

Economic impact of the war in Ukraine: a Belgian perspective

Dashboard compiled by

- National Bank of Belgium
- Federal Planning Bureau
- FPS Economy

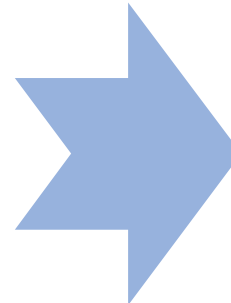
22 December 2022



Overview of the presentation

External developments

1. Energy/commodity markets
2. Trade and FDI exposure
3. Global economic developments and forecasts
4. Financial markets



5. Belgium: overview

7. Households
10. Financial sector
6. Energy markets in Belgium
8. Labour markets and wages
9. Firms
11. Government

12. Useful information sources (news, databases. ...)

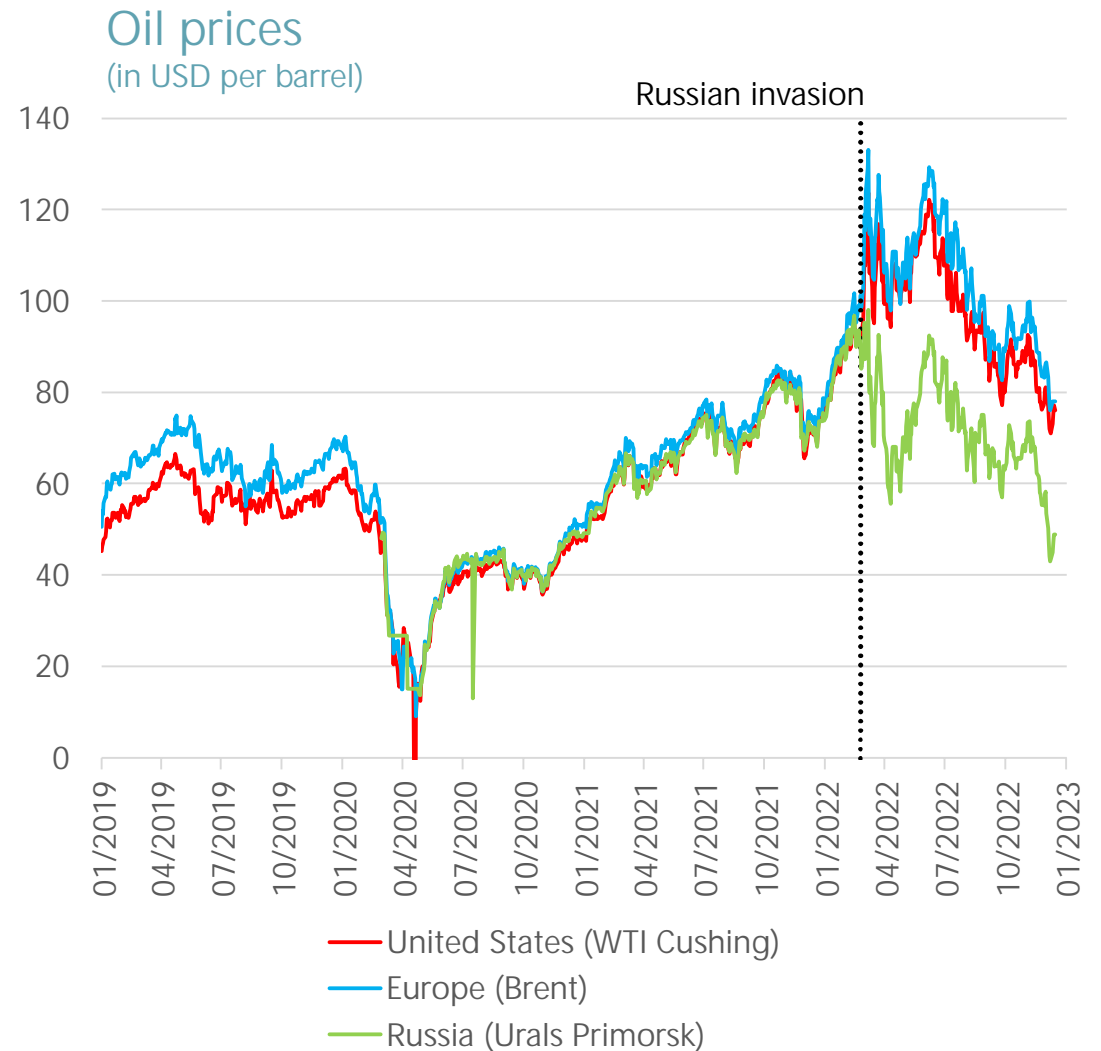
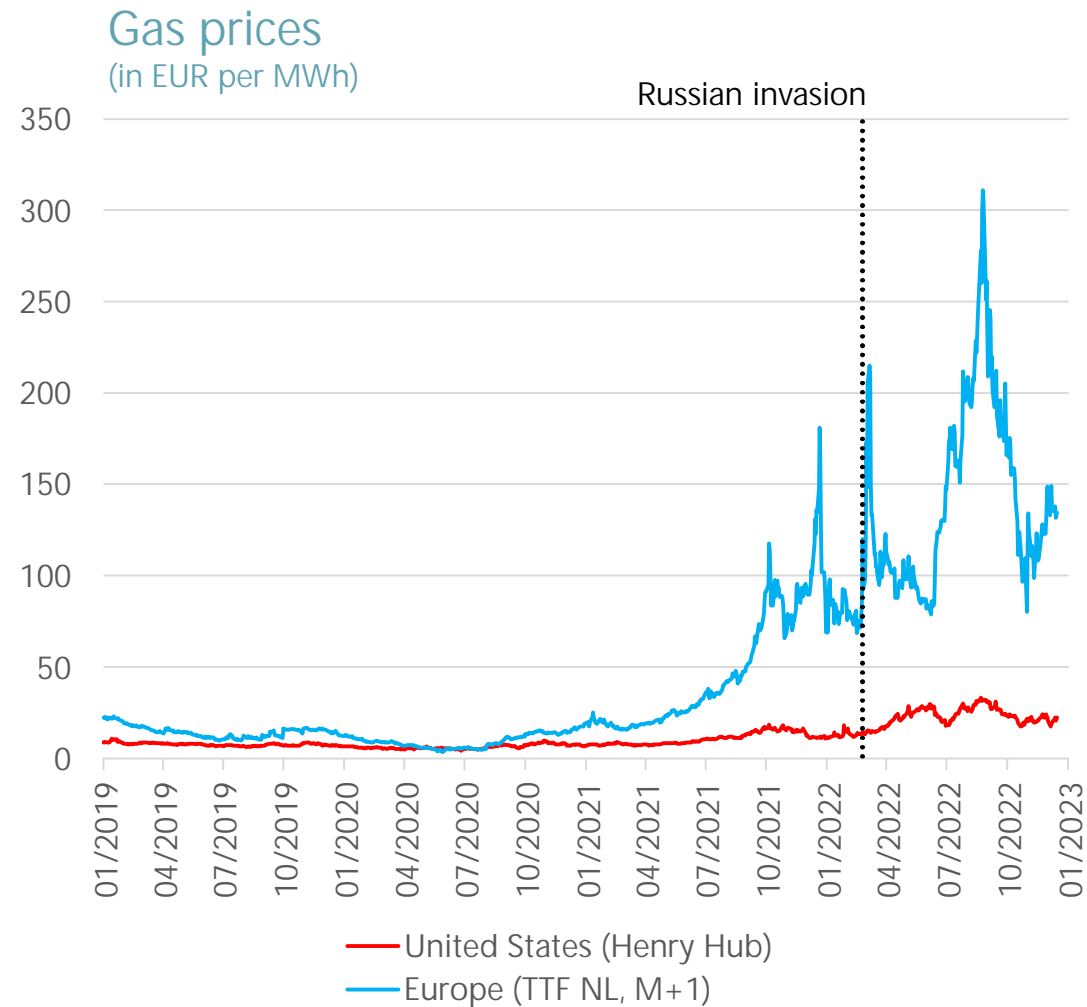


1. Energy/commodity markets

Energy prices have surged since the war; other commodity prices initially too

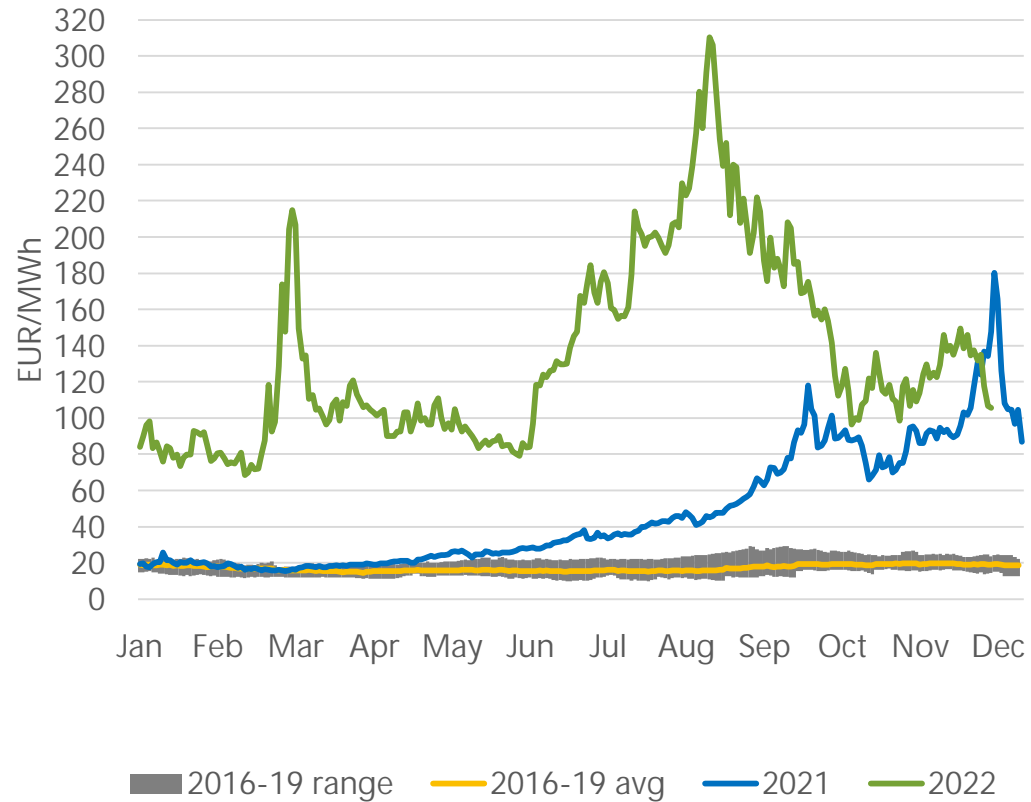
- The war has raised uncertainty about energy supplies and has therefore driven up energy prices
 - Particularly in Europe (and particularly for gas), as Russia is a major (gas) supplier for many European countries
 - European gas price volatility has been linked to cuts in Russian supplies, (faster than expected) replenishment of gas reserves for the winter, and (anticipation of) energy crisis measures
- Other, non-energy commodity prices have also been strongly affected
 - Russia (and Ukraine) are key exporters of important non-energy commodities (incl. industrial metals, grains and fertilisers), both to the EU and the rest of the world (cf. [May 2022 Dashboard](#) – slide 8)
 - After initially steep price surges, due to supply chain disruptions, slowing demand (especially from China) has pushed most industrial metal prices down
 - Agri-food prices have also eased, due to (partial) resumption of Black Sea trade and positive news about harvests in other producer countries
 - Rising energy price costs affect food production, which may feed into new food price spikes

Gas prices have seen huge spikes and volatility since the start of the war ...

