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- SPECIAL TOPIC: Firms and margins
- FINANCIAL MARKETS AND INTEREST RATES: Volatility remains elevated on sovereign bond markets
- TREASURY HIGHLIGHTS: 2023 funding plan announced

CONSENSUS **Average of participants' forecasts**

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

	Belgium				Euro area			
	2022e	2023e	2024e	2025e	2022e	2023e	2024e	2025e
Real GDP ⁽¹⁾	3.0	0.0	1.1	1.8	3.3	-0.1	1.2	1.7
Inflation (HICP) ⁽¹⁾	10.3	6.8	2.4	1.8	8.4	6.2	2.3	2.0
General government balance ⁽²⁾	-5.0	-5.3	-4.9	-4.9	-3.8	-4.0	-3.3	-3.0
Public debt ⁽²⁾	105.9	107.1	108.5	110.6	94.0	94.1	93.4	92.8

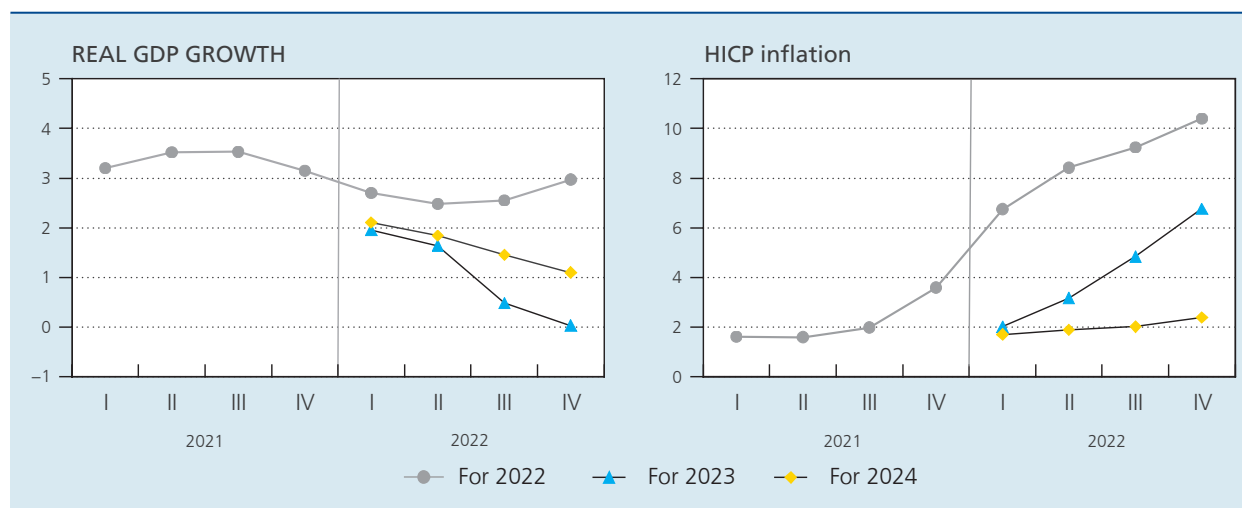
1 Percentage changes.

2 EDP definition; percentages of GDP.

Please note that the HICP inflation rate for 2022 does not correspond to the average of participants' forecasts, but to the already observed rate based on the flash estimate by Eurostat.

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 DEVELOPMENTS **Global inflation remains high but has most likely peaked**

In 2022, the global economy faced numerous challenges which dampened growth. On the bright side, weaker demand allowed supply chain bottlenecks to ease somewhat, with the PMI suppliers' delivery times index showing a clear improvement near the 50 mark. The PMI also indicates reduced pressure on input prices. With energy prices down somewhat from the very high levels reached over the summer, headline inflation is considered to have peaked. Nonetheless, inflation remains high and is expected to weigh down activity in the coming months.

The euro area economy expanded strongly in the first half of the year, but growth slowed significantly in the third quarter of 2022. Growth is even expected to contract in the last quarter as high inflation and uncertainty curb activity. In annual terms, Belgian Prime News participants expect the **euro area economy to shrink by 0.1 % in 2023. However, growth is expected to rebound to 1.2 % in 2024 and to 1.7 % in 2025.** Compared to the September consensus, the growth outlook for 2024 has been adjusted downwards. Conversely, Belgian Prime News participants have revised their inflation forecasts even further upwards. **Euro area inflation is now expected to come in at 6.2 % in 2023, down only somewhat from the average rate of 8.4 % recorded in 2022.** Participants expect inflation to level off at just above 2 % in 2024 and 2025.

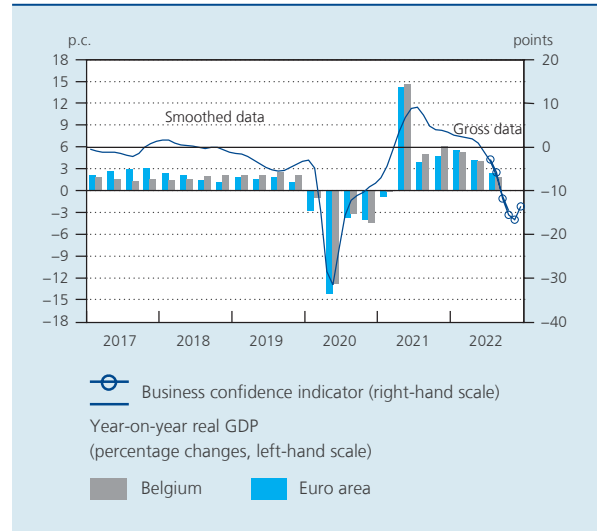
In Belgium, economic activity expanded by 0.2 % in the third quarter, once again surprising on the upside. As is the case for the euro area, however, the Belgian economy is expected to struggle in the fourth quarter due to high inflation and weak confidence. According to the latest Business Cycle Monitor, a slight contraction in economic activity appears to be the most plausible scenario, although uncertainty remains high. **BPN participants expect real GDP growth in Belgium to be 0 % in 2023, down from 3 % in 2022.** Growth is expected to pick up in 2024 (1.1 %) and 2025 (1.8 %). Compared to September, the consensus forecasts for 2023 and 2024 have been revised by -0.5 and -0.3 percentage point, respectively.

