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- SPECIAL TOPIC: Rising interest rates expected to have a gradual impact on public finances, increasing the need for fiscal consolidation
- FINANCIAL MARKETS AND INTEREST RATES: Higher sovereign bond yields amid high inflation, tighter monetary policies and elevated uncertainty
- TREASURY HIGHLIGHTS: 90 % of funding target has been achieved

CONSENSUS Average of participants' forecasts

A spreadsheet on the NBB website gives more details on participants' individual forecasts.

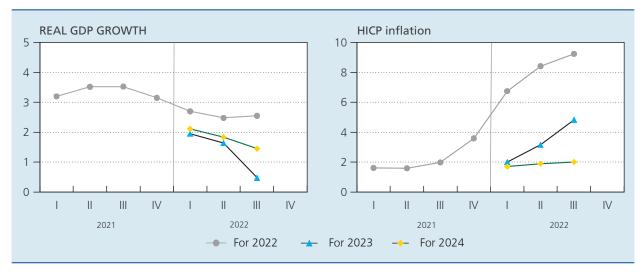
	Belgium			Euro area				
	2021	2022p	2023p	2024p	2021	2022p	2023p	2024p
Real GDP ⁽¹⁾	6.2	2.6	0.5	1.4	5.3	3.0	-0.1	1.7
Inflation (HICP) ⁽¹⁾	3.2	9.2	4.8	2.0	2.6	8.2	5.6	2.1
General government balance ⁽²⁾	-5.5	-4.8	-4.9	-5.2	-5.1	-4.1	-3.6	-3.4
Public debt ⁽²⁾	108.2	104.3	106.3	109.5	95.6	95.5	95.4	95.2

1 Percentage changes.

2 EDP definition; percentages of GDP.

SUCCESSIVE FORECASTS FOR BELGIUM

(each line shows the evolution since the start of 2021 of the growth and inflation forecast for the calendar years 2022-2023-2024)



Source: Belgian Prime News.

MACROECONOMIC Uncomfortably high inflation DEVELOPMENTS

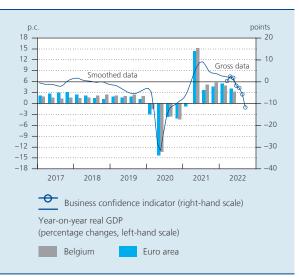
Inflationary pressures worldwide have remained uncomfortably high in the past months, but there are signs of relief as supply bottlenecks have started to unclog. The global PMI indicator on delivery times as well as the one on input prices appear to have peaked. While volatility and uncertainty remain high on the energy markets, commodity prices seem to have softened somewhat recently and – according to futures markets – are expected to continue to drop in the coming years. Nonetheless, high inflation numbers in several advanced economies have put a damper on the global economic outlook. In line with global growth, the global trade outlook has also worsened.

The euro area economy expanded strongly in the first half of the year, probably due to post-COVID reopening of the economy and some catch-up. However, the economy is expected to stagnate in the second half of the year, as high inflation and uncertainty weigh on activity. In annual terms, Belgian Prime News participants expect the euro area economy to grow by 3 % in 2022, shrink by 0.1 % in 2023 and and grow again by 1.6 % in 2024. Overall, the latest growth outlook has thus been revised downwards compared to the June forecast; most notably for 2023, by 1.8 percentage points. Conversely, Belgian Prime News participants' inflation forecasts have been revised upwards even further. Euro area inflation is now expected to come in at 8.2 % on average for 2022. BPN participants expect inflation to fall and level out, at 5.6 % in 2023 and 2.1 % in 2024, but the decline is predicted to be more moderate than forecast in June.

In Belgium, economic activity expanded by 0.2 % in the second quarter, which was somewhat better than predicted in the NBB's previous Business Cycle Monitor. Like the euro area, the Belgian economy is expected to experience increased headwinds in the third quarter due to high (energy) prices. According to the latest Business Cycle Monitor, a slight contraction of economic activity seems to be the most plausible scenario, although uncertainty remains high. BPN participants expect real GDP growth in Belgium to reach 2.6 % this year, 0.5 % in 2023 and 1.4 % in 2024. Compared to June, the consensus forecast was revised by -1.2 percentage point in 2023 and by -0.4 percentage point in 2024.

The Belgian labour market continued to surprise on the upside. Once again, domestic employment grew more strongly than economic activity, by 0.6 % on a quarterly basis, with yet another 30,000 workers added to the labour market. The unemployment rate has been hovering at just above 5.5 % since the beginning of the year, which is quite close to prepandemic levels.