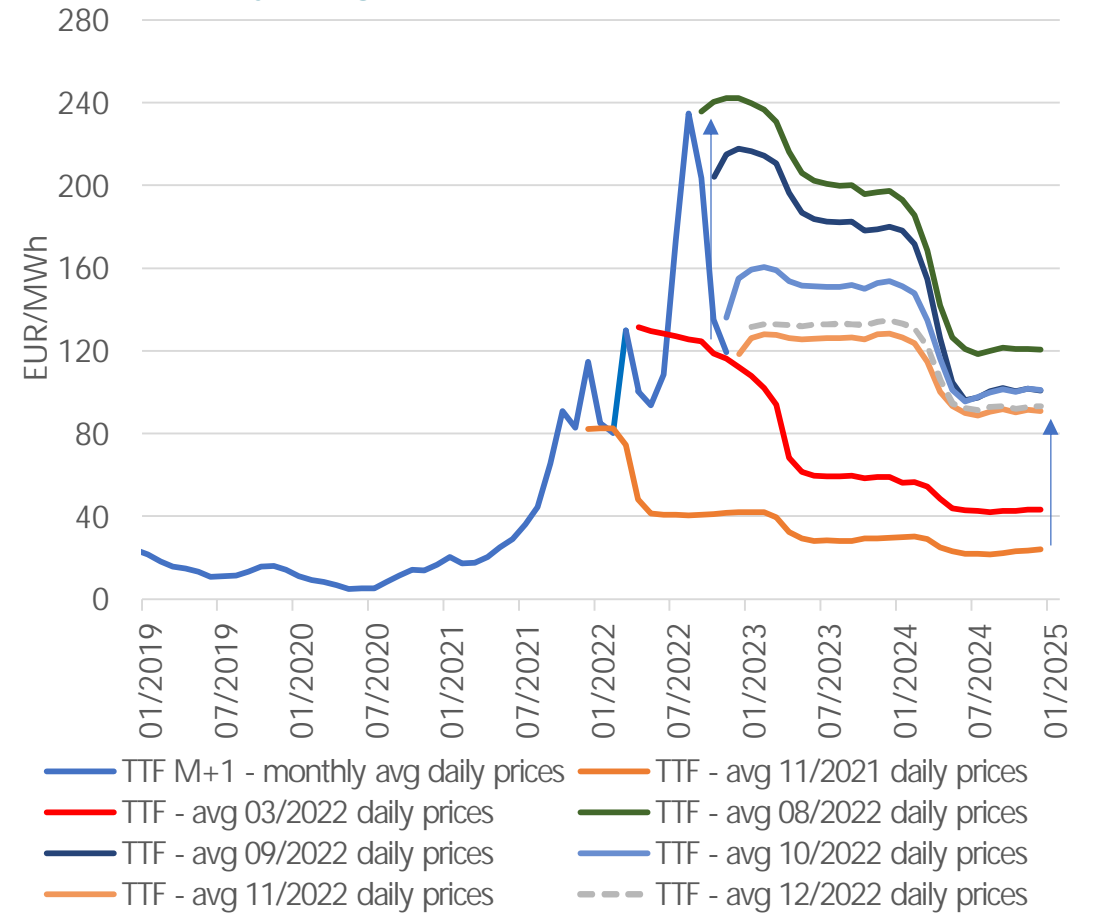


... and the market expects high gas prices to stay

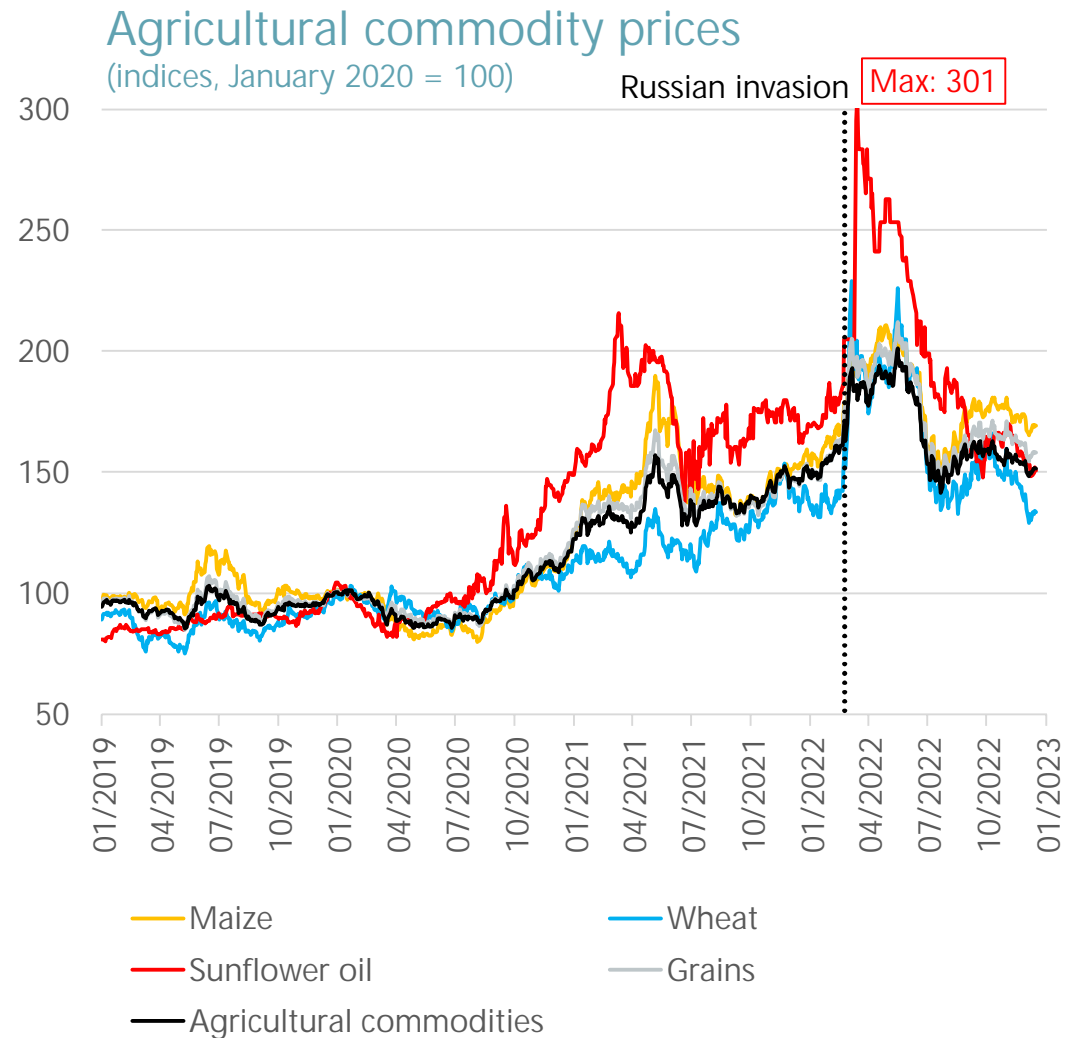
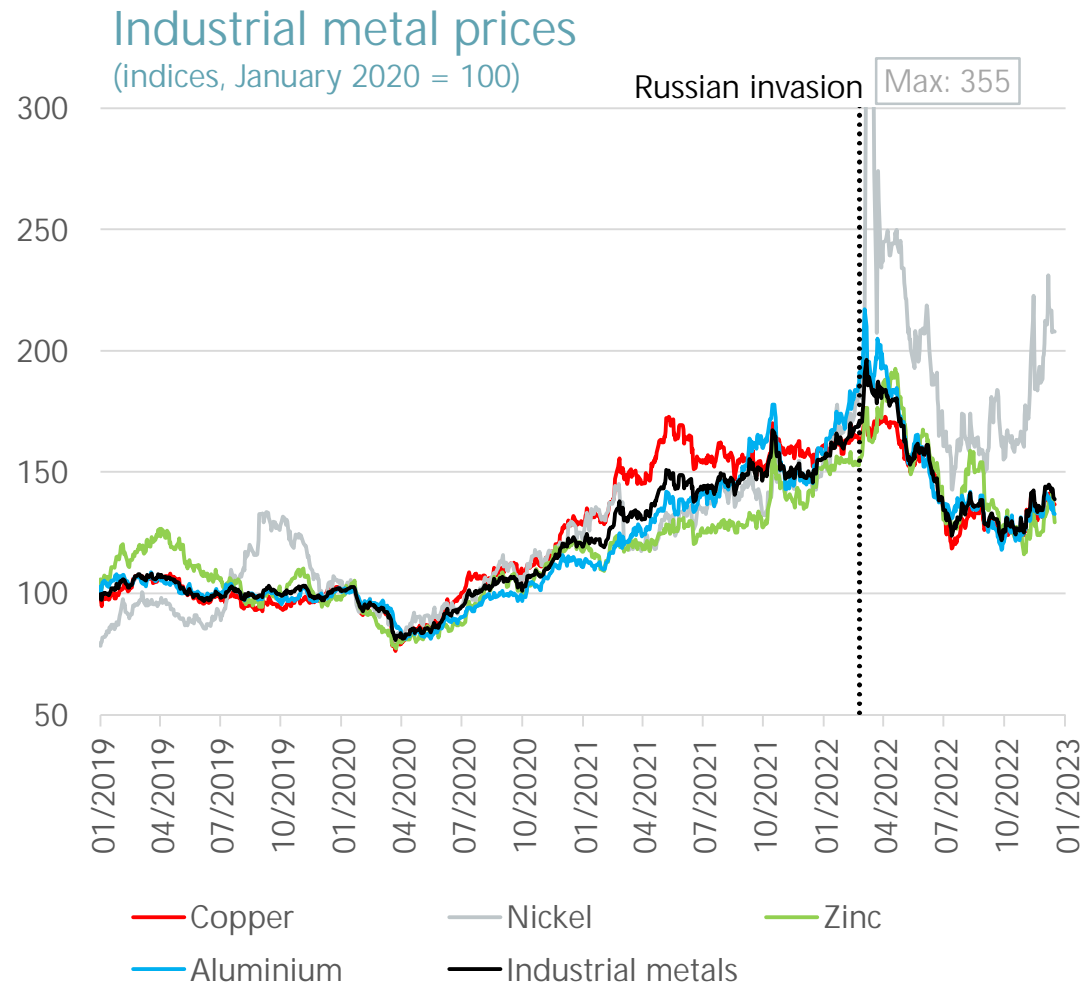
Dutch gas TTF – M+1 delivery price



Dutch gas TTF Futures¹ (monthly averages)

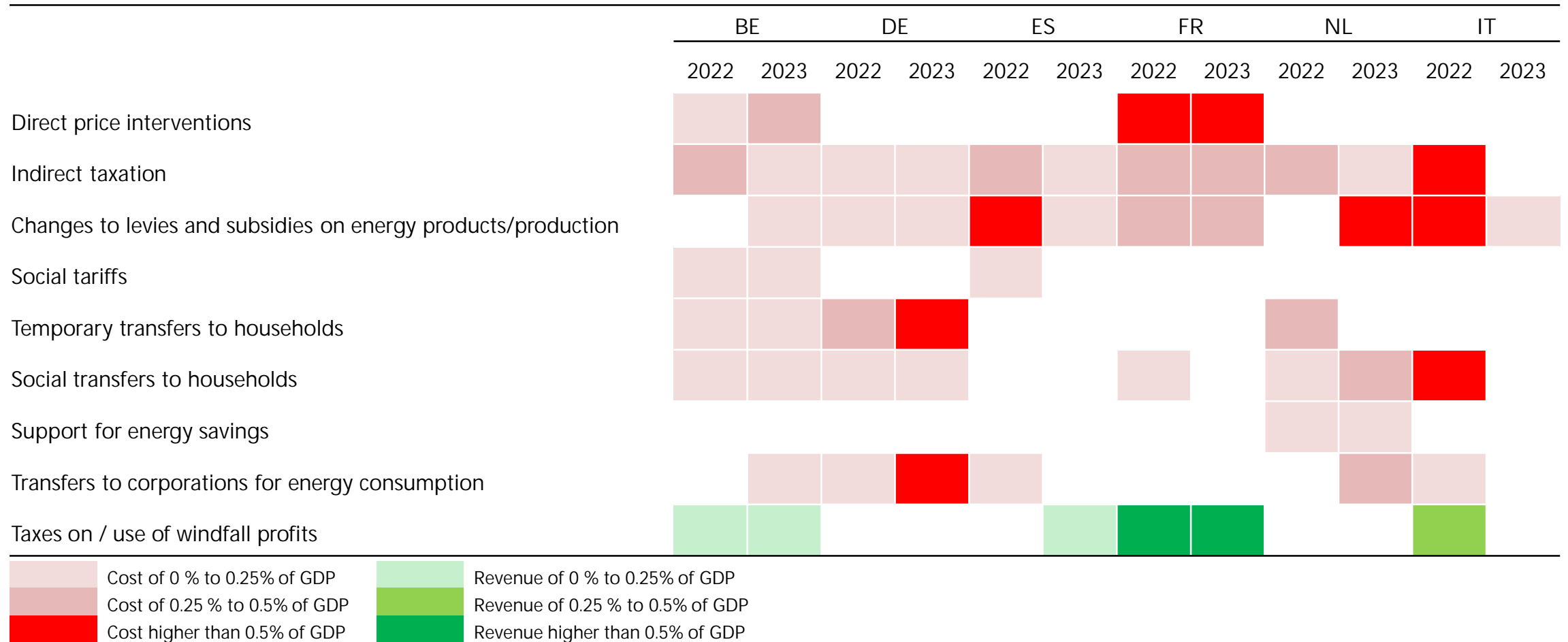


Other commodity prices have eased upon slowing demand and improved supply



Governments have attempted to shield consumers from the energy crisis

Selected euro area governments' energy crisis responses: measures and their budgetary costs for 2022/2023¹
 (colours based on costs/revenue effects in % of GDP)





2. Trade and FDI exposure



Une exposition directe au conflit russo-ukrainien limitée

- L'exposition directe de la Belgique au conflit russo-ukrainien est limitée:
 - la Fédération de Russie ne représente que 0,9 % et 1,8 % des échanges totaux belges en termes d'exportations et d'importations de biens et de services avec le reste du monde (0,2 % et 0,1 % vis-à-vis de l'Ukraine)¹
 - le nombre de firmes directement exposées est peu important et peu d'entre elles le sont de manière significative
 - les relations d'investissements directs sont également restreintes
- La Belgique pourrait toutefois être affectée de manière plus importante par le biais des répercussions sur ses partenaires commerciaux européens plus étroitement liés à la Russie et à l'Ukraine

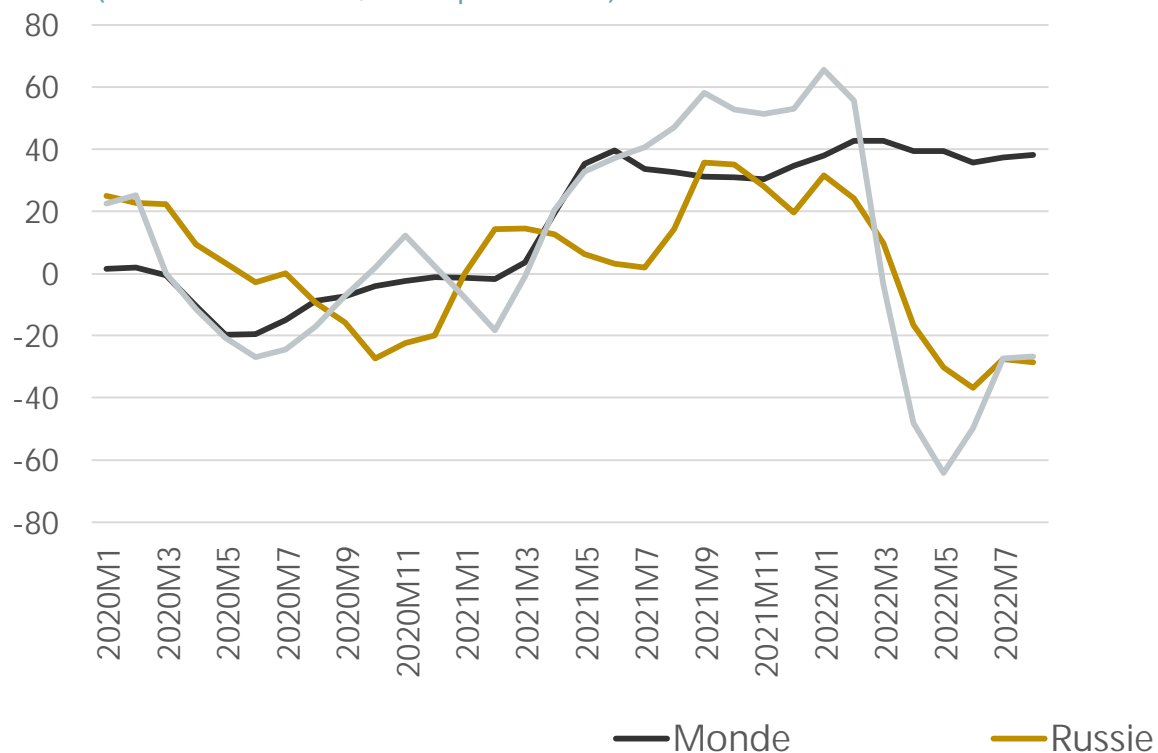
Plus de détails dans



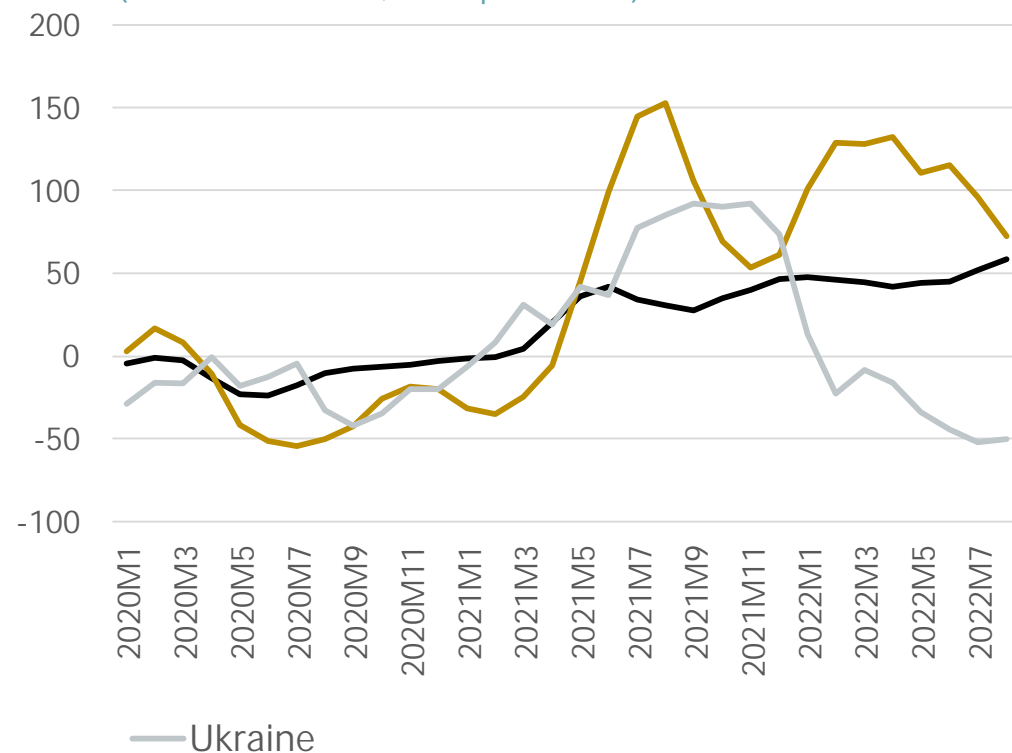
Et: [Dashboard Economic impact of the war in Ukraine - a Belgian perspective. May 2022 - slides 11 à 13](#)

Les flux commerciaux de biens vers la Russie et l'Ukraine sont globalement en baisse bien que les importations en provenance de Russie étaient encore soutenues jusqu'à récemment par la hausse des prix énergétiques

Exportations de biens¹ (données en valeur, concept national)



Importations de biens¹ (données en valeur, concept national)





