

# NBB Economic Review

2022 / #23

Economic projections for Belgium  
December 2022



# Economic projections for Belgium – December 2022

## Introduction

The macroeconomic projections for Belgium described in this article form part of the Eurosystem projections for the euro area. These projections are based on a set of technical assumptions and forecasts for the international environment drawn up jointly by the participating institutions, namely the ECB and the national central banks of the euro area. The cut-off date used for the Belgian projections was 30 November 2022. The baseline projections for Belgium are discussed in detail; individual risks are discussed in the final section of this article. As usual, the projections only take into account government measures that have been decided and are likely to pass the legislative process and had been announced in sufficient detail by the cut-off date.

## 1. A clouded global economic outlook

Despite an initially brighter outlook, 2022 turned out to be another challenging year for the global economy. The impact of the COVID-19 pandemic lingered – especially in China, which stuck to its zero-COVID policy – and activity was further weighed down by the fall-out caused by the Russian invasion of Ukraine. War-induced volatility on the commodities markets led to a surge in energy and food inflation, which spread to less volatile components as higher input prices worked their way through value chains and into retail prices. Europe has been particularly affected. European prices for natural gas peaked briefly at over €300/MWh at the end of August, before moderating significantly. Nevertheless, uncertainty remains high, including for the coming winter(s).

Going forward, survey data currently point to a subdued outlook for economic activity in the short run. According to the Eurosystem assumptions used for these projections, global growth should remain rather weak until the first quarter of next year, at which time it is projected to pick up more strongly. In annual terms, global economic growth (excluding the euro area) is projected to be 2.6% for 2023. This is the weakest rate of expansion in over two decades, leaving aside the global financial crisis of 2008-2009 and the COVID-19 crisis in 2020. This slowdown is expected to be temporary, however, with annual global growth exceeding 3% again in 2024 and 2025.

Global supply chains have shown signs of unclogging over the past couple of months. Supply has been catching up with a large backlog of orders, and demand has started to weaken. Nonetheless, risks of renewed disruption to global supply chains persist due to the ongoing war and the possibility of (renewed) local lockdowns at Chinese production hubs or ports. All in all, global trade growth (excluding the euro area) is expected to decelerate in 2023, but should pick up again as from 2024.

As usual, the profile of world trade determines the outlook for euro area foreign demand and Belgian export markets, with the latter being an important factor for the medium-term macroeconomic projections for

**Table 1****The international environment**

(annual percentage changes)

	2021	2022 e	2023 e	2024 e	2025 e
World (excluding euro area) real GDP	6.4	3.3	2.6	3.1	3.3
World (excluding euro area) trade	12.7	5.6	1.9	3.3	3.3
Euro area foreign demand <sup>1</sup>	10.5	6.0	1.2	3.0	3.1
Belgium's relevant export markets <sup>1</sup>	9.1	7.4	2.2	3.2	3.2

Source: Eurosystem.

<sup>1</sup> Calculated as a weighted average of imports of trading partners.

Belgium. Compared to the June 2022 projections, Belgian export market figures have clearly been revised downward for 2023. Based on the assumptions, Belgian export market growth is expected to slow from 7.4 % in 2022 to 2.2 % in 2023. Starting in 2024, Belgian export market growth should stabilize at just above 3 %, in line with the euro area average.

Turning to the technical and financial assumptions underlying the current Eurosystem projections, the exchange rate is considered to remain constant throughout the projection period. The euro is currently trading near parity with the US dollar, at a rate of \$ 1.03 to the euro.

As usual, oil-price and interest-rate assumptions are based on market expectations. At the cut-off date for the common Eurosystem assumptions (30 November 2022), a barrel of Brent crude oil was priced near €90, with the price expected to trend gradually down to €73 by the end of 2025. The path for natural gas and electricity prices, which are currently still higher than usual, is based on information from futures. Gas prices are expected to come down in successive steps, after each winter, but to remain at a level much higher than in 2019, for example.

Global financial conditions have tightened since the previous projections, with central banks hiking interest rates in response to persistently high inflation numbers. The ECB raised its key ("policy") rates in July, September and October.

**Table 2****The Eurosystem technical assumptions**

(annual averages; in %, unless otherwise stated)

	2021	2022 e	2023 e	2024 e	2025 e
EUR/USD exchange rate	1.18	1.05	1.03	1.03	1.03
Oil price (US dollars per barrel)	71.1	104.6	86.4	79.7	76.0
Interest rate on three-month interbank deposits in euro	-0.5	0.4	2.9	2.7	2.5
Yield on ten-year Belgian government bonds	0.0	1.7	2.5	2.6	2.7
Business loan interest rate	1.6	2.1	4.0	3.9	3.7
Household mortgage interest rate	1.5	2.2	3.4	3.6	3.7

Source: Eurosystem.

Consequently, the three-month interbank deposit rate turned positive again in 2022, for the first time since 2015. Markets currently expect it to peak near 3 % in 2023, before falling slightly to 2.5 % in 2025. The average mortgage rate is also clearly edging up. It is expected to rise from just above 2 % in 2022 to around 3.5 % on average as of 2023. The average interest rate on business loans is rising, too, and is expected to temporarily exceed 4 % in 2023. Even so, financing conditions still remain favourable compared to long-run averages.

## 2. The euro area economy enters into a short and shallow recession in the winter but recovers thereafter as inflation comes down

The euro area economy continued to expand strongly in the first half of 2022. While growth remained positive, it edged down in the summer period as the high inflation numbers further eroded confidence and purchasing power; a short and shallow recession is now expected for the last quarter of 2022 and the first quarter of 2023.

In the course of 2023, economic activity will start to recover as inflation should come down gradually, allowing uncertainty to recede. Supply chain disruptions have already moderated recently and are expected to further unwind. In annual terms, euro area GDP grows by 3.4 % in 2022 and is set to slow down to 0.5 % in 2023. In 2024-25, actual growth exceeds potential, nearly reaching 2 %.

Headline inflation has recorded double-digit rates in recent months but has started to come down in the most recent observation for November. It is expected to decline further in the course of the projection period due to declining energy prices, but it would not dip below 2 %. Energy and inflation compensatory fiscal measures are

**Table 3**

### Eurosystem projections for the euro area

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

	2021	2022 e	2023 e	2024 e	2025 e
Real GDP (contributions in percentage points)	5.2	3.4	0.5	1.9	1.8
of which:					
Domestic demand (excluding changes in inventories)	3.7	3.0	0.3	1.5	1.7
Net exports	1.2	0.1	0.0	0.3	0.0
Inflation (HICP)	2.6	8.4	6.3	3.4	2.3
Core inflation <sup>1</sup>	1.5	3.9	4.2	2.8	2.4
Domestic employment	1.3	2.1	0.4	0.5	0.5
Unemployment rate <sup>2</sup>	7.7	6.7	6.9	6.7	6.5
General government financing requirement (–) or capacity <sup>3</sup>	–5.1	–3.5	–3.7	–2.7	–2.6
Public debt <sup>3</sup>	95.3	91.5	90.6	89.2	88.0

Source: ECB.

1 Measured by the HICP excluding food and energy.

2 In % of the labour force.

3 In % of GDP.

estimated to weigh down inflation in 2023, but will have an upward impact upon their withdrawal in 2024. Core inflation is expected to reach its peak at more than 5 % in the first quarter of 2023, but to moderate to 2.4 % on average in 2025. Hence, it clearly remains above its long-term average due to ongoing strong wage growth.

The labour market is expected to remain resilient. In the short term, employment growth may lose traction, but employers are expected to resort to labour hoarding in a tight labour market. The unemployment rate jumps up to 7 % by mid-2023, but declines thereafter as job creation picks up again in line with economic activity.

The euro area budget deficit worsens somewhat in 2023, on account of the economic downturn, but declines again as of 2024. The government debt ratio is on a declining path throughout the projection period, reaching 88 % of GDP in 2025. Nevertheless, in 2025, both the deficit and the debt ratio should still be above pre-pandemic levels.