Inflation has continued its upward trend, with the latest HICP reading for Belgium standing at 10.5 % in August. As in recent months, the rise in inflation is mostly due to soaring energy prices, even though core inflation is climbing, too. According to the latest consensus forecast, the inflation rate in



GDP GROWTH AND BUSINESS CYCLE INDICATOR

INFLATION (HICP) (annual percentage changes)

Sources: EC. NAI. NBB.



Belgium is expected to be 9.2 % on average for 2022, before slowly dropping to 4.8 % in 2023 and 2 % in 2024. This implies a further uptick from the BPN's June consensus of 2.6 percentage points in cumulative terms.

On the public finance side, temporary measures such as those taken to shore up purchasing power in response to galloping energy prices are deepening the 2022 budget deficit. According to the consensus forecast, Belgium's **budget deficit is expected to reach 4.8% of GDP in 2022 and to worsen slightly to 5.2% in 2024**. BPN participants expect Belgian government debt to edge upwards somewhat further in the coming years, from around 104% of GDP in 2022 to 109.5% of GDP in 2024.

SPECIAL TOPIC Rising interest rates expected to have a gradual impact on public finances, increasing the need for fiscal consolidation

Era of low interest rates that benefitted public finances draws to a close

The period of ultra-low interest rates is over. Indeed, the long-term interest rate (10-year OLO) rose from around 0% at the beginning of the year to 2.5% in June. After dropping to 1.4% over the summer, it started to rise again and peaked in September at a level close to that observed in June. Despite this sharp rise, interest rates remain relatively low in historical perspective.

Over the past decade, the dramatic decline in interest rates and their stabilisation at a low level made it possible for the governments to refinance debt using issues with lower interest rates than those on maturing instruments, thereby steadily reducing the implicit interest rate on public debt. This policy picked up steam as market rates progressively fell.

At the same time, government debt managers took advantage of lower interest rates to reduce refinancing risks at less cost. By staggering the maturity dates of debt, refinancing risks, which can be substantial in highly indebted countries such as Belgium, have been steadily mitigated. For example, since 2010, the average maturity of federal government debt, which represents more than 80% of Belgian public indebtedness, has risen from around six years to more than ten years.

It should be noted that even had the era of very low interest rates continued, the remaining margins to lower interest expenses would be limited as from 2023, as more and more instruments due for refinancing were already being issued at low rates. Under the new financing conditions, which made also public deficits much more expensive to finance on the markets, interest expenses are expected to rise as from next year. Thanks to the lengthening of the duration of the debt, the increase will be very gradual since only a limited portion of public debt is to be refinanced in the coming years. Nonetheless, even greater efforts in the area of the primary budget balance will be required to reverse the expected upward trajectory of the debt ratio.

Assuming unchanged policy, debt expected to increase further in the next few years

There are three main factors that endogenously affect the debt-to-GDP ratio. The first is the primary budget balance; a higher primary deficit will obviously increase the level of debt. This is also true for the second factor, interest expenses. As mentioned above, interest expenses are expected to gradually increase as from 2023. Finally, nominal GDP growth also affects the public debt ratio. This is what is generally referred to as the denominator effect.

Public debt in Belgium represented 108.4 % of GDP at the end of 2021 (chart). Before the pandemic, Belgium was already amongst the euro area countries with the highest levels of public debt. Unlike in other countries, however, our public deficit is not expected to return to pre-pandemic levels, according to projections, but rather to remain high at around 5 % of GDP. The decrease in the debt-to-GDP ratio observed since 2021 is only temporary and is attributable to favourable nominal GDP growth. The structural trajectory of public debt is undeniably upward. Assuming unchanged policy and under the financing conditions observed in June, it is expected to reach more than 120 % of GDP by 2030.

According to the latest economic projections by the Bank and a simulation exercise (chart), the high budget deficit is expected to remain the primary driver of Belgium's public debt ratio in the next decade. Unlike in previous decades, the share of interest payments will increase, although the speed of this increase will be mitigated by lengthened debt maturity.