3. Global economic developments/forecasts

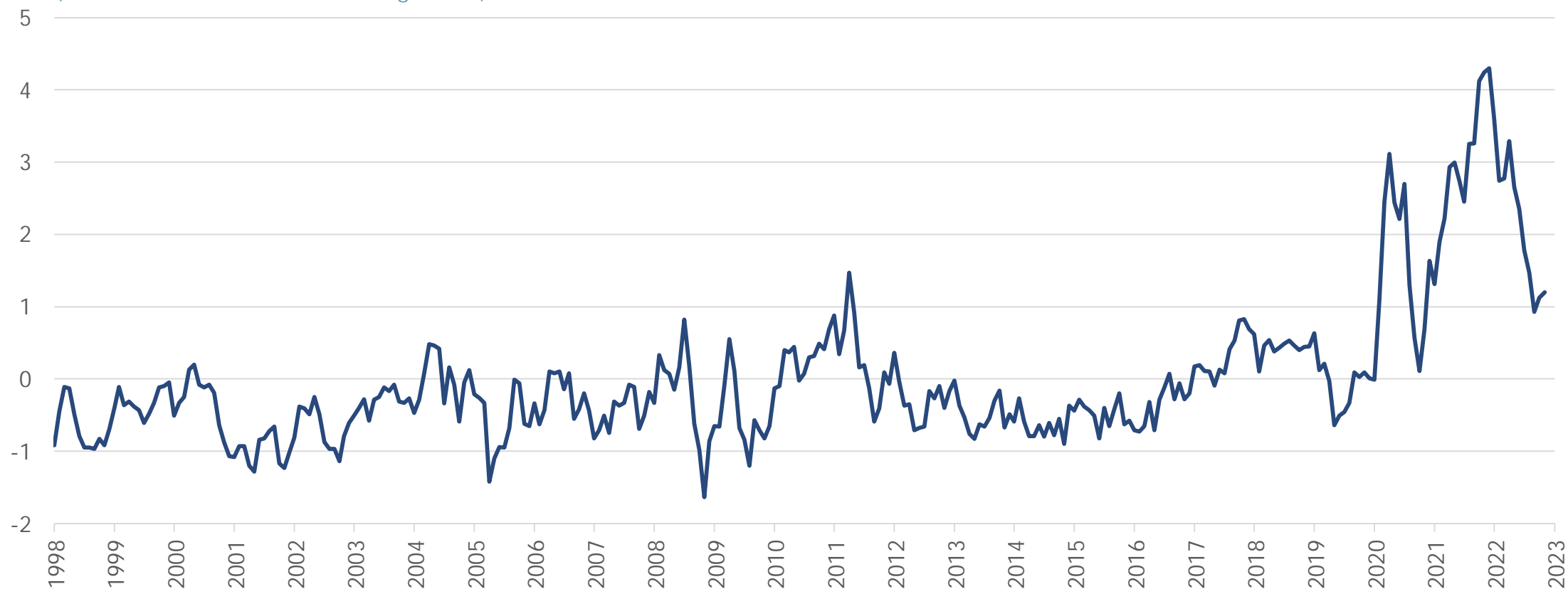
The world economy has experienced a series of severe supply shocks

- Supply chain disruptions following the economic recovery from the Covid crisis had started to ease but increased again due to the war in Ukraine and a series of new lockdowns in China
- Together with energy and other commodity price developments, the disrupted supply chains put upward pressure on producer and consumer prices
- In recent months, supply chain pressures have significantly eased – although they remain higher than before the pandemic
- Inflation expectations signal only a gradual return of inflation to central bank targets. Market expectations of inflation developments over the short term remain more benign for the US than for the euro area
- Economic forecasts reflect the negative supply shocks:
 - Higher inflation for longer
 - Lower growth as central banks tighten monetary policy
 - European economy hit harder than US (and most others) due to direct links with Russia and negative terms-of-trade shock, but with cross-country differences

Global supply chain pressures have continued to decline from their historic peaks

Global Supply Chain Pressure Index (GSCPI)¹

(in standard deviations from average value)



Source: Federal Reserve Bank of New York, latest data point: November 2022.

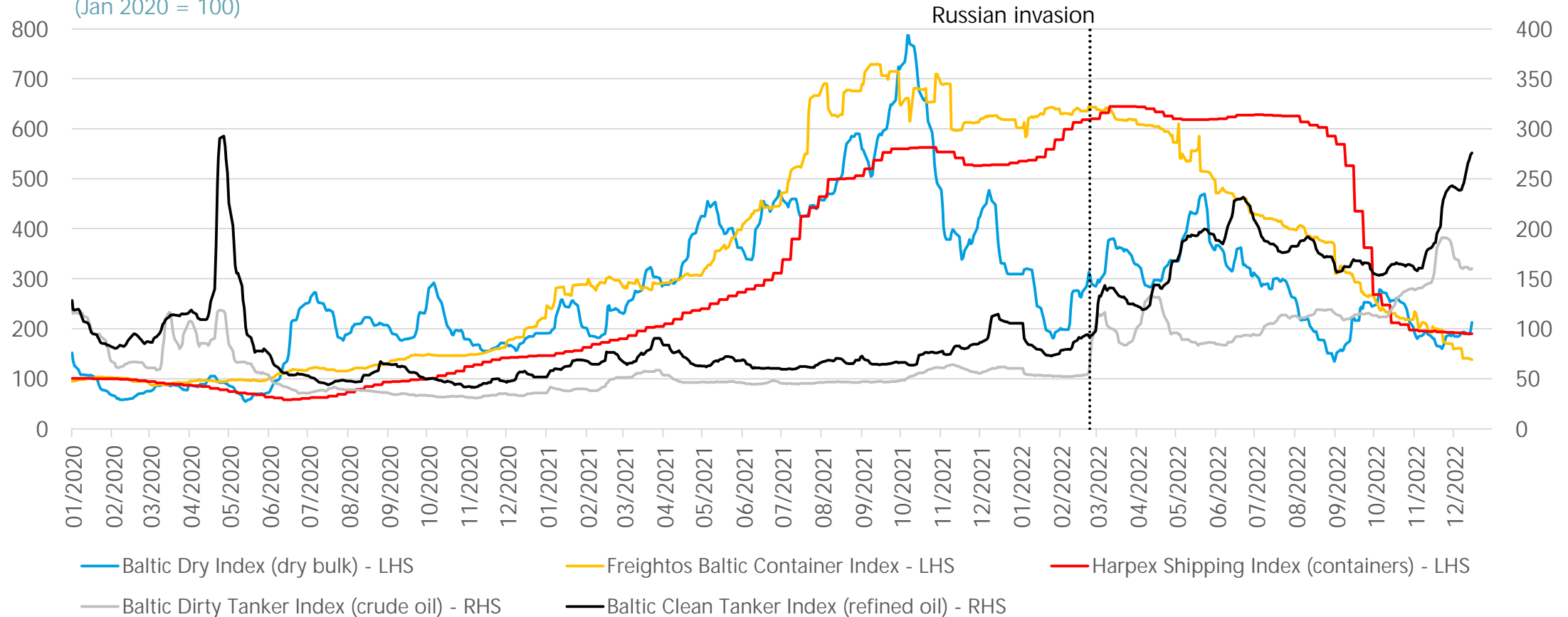
¹ The GSCPI combines global transportation costs (shipping, air freight) with supply chain-related components of PMI (Purchasing Manager Index) surveys (delivery times, backlogs, purchased stocks) for US, EA, UK, Japan, China, South Korea and Taiwan by means of principal component analysis. Demand effects are purged from the underlying 27 series by regressing them on the "new orders" and "inputs purchased" components of the PMI surveys.

See: [A New Barometer of Global Supply Chain Pressures](#).

While container rates continue to decrease, oil tanker rates have surged as EU ban on Russian oil has lengthened shipping routes and reduced vessel availability

Shipping cost indices¹

(Jan 2020 = 100)

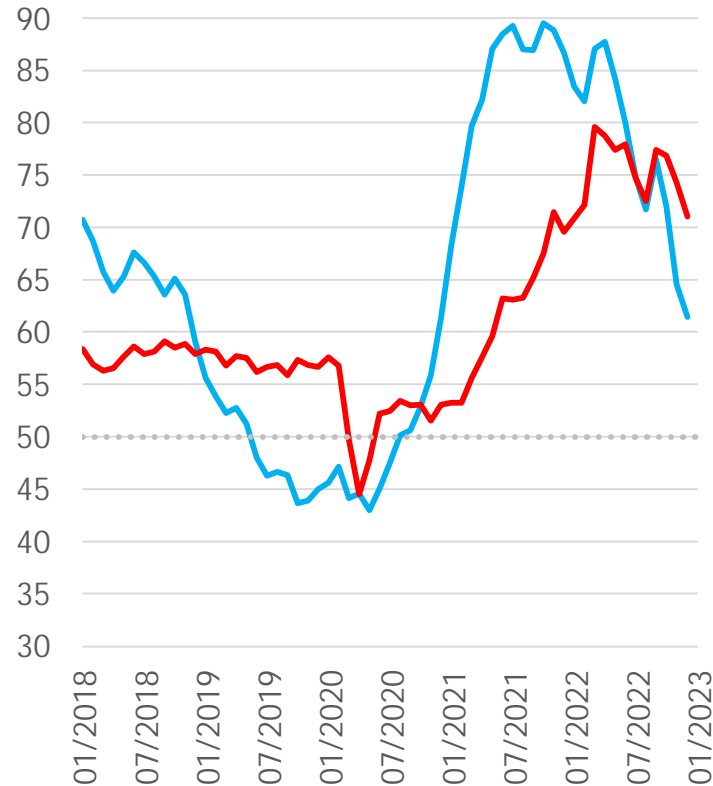


Purchasing manager surveys suggest rise of input costs continues to moderate

Euro area

PMI input prices¹

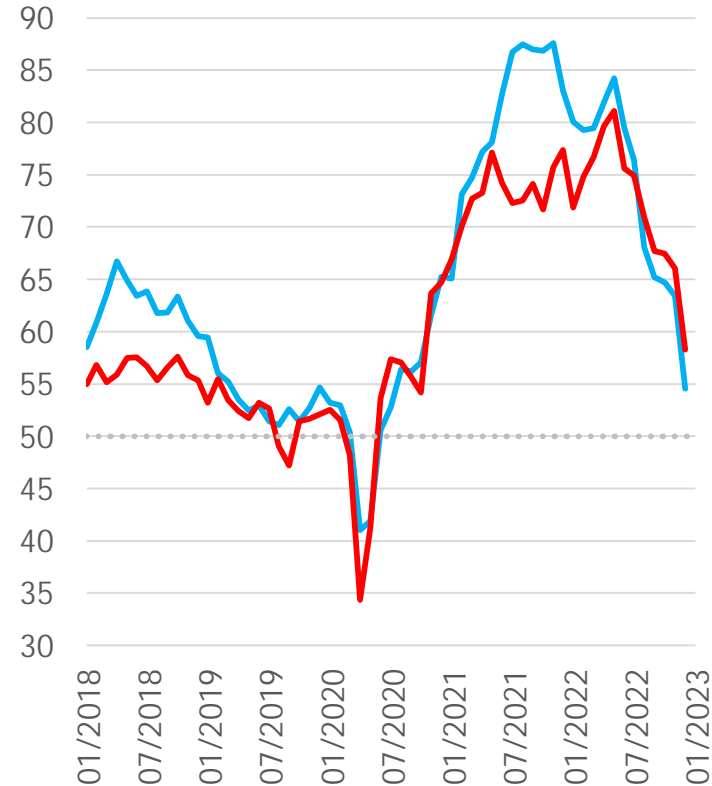
(diffusion indices, seasonally adjusted)



United States

PMI input prices¹

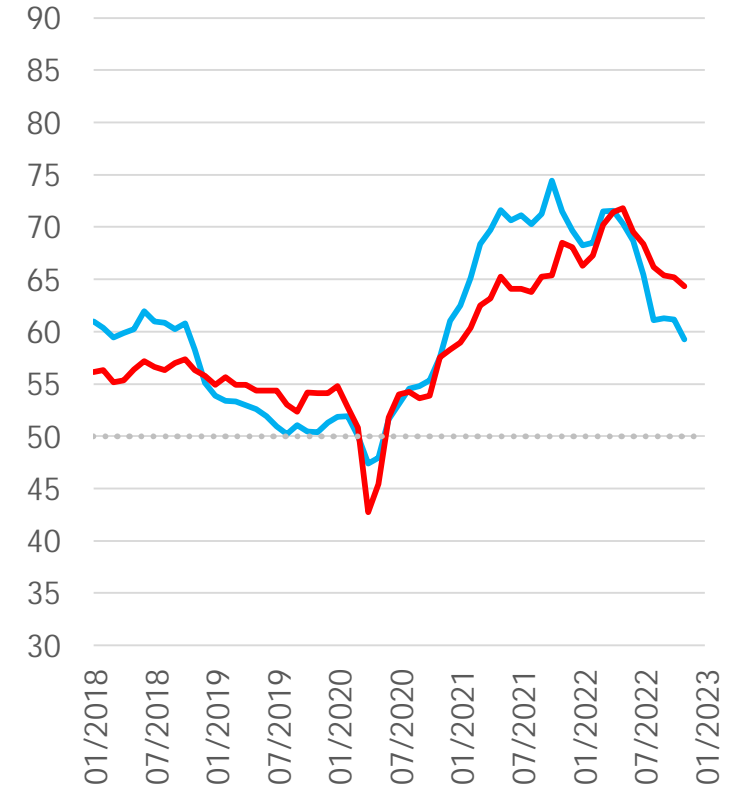
(diffusion indices, seasonally adjusted)



World

PMI input prices¹

(diffusion indices, seasonally adjusted)



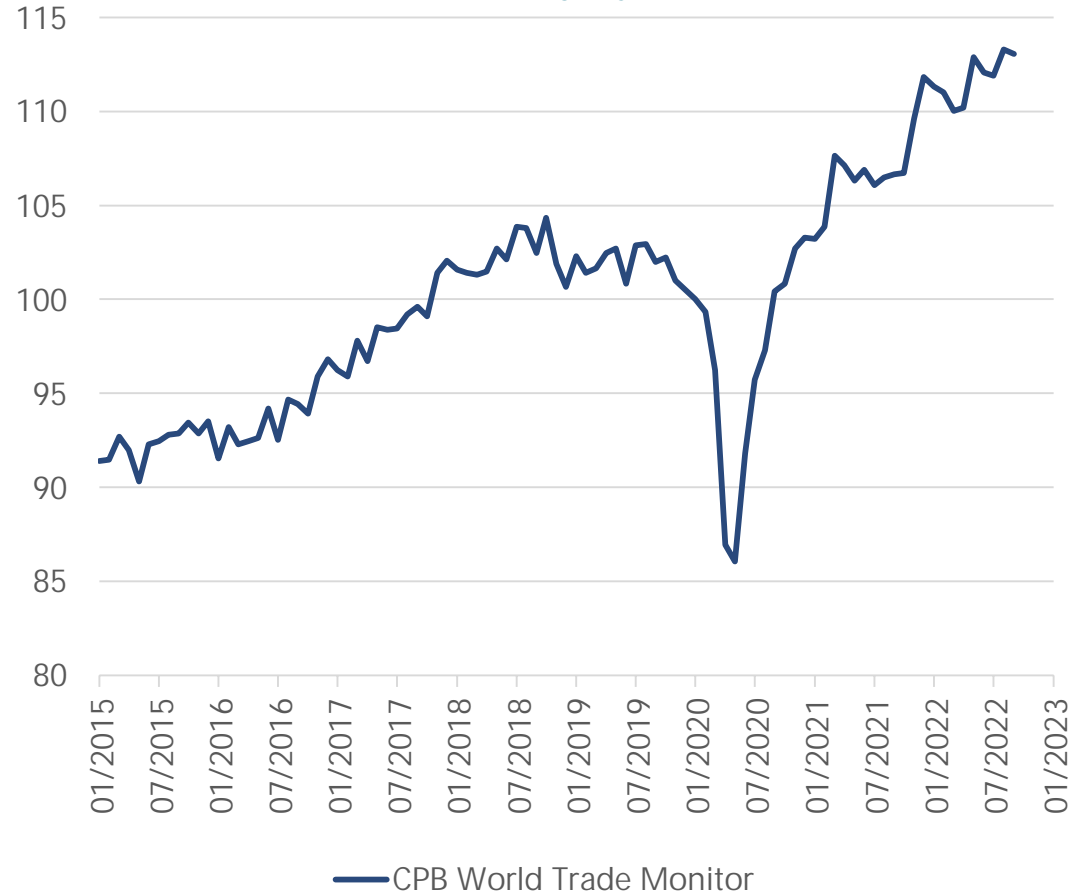
— PMI Manufacturing sector — PMI Services sector

Sources: Refinitiv (an LSEG Business), S&P Global. Last data points: December 2022 (for EA and US) / November 2022 (for World).