Eurosystem staff assesses risks to growth as being tilted to the downside for 2023 and 2024. At the same time, risks to inflation are assessed to be mainly on the upside. The possibility of a stronger wage-price spiral, as well as an upward shift in inflation expectations, represent domestic upside risks to inflation, while energy price developments and the geopolitical situation remain very uncertain. In this connection, the baseline projections assume that there is no further escalation of the war or the sanctions on Russia and, in particular, that there is no sudden stop in energy imports from Russia to the euro area that could lead to rationing and production cuts. A downward scenario was also prepared, that incorporates a complete cut-off of Russian gas flows into the euro area, low substitution from other countries and successive cold winters. Such a scenario is projected to trigger a more severe recession in the euro area in the course of 2023 and 2024, while inflation would be pushed up about a percentage point above the baseline estimate in 2023.

### **3. The Belgian economy narrowly avoids a technical recession**

In the first nine months of 2022, the Belgian economy proved to be more resilient than expected. While our spring projections had predicted that the economy would flatline in the second and third quarters due to renewed supply chain problems and very high energy prices, growth remained firmly positive according to the NAI's most recent figures, at 0.5 % and 0.2 %, respectively. Supply chain deterioration proved very limited, and it seems that tailwinds from improvements in the public health situation outweighed the impact of the war in Ukraine, the rise in inflation and the drop in consumer and business confidence.

However, with confidence indicators further deteriorating after the summer, growth in the fourth quarter is expected to temporarily dip into slightly negative territory. A deep or long-lasting slump is currently considered unlikely, however, as high-frequency indicators such as retail sales and industrial production showed signs of improvement in September. According to anecdotal evidence from business contacts, some firms reported being able to restart production as energy prices came down.

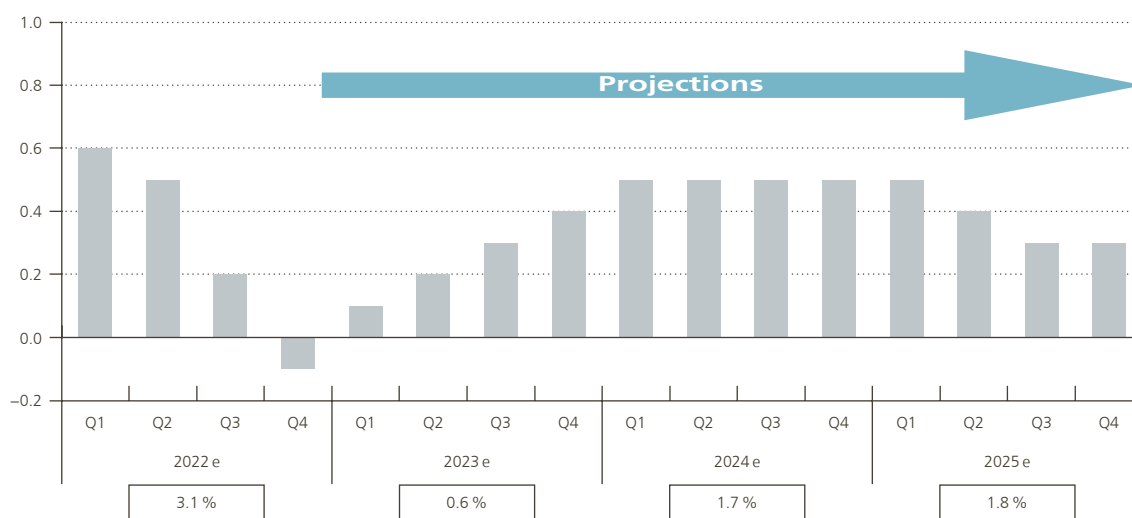
Moreover, there are some signs of optimism beyond the near term, and we expect growth to gradually pick up in the course of 2023. The economic fundamentals remain sound, with a very robust labour market, in particular, continuing to support household purchasing power. Household incomes are expected to increase over the forecast horizon due to the (delayed) reaction of indexation mechanisms to inflation. Futures prices on the energy market are declining, which should allow growth to pick up over the course of 2023. In the final years of the projection horizon, the economy should expand at a stable quarterly rate of about 0.4 %.

In annual terms, growth is estimated to come in at 3.1 % in 2022, a portion of which is determined by the carry-over effect from the strong recovery throughout 2021. Annual growth is then projected to temporarily drop to 0.6 % in 2023 and bounce back to 1.7 % in 2024 and 1.8 % in 2025.

Chart 1

### The Belgian economy remains resilient

(quarter-on-quarter growth of real GDP, percentages, seasonally and working-day adjusted; the numbers in the boxes refer to annual growth)



Sources: NAI, NBB.

## 4. Domestic demand and household consumption will drive growth

Following two weak quarters, household consumption rebounded as from the second quarter of 2022, despite a spike in uncertainty and high inflation rates. This strong consumption growth clearly exceeded expectations, and some of it is probably attributable to pent-up demand owing to reopening effects as life returned to normal for the first time since March 2020. However, with consumer confidence dropping to a record low in September, household consumption is expected to stall in the fourth quarter of 2022. Anecdotal information<sup>1</sup> suggests that households have significantly cut back on their energy consumption (more than what would be expected given the mild autumn), but rampant inflation is likely to weigh on consumption more heavily, in particular that of households for which energy constitutes a higher-than-average share of expenditure.

Early next year, private consumption growth is expected to return to positive territory and gradually strengthen. International energy prices have declined recently, and this drop should gradually pass through to retail contracts. In addition, as about a third of private-sector employees only have their wages indexed once a year, a large boost to many household incomes will take effect on 1 January 2023. These households will then recover in one go much of the purchasing power lost due to high inflation over the past year.

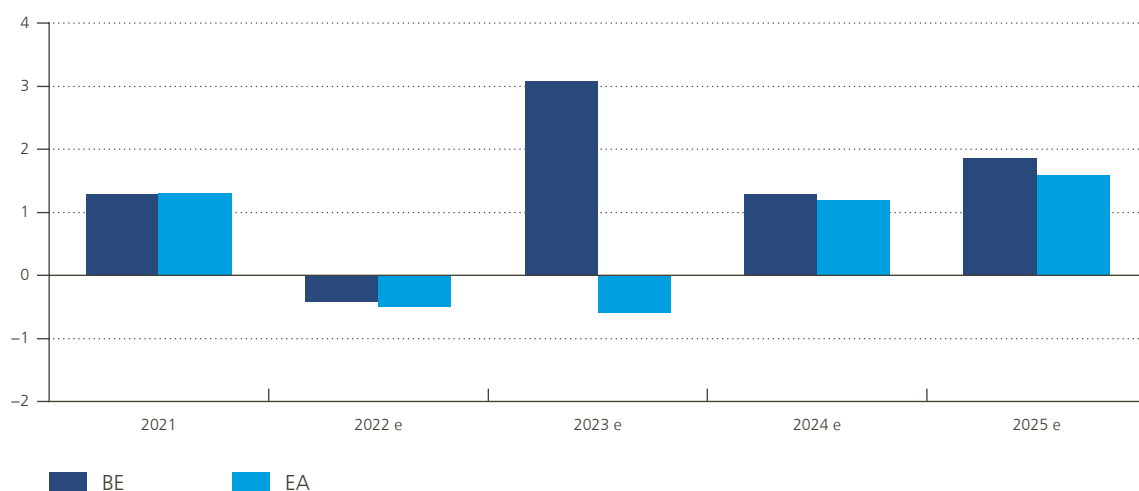
The abovementioned indexation-driven jump in wages will occur at a time when actual inflation is expected to be coming down, amplifying the change in terms of *real* wage growth and hence household purchasing power. In addition, the labour market is expected to remain resilient and property income may offer some support as interest rates pick up. Overall, after shrinking in 2022, purchasing power is expected to grow by a solid 6% over 2023-2025.