The Belgian labour market remains resilient, although it also faltered slightly in the third quarter. Still, domestic employment continued to grow more strongly than economic activity, expanding by 0.3 % on a quarterly basis and adding another 15,000 workers on average to the labour market. The harmonised unemployment rate hovered near 5.5 % throughout 2022, quite close to pre-pandemic levels.

As in the global economy, inflation in Belgium is considered to have peaked in October at over 13 %. The latest HICP reading, for December, stands at 10.2 %. Energy inflation has clearly moderated, but core and food inflation are still on the rise. **According to the latest consensus forecast, the headline inflation rate in Belgium is expected to be 6.8 % in 2023, down from 10.3 % in 2022. It should drop to 2.4 % in 2024 and 1.8 % in 2025.** This implies a further uptick from the BPN's September consensus of 2.3 percentage points in cumulative terms.

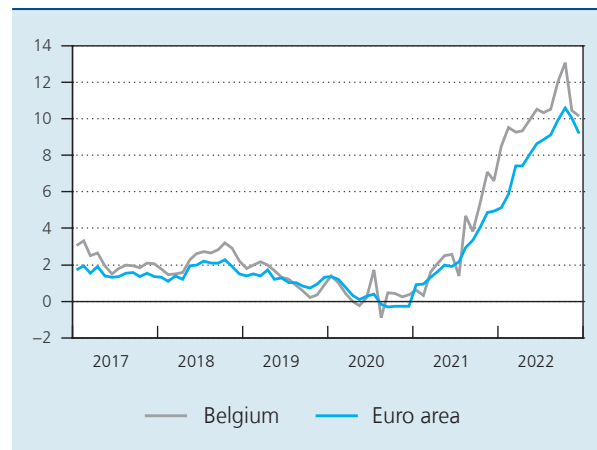
On the public finance side, temporary measures such as those taken to shore up purchasing power in response to galloping energy prices have widened the 2022 budget deficit, while the economic slowdown is expected to weigh on the budget ratio in 2023. According to the consensus forecast, Belgium's **budget deficit is expected to reach 5 % of GDP in 2022 and 5.3 % of GDP in 2023. It is expected to improve only slightly thereafter, to 4.9 % in 2024 and 2025.** Finally, BPN participants expect Belgian government debt to edge upwards somewhat further in the coming years, from around 106 % of GDP in 2022 to 110.6 % of GDP in 2025.

GDP GROWTH AND BUSINESS CYCLE INDICATOR



Sources: EC, NAI, NBB.

INFLATION (HICP) (annual percentage changes)



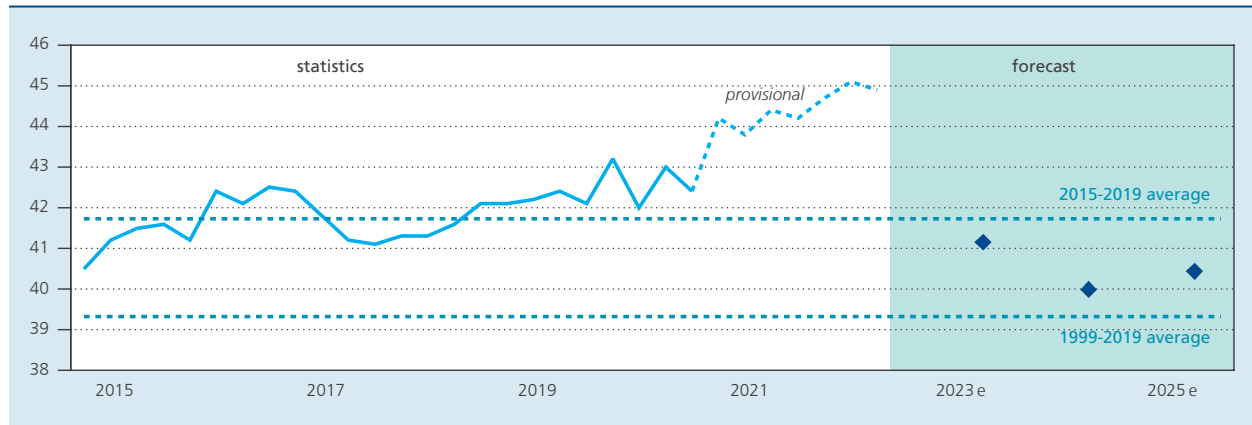
Source: EC.

SPECIAL TOPIC Firms and margins

The macroeconomic gross margin and gross operating surplus of companies have risen in recent years, and were expected to fall in 2022. This is because costs for companies have risen sharply in the past year and they are only partially succeeding in passing on the increased costs into higher selling prices, which negatively affects margins.