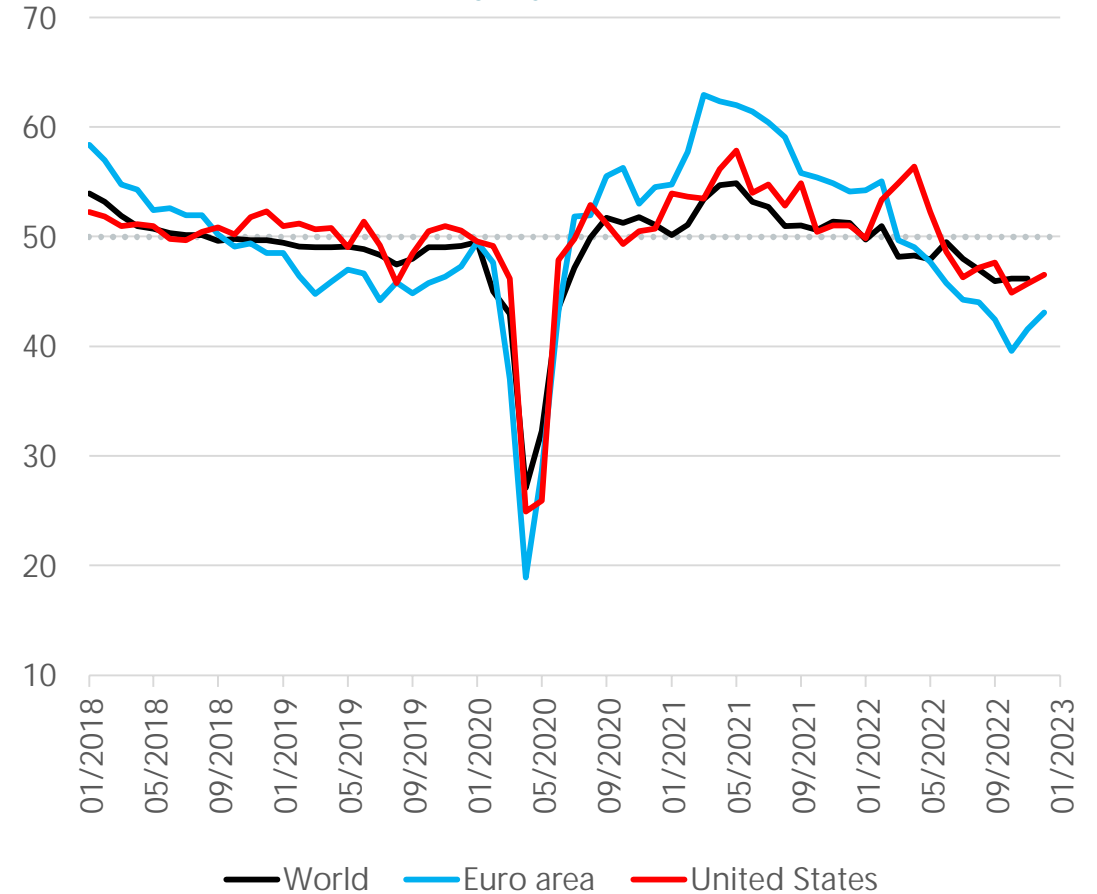
¹ Diffusion indices vary between 0 and 100 with a level of 50 signaling an unchanged price level compared to the previous month. Readings above (below) 50 signal increasing (decreasing) prices relative to the previous month.

World trade has held up relatively well, but prospects look weaker

World goods import volume
(index, Jan 2020 = 100, seasonally adjusted)



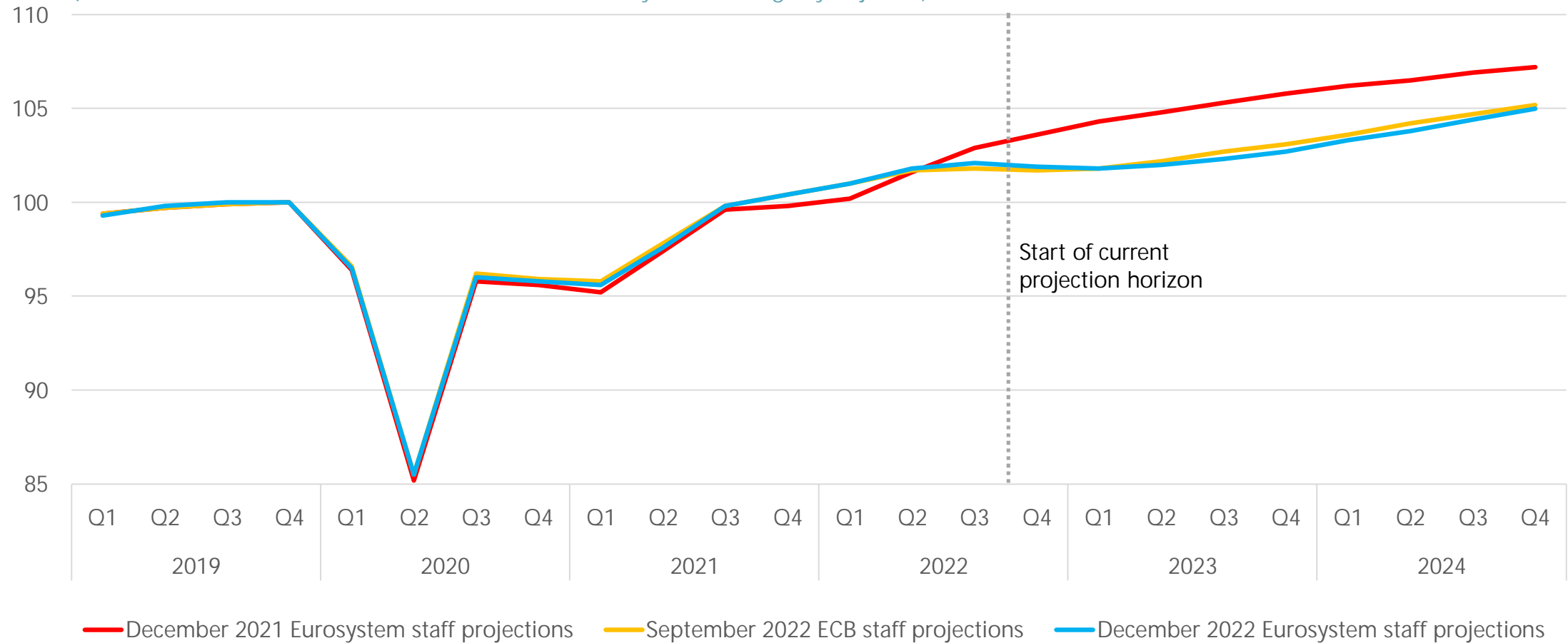
PMI Manufacturing sector: new export orders¹
(diffusion indices, seasonally adjusted)



December 2022 Eurosystem projections: slight downward adjustment of real GDP path

Euro area real GDP

(index of chain-linked volumes, 2019 Q4 = 100, seasonally and working day-adjusted)

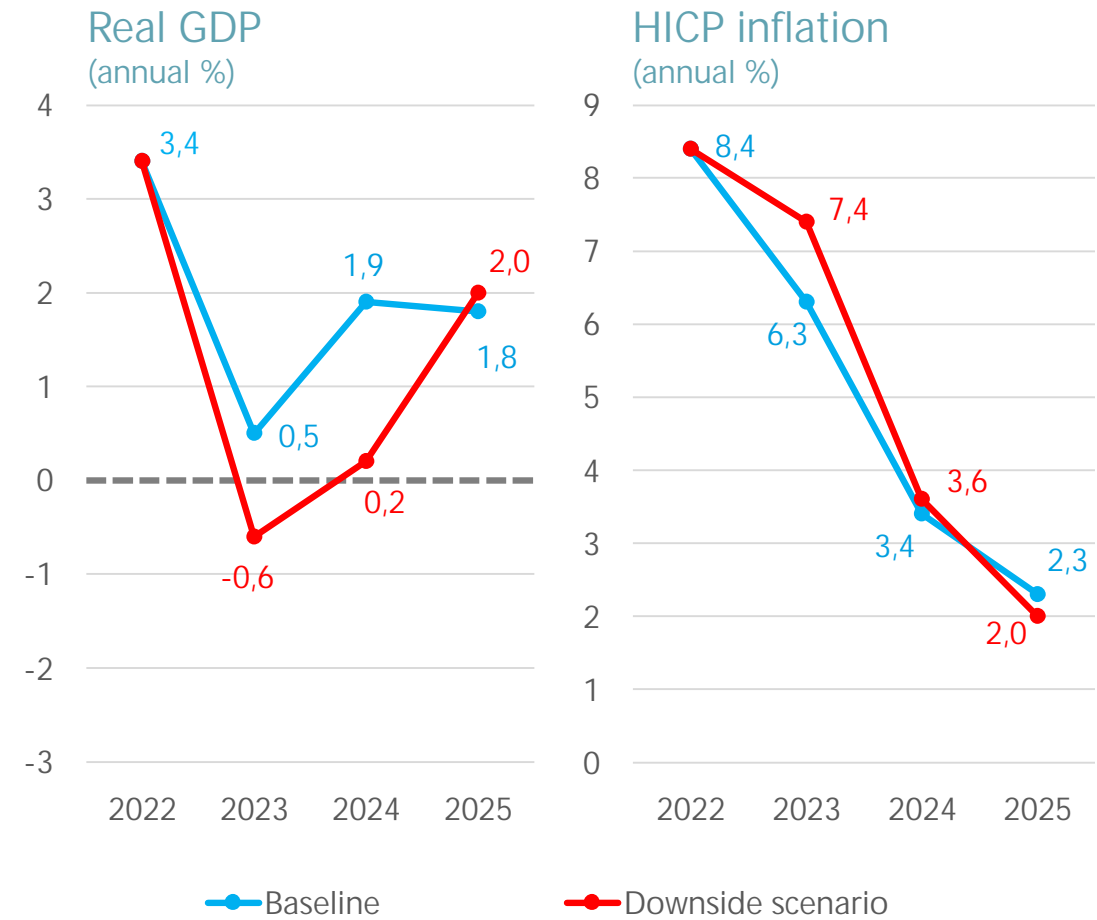


December 2022 Eurosystem projections: baseline vs. downside scenario

Main assumptions of Eurosystem staff projections

Baseline scenario	Downside scenario
<ul style="list-style-type: none"> • <i>Cut-off</i>: 23 November 2022 • High levels of gas inventories and energy demand-reducing measures imply no need for production cuts • Short-lived, shallow EA recession at turn of year • Over medium term, energy market rebalances, uncertainty declines and real incomes improve • Rebound in growth supported by strengthening external demand and resolution of remaining supply bottlenecks • <i>Compared to September 2022 baseline</i>: higher interest rates, new fiscal measures, lower oil prices, significantly lower wholesale gas and electricity prices, appreciation of euro 	<ul style="list-style-type: none"> • Longer, more intense conflict in Ukraine • Complete cut-off of Russian gas and much lower level of substitution with alternative sources; closure of Black Sea shipping corridor • Measures implemented by EU countries fail to constrain energy demand and coming two winters are unusually cold, resulting in limited gas shortages this winter and more severe shortages during 2023-2024 winter; energy rationing and production cuts • Higher food commodity prices and weaker trade • Increased uncertainty leading to financial market repricing and deterioration in bank lending conditions

Euro area projections: baseline vs. downside



Comparison of forecasts: downward revision to 2023 real GDP growth projections

Real GDP growth (%, year-on-year)

	Eurosystem BMPE - baseline December 2022 (revision in ppt compared to ECB MPE of September 2022)		EC Autumn Forecast November 2022		OECD Economic Outlook November 2022		IMF World Economic Outlook October 2022		Consensus (moving average) ¹ 19 December 2022	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
World ²	3.3 (+0.4)	2.6 (-0.4)			3.1	2.2	3.2	2.7		
Euro area	3.4 (+0.3)	0.5 (-0.4)	3.2	0.3	3.3	0.5	3.1	0.5	3.3	0.0
Germany			1.6	-0.6	1.8	-0.3	1.5	-0.3	1.8	-0.6
France			2.6	0.4	2.6	0.6	2.5	0.7	2.5	-0.1
Italy			3.8	0.3	3.7	0.2	3.2	-0.2	3.7	-0.1
Spain			4.5	1.0	4.7	1.3	4.3	1.2	4.6	0.6
Netherlands			4.6	0.6	4.3	0.8	4.5	0.8	4.3	0.3
Belgium ³	3.1	0.6	2.8	0.2	2.9	0.5	2.4	0.4	2.8	-0.1
UK			4.2	-0.9	4.4	-0.4	3.6	0.3	4.4	-0.9
US			1.8	0.7	1.8	0.5	1.6	1.0	1.9	0.3
Japan			1.7	1.6	1.6	1.8	1.7	1.6	1.3	1.3
China					3.3	4.6	3.2	4.4	2.9	4.6

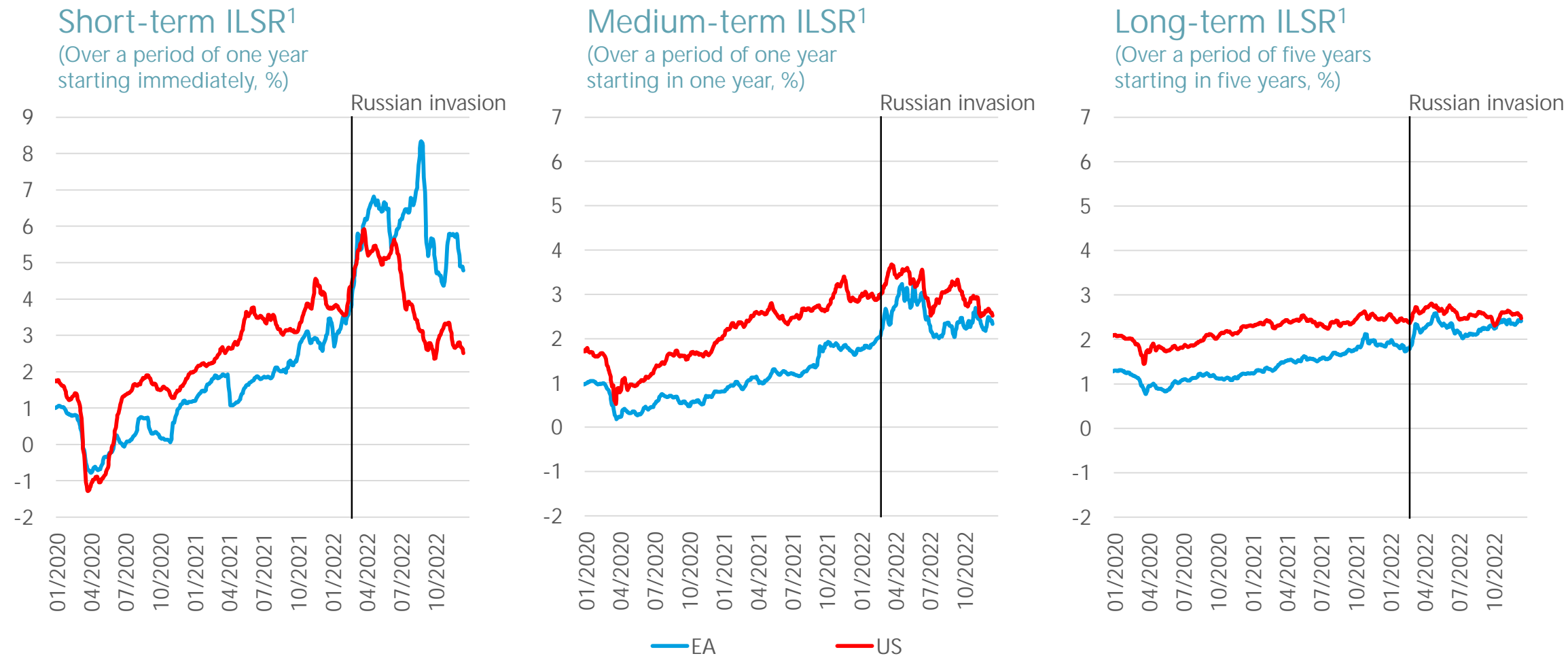
¹ Average of latest forecast revisions, including updates in between monthly surveys of forecasters.