<sup>1</sup> See <https://www.tijd.be/dossiers/energieprijzen/duur-gas-doet-belgen-fors-minder-verbruiken/10424471.html>

## Chart 2

### Household purchasing power

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



Sources: NAI, NBB.

It should be noted that most of the other euro area countries do not have automatic wage indexation. This means that in those countries, absent government action, a larger share of the burden caused by external energy shocks and inflation can be expected to fall on households as real wages and replacement income take a hit. However, in 2022, many governments stepped in and implemented measures to support incomes or cap energy prices. Hence, household purchasing power in the euro area as a whole held up much better than initially expected and ended up more or less in line with Belgian figures. That being said, expectations for income growth as from 2023 are currently much more muted for the euro area than for Belgium (with an expected increase in purchasing power that only equals about one third of that forecast for Belgian households between 2023 and 2025). It cannot be excluded, however, that the situation could turn out very differently, as governments could again take measures to support household purchasing power, as was the case in 2022.

As in previous projections, household consumption growth is also supported by a normalisation of the saving ratio. The latter continues to decline from its pandemic-related peak of 20.5% in 2020. It temporarily falls to 13% in 2022, on account of some consumption smoothing, but is projected to rebound to 14% as of 2023. It should be noted that this is slightly above the levels recorded prior to the pandemic. First, increased uncertainty as well as the awareness of a greater need for fiscal consolidation may give rise to additional precautionary saving. Second, with interest rates on the rise, incentives to save gradually become stronger in the outer years of the projection period. This outlook also implies that the “savings buffer” accumulated during the pandemic will not be used to finance additional consumption. Amongst other reasons, those savings were mostly accumulated by high-income households,<sup>1</sup> which are suffering relatively less from high energy prices<sup>2</sup> and, hence, are less likely to have to dip into savings to maintain their level of consumption.

1 This was confirmed in a recent analysis by Basselier and Minne (2021), [Household savings during and after the COVID-19 crisis: Lessons from surveys | nbb.be](#), November 2021.

2 Please refer to the [ECARES working paper by Capeau, Decoster, Güner, Hassan, Van Houtven, Vanderkelen and Vanheukelom on the purchasing power effects of the recent energy price shock](#), March 2022.

Increased uncertainty for households, high inflation and rising mortgage rates are expected to lower the appetite for residential investment as well. Housing investment has posted very strong growth since the second half of 2020 but has been losing steam since the second quarter of 2022. We expect residential investment to shrink for a few more quarters, before returning to positive territory as of mid-2023. Even then, growth is expected to average around 0.2 % per quarter, which is clearly more subdued than what was observed in the rebound from the COVID dip or in the decade before the pandemic.

Business investment has been rather lacklustre since the second half of last year, with rising input costs and supply chain difficulties likely to blame. While first-quarter growth was buoyant again – partly due to a few exceptional transactions abroad involving the purchase of ships but possibly also as a result of the temporary improvement in supply chains – business investment plummeted in the second and third quarters. As firms face high input costs, a significant degree of uncertainty and a deteriorating demand outlook, their investment plans are likely to remain subdued for some time to come. Business investment is expected to start growing again in mid-2023. At that point, the level of firm investment will be some 7 % below its pre-COVID level and some catch-up is due, especially with demand expected to rebound as the aforementioned headwinds fade. Moreover, firms report wanting to invest in the “greening” of their production processes in order to reduce exposure to energy price volatility and comply with environmental regulations. In addition, many are considering<sup>1</sup> automating (part of) their production facilities in response to increasing wage costs. Despite higher interest rates, financing conditions remain historically favourable.

**Table 4**

**GDP and main expenditure categories**

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

	2020	2021	2022 e	2023 e	2024 e	2025 e
Household and NPI final consumption expenditure	-8.3	5.5	4.0	1.7	2.1	1.8
General government final consumption expenditure	0.0	4.8	-0.3	0.6	1.0	1.2
Gross fixed capital formation	-5.1	4.9	-1.5	-0.3	3.7	4.2
General government	0.1	5.2	-5.0	10.9	5.1	-1.4
Housing	-7.1	7.9	2.2	-1.3	0.7	0.9
Businesses	-5.4	3.9	-2.0	-1.7	4.4	6.3
<i>p.m. Domestic expenditure excluding the change in inventories<sup>1</sup></i>	-5.5	5.1	1.5	0.9	2.2	2.3
Change in inventories <sup>1</sup>	-0.3	0.4	1.2	0.1	0.0	0.0
Net exports of goods and services <sup>1</sup>	0.4	0.7	0.4	-0.5	-0.4	-0.5
Exports of goods and services	-5.0	11.3	4.4	-0.2	1.6	2.3
Imports of goods and services	-5.6	10.7	4.0	0.3	2.0	2.7
<b>Gross domestic product</b>	<b>-5.4</b>	<b>6.1</b>	<b>3.1</b>	<b>0.6</b>	<b>1.7</b>	<b>1.8</b>

Sources: NAI, NBB.

<sup>1</sup> Contribution to the change in GDP compared to the previous year, percentage points.

<sup>1</sup> In the NBB's ad hoc survey of a large group of firms at the end of September, around 15 % of respondents indicated that they were considering (more) automation in response to higher wage costs.



Turning to public expenditure, public consumption is projected to grow rather moderately over the projection horizon. Public investment growth is more volatile throughout the projection period as it follows the usual local election cycle (with a particularly strong boost in 2023 and 2024).

Growth in Belgian exports is projected to be negative in the near-term and to remain subdued throughout the remainder of the projection period. Export growth largely tracks foreign demand, as discussed in Section 1, but does not grow as strongly as Belgian export markets. In fact, worsening cost competitiveness of Belgian exporters is likely to lead to a larger-than-usual decline in market share. Very strong wage cost pressures (as discussed in Section 6) will partly spill over to export prices or reduce exporters' profit margins. The current projections point to a significant decline in export market share for Belgian firms of about 2% on average each year in the projection period, which is more than twice the trend decline. This will automatically dampen import growth as well (as exports have a large import content) but the latter will be fuelled by the projected increase in domestic demand (in particular household consumption). Hence, import growth is expected to slightly outpace export growth over the projection period causing net exports to reduce GDP growth in all years of the projection period.

## 5. Job creation is expected to slow

Following the strong post-pandemic expansion in 2021, data on the first three quarters of the year confirm that the labour market is on track for unprecedented growth in 2022, with net job creation expected to add over 100 000 units, the largest increase in the last 70 years. This number is partly pushed up by carry-over effects of last year's increases. However, rising wages, the energy crisis and the deceleration in economic activity are expected to weigh on job creation as from the end of 2022.

Employment in branches sensitive to the business cycle will be most affected by both the economic slowdown and rising wage costs and is expected to barely expand in 2023 and 2024. Employment in these sectors will pick up more strongly as from 2025. Employment growth in other services is projected to remain fairly stable, while net hiring in administration and education will decelerate. The number of self-employed persons is expected to continue to rise, despite a near-term deceleration in activity. This expansion is expected to be supported by targeted temporary support measures: as a result of the energy crisis, the self-employed will have access to bridging rights, as was the case during the pandemic.

All in all, the impact on the labour market should be limited, with only a quarter showing slight net job losses. In the context of only a temporary dip in activity and a structurally tight labour market, employers are expected to refrain from dismissing workers and to resort instead to some labour hoarding. The latter option is rendered more attractive through the introduction of a special temporary unemployment scheme for energy-intensive companies (up to March 2023). The use of temporary unemployment, which peaked during the pandemic and only recently returned to pre-pandemic levels, is expected to increase in the coming quarters. Uptake should remain far below pandemic levels but will nevertheless bring about a drop in average hours worked.

