic growth should go up

Even before pandemic, in 2019, government spending in Belgium exceeded the euro area average. These relatively high levels have been recorded in Belgium for many decades.

A recent study[1] by the Bank, which compares government spending levels in Belgium with those in its neighbouring countries, showed that this higher spending chiefly relates to salaries and subsidies. Broken down by category, spending was found to be relatively high in "economic affairs", "education" and "general public services", even before the health crisis. In the "economic affairs" category the key item of concern is wage subsidies, which have surged since the early 2000s. Interest charges on public debt, which fall into the "general public services" category, have remained relatively high even despite some decline. As for education, the gap with the neighbouring countries' average is predominantly explained by spending on primary and secondary education; the differences are particularly marked on the cumulative wage bill. Lastly, social protection spending has gone up markedly. In 2001, there had still been a negative difference with the country's neighbours, but spending has shot up since, and the gap with neighbouring countries had disappeared by 2019.

According to the Bank's economic autumn projections, primary spending – i.e. government spending excluding interest charges on public debt – as a percentage of GDP is likely to continue its upward trend in the years ahead, ending up at around 53 % of GDP by 2024 compared with 50 % in 2019.

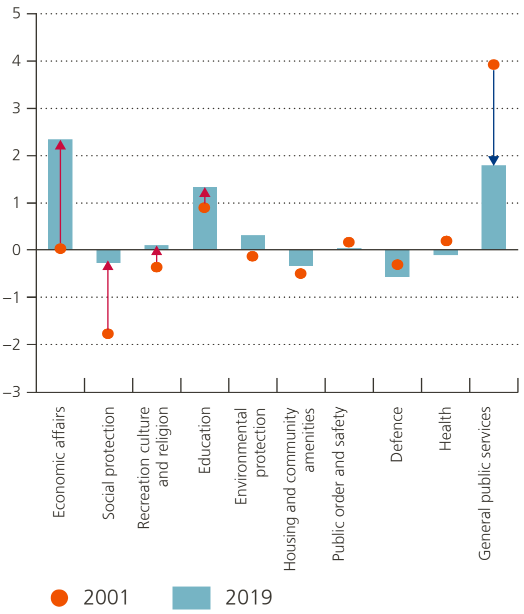
The rise predicted by 2024 largely reflects higher current expenditure, a category comprising wages,

1 See Godefroid H., P. Stinglhamber and S. Van Parys (2021), "What kind of public expenditure is high in Belgium? A comparison with neighbouring countries", NBB, *Economic Review*, September.

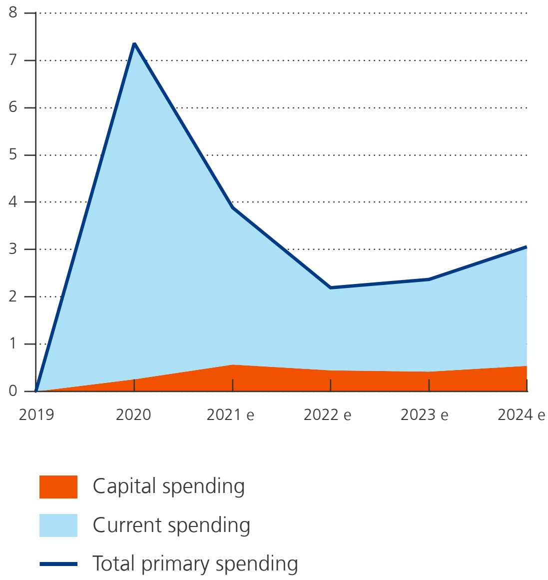
Chart 7.18

Spending already high compared with neighbouring countries and set to rise further

Government spending : difference compared with average for neighbouring countries
(per category, in percentage points of GDP)



Primary spending since 2019
(in percentage points of GDP)



Sources: EC, NAI, NBB.

subsidies and social benefits. The latter two will feed the post-pandemic advance but are not exactly the most economic growth-friendly type of spending for the longer term. By contrast, capital spending – consisting of government investment and investment subsidies to companies – has only a limited impact on rising primary spending.