² For BMPE forecasts, world aggregate excludes the euro area.

³ Figures for Belgium in the first column are those published by the NBB on 19 December 2022.

US inflation expected to ease in the short run, according to markets

In EA, medium- and long-term measures are slightly above 2 %



Source: Refinitiv. Last data point: 16/12/2022.

¹ Inflation-linked swap rates. "Ay By" refers to expected inflation over a period of A years B years ahead. Five-days moving averages. These measures contain risk premia so need not correspond to the true/genuine expectations of market participants. Sharp movements in the short-term ILSR also reflect base effects (= shifts of the month to which the inflation swap contract refers).

Euro area inflation expected to come down slowly from current highs

Recent headline inflation projections

(yoy % change)

	2023	2024	2025	2027
BMPE December 22	6.3	3.4	2.3	-
SPF Q4 2022	5.8	2.4	-	2.2
SMA December 22 ²	3.4	2.0	2.0	-

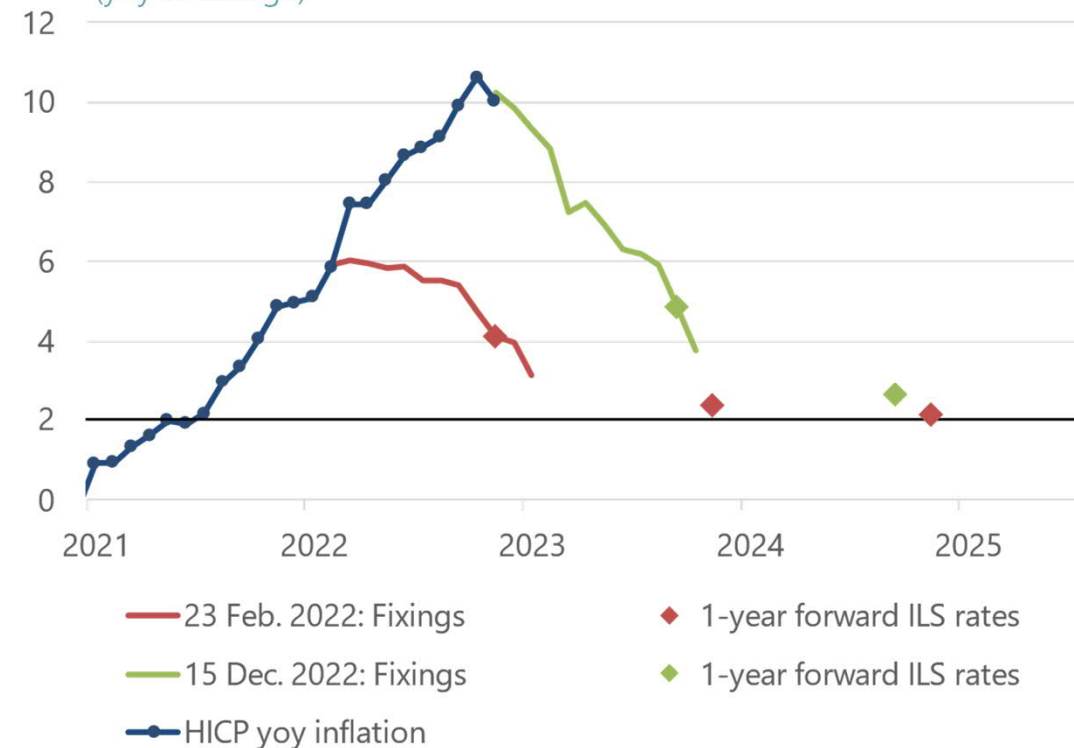
Recent core inflation projections¹

(yoy % change)

	2023	2024	2025	2027
BMPE December 22	4.2	2.8	2.4	-
SPF Q4 2022	3.9	2.6	-	2.1
SMA December 22 ²	3.1	2.3	2.1	-

Market-based measures of inflation compensation

(yoy % change)





4. Financial markets

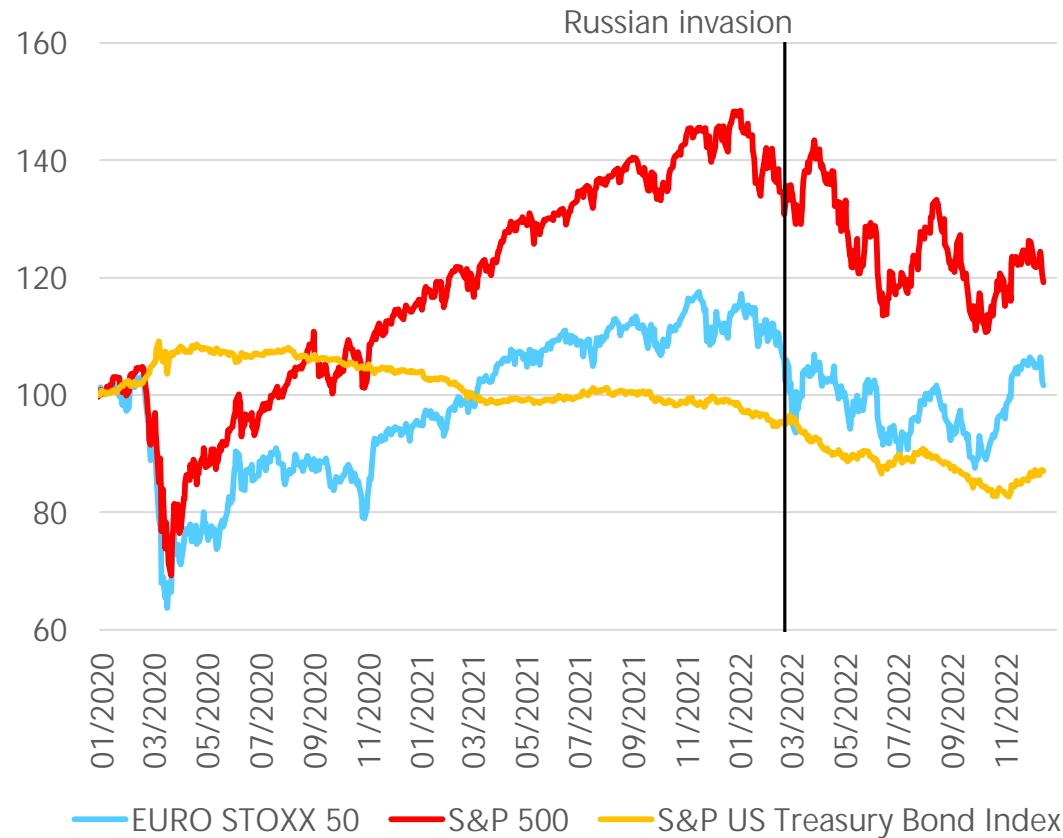
Uncertainty, inflation and growth prospects weigh on financial markets

- Asset prices continued to seesaw, recovering some of the losses of previous months
 - However, volatility remained high, particularly in bond markets, and liquidity is thin in some segments
 - Yield curve slopes inverted further for US and EA, signaling heightened fears of a slowdown
 - The euro exchange rate regained lost territory, following some easing of the energy crisis
- Interest rate expectations:
 - Forward markets expect US interest rates to recede, after inflation is brought back under control
 - ECB monetary policy rate hikes (relevant policy rate currently at 200 basis points) and announcement of stop to full reinvestment of the principal payments from maturing securities purchased under the APP (Asset Purchase Programme) supported higher expected future rates in the euro area
- The continued application of PEPP (Pandemic Emergency Purchase Programme) flexibility and the background presence of the TPI (Transmission Protection Instrument) helped contain fragmentation risks in the euro area

Macro and monetary environment continues to drive asset markets, as volatility remains high, particularly for bonds

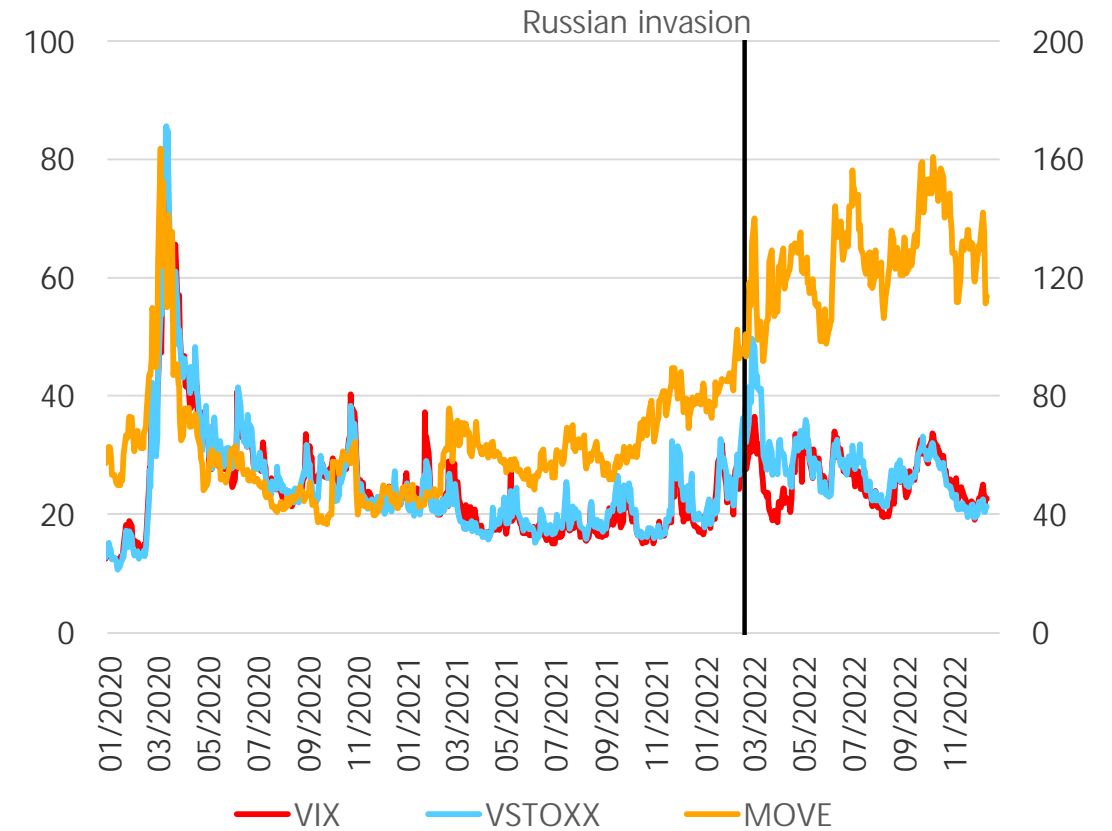
Major stock and bond market indices

(01/2020=100)



Implied stock and bond market volatility

(in %; MOVE¹ on rhs axis. VIX and VSTOXX on lhs axis)



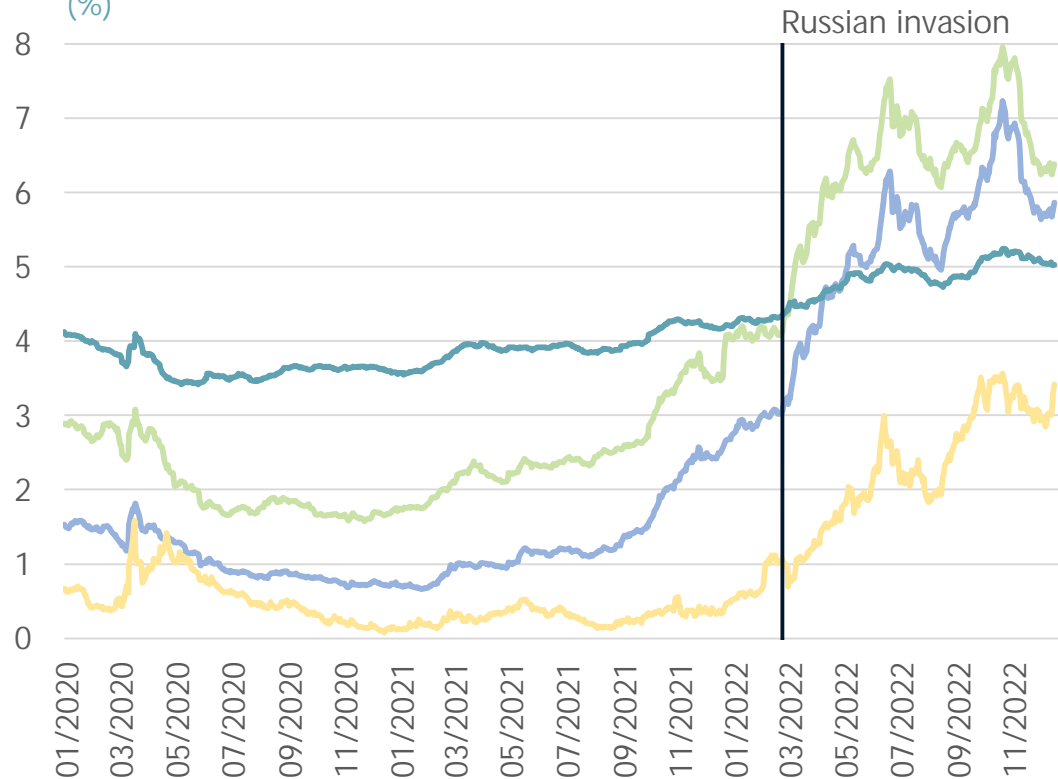
Source: Refinitiv, last data point: 16/12/2022.

¹ The MOVE Index is a yield curve weighted index of the normalised implied volatility on 1-month US Treasury options which are weighted on the 2-, 5-, 10-, and 30-year contracts.