The dip in job creation is expected to materialise in early 2023. However, from the second quarter onwards, employment should pick up again, albeit at a more moderate rate than observed in the recent past due to higher labour costs and recruitment difficulties. As a result, activity growth will be increasingly driven by productivity growth. Average hours worked are expected to recover gradually, as the number of temporary unemployed normalises.

The employment rate is expected to increase only modestly over the projection horizon, reaching 72.6% in 2025, still far below the government's 2030 target of 80%.

**Table 5**

**Labour supply and demand**

(seasonally adjusted data; change in thousands of persons, unless otherwise stated)

	2020	2021	2022 e	2023 e	2024 e	2025 e
Working age population <sup>1</sup>	15	18	52	24	-14	-4
Labour force	19	61	90	51	25	28
Domestic employment	3	91	105	26	21	42
Employees	-13	66	90	19	9	28
Branches sensitive to the business cycle <sup>2</sup>	-25	44	64	1	-2	18
Administration and education	7	13	10	6	2	0
Other services <sup>3</sup>	6	10	16	11	9	9
Self-employed	16	25	15	7	13	14
Unemployed job-seekers	17	-30	-15	25	4	-13
<i>p.m. Harmonised unemployment rate <sup>4,5</sup></i>	5.6	6.3	5.7	6.2	6.3	6.0
<i>Harmonised employment rate <sup>4,6</sup></i>	70.0	70.6	71.6	71.6	72.0	72.6

Sources: FPB, NAI, NEO, Statbel, NBB.

1 Population aged 15-64 years. Note that the retirement age will increase from 65 to 66 in 2025. However, for comparison purposes, we show the population aged 15-64 years for the entire period.

2 Agriculture, industry, energy and water, construction, trade, hotels and restaurants, transport and communication, financial activities, property services and business services.

3 Health, welfare, community, public social services, personal services and domestic services.

4 On the basis of data from the labour force survey.

5 Job-seekers in % of the labour force aged 15-64 years.

6 Persons in work in % of the total population of working age (20-64 years).

Ukrainian refugees boosted the working age population in 2022. Due to carry-over effects, this bump will continue into 2023, but will be reversed in 2024 and 2025, when most are expected to leave Belgium. Nonetheless, a rising participation rate should lead to an expanding labour force throughout the projection period. Due to moderate net job creation, the unemployment rate, which stood at 5.4% in Q1 2022, close to its pre-pandemic level, will rise to around 6.3% by 2024 but should fall thereafter, particularly as employment in branches sensitive to the business cycle picks up again.

## 6. Inflation pushes up labour cost growth to unprecedented levels but is projected to moderate

### 6.1 High inflation will drive up wages in the coming years

Inflation continued to surge until October, when it reached 13.1% according to the HICP, clearly surpassing the spring 2022 projections. The higher-than-expected inflation rates in recent months were largely the result of an (unanticipated) explosive rise in gas prices over the summer. A peak of more than €300 per megawatt hour was reached at the end of August. Even though prices on the international energy markets have since

moderated, it takes some time for these developments to pass through to energy contracts for households and businesses. Headline inflation came down to 10.5 % in November, with energy inflation amounting to 37.9 % compared with close to 70 % in October.

However, price pressures have spread as companies are increasingly passing on at least a portion of their rising input costs to their sales prices, despite a significant easing of supply chain pressures since mid-2022. Food and core inflation are on the rise, amounting to 13.2 % and 5.2 %, respectively, in November 2022.

As a result of high inflation, the automatic indexation mechanisms for wages, which are based on the health index,<sup>1</sup> are causing (and will cause) nominal wage costs to skyrocket, particularly in 2022 and 2023. Over the period 2022-2025, the indexation effect is projected to amount to nearly 20 %, far outstripping our spring 2022 forecast. Given the lag inherent in the indexation mechanisms depending on the sector, indexation is only expected to peak (at nearly 9 %) in 2023.

To soften the blow from soaring input costs and the effects of indexation on the wage bill, the government has decided to grant firms an exceptional reduction of 7.07 % in their social security contribution rate for the first two quarters of 2023. While this will lower the wage cost somewhat, it is still expected to increase by a massive 8.6 % in 2023.<sup>2</sup> As this measure is temporary, an unwinding effect on compensation is expected in 2024.

The projected increase in wage costs in 2022 and 2023 strongly outpaces that of the three main neighbouring countries considered in the legal framework guiding wage negotiations in Belgium. Hence, the projections

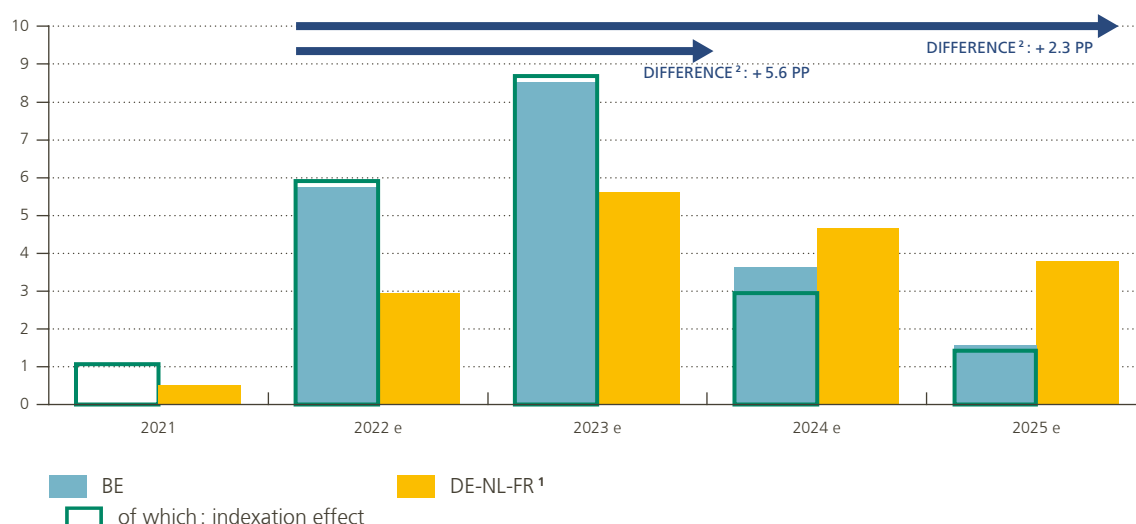
1 The health index excludes motor fuels, alcohol and tobacco but takes into account gas and electricity.

2 The historical average for hourly compensation is around 2 % (2004-2019).

### Chart 3

#### Hourly labour cost growth in the private sector: Belgium versus main trading partners

(percentage change compared to the previous year)



Sources: Eurosystem, NAI, NBB.

1 Weighted average wage cost growth in neighbouring countries, based on current Eurosystem projections.

2 The difference in wage cost growth between Belgium and neighbouring countries shown here is not necessarily identical to the official assessment by the Central Economic Council.

for 2023 and 2024 are based on the technical assumption that there will be no room for any conventional pay rises in the new wage norm covering this period. We also assumed no real conventional increases in 2025.

All in all, after an unprecedented increase in 2023, growth in hourly wage costs is projected to be more moderate in 2024 and 2025 as the indexation effect loses steam. The strong increase in hourly wage costs is expected to translate into a very large increase in unit labour costs, partially softened by a recovery of labour productivity over the projection period.

Despite very moderate growth in conventional wages, the Eurosystem projections point to the wage cost gap between Belgium and the three reference countries worsening by more than 5% between 2021 and 2023. This is expected to be partially offset in 2024 and 2025, when the indexation effect moderates in Belgium and lagged nominal wage increases are granted in neighbouring countries.

## 6.2 Inflation is considered to have peaked in October

Year-on-year headline inflation peaked in October and started moderating as from November 2022. This is partly a base effect since (energy) prices were already at high levels during the same period in 2021, but also follows from the declining gas prices on international markets since the end of August. According to the futures prices to which the Eurosystem projections are anchored, prices for natural gas should continue to fall gradually over the projection horizon. Brent oil futures are also on a downward path.