THE MACROECONOMIC GROSS MARGIN IS EXPECTED TO FALL

(Gross operating surplus of non-financial corporations as a % of value added)

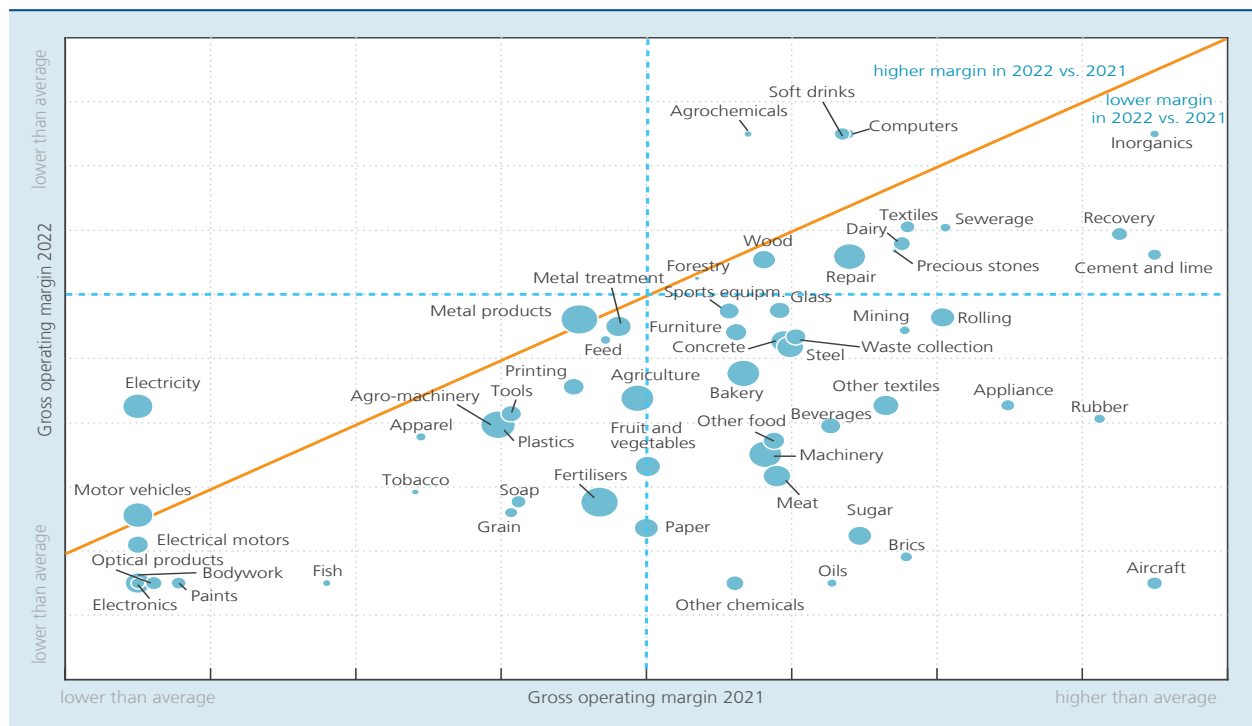


Sources: NAI, NBB calculations.

Developments in this macroeconomic margin are, however, largely driven by developments among a small number of very large companies. As the exposure to increasing costs and the ability to pass on these costs to clients varies significantly across firms, the macro margin rate is not necessarily representative of the condition of a large proportion of firms. To study the underlying heterogeneity between firms and sectors, we therefore analyse the median operating gross margin that closely resembles the EBITDA margin used in corporate finance.

MARGINS IN MANUFACTURING

(median operating margins in Q1-Q3 2021 (horizontal axis) and 2022 (vertical axis) vs. 2015 – 2019 average)



Sources: NAI, NBB calculations.

Note: The sectors below the diagonal saw their margins fall in 2022 relative to 2021. The sectors to the right of the vertical dotted line had higher margins in 2021 than the historical average. The sectors above the horizontal dotted line had higher margins in 2022 than the historical average. The size of the circle represents the relative size of the sector in terms of employment.