Spreads of high-yield corporates and emerging market sovereigns remain wide

Government bond yields

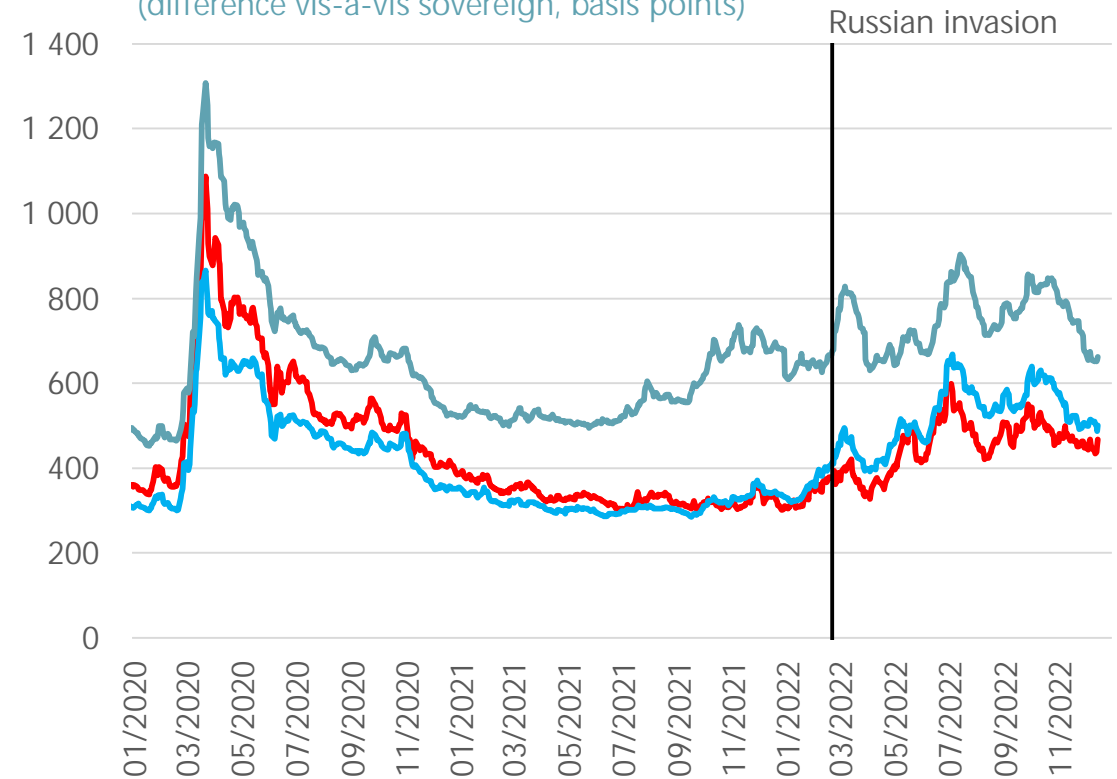
(%)



- Eastern Europe excl. Russia
- Greece Ireland Italy Portugal & Spain
- Czech Republic Hungary Poland Slovakia & Turkey
- Emerging Markets

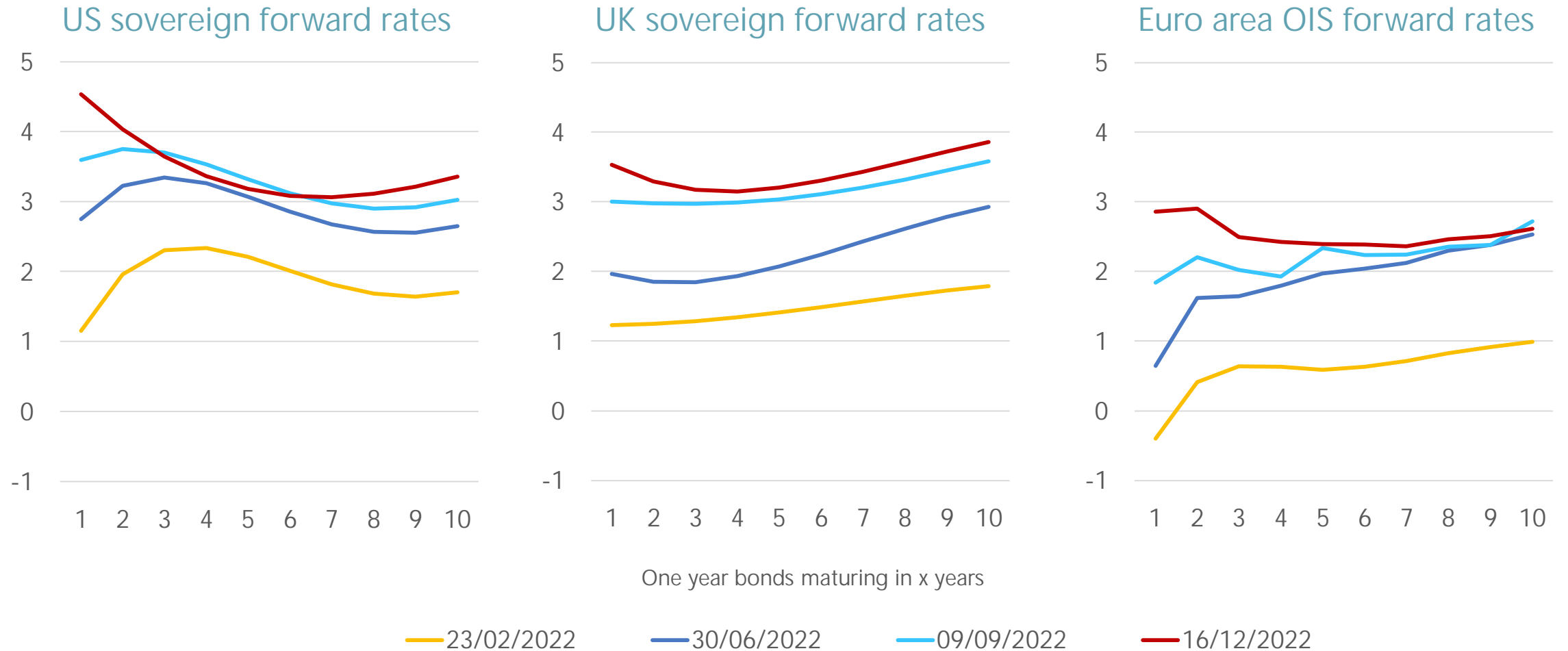
Corporate bond spreads

(difference vis-à-vis sovereign, basis points)

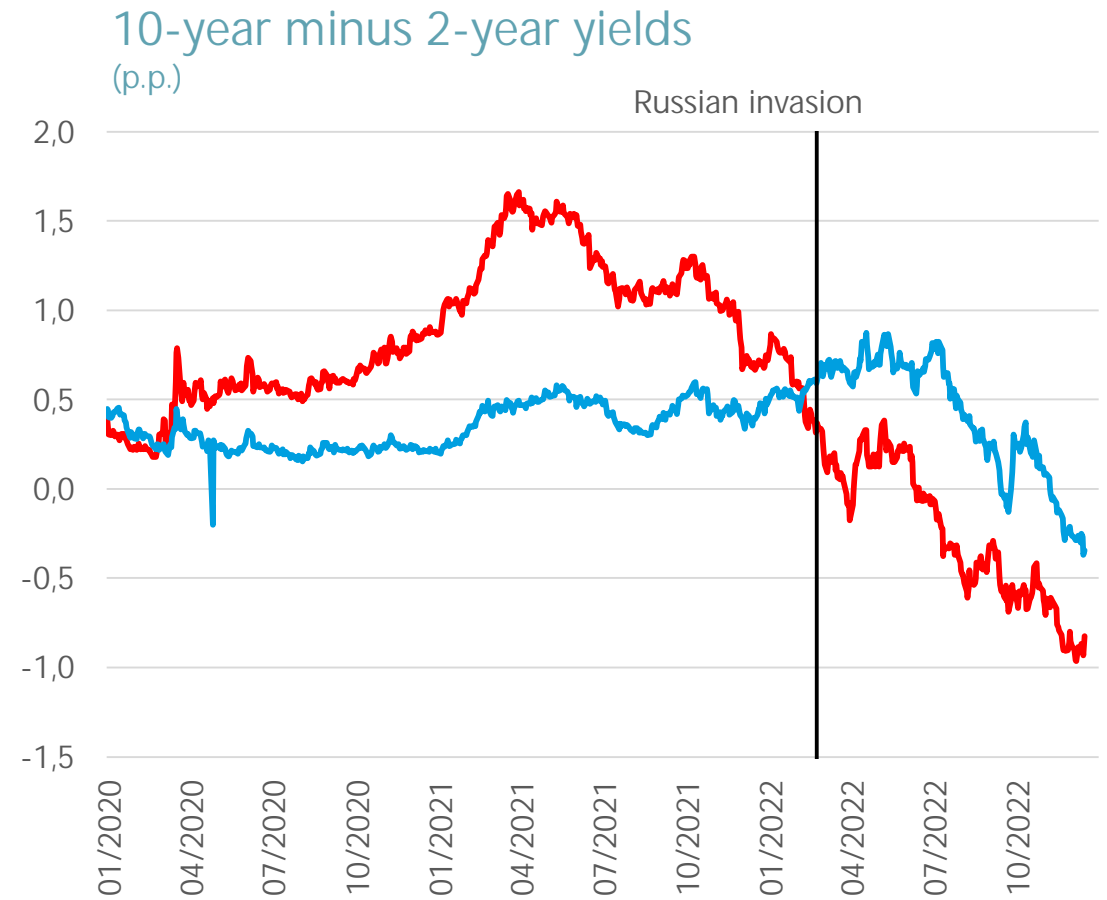
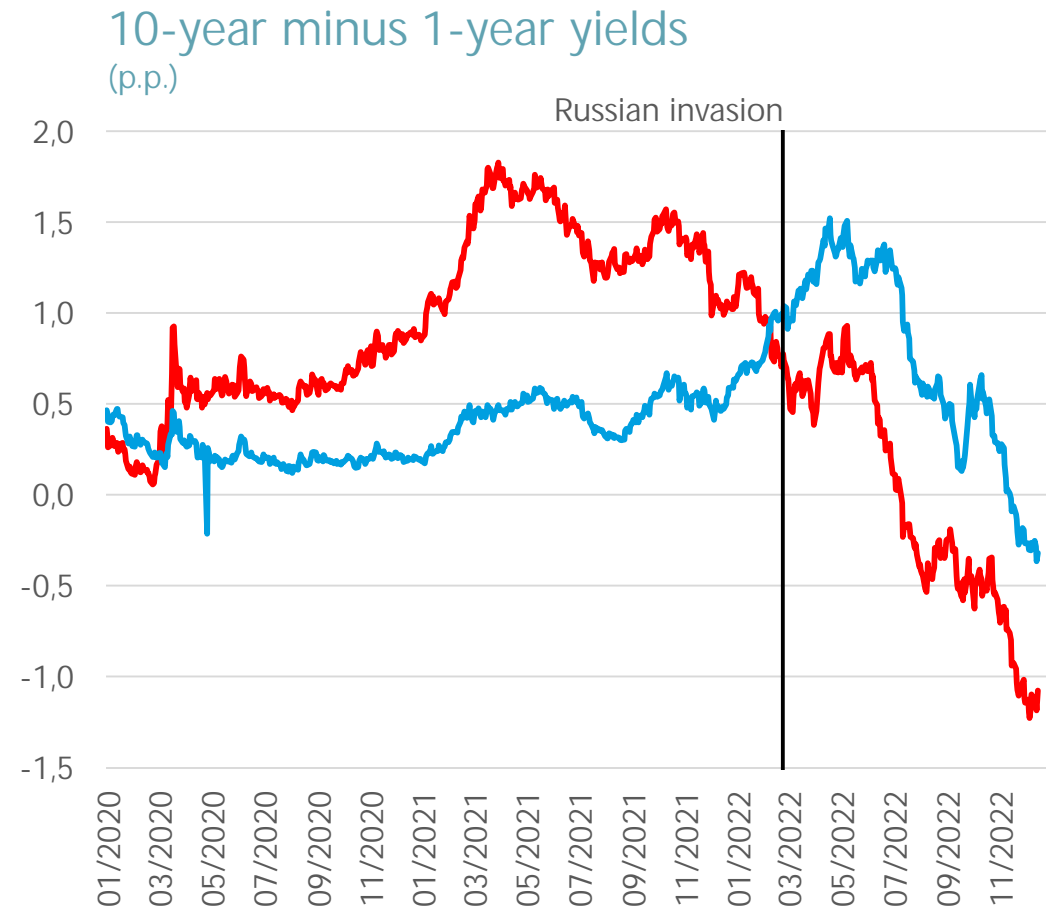


- US high Yield
- Euro High Yield
- Emerging Markets High Yield

Markets expect monetary tightening to continue in the short run



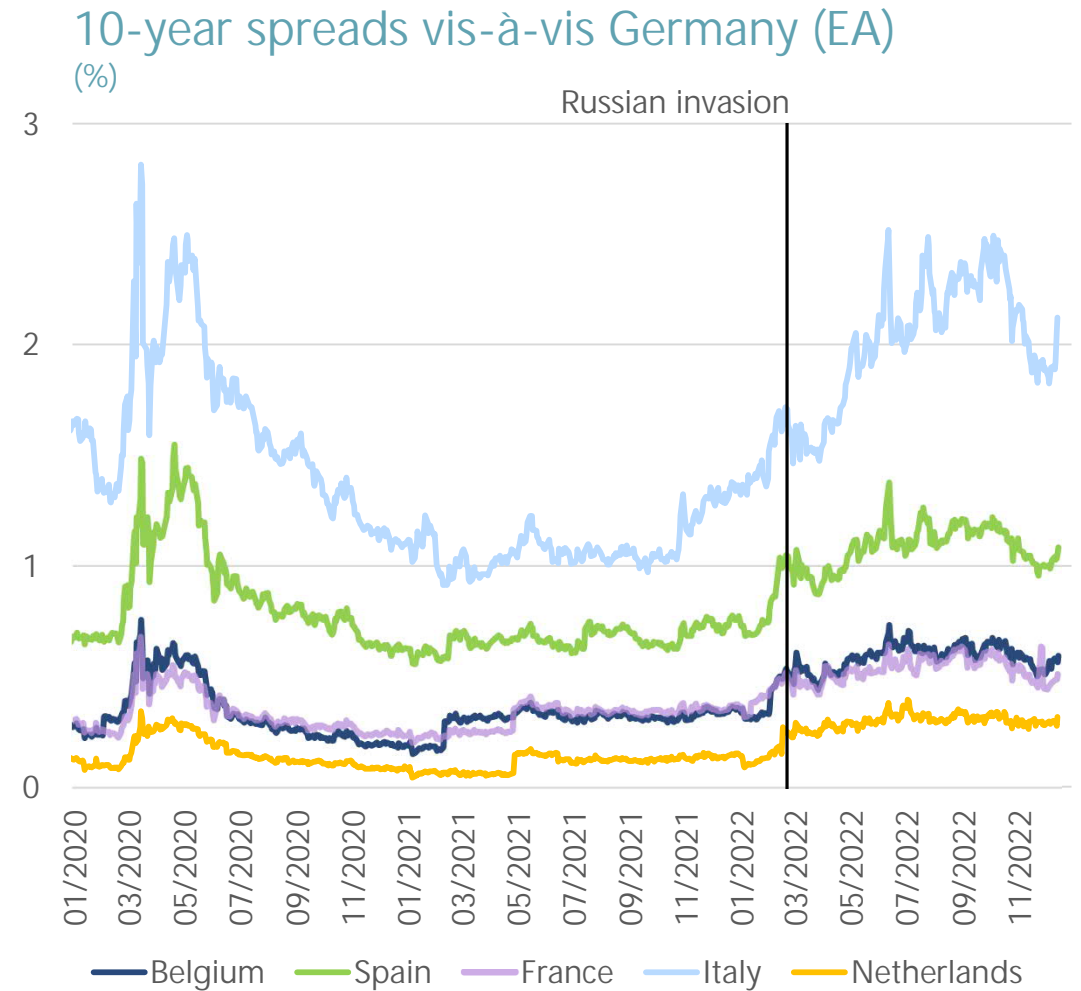
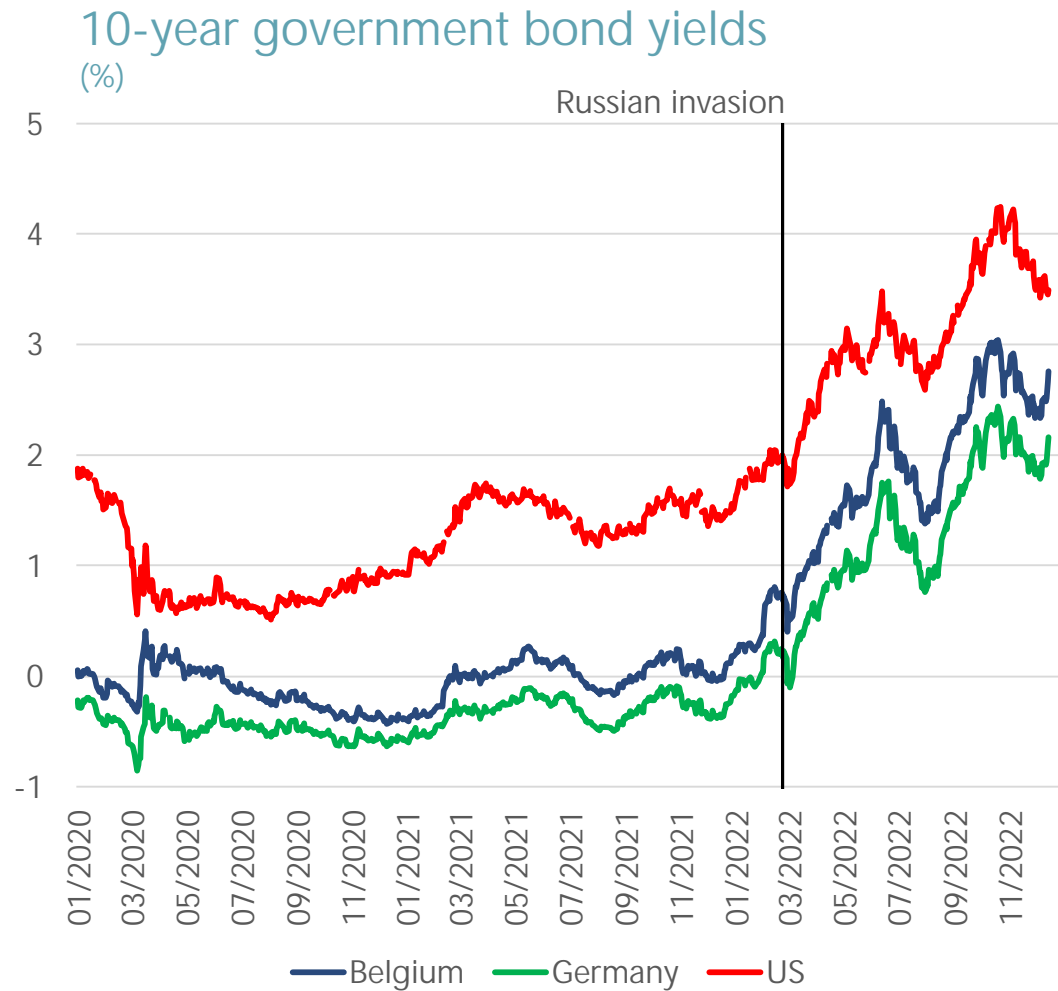
US- and EA-yield curve slopes invert further into negative territory, as markets reassess upwards the probability of a slowdown