To ensure the sustainability of public finances, government spending cannot keep rising in the next couple of years, while the spending mix must change to enhance the economy's growth potential and address future challenges, including the transition to a low-carbon economy and its digitalisation. Restructuring of government spending requires both managing current expenditure and creating margins to increase capital spending and, more particularly, economic growth-enhancing investment.

Expected rise in public spending mostly due to higher current expenditure

In the absence of any change in policy, current government spending looks set to expand in the decades ahead as the population ages. In its 2021 report, the SCA puts the peak in social benefits at 30.2 % of GDP in 2049, an increase by 3.7 percentage points of GDP compared with 2022. In fact, by 2070, the gap is forecast to still be at 3.3 percentage points of GDP. Between 2022 and 2027, these benefits are set to add an average 0.3 percentage point of GDP per year. Pension measures approved by the federal government at the end of 2020 have pushed up population ageing costs : higher minimum pensions, higher wage ceilings (for employees) and income ceilings (for the self-employed) towards pension calculations, and the abolition of the correction factor for the self-employed, which meant that only a proportion of their income qualified for the calculation of their pensions.

The federal government has yet to decide on pension systems reforms to help cut its fiscal cost over time. To ensure the financial sustainability of social security, it is counting on a broader economic base and an increased employment rate (with an employment target at 80 % in 2030, as discussed in section 7.2).

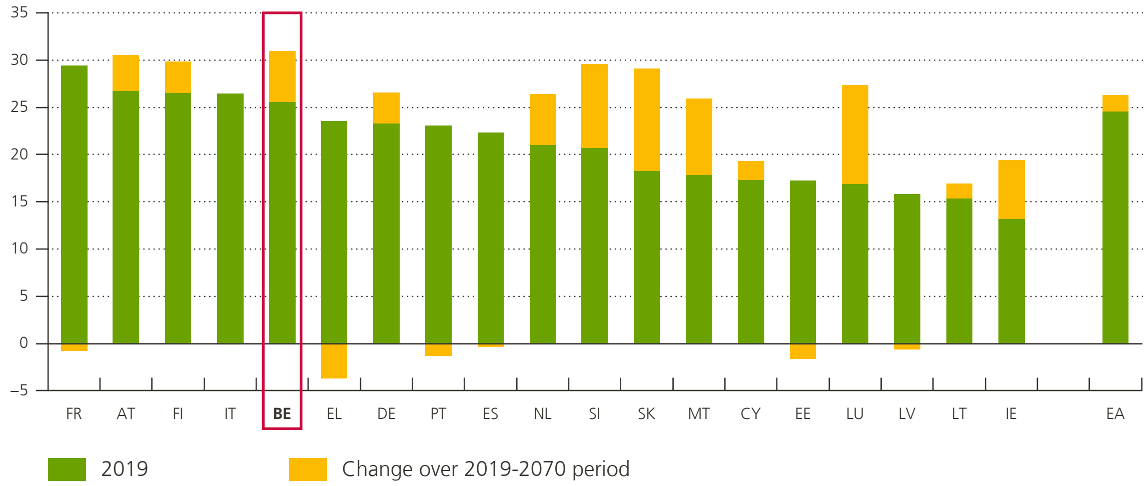
At the European level, the budgetary impact of population ageing is also the subject of projections, the outcomes of which are reported once every three years in the Ageing Report, the most recent of which was released in May 2021. Together, the Commission and EU Member States draw up long-term projections for age-related public expenditure, covering pensions, health care and education. These projections cannot be compared directly with those of Belgium's SCA, as data, methodologies and assumptions differ. That said, the report's coherent methodology does allow for a comparison between EU countries.

On the data provided by the most recent Ageing Report, in 2019 age-related public expenditure amounted to 24.6 % of GDP in the euro area as a whole, with major differences between the Member States. At 25.6 % of GDP, Belgium was among the Member States recording higher-than-average spending, while the expected spending increase by 5.4 percentage points of GDP in the 2019-2070 period – according to the reference simulation for Belgium – is among the highest of all countries. Steeply higher pensions spending is mostly to blame. As a result, Belgium's age-related public expenditure in 2070 would be at the very top of the euro area, at 30.9 % of GDP.