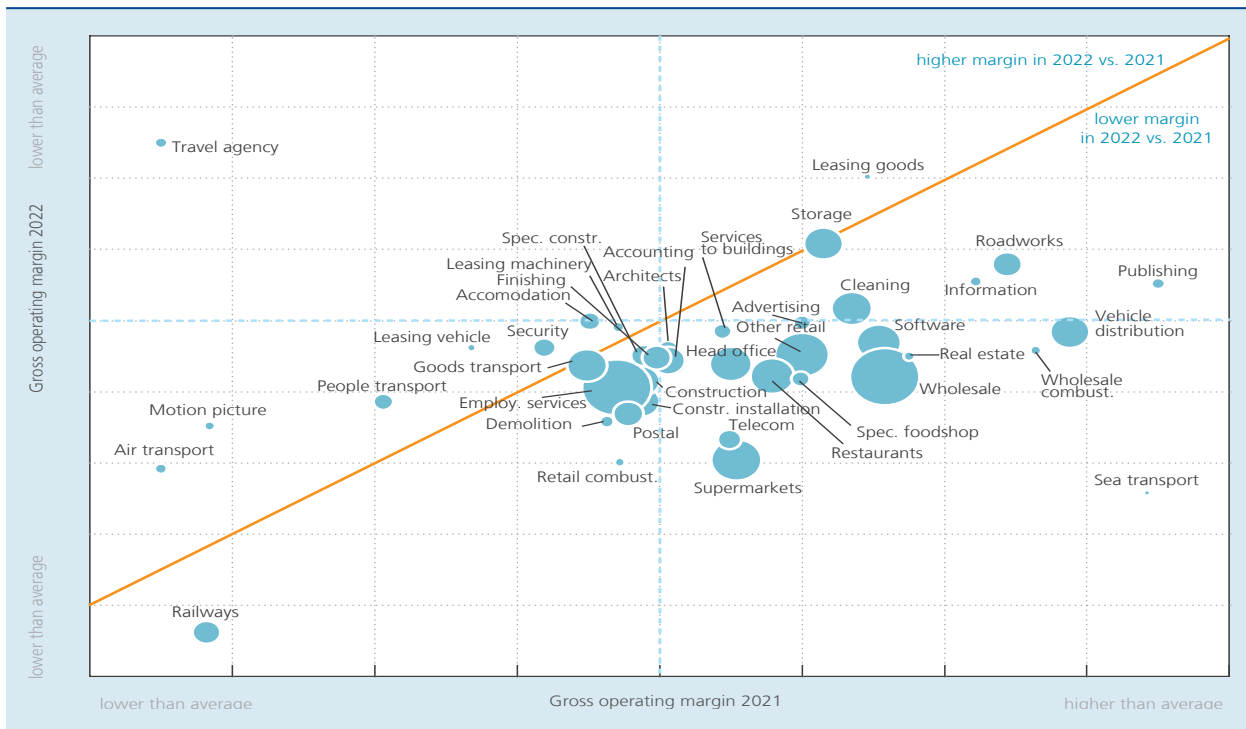
This median margin was relatively low during the first three quarters of 2022. The margins were not only lower than in 2021, a year in which fairly high margins were recorded, but also lower than the average over the 2015-2019 period and 2020. The margins recorded in 2020, which was marked by the outbreak of the COVID pandemic, were higher than those in 2022, except for the second quarter during the height of the crisis.

A look into the underlying heterogeneity between sectors shows that most manufacturing sectors saw their margins decline in 2022 relative to a better-than-average 2021. This implies there is some buffer to absorb the declining margins. Still, there are sectors that had relatively low margins in 2021 and saw their margins fall further in 2022. These include chemicals sectors (basic chemicals, paints, plastics), the food industry (fish, starch) as well as traditional manufacturing (motor vehicles, electric motors, electronics). Several sectors, including some energy-intensive sectors, still had high margins in 2022 from a historical perspective. This suggests that some major energy consumers have still managed to largely pass on higher energy costs.

Margins are also falling in most services sectors, although the decline has been less pronounced than in manufacturing. Retail and distribution have fallen from a relatively strong 2021 position to margins below historical averages. A number of industries related to construction also saw their margins decline (slightly). Some sectors that were still badly affected by the COVID crisis in 2021 (accommodation, travel agencies, passenger transport) saw their margins recover in 2022. Most knowledge-driven services sectors experienced a limited impact on margins.

MARGINS IN SERVICES

(median operating margins in Q1-Q3 2021 (horizontal axis) and 2022 (vertical axis) vs. 2015 – 2019 average)



Sources: NAI, NBB calculations.

Note: The sectors below the diagonal saw their margins fall in 2022 relative to 2021. The sectors to the right of the vertical dotted line had higher margins in 2021 than the historical average. The sectors above the horizontal dotted line had higher margins in 2022 than the historical average. The size of the circle represents the relative size of the sector in terms of employment.

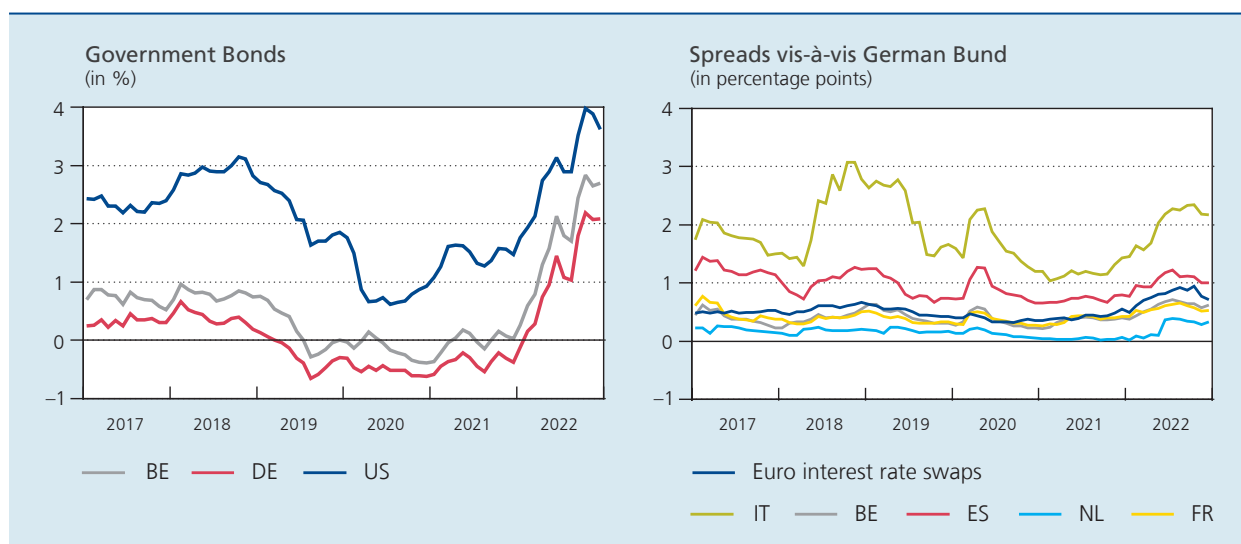
Over the course of the fourth quarter of 2022, central banks took additional measures to tackle high inflation. The Fed implemented a fourth consecutive 75-basis-point interest rate rise in November followed by a further 50-basis-point increase in December, bringing the target range for the federal funds rate up to between 4.25 and 4.50 %. The ECB also raised its deposit facility rate twice, by 75 basis points in October and by 50 basis points in December. The deposit facility rate now stands at 2 %. The ECB also announced that it will stop reinvesting all principal repayments from maturing securities held in its asset purchase programme (APP) portfolio from March 2023 onwards.