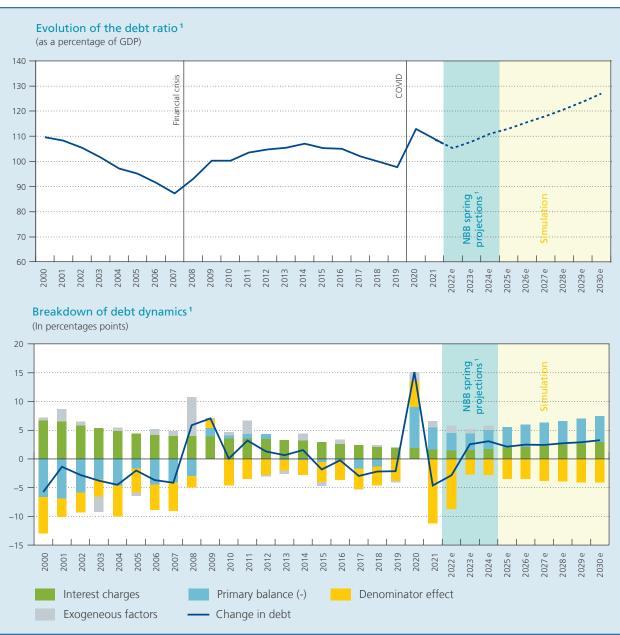
To bring the public debt ratio back to a sustainable level in the long term, structural budgetary consolidation is required, both to face numerous future challenges and to create budgetary margins to counter negative economic shocks, which could cause a further deterioration in the financing balance.

Currently favourable interest rate-growth differential should not be taken for granted

To keep public debt dynamics under control, the government must keep a tight rein on the budget balance at any interest rate level, but especially when interest rates are rising, as is now the case.

When nominal GDP growth exceeds the implicit interest rate on public debt, a minor primary deficit does not automatically lead to an increase in the public debt ratio. On the other hand, when interest rates exceed nominal GDP growth, sufficient primary surpluses are needed to stabilise the debt ratio and counterbalance the phenomenon referred to as "snowball effect" of interest expenses on public debt.

PRIMARY DEFICIT THE MAIN DRIVER OF THE UPWARD TRAJECTORY OF PUBLIC INDEBTEDNESS IN BELGIUM IN THE COMING YEARS



Sources: NAI, NBB.

¹ The baseline scenario reflects the Bank's June 2022 macroeconomic projections through 2024, adjusted for more recent interest rate expectations for 2023 and 2024. For the 2025-2030 period, the 2024 primary balance is used as the starting point, with the incorporation of aging costs and GDP assumptions from the July 2021 Study Committee on Ageing report. Nominal interest rates are assumed to follow market expectations observed in the first half of June 2022, while inflation (which here aligns with the GDP deflator) is set at 2 percent from 2025 onward. The other assumptions are that debt maturity will remain stable at 10 years on average and that no exogenous factors will impact the debt ratio.

Since 2015, the implicit interest rate has been below nominal GDP growth (except in 2020), which is rather exceptional from a historical point of view. Intuitively, the favourable impact of the denominator effect was greater than the unfavourable impact of interest payments on the debt-to-GDP ratio (chart). As a result, there was no snowball effect.

According to the Bank's latest macroeconomic projections and an additional simulation exercise based on market expectations in June, this favourable situation is predicted to last for the next few years, despite the increase in interest rates. Nonetheless, the debt ratio is expected to increase due to high primary deficits. However, a favourable interest rate-growth differential should not be taken for granted. If interest rates were to rise further, for example due to rising risk premia, the snowball effect could emerge. In that case, primary deficits would have to be turned into primary surpluses to get the debt ratio under control. For these reasons, the government should not defer decisions on the structural consolidation of public finances.

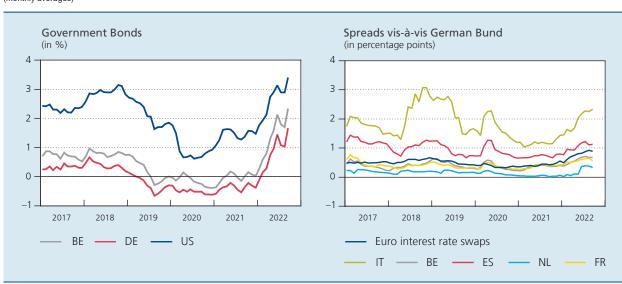
FINANCIAL MARKETS AND INTEREST RATES

Higher sovereign bond yields amid high inflation, tighter monetary policies and elevated uncertainty

In the third quarter of 2022, central banks took additional measures to combat high inflation. The Federal Reserve carried out two 75-basis-point interest rate hikes in July and September, bringing the target range for the federal funds rate to between 3 % and 3.25 %. The ECB also raised its deposit facility rate twice, by 50 basis points in July and 75 basis points in September. The deposit facility rate now stands at 0.75 % after having been negative for eight years. In this context, the US 10-year sovereign bond yield rose by 28 basis points, from 3.14 % in June to 3.42 % in September. Over the same period, Belgian and German 10-year government bond yields went up by 21 and 24 basis points, settling at 2.34 % and 1.69 %, respectively.