Energy inflation has been difficult to forecast lately. This is mainly due to volatility on the international energy markets, but also the result of unexpected changes in pricing behaviour by energy suppliers. Since the end of 2021, energy suppliers have adapted price formulas in new retail contracts more frequently, for instance switching from monthly to quarterly indexation parameters or vice versa. The Federal energy regulator (CREG) has labelled some of these formula adjustments “unfair trade practices” and published a proposal for a stricter framework for indexation mechanism adaptations.<sup>1</sup>

With price-setting behaviour by energy suppliers being closely monitored by the CREG, the pass-through of wholesale market prices to consumer prices is assumed to be relatively fast and strong, also because energy suppliers want to attract new customers and need to offer competitive prices to do so. Hence, the energy inflation rate is expected to turn negative in 2023, dragging down total inflation. Our forecast for energy inflation also takes into account the impact of numerous government measures to curb the increase in household energy bills, such as the reduction of the VAT rate on electricity and gas to 6%, lower excise duties on motor fuels, extension of the social tariff for natural gas and electricity and various one-off subsidies. Without these measures, inflation would have been even higher in 2022 and 2023 but lower in 2024.<sup>2</sup>

The pass-through of higher input costs, which are also attributable to the effects of the war in Ukraine on the prices of food commodities such as wheat, has caused food inflation to rise. It is expected to remain high in 2023, in particular due to the wage increases expected at the beginning of the year. However, food inflation is expected to significantly slow down as from 2024. The annual increases in excise duties on tobacco products are taken into account in the forecast.

Core inflation has been rising steadily since mid-2021, reaching 5.2% in November 2022. Firms with pricing power have passed on a portion of their increased energy and wage costs to their sales prices. However, some pipeline cost pressures are still expected to feed through to core inflation, causing it to peak only in the first half of 2023 and to ease more gradually thereafter than total inflation.

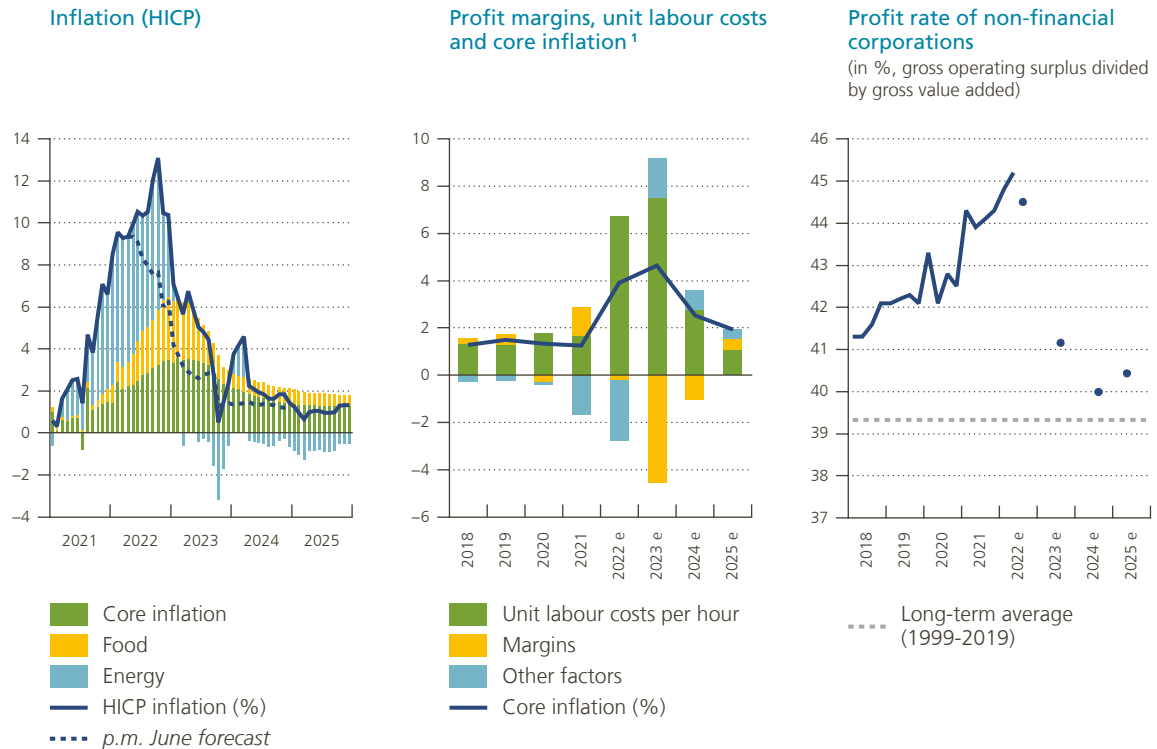
<sup>1</sup> Please see [the NBB blog article on this topic](#) for more information.

<sup>2</sup> Despite most measures coming to an end in April 2023, the “basic energy package” offsets this upward impact on year-on-year inflation and pushes down the index until February 2024.

## Chart 4

### Inflation and determinants

(contributions in %, unless stated otherwise)



Sources: Eurostat and NBB calculations.

<sup>1</sup> The decomposition of core inflation is based on an article that appeared in the Bulletin of the Banque de France (issue no. 225, September/October 2019) by Diev, Kalantzis and Lalliard, entitled "Why have strong wage dynamics not pushed up inflation in the euro area?". Margins are defined as GDP deflator growth minus unit labour cost growth. "Other factors" are mainly determined by changes in the terms of trade, excluding energy and food, and price differences between household consumption and other domestic demand components such as government consumption and investment. The term "other factors" also comprises a statistical adjustment due to differences between the consumption deflator and HICP inflation

The recent non-energy industrial goods (NEIG) inflation figure of 6.2 % in November was roughly equivalent to seven times its long-term average<sup>1</sup> of 0.8 %. Mechanically, most of the high NEIG inflation reported at the end of 2022 will be "carried over" to 2023. NEIG inflation is not expected to fall immediately, but, given the recent easing of energy prices, month-on-month price increases should start to moderate. This will be reflected in a quite strong fall in the annual inflation rate as from the second half of 2023, to 1.2 % on average in 2025, which is still above the long-term average. Services inflation has also been high recently (4.5 % in November, more than twice the long-term average of 2 %) and is projected to remain high in 2023, given that some services prices are automatically indexed (such as housing rents), but also because, as mentioned, about a third of private-sector employees have their wages indexed once per year, meaning these employees will see their wages rise significantly in January 2023. Companies will further pass on (a portion of) this cost increase to their sales prices.

The assumed degree of absorption of rising cost pressures in corporate profit margins is in line with historical regularities. Profit margins of Belgian firms typically decelerate or decline when wage costs increase rapidly, as companies do not or cannot pass on the cost increases in full to final sales prices. In this regard, current

<sup>1</sup> Average NEIG inflation over the period 1997-2019.

projections point to declining profit margins throughout the forecasting period. Clearly, this is conditional on the absence of non-linear reactions in price-setting, not assumed by our projection models, and compliance with the Law on Competitiveness and Employment that caps conventional wage increases.

The national consumer price index is used to calculate the health index, which excludes tobacco, alcoholic beverages and motor fuels and serves as a reference for the indexation of wages and replacement income. As electricity, heating oil and natural gas are taken into account in the health index, this index largely follows the movements of the total inflation. The pivotal index for public wages and social benefits was exceeded six times since August 2021, namely in December 2021, February 2022, April 2022, July 2022, October 2022 and November 2022. It is expected to be exceeded again in May 2023, January 2024 and March 2025.