While the ECB and the Fed raised their interest rates, the yields on long-term government bonds were also driven by the inflation and growth outlooks and their implications for the future course of monetary policy. Overall, the US 10-year sovereign bond yield remained broadly stable in the final quarter of 2022, increasing from 3.52 % in September to 3.62 % in December. This apparent stability nevertheless masks day-to-day volatility. The MOVE index, which measures volatility on the US Treasuries market, remained high amidst reduced liquidity. Over the same period, Belgian and German 10-year government bond yields were up by 26 and 29 basis points, to settle at 2.70 and 2.09 %, respectively.

Uncertainty surrounding the inflation outlook and a slowing global economy also contributed to high volatility on stock markets. For instance, the VIX and VSTOXX have been hovering above their historical average. In the US and euro area, where the yield curves are inverted, the gaps between the two- and ten-year rates widened over the course of the fourth quarter of 2022. Historically, an inverted yield curve has been associated with the risk of an upcoming recession. Weaker global economic growth prospects also had a negative impact on oil prices, which, by the end of the final quarter of 2022, stood close to \$ 80 a barrel. However, on European markets, gas prices have fallen from their record high registered in August, lowering the odds of a deep recession in the euro area. In this context, corporate spreads fell, and the euro appreciated against the US dollar in the last three months of 2022. One euro was worth \$ 1.07 on December 31, after having fallen below parity with the dollar in September.

Sovereign spreads vis-à-vis German Bunds also eased marginally in the fourth quarter of 2022 in the euro area, mirroring the fall in corporate spreads. In Belgium and France, sovereign spreads narrowed by 3 and 8 basis points, respectively. Italian and Spanish spreads also declined by 17 and 12 basis points, to 2.17 and 1.00 % respectively. However, sovereign spreads began to rise in the second half of December on the back of a renewed increase in borrowing costs in the euro area.

10-YEAR INTEREST RATES (monthly averages)



Sources : BIS, Thomson Reuters.

TREASURY HIGHLIGHTS 2023 funding plan announced

2022 funding programme completed

In the framework of its 2022 funding programme, the Belgian Debt Agency issued a total of € 44.24 billion in medium- and long-term debt, corresponding to 100.1 % of its € 44.2 billion funding target.

On 10 November, given that its long-term funding programme had been completed and that the federal government's cash deficit was still in line with expectations, the Belgian Debt Agency decided to cancel the OLO auction scheduled for 21 November 2022. Therefore, only one auction was held in the fourth quarter of 2022, with the following result.

OLO auctions (€ 2.887 billion)

Date	OLO		Issued (€ billion)	Yield	Bid-to-cover
24 October	OLO 0.35 % 22/06/2032 OLO 1.40 % 22/06/2053	OLO 94 OLO 95	1.711 1.008	2.935 % 3.307 %	1.64 1.75
Non-competitive subscriptions			0.708		
November total			2.887		

Moreover, two Optional Reverse Inquiries were held.

ORI facilities (€1.251 billion)

Date	OLO		Issued (€ billion)	Yield
4 November	OLO 0.80 % 28/06/2025 OLO 3.00 % 22/06/2034	OLO74 OLO73	0.250 0.250	2.205 % 2.975 %
Total November			0.500	
16 December	OLO 3.75 % 22/06/2027 OLO 2.15 % 28/03/2028	OLO71 OLO80	0.208 0.543	2.988 % 2.774 %
Total December			0.751	

No EMTNs or *Schuldscheine* were issued in the fourth quarter of 2021.

In terms of portfolio structure, the average portfolio life remains high at 10.35 years (as of the end of November). The implicit portfolio cost increased by 1.41 %.

2023 funding plan announced

The Belgian Debt Agency expects the federal government's gross borrowing requirements for 2023 to amount to € 51.07 billion. This represents an increase of € 2.58 billion compared with 2022, for which year the borrowing requirements are expected to amount to € 48.49 billion.

To establish this estimate, the Debt Agency assumed that the government's net financing requirements for 2023 would amount to € 27.54 billion. This figure is derived from the 2023 draft budget.

Redemptions of medium- and long-term debt (in March and October) will be substantially lower, at € 21.13 billion. The Belgian Debt Agency plans to buy back € 2.09 billion of bonds maturing in 2024. Finally, the exercise of put and call options on certain instruments could result in the need to borrow an additional € 0.31 billion.

In 2023, the Belgian Debt Agency plans to issue € 45 billion worth of OLOs, an increase of € 0.87 billion compared with the € 44.13 billion that were expected to be issued in 2022, and to launch up to three new OLO fixed-rate benchmarks.

The Debt Agency further expects to issue EUR 2.00 billion via its EMTNs or other alternative funding instruments such as *Schuldscheine*.

After a three-year break, retail notes were issued again as rates moved significantly into positive territory. The Belgian Debt Agency expects to issue € 0.25 billion of such instruments in 2023.