High commodity and energy prices, persisting supply-side bottlenecks, and strong demand following the pandemic all continue to contribute to high inflation in the US and Europe. On the European markets, spot gas prices crossed the \in 300 per megawatt hour (MWh) mark in August but declined thereafter. Weaker global economic growth prospects also had a negative impact on oil prices, which fell below \$ 90 a barrel in September. Uncertainty surrounding the inflation outlook and growing fears of a recession contributed to high volatility on the stock and bond markets. For instance, the VIX and VSTOXX indices remained well above their historical average. Corporate spreads in the US and the euro area have also increased since the Russian invasion of Ukraine. Together with the current monetary stance, a weaker global economy has contributed to the euro depreciating against the dollar. Indeed, the euro has now fallen below parity with the dollar and is at its lowest level in 20 years. The British pound also depreciated markedly after a change in the course of fiscal policy was announced on 23 September.

Euro area sovereign spreads vis-à-vis Germany remained broadly stable in the third quarter of 2022. In July, the ECB approved its Transmission Protection Instrument (TPI) aimed at countering deteriorations in financing conditions not warranted by country-specific fundamentals and threatening an effective transmission of monetary policy. The ECB's commitment to countering market fragmentation has prevented further increase in sovereign spreads despite rising funding costs, elevated public deficits, and the energy crisis in Europe. In Belgium, France and the Netherlands, sovereign spreads declined marginally, settling at 0.65 %, 0.49 % and 0.32 %, respectively. In contrast, Italian spreads increased by 13 basis points amid political uncertainty, rising from 2.19 % in June to 2.32 % in September.



10-YEAR INTEREST RATES (monthly averages)

Sources : BIS, Thomson Reuters. Average over the first 27 days for September 2022.

2022

TREASURY HIGHLIGHTS 90% of funding target has been achieved

Two OLO auctions (in July and August), two ORI facilities (in August and September) and one OLO syndication (in September) were held, raising a total of € 11.519 billion.

OLO auctions (€ 6.106 billion)

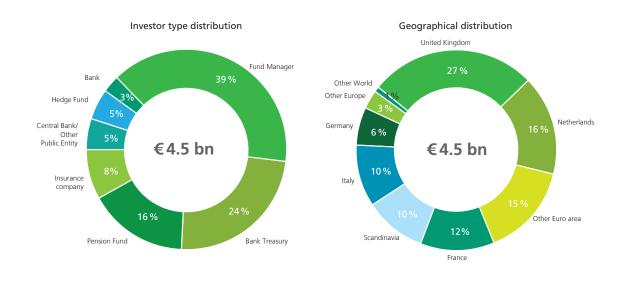
Date	OLO		lssued (€ billion)	Yield	Bid-to-cover
July 18	OLO 0.00 % 22/10/2027 OLO 0.35 % 22/06/2032 OLO 1.40 % 22/06/2053	OLO91 OLO94 OLO95	0.931 1.604 1.177	1.208 % 1.854 % 2.532 %	2.06 2.08 1.56
Non-competitive subscriptions			0.393		
Total July			4.105		
August 22	OLO 0.00 % 22/10/2027 OLO 0.35 % 22/06/2032	OLO91 OLO94	0.780 1.221	1.258 % 1.809 %	2.36 1.77
Non-competitive subscriptions			0.000		
Total September			2.001		

OLO syndication (€ 4.5 billion)

As announced in its borrowing requirements, the Belgian Debt Agency issued a new green OLO in September. The new € 4.5 billion OLO 96, falling due on 22 April 2039, pays an annual coupon of 2.75 % and was priced at 6 bp above OLO 2038, implying a re-offer yield of 2.754 %.

The lead managers for this syndicated OLO were BNP Paribas Fortis, Crédit Agricole CIB, HSBC and J.P. Morgan. As for the first green OLO, BNP Paribas Fortis and Crédit Agricole CIB were in charge of structuring the Green OLO.

The proceeds from the issue will be used in accordance with Belgium's 2022 new Green OLO Framework.



The auction scheduled for 19 September was cancelled.

Moreover, on 5 August and 2 September, the Belgian Debt Agency issued an additional €913 million through its fourth and fifth ORI facilities.