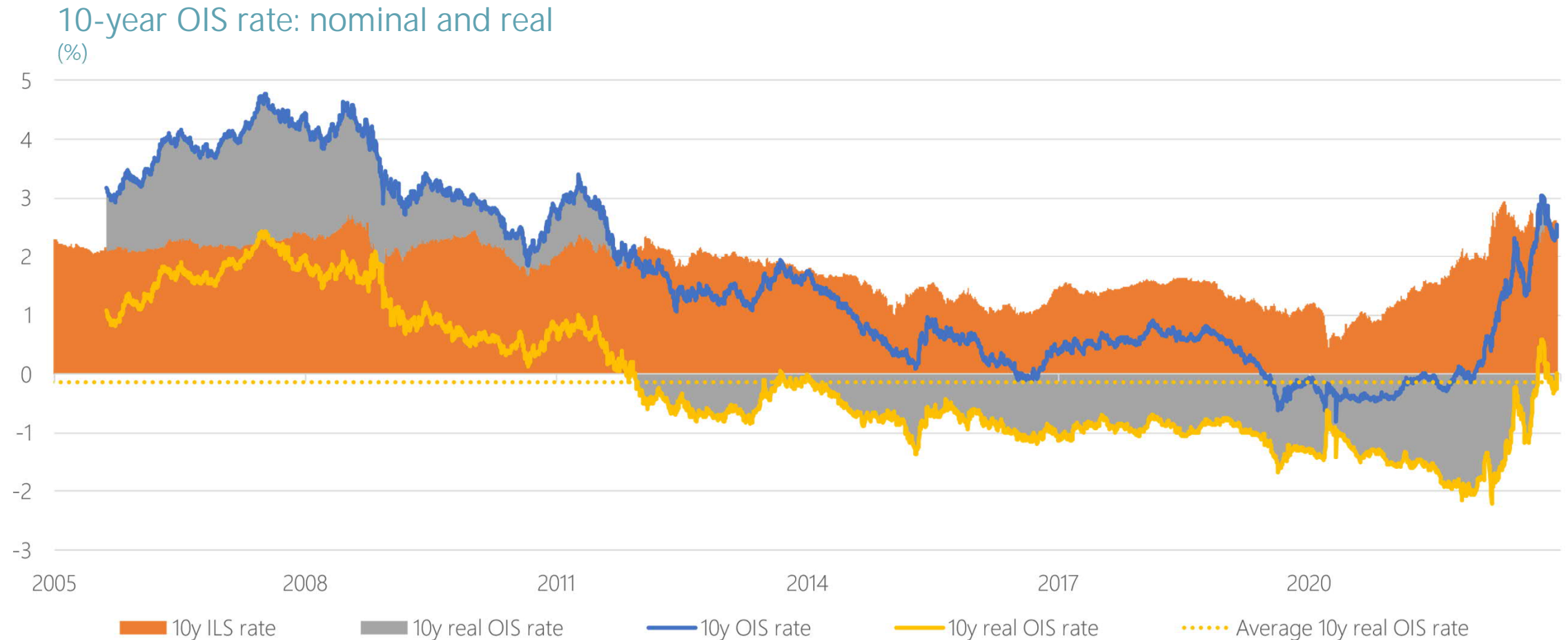
— US (Treasury yields)

— EA (OIS)

After rising markedly, sovereign bond yields trend downwards but remain volatile



Recent dynamic of EA long-term interest rates is driven by the real component



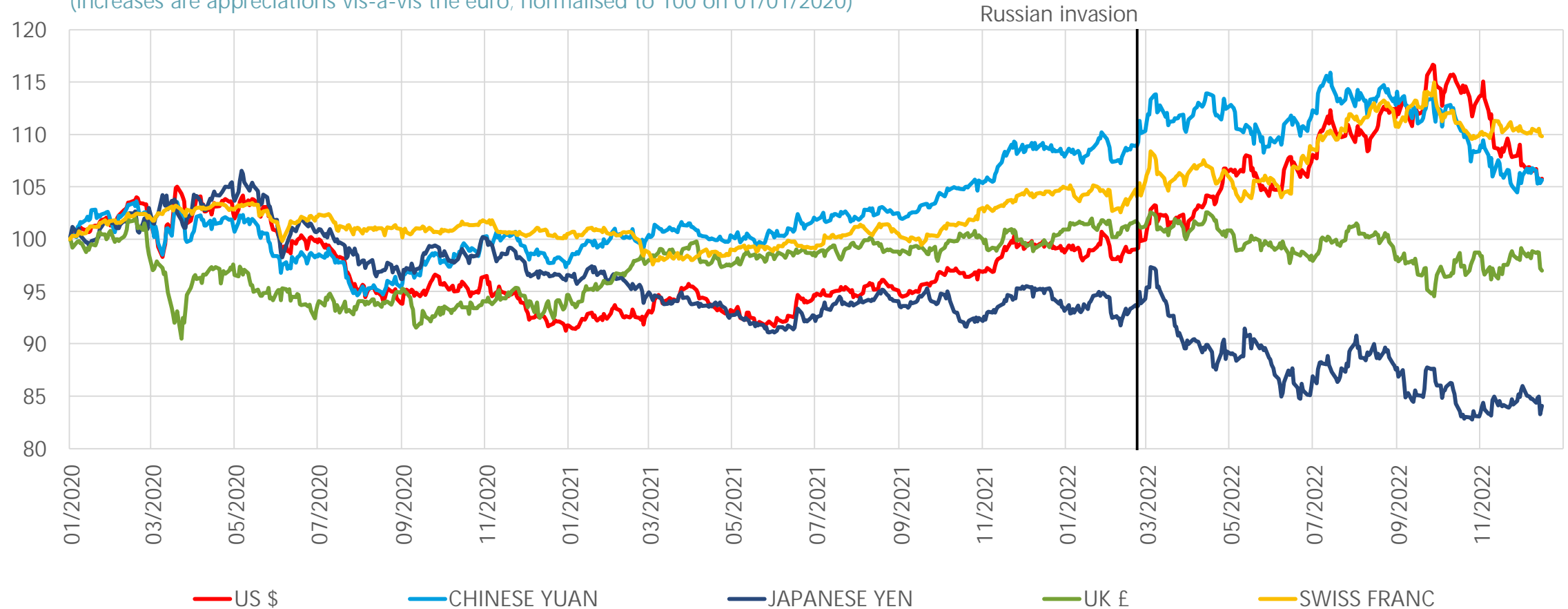
See also [De lange rente: hoger maar toch nog best laag](#)

Euro recovers, in part due to easing of energy concerns

- US dollar falls from multi-decade highs, alleviating pressures in funding markets

Exchange rates to euro

(increases are appreciations vis-à-vis the euro; normalised to 100 on 01/01/2020)



An aerial photograph of a Dutch village, likely in the Friesland region, showing a cluster of houses with orange-tiled roofs and a prominent church tower. The village is surrounded by lush green fields and a network of canals. In the background, a city skyline is visible under a blue sky with scattered white clouds.

5. Belgium: overview



L'économie belge se contracterait temporairement au dernier trimestre de 2022 mais repartirait à la hausse au cours de l'année 2023

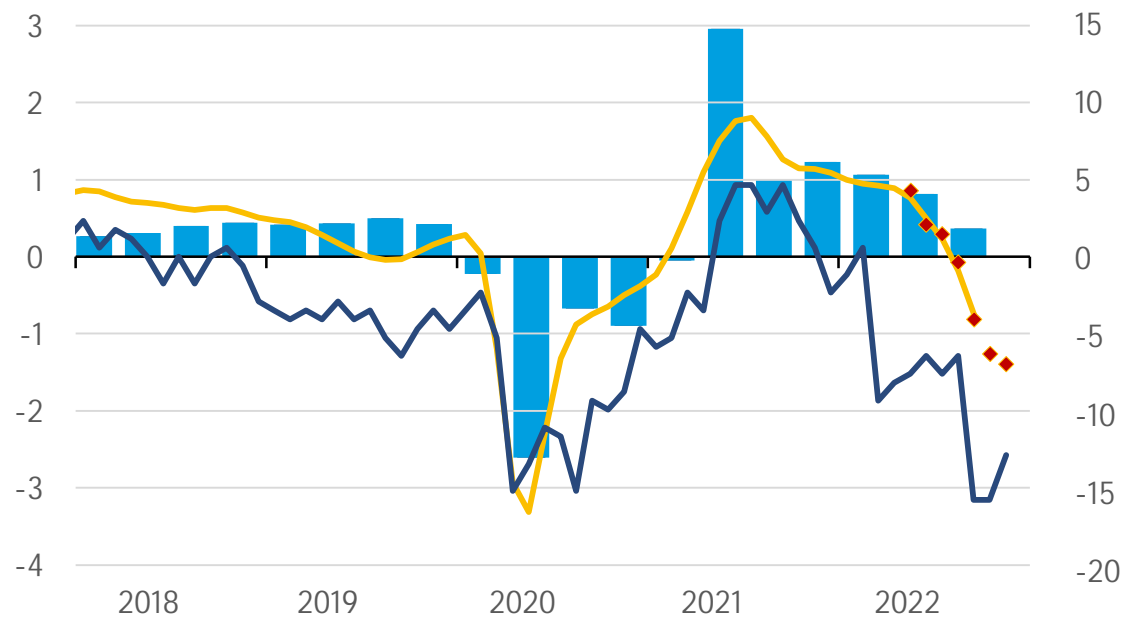
- L'activité économique progresserait de quelque 3,1 % en 2022 sur une base annuelle avant de retomber provisoirement à 0,6 % en 2023. Le rythme de croissance grimperait ensuite à nouveau pour s'établir à 1,7 % en 2024 et à 1,8 % en 2025.
- la flambée des prix, en particulier ceux de l'énergie, a une incidence sur la confiance des consommateurs et le pouvoir d'achat des ménages, ce qui pèse à court terme sur la consommation des ménages
- l'investissement des entreprises ne retrouverait pas une croissance positive avant la mi-2023. La forte augmentation des coûts de la main-d'œuvre pose des défis importants aux entreprises en termes de rentabilité et de compétitivité des coûts. À long terme, ils devraient toutefois consacrer davantage d'efforts à l'automatisation et à la numérisation
- la contribution des exportations à l'activité serait négative au cours des prochaines années
- L'inflation a augmenté sous l'effet du renchérissement des prix de l'énergie et des effets de second tour, mais elle aurait atteint son pic en octobre 2022 et diminuerait progressivement à la faveur de la (poursuite de la) modération des prix de l'énergie

Plus de détails dans: [Projections économiques BNB automne 2022](#), [BNB Business Cycle Monitor Décembre 2022](#)

Les indicateurs de confiance se sont affaiblis, mais les données concrètes brossent une image moins dramatique

Croissance du PIB contre confiance des consommateurs et des chefs d'entreprise¹

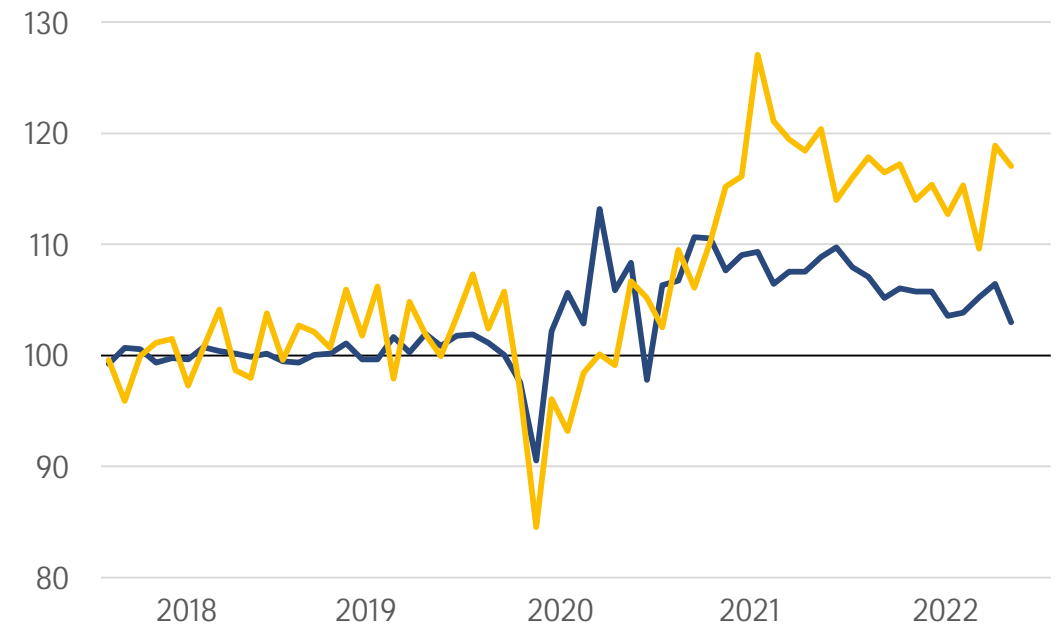
(dernière observation: 2022T3/novembre)



- Confiance des chefs d'entreprise (lissée)
 - ◆ Confiance des chefs d'entreprise (brute)
 - Confiance des consommateurs
 - Croissance annuelle du PIB (%)
- (normalisée², échelle de gauche)
- (échelle de droite)

Données concrètes: pas de crise majeure

(indices de volume corrigés des variations saisonnières, 2018=100, dernière observation portant sur octobre 2022)