As for short-term funding, the outstanding amount of treasury certificates is expected to increase by € 1 billion over the course of the year. The net change in other short-term debt and financial assets should amount to € 2.82 billion.

In 2023, the maximum 12-month refinancing and refixing risks will be maintained at their current level of 17.5 %. The maximum 60-month refinancing and refixing risks will also remain unchanged at 42.5 %. In 2023, as in 2022, the average debt portfolio life is required to be higher than 9.25 years.

€ billion	2023 funding plan	2022 estimate as of 9 December 2022
1. Gross financing requirements	51.07	48.89
- Net financing requirements	27.54	18.93
- Debt maturing in 2023	21.13	27.96
- Planned pre-funding (bonds maturing in 2024 and afterwards)	2.09	1.60
- Other financing requirements ⁽¹⁾	0.31	0.00
2. Funding resources (long- and medium-term)	47.25	44.24
- OLOs	45.00	44.13
- Euro Medium Term Notes (EMTNs)/ <i>Schuldscheine</i>	2.00	0.00
- Securities for retail investors	0.25	0.11
3. Change in short-term debt	3.82	4.25
- Treasury Certificates ⁽²⁾	1.00	3.00
- Others ⁽³⁾	2.82	1.25

(1) Including put/call options exercised on bonds and net redemptions of the Treasury bonds representing Belgian participation in international organisations.

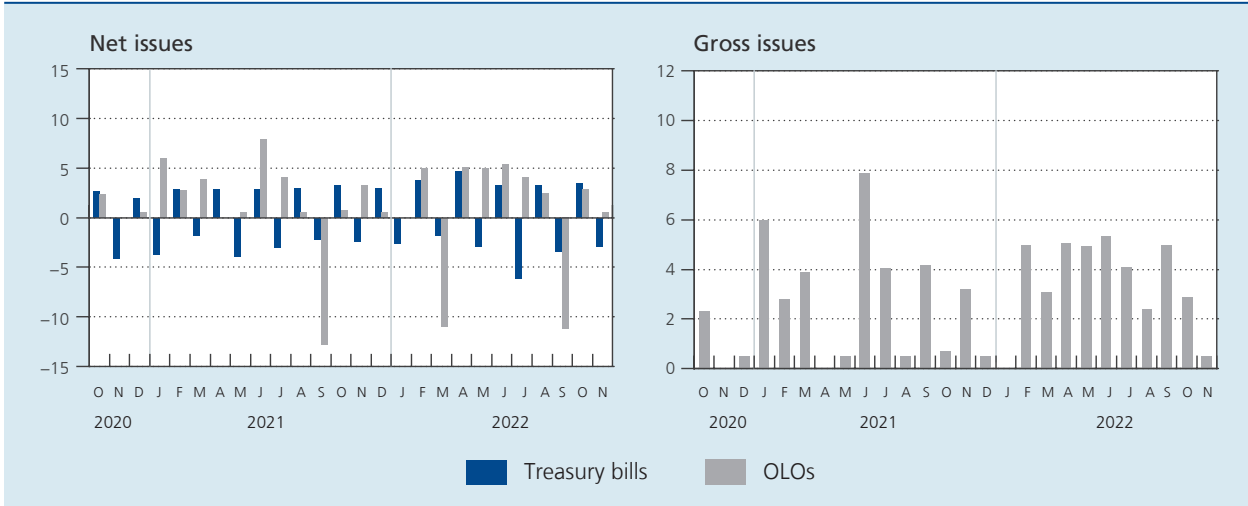
(2) Expected outstanding stock of Treasury Certificates on 1 January 2023: € 33 billion.

(3) This section includes residual financing instruments complementing the reference instruments mentioned in the previous section, including collateral margin changes. A positive figure represents an increase in the stock of residual financing and/or a reduction in financial assets

GOVERNMENT SECURITIES STATISTICS

PRIMARY MARKET

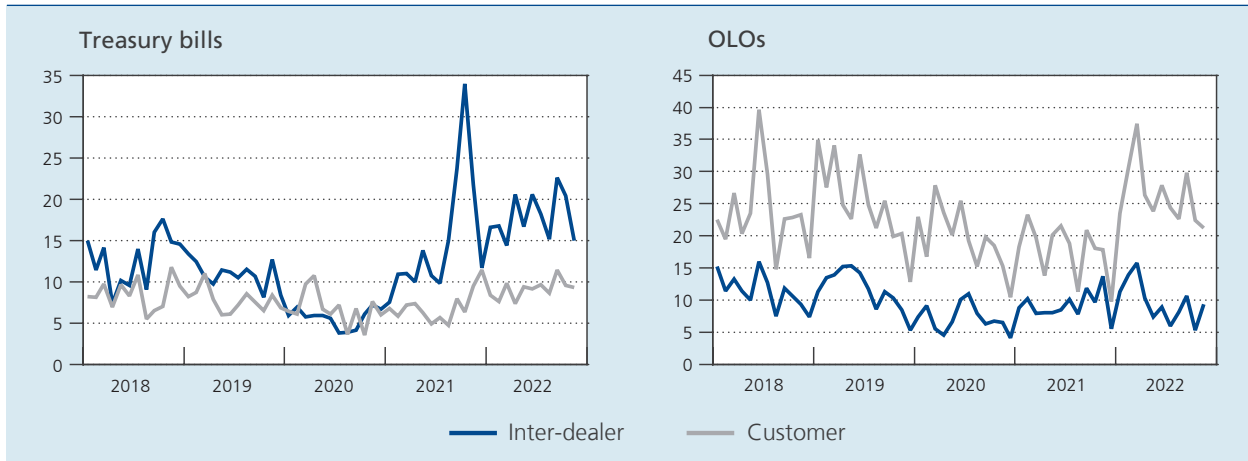
(€ billion)



Source: Belgian Debt Agency.