ORI facilities (€ 0.913 billion)

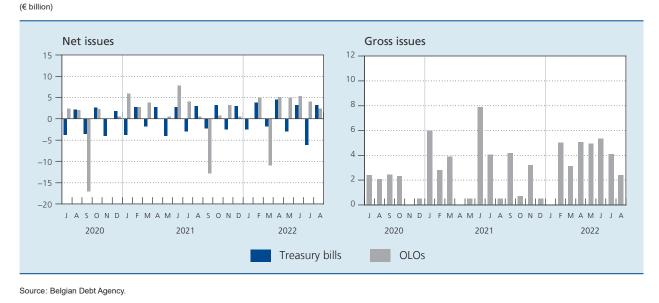
Date	OLO		lssued (€ billion)	Yield
August 5	OLO 1.25 % 22/04/2033 OLO 2.25 % 22/06/2057	OLO86 OLO83	0.201 0.212	1.381 % 2.045 %
Total August			0.413	
September 2	OLO 0.80 % 22/06/2028 OLO 2.25 % 22/06/2057	OLO85 OLO83	0.310 0.190	1.738 % 2.755 %
Total September			0.500	

No EMTNs or Schuldscheine were issued in the third quarter of 2022.

The total issuance now amounts to € 40.053 billion, corresponding to 90.6 % of the € 44.2 billion funding target.

In terms of portfolio structure, the average life of the portfolio was 10.43 years at the end of August. The implicit portfolio yield rose slightly to 1.37 % (end of August).

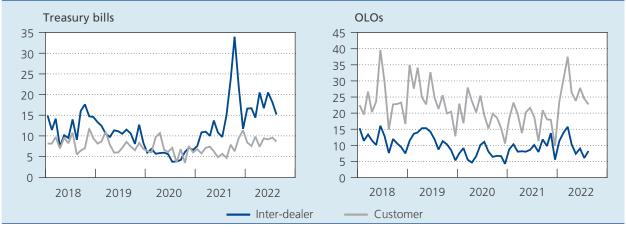
GOVERNMENT SECURITIES STATISTICS



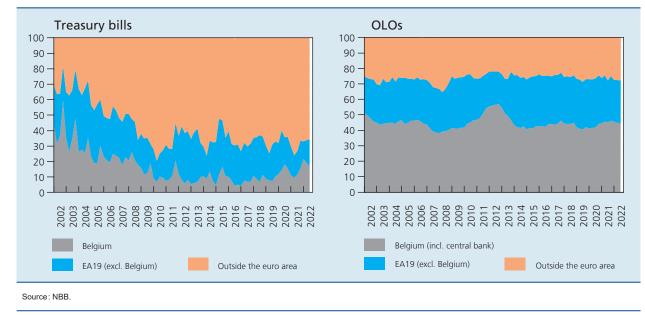
PRIMARY MARKET

SECONDARY MARKET TURNOVER

(as reported by primary and recognised dealers to the Treasury, € billion)



Source: Belgian Debt Agency.



HOLDERSHIP BELGIAN SECURITIES

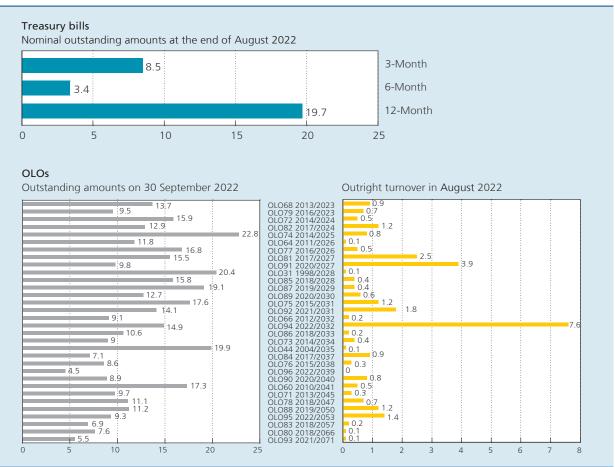
Treasury bills OLOs (basis points) (ticks) 20 5 80 4 15 60 3 40 10 2 20 5 0 -0 0 S O N D J F M A M J J A S O N D J F M A M J J A S S O N D J F M A M J J A S O N D J F M A M J J A S 2020 2021 2022 2020 2021 2022 5-year benchmark (OLO 74 – OLO77 as of 15/01/2021 – Best spread OLO91 as of 03/01/2022) - Average spread on assigned T-bills 10-year benchmark (OLO89 – OLO92 as of 15/01/2021 – OLO94 as of 24/01/2022) - 10 day moving avrg best b/o spread 30-year benchmark (OLO88 – OLO95 as of 18/02/2022)

BEST BID/OFFER SPREADS (1)

Source: Treasury.

(1) As reported by three electronic platforms (MTS, Broker Tec and BGC eSpeed).

OUTSTANDING AMOUNTS AND TURNOVER (€ billion)



Source: Belgian Debt Agency.

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This publication is also available on the website: www.nbb.be.

Information on the Belgian government debt can be found on the Treasury website: www.debtagency.be. General information on the Belgian government's action can be found on the website: www.belgium.be.