**Table 6**

**Price and cost indicators**

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

	2020	2021	2022 e	2023 e	2024 e	2025 e
<b>Private sector labour costs<sup>1</sup>:</b>						
Labour costs per hour worked	4.2	-0.2	6.1	8.6	3.7	1.6
of which:						
Real conventional wages	0.6	0.4	0.6	0.0	0.0	0.0
Wage drift and other factors	2.9	-1.0	-0.6	0.3	0.2	0.2
Indexation	1.0	1.1	5.9	8.7	2.9	1.4
Social contributions	0.6	-0.5	-0.1	-0.5	0.5	0.0
Wage subsidies	-0.9	-0.1	0.4	0.1	0.1	0.0
<i>p.m. Labour costs per hour worked according to the national accounts<sup>2</sup></i>	5.2	0.0	5.7	8.5	3.6	1.6
<b>Labour productivity<sup>3</sup></b>	4.5	-2.3	-0.9	0.8	0.8	0.7
<b>Unit labour costs<sup>1</sup></b>	-0.2	2.1	7.1	7.8	2.9	0.9
<b>Total inflation (HICP)</b>	0.4	3.2	10.4	4.4	2.4	1.1
<b>Core inflation<sup>4</sup></b>	1.4	1.3	4.0	4.7	2.6	2.0
of which:						
Services	1.8	1.6	3.8	4.3	2.9	2.5
Non-energy industrial goods (NEIG)	0.7	0.8	4.2	5.4	2.1	1.2
<b>Energy</b>	-11.0	22.4	58.2	-7.1	0.3	-7.6
<b>Food</b>	2.6	0.9	8.2	8.5	3.1	2.6
<i>p.m. Inflation according to the national index</i>	0.7	2.4	9.6	5.1	2.1	1.1
<b>Health index<sup>5</sup></b>	1.0	2.0	9.2	5.4	2.3	1.2

Sources: EC, FPS Employment, Labour and Social Dialogue, Statbel, NAI, NBB.

1 The labour costs are not shown here according to the national accounts concept but according to a broader concept which includes reductions in contributions for target groups and wage subsidies. This concept provides a better picture of the true labour cost for firms.

2 Excluding wage subsidies and reductions in contributions for target groups.

3 Value added in volume per hour worked by employees and the self-employed.

4 As measured by the HICP, excluding food and energy.

5 As measured by the national consumer price index, excluding tobacco, alcoholic beverages and motor fuels.

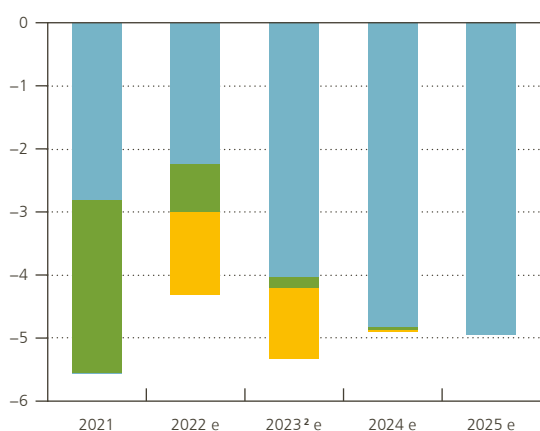
## 7. The general government deficit is not projected to improve and the debt ratio is expected to rise

The general government deficit for 2022 will be 4.3% of GDP, which implies a substantial improvement compared to 2021. However, in 2023, the deficit is projected to widen again to 5.3% of GDP, after which it should improve slightly to just below 5% of GDP in 2024 and 2025.

Chart 5

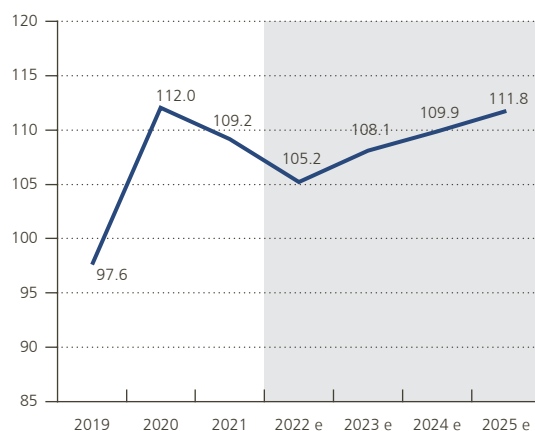
### Budget deficit and public debt ratio

The budget deficit<sup>1</sup> remains structurally high  
(in % of GDP)



■ General government budget balance  
■ of which: temporary Covid-19 measures  
■ of which: temporary energy and UA crisis related measures

The public debt / GDP ratio is on a rising path  
(in % of GDP)



Sources: NAI, NBB.

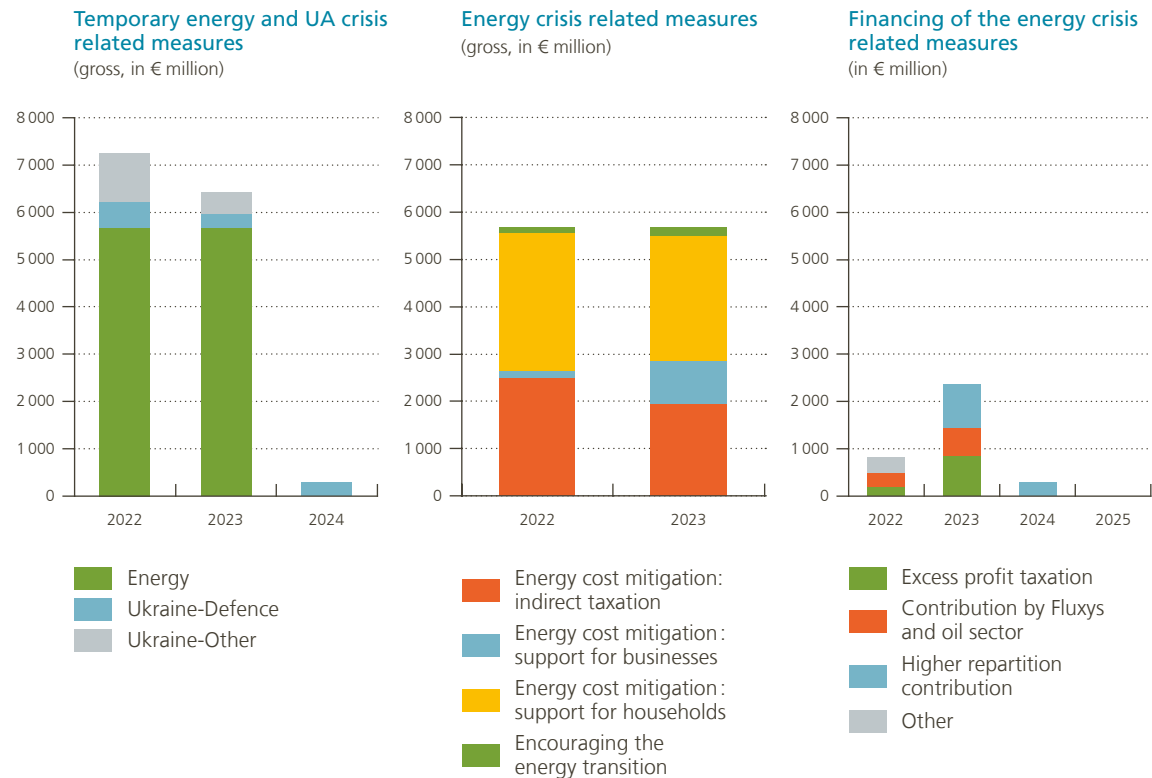
- 1 The above figures on the Belgian budget balance consider only Belgian revenue and expenditure. They disregard the deficit at EU level originating from grants by the EU to Member States in the context of the Next Generation EU programme between 2021 and 2026, which are or will be financed by European debt.
- 2 This projection does not take into account the federal government's decisions to either extend the VAT reduction for gas and electricity as from the second quarter of 2023 or make the reduction permanent and increase excise duties. Both options will increase the deficit in 2023 and possibly beyond.