SECONDARY MARKET TURNOVER

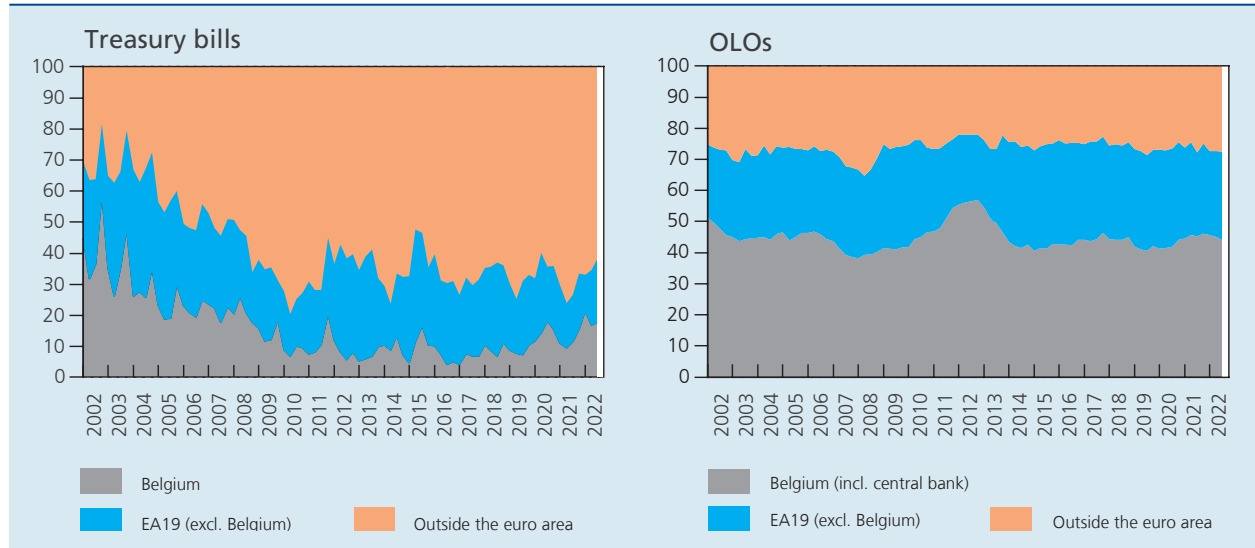
(as reported by primary and recognised dealers to the Debt Agency, € billion)



Source: Belgian Debt Agency.

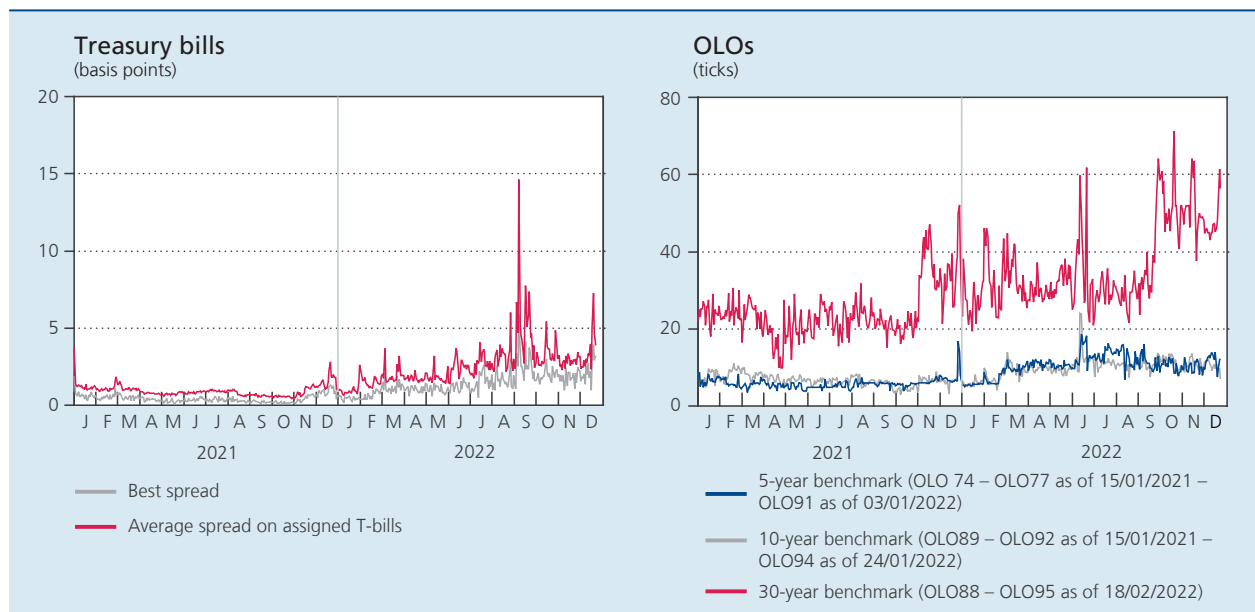
HOLDERSHIP BELGIAN SECURITIES

(in %)



Source: NBB.