Chart 7.19

Age-related public expenditure is high in Belgium and looks set to grow more than in most other euro area countries

(in % of GDP)



Source: EC.

The Ageing Report figures underline that population ageing will be a key challenge for most euro area Member States when it comes to the sustainability of public finances in the long term. The Ecofin Council has called on Member States to address high age-related expenditure by raising employment rates and productivity, closing the gender gap in the labour markets and adapting pension and health care systems. This is all the more pertinent to Belgium, given the country's high age-related spending.

Credible European and Belgian fiscal frameworks are crucially important

A sound fiscal framework, covering the full range of procedures, institutions and fiscal rules, is an essential instrument to create a healthy fiscal policy. Such a framework exists at the European level in the shape of the Stability and Growth Pact (SGP), whose aim is to ensure the sustainability of Member States' public finances and encourage fiscal discipline. In its 2020 evaluation of the SGP, the Commission flagged up a number of weaknesses including the complexity of the rules, the lack of national ownership, the often pro-cyclical nature of fiscal policy, persistently high public debt in some Member States and the lack of focus on public investment. Based on this evaluation, the Commission initiated a public debate on the reform of the European fiscal framework. Having been postponed in the wake of the coronavirus crisis, the debate was reopened in October 2021 and interested parties were invited to share their views. Drawing on their input, the Commission will attempt to arrive at a broad-based consensus view well before 2023. It is crucially important for Member States to have clarity on this new framework when preparing their budgets for 2023.

The European fiscal framework must be supported by robust and efficient national frameworks, as these should help improve compliance with the European framework and enhance national ownership. An analysis of the key elements of Belgium's fiscal framework and a comparison with best practices in other euro area countries reveals a number of areas for improvement in the Belgian framework [1].

It is highly recommended for all levels of the Belgian government to implement a multi-year budget plan,

1 For more details, see Bisciari P., H. Godefroid, W. Melyn, R. Schoonackers, P. Stinglhamber and L. Van Meensel (2020), "Belgium's fiscal framework: what is good and what could be better?", NBB, Economic Review, December.

as most budgetary measures have an impact beyond the fiscal year. Having such a framework in place should encourage timely planning and a closer observance of budgetary targets in the medium term. On a separate note, an expenditure rule might have a key role to play in such a multi-year budget. In fact, such a rule already exists at the European level, but is only applied after the fact, i.e. when the Commission evaluates the budget numbers. In a country such as Belgium, in particular, where government spending is high, an expenditure rule could serve as a key tool to increase visibility of selected trends and to implement medium-term targets. A number of technical exercises have already been started in this regard. For example, the Flemish authorities are working on a Flemish expenditure standard, while the Public Sector Borrowing Requirement section of Belgium's High Council of Finance has joined forces with the Commission and the OECD to develop an expenditure rule at the Belgian level.

Strongly recommended: multi-year budget planning at all levels of Belgian government

In addition, budget numbers put forward by governments must be a transparent reflection of all expenditures and revenues that influence their budget balances, in keeping with ESA accounting rules. This implies that the budget balance should not be creatively accounted by leaving out certain expenditure, even if it might pay back over time, as in the case of some investment spending.

Lastly, Belgium needs effective budget coordination between the various policy levels, as this contributes to general government fiscal discipline. The cooperation agreement of 13 December 2013 between the country's federal government, Communities and Regions provides a formal framework for budget coordination in Belgium. To date, the various authorities have never agreed on the breakdown of the general government budget path as envisaged in the stability programme. The High Council of Finance, the Commission and the Ecofin Council have repeatedly emphasised the necessity to fully implement the 13 December 2013 agreement.

It is important to forge ahead on these areas of concern, as the suggested further changes should help make public finances healthier, enhance the efficiency of government and thus ensure the sustainability of Belgian public finances in the long term.