The main factors explaining the firm improvement in the general government budget balance in 2022 are a further unwinding of temporary COVID-19 measures – which improves the budget by around 2% of GDP – and strong economic growth. The latter reduces the primary expenditure ratio as non-cyclical government spending categories are balanced against higher GDP.

On the other hand, the war in Ukraine and the spike in energy prices have prompted the government to adopt new measures which will cause the deficit to widen by 1.3% of GDP. For 2022, these are mainly initiatives to lower the cost of energy for households, such as the temporary reduction in VAT on electricity and gas, reduced excise duties on petrol and gasoil, a basic package of energy at a fixed price and extension of the social tariff for electricity and gas. Moreover, the war has led to increased public spending on humanitarian aid for Ukraine and refugees coming to Belgium. In the longer run, defence spending will also rise.

Chart 6

Ukraine and energy-related compensatory measures



Source: NBB.

Also in 2023, the government aims to mitigate the higher than expected cost of energy, but a shift should take place towards more support for firms. Concretely, this concerns regional initiatives to lower firms' energy costs. In addition, to compensate firms for increased wage costs caused by high automatic indexation, the Federal government has granted a temporary general reduction in employer social security contributions for the first half of 2023. All in all, the budgetary impact of the compensatory measures related to energy and inflation will be about the same size as in 2022.

The significant worsening of the budget balance projected for 2023 can be explained in part by the cyclical slowdown. At the same time, the expenditure ratio will shoot up as social benefits and public wages are indexed. As indexation occurs with a certain lag, the strong projected growth in these spending categories still partially reflects high inflation at the end of 2022. In addition, more structural elements also weigh on primary spending, such as the agreed gradual increase in certain minimum allowances and the growth in defence investment. Finally, interest payments are also expected to increase as from 2023. Higher sovereign yields are gradually passed on to the implicit interest rate on government debt. This is projected to lead to a deterioration of the budget by 0.2 % of GDP in 2023 and an additional worsening of 0.3 % of GDP by 2025.

Rising public spending in 2023, however, will be partially offset by higher government revenue. First, both personal income tax revenue and social contributions will benefit from strong automatic indexation of wages. Second, corporate tax revenue will benefit from a temporary excess profits tax on electricity producers. Finally, indirect tax revenue will rise due to high energy prices, *inter alia through* increased revenue from contributions by the nuclear sector and a temporary contribution of Fluxys to partially finance the energy support measures.



The improvement in the budget balance projected for 2024 is due to the almost full unwinding of the temporary energy crisis measures, which will lower the expenditure ratio. This will be partially countered by an increase in real pensions and a peak in local government investment following the electoral cycle. The revenue ratio is also projected to increase due to the ending of both VAT and excise duties reductions on energy products and the ending of the temporary general reduction in social security contributions. On the other hand, the abolition of the excess profits tax on electricity producers and the drop in revenues from the repartition contribution – due to a normalisation of energy prices – will weigh on revenue.

In 2025, the government deficit is expected to more or less stabilise at a level of 4.9% of GDP, thanks to the cyclical improvement of the economy. Moreover, in 2025, the trend growth of pension-related expenditures will temporarily stop due to extension of the statutory retirement age to 66.

The government debt ratio declines to 105.2% of GDP this year but is expected to be on a rising path afterwards. Given the high primary deficits, debt dynamics are projected to become unfavourable even though the interest rate growth differential remains beneficial. This favourable effect on debt will gradually fade out if interest rates would rise further.

It should be noted that to assess the budgetary impact of energy-price related support measures and the measures (partially) financing them (e.g. the excess profits tax on the electricity sector), our projections use the budgetary impact estimated by the government. If energy prices would turn out to be lower than projected by the government, the budgetary impact of these measures will be lower. Concerning the reduction in VAT (from 21% to 6%) on gas and electricity until the first quarter of 2023, the government has decided that it will either extend the reduction or make it permanent and replace the reduced VAT with excise duties based on prices of 2021. Either way, these decisions will cause the budget deficit to widen further in 2023 and possibly beyond. Our projections do not take this additional cost into account as the government has not yet made a decision on these two options and the timing thereof.

**Table 7**

**General government accounts<sup>1</sup>**

(in % of GDP)

	2020	2021	2022 e	2023 e	2024 e	2025 e
<b>General government</b>						
Revenue	49.9	49.9	49.7	51.2	51.5	51.3
of which: taxes and social contributions	42.9	43.1	42.8	44.2	44.5	44.3
Primary expenditure	57.0	53.8	52.5	54.8	54.6	54.2
Current expenditure	53.4	49.9	49.0	51.0	50.8	50.5
Capital expenditure	3.6	3.9	3.5	3.8	3.8	3.7
Primary balance	-7.0	-3.9	-2.8	-3.6	-3.1	-2.9
Interest charges	1.9	1.7	1.5	1.7	1.8	2.0
<b>Financing requirement (-) or capacity<sup>2</sup></b>	<b>-9.0</b>	<b>-5.6</b>	<b>-4.3</b>	<b>-5.3</b>	<b>-4.9</b>	<b>-4.9</b>

Sources: NAI, NBB.

1 These figures do not take into account the implicit deficit of on average 0.4% of GDP annually over the period 2021-2026, due to debt-financed grants to EU Member States from the NGEU programme.

2 This projection does not take into account the federal government's decisions to either extend the reduction in the VAT rate on gas and electricity from the second quarter of 2023 or make the reduction permanent and increase excise duties. Both options will increase the deficit in 2023 and possibly beyond.

## 8. The baseline projections are still subject to considerable uncertainty

The uncertainty surrounding the baseline economic projections described in this article is still much larger than usual, in particular as regards the nominal side (costs and inflation).

It should be reiterated that the decline in inflation anticipated by the current projections rests on a series of assumptions. First, energy prices are expected to continue to moderate, according to futures prices on international markets. It should be stressed, however, that these futures can only take on board what is already known and that those price expectations are not always accurate (as was the case in the previous three projection exercises: the downward path anticipated at the cut-off date did not materialise, *inter alia* due to geopolitical tensions). Second, it is assumed that lower energy prices on international markets will feed through to retail contracts rather rapidly. Third, any worsening of global supply chains could throw a spanner in the works and re-introduce pressure on input prices. Finally, the gradual moderation of core inflation depends on partial absorption of the cost shock via firms' profit margins, as has been observed in past episodes of increasing wage costs. It also requires compliance with the provisions of the 1996 Law on Competitiveness and Employment as regards limitations on conventional wage increases in the future. Keeping inflation in check will also require an adequate monetary policy response and well-anchored inflation expectations. Inflation may turn out to be higher or more persistent if external price pressures remain higher than currently assumed, if profit margins do not decline or if conventional wages rise faster.