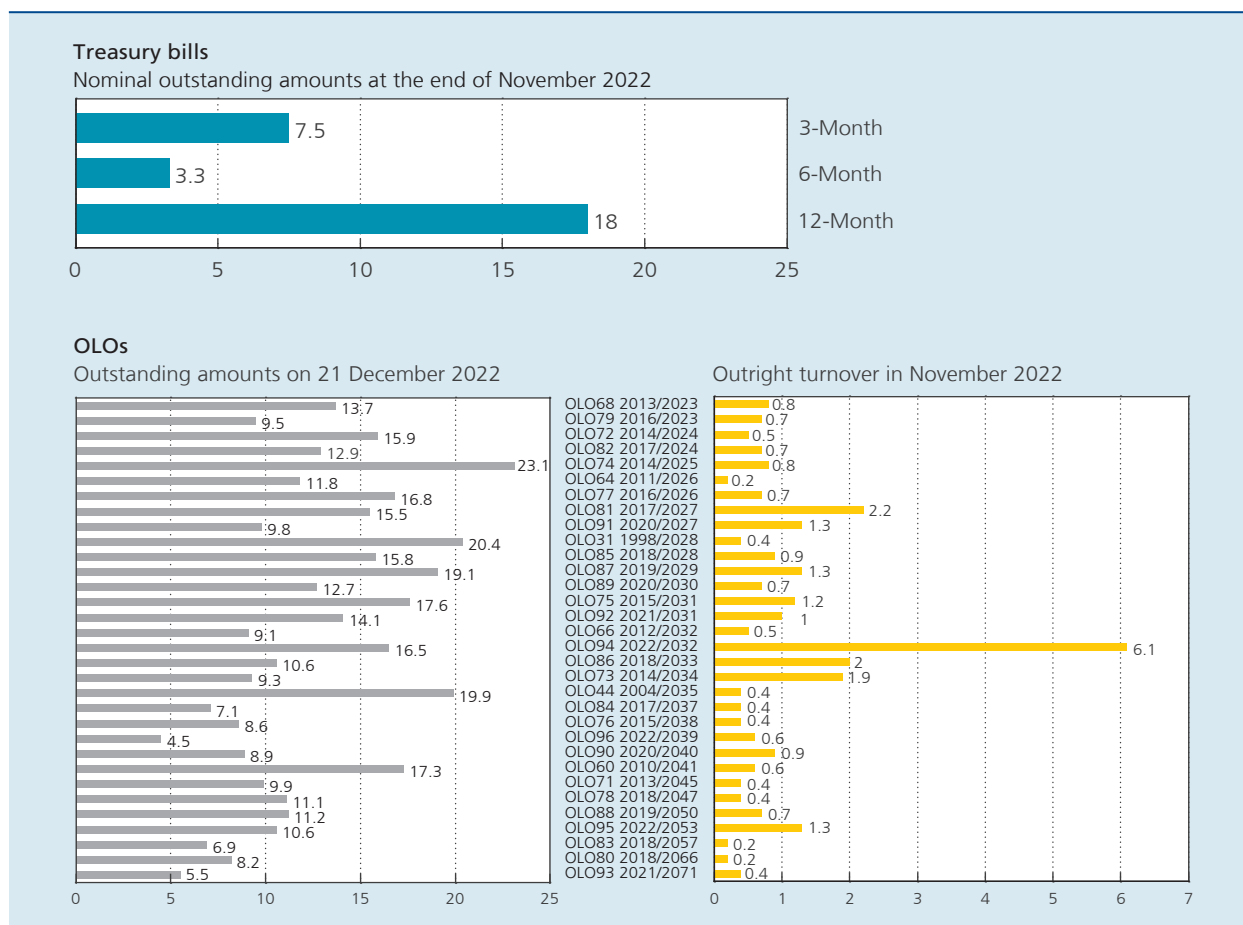
BEST BID/OFFER SPREADS ⁽¹⁾



Source: Belgian Debt Agency.

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

OUTSTANDING AMOUNTS AND TURNOVER
(€ billion)



Source: Belgian Debt Agency.

LIST OF CONTACT PERSONS

PARTICIPATING INSTITUTIONS

Belgian Debt Agency
Barclays
Belfius Bank
BNP Paribas Fortis
Citigroup
Crédit Agricole CIB
Deutsche Bank
HSBC
J.P. Morgan
KBC Bank
Morgan Stanley
Natixis
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TELEPHONE

+32 2 574 72 79
+32 2 222 71 13
+32 2 565 16 37
+32 2 312 12 10
+33 1 43 23 97 36
+44 20 75 47 76 35
+33 1 40 70 77 95
+32 2 417 32 35
+32 2 429 80 08
+33 1 42 13 34 21
+44 20 7762 5665

E-MAIL

jean.deboutte@debtagency.be
silvia.ardagna@barclays.com
catherine.cd.danse@belfius.be
annelore.vanhecke@belfius.be
philippe.gijssels@bnpparibasfortis.com
arne.maes@bnpparibasfortis.com
christian.schulz@citi.com
louis.harreau@ca-cib.com
pierre.benadjaoud@credit-agricole-sa.fr
marc.de-muizon@db.com
chantana.sam@hsbc.fr
aditya.x.chordia@jpmorgan.com
peter.wuyts@kbc.be
hans.dewachter@kbc.be
jean-francois.ouvrard@morganstanley.com
cyril.regnat@natixis.com
giovanni.zanni@natwestmarkets.com
andrzej.szczepaniak@nomura.com
michel.martinez@sgcib.com
yvan.mamalet@sgcib.com

GENERAL INFORMATION

National Bank of Belgium Mr Jef Boeckx +32 2 221 43 27 jef.boeckx@nbb.be

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