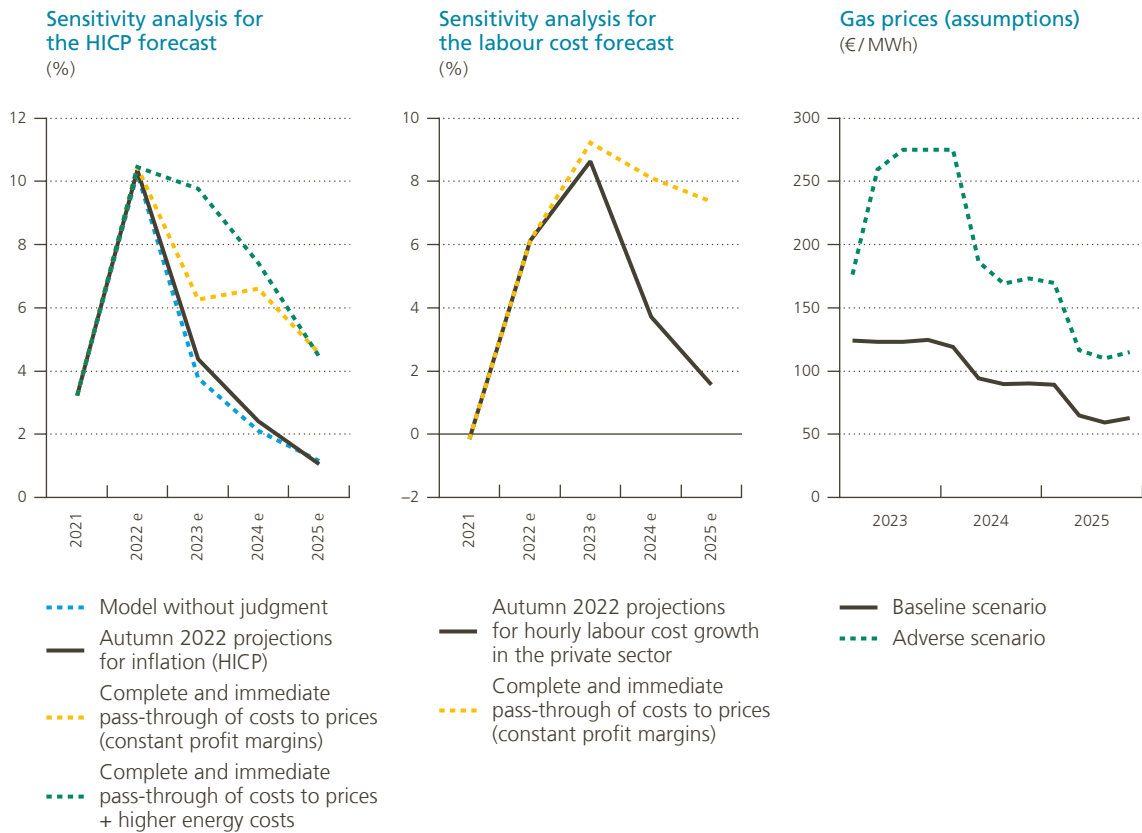
To illustrate the degree of uncertainty, a (two-step) sensitivity analysis was performed. The first step tracks inflation and wage cost growth under the (extreme) assumption that all firms have significant pricing power, allowing them to keep their profit margins constant at the current level. In this case, there would be a complete and immediate pass-through of firms' costs to their sales prices. Even if inflation would still come down from its peak in 2022 (due to the moderation of energy prices), it would turn out higher than the baseline scenario in 2023, and even more so in the years thereafter. As higher inflation in 2023 will only work through to higher wage costs with a certain lag, inherent in indexation mechanisms, wage cost growth would exceed that of the baseline scenario only as from 2024. Via second-round effects, these higher wage costs are – in this analysis – assumed to quickly and completely feed through to inflation, keeping profit margins constant. While this may seem to be a good thing for businesses, the escalation of inflation (and, consequently, wage growth) that comes with keeping profit margins constant is likely to further deteriorate Belgium's cost competitiveness.

In the second step, it was examined what inflation looks like when an adverse scenario for energy prices – in which gas, oil and electricity prices would shoot up and remain higher for longer – is added to the first sensitivity analysis with constant profit margins. This alternative set of assumptions was provided by the ECB, which has performed a similar sensitivity analysis for energy prices in the euro area. For Belgium, these alternative assumptions for energy prices, combined with complete and immediate pass-through of costs to prices, would imply a much more limited moderation of headline inflation in 2023, with the annual average remaining close to 10%. However, in the following years, headline inflation would also moderate as the alternative profile for energy prices shows a downward trajectory, albeit at higher levels.

Turning to the real side, the most recent high-frequency indicators show a dichotomy between so-called soft and hard indicators. While confidence indicators have worsened substantially since the summer, with consumer confidence even hitting an all-time low, other recent data, such as turnover in retail trade and industrial production, are holding up relatively well. We currently expect growth in the fourth quarter to be slightly negative, but it could very well surprise in both directions. As for the medium- to longer-term outlook, the point is often raised that next winter may be more difficult than the current one (due to low gas reserves), but this is currently not reflected in the common Eurosystem assumptions (on energy prices or world trade).

## Chart 7

### Sensitivity analysis for HICP and wage cost growth



Source: NBB.

Finally, rising interest rates have reminded us of the cost of high (public) debt. In the longer term, the unsustainable budget position will have to be addressed, which may require consolidation measures in the outer year(s) of the projection period. Depending on the specific measures taken, the growth and budget outlook could be quite different for those years.

## Annex

### Projections for the Belgian economy: summary of the main results

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

	2021	2022 e	2023 e	2024 e	2025 e
<b>Growth (calendar adjusted data)</b>	6.1	3.1	0.6	1.7	1.8
<b>Real GDP</b>					
<b>Contributions to growth:</b>					
Domestic expenditure, excluding change in inventories	5.1	1.5	0.9	2.2	2.3
Net exports of goods and services	0.7	0.4	-0.5	-0.4	-0.5
Change in inventories	0.4	1.2	0.1	0.0	0.0
<b>Prices and costs</b>					
Harmonised index of consumer prices	3.2	10.4	4.4	2.4	1.1
Health index	2.0	9.2	5.4	2.3	1.2
GDP deflator	2.9	6.7	3.0	1.7	1.5
Terms of trade	-1.5	-4.4	-0.2	0.5	1.2
Unit labour costs in the private sector <sup>1</sup>	2.1	7.1	7.8	2.9	0.9
Hourly labour costs in the private sector <sup>1</sup>	-0.2	6.1	8.6	3.7	1.6
Hourly productivity in the private sector	-2.3	-0.9	0.8	0.8	0.7
<b>Labour market</b>					
Domestic employment (annual average change in thousands of persons)	90.8	104.7	26.0	21.3	41.5
Total volume of labour <sup>2</sup>	7.5	4.1	-0.1	0.9	1.0
Harmonised unemployment rate (in % of the labour force aged 15 years and over)	6.3	5.7	6.2	6.3	6.0
<b>Incomes</b>					
Real disposable income of individuals	1.3	-0.4	3.1	1.3	1.9
Savings ratio of individuals (in % of disposable income)	17.0	13.3	14.5	13.9	13.9
<b>Public finances (in % of GDP)</b>					
Primary balance	-3.9	-2.8	-3.6	-3.1	-2.9
Budget balance	-5.6	-4.3	-5.3	-4.9	-4.9
Public debt	109.2	105.2	108.1	109.9	111.8
<b>Current account (according to the balance of payments, in % of GDP)</b>	0.4	-4.7	-5.1	-4.6	-3.7

Sources: EC, NAI, Statbel, NBB.

1 Including wage subsidies (mainly reductions in payroll tax) and targeted reductions in social contributions.

2 Total number of hours worked in the economy.

## Conventional signs

€	euro
\$	dollar
%	per cent
e	estimate
e.g.	<i>exempli gratia</i> (for example)
EUR	euro
no.	Number
p.m.	<i>pro memoria</i>
p.p.	percentage point
USD	US dollar

# List of abbreviations

## Countries or regions

BE	Belgium
DE	Germany
FR	France
NL	Netherlands
EA	Euro area
EU	European Union
UA	Ukraine
US	United States

## Abbreviations

COVID-19	Coronavirus disease-19
CREG	Commission for Electricity and Gas Regulation
EC	European Commission
ECARES	European Center for Advanced Research in Economics and Statistics
ECB	European Central Bank
EU	European Union
FPB	Federal Planning Bureau
FPS	Federal Public Service
GDP	Gross domestic product
HICP	Harmonised index of consumer prices
MWh	Megawatt-hour
NAI	National Accounts Institute
NBB	National Bank of Belgium
NEIG	Non-energy industrial goods
NEO	National Employment Office
NPI	Non-profit institutions serving households

Q1	First quarter
Q2	Second quarter
Q3	Third quarter
Q4	Fourth quarter
Statbel	Belgian Statistical Office
VAT	Value added tax

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