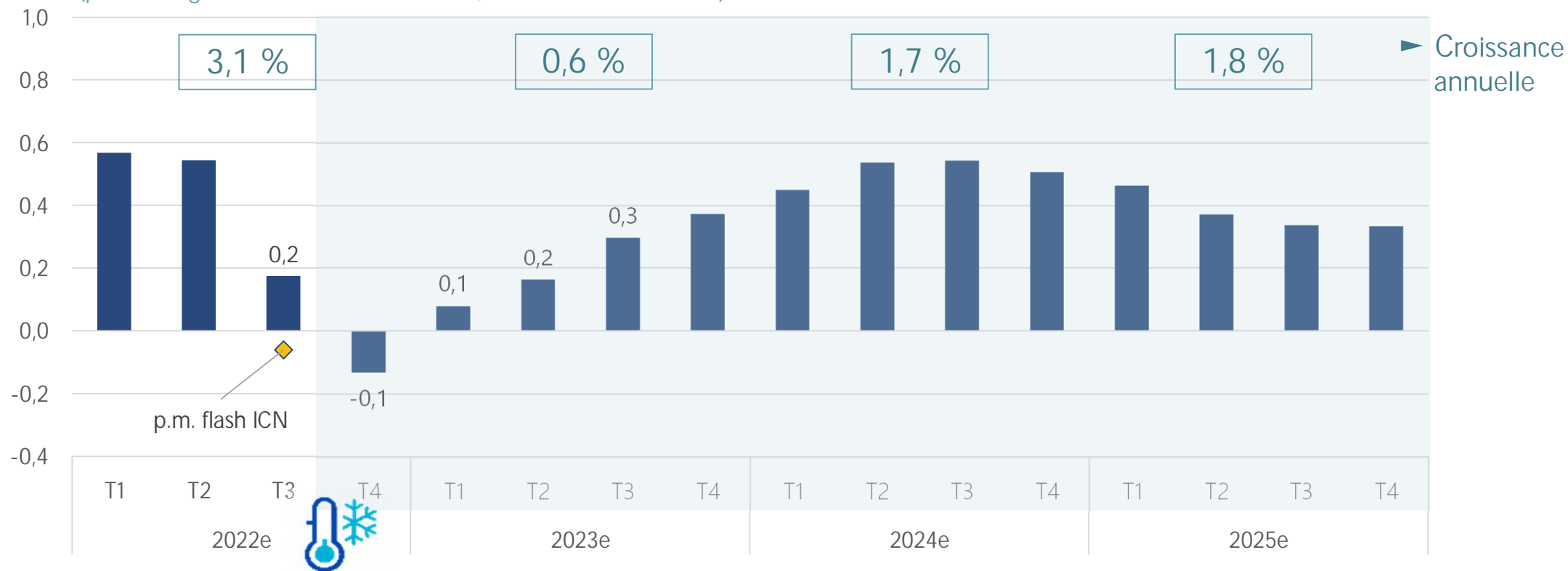


- Chiffre d'affaires du commerce de détail
- Production industrielle

L'économie belge frôlerait une récession et rebondirait au printemps de 2023

Croissance du PIB belge en volume¹

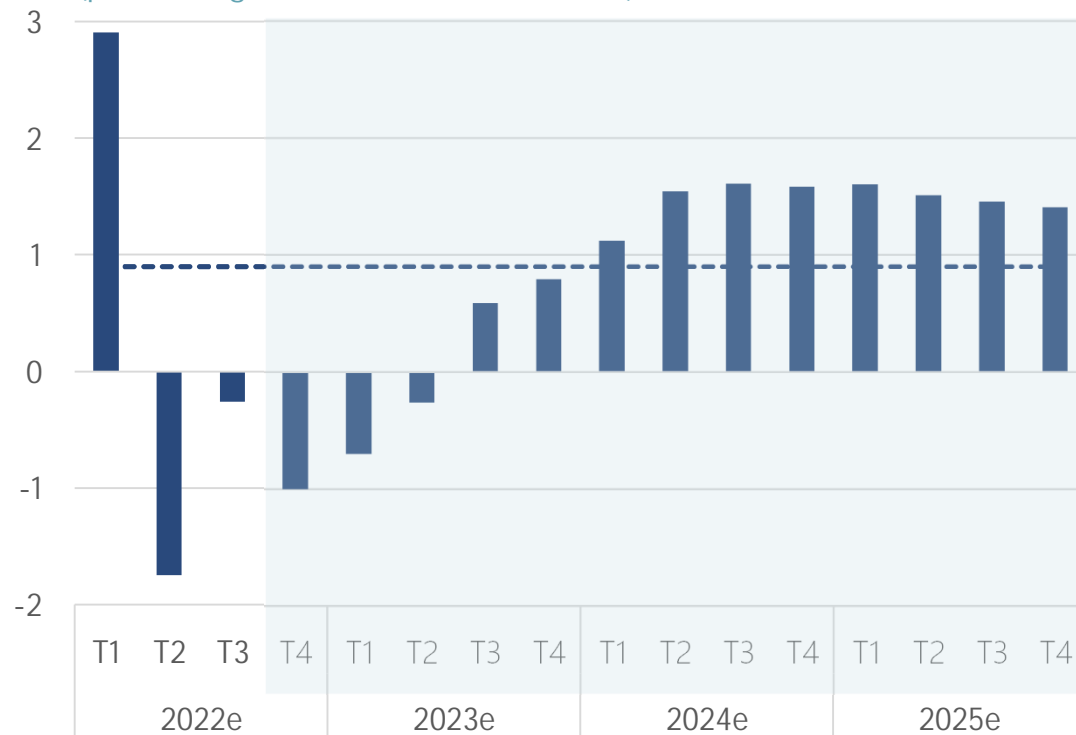
(pourcentages de variation trimestrielle, sauf mention contraire)



Les investissements des entreprises continueraient à reculer à court terme mais repartiraient à la hausse à partir de la mi-2023

Investissements des entreprises¹

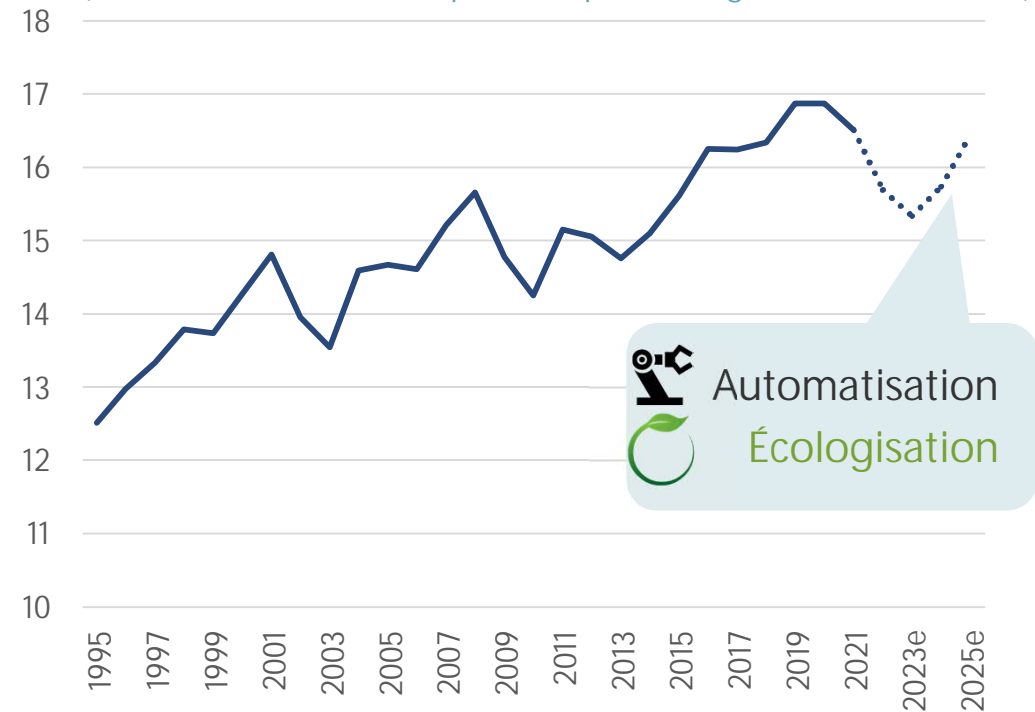
(pourcentages de variation trimestrielle)



----- p.m. moyenne 2010-2019

Taux d'investissement¹

(investissements des entreprises en pourcentage du PIB, en volume)

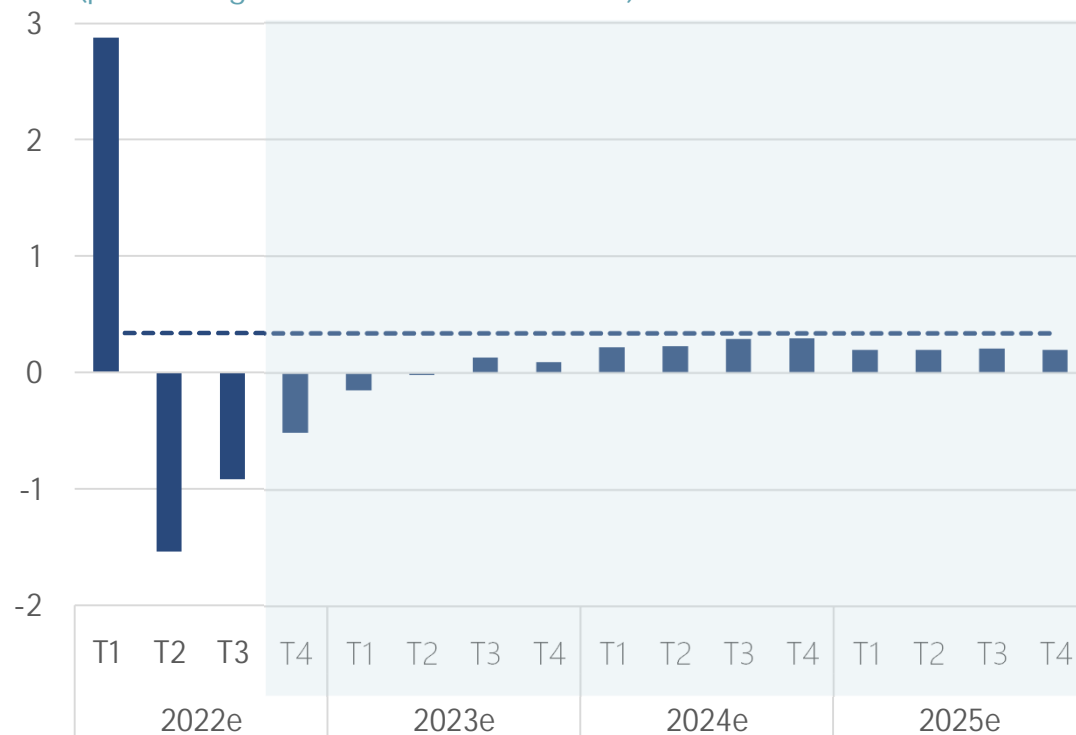


 Automatisation
 Écologisation

La hausse des taux d'intérêt pèserait sur l'investissement résidentiel, même si le recul par rapport au PIB resterait limité

Investissements résidentiels¹

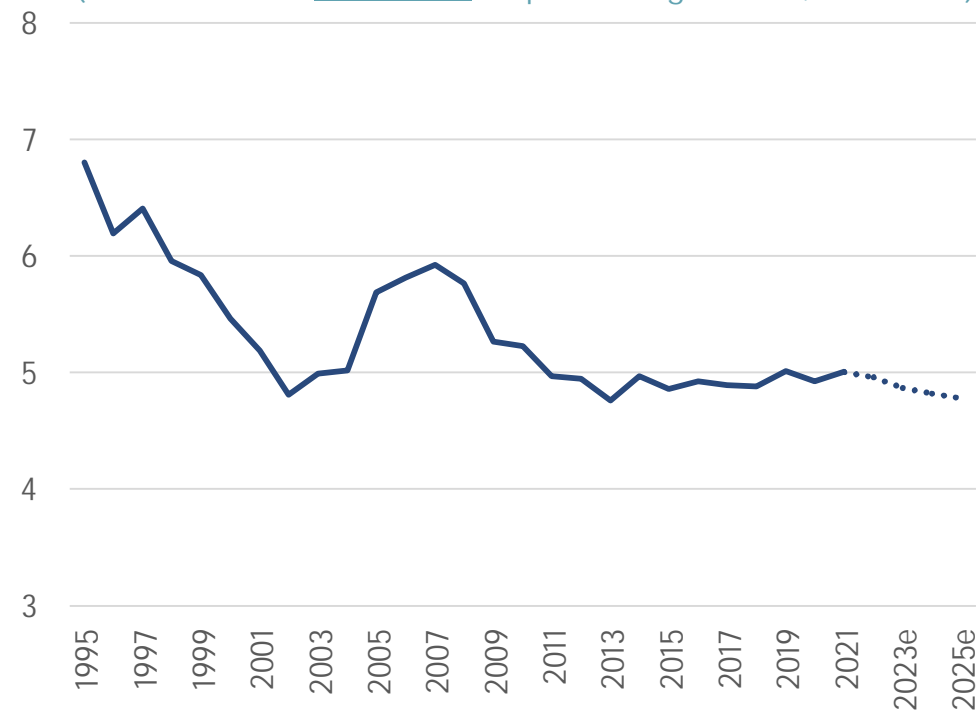
(pourcentages de variation trimestrielle)



----- p.m. moyenne 2010-2019

Taux d'investissement¹

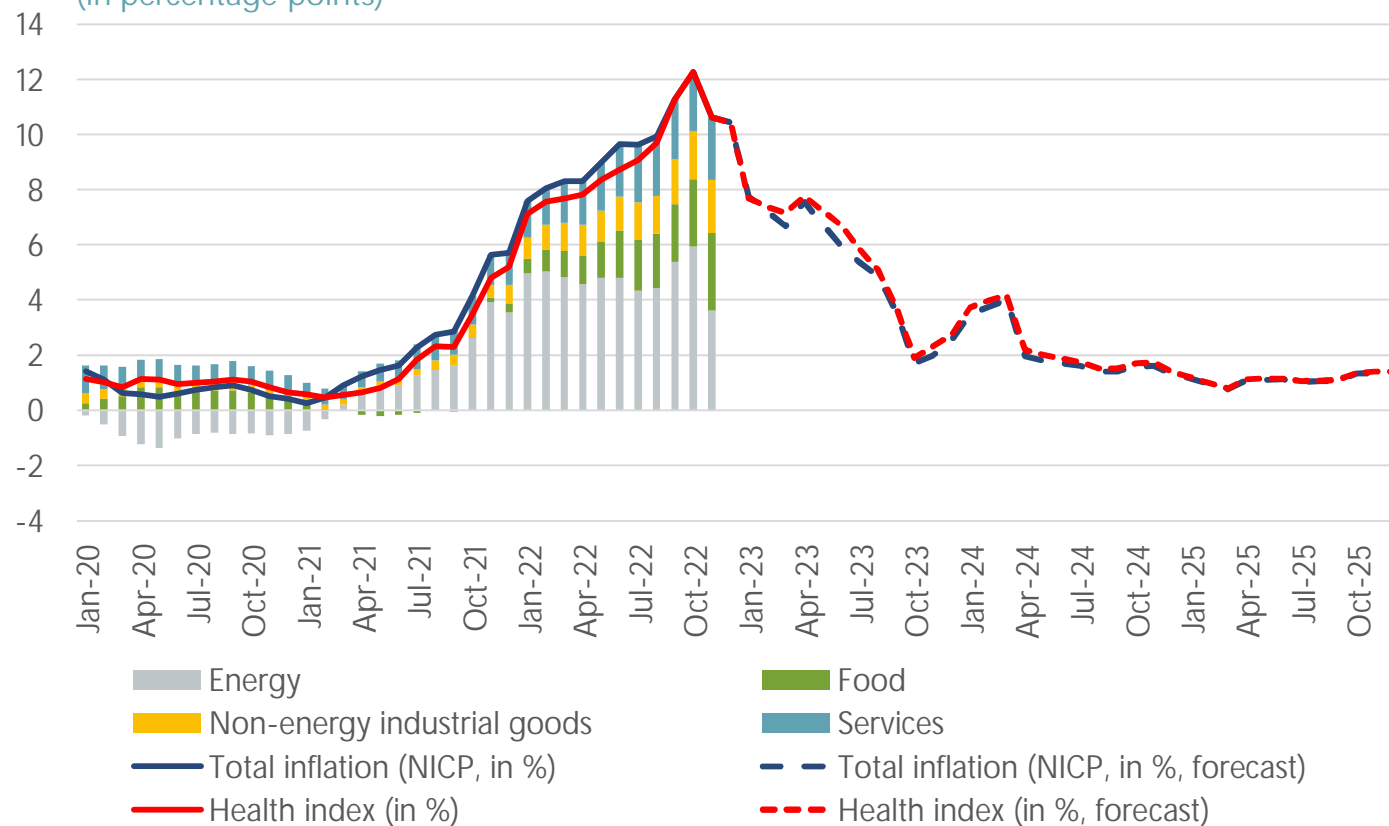
(investissements résidentiels en pourcentage du PIB, en volume)



Inflation is mostly driven by energy prices, but other components gain importance

According to the latest forecasts, inflation peak should be reached end 2022

Inflation, contributions (NICP) and health index¹
(in percentage points)



Average annual inflation
(in percentages)

	Headline (NICP)	Health
2020	0.7	1.0
2021	2.4	2.0
2022e	9.6	9.2
2023e	5.1	5.4
2024e	2.1	2.3
2025e	1.1	1.2

Sources: FPB, Statbel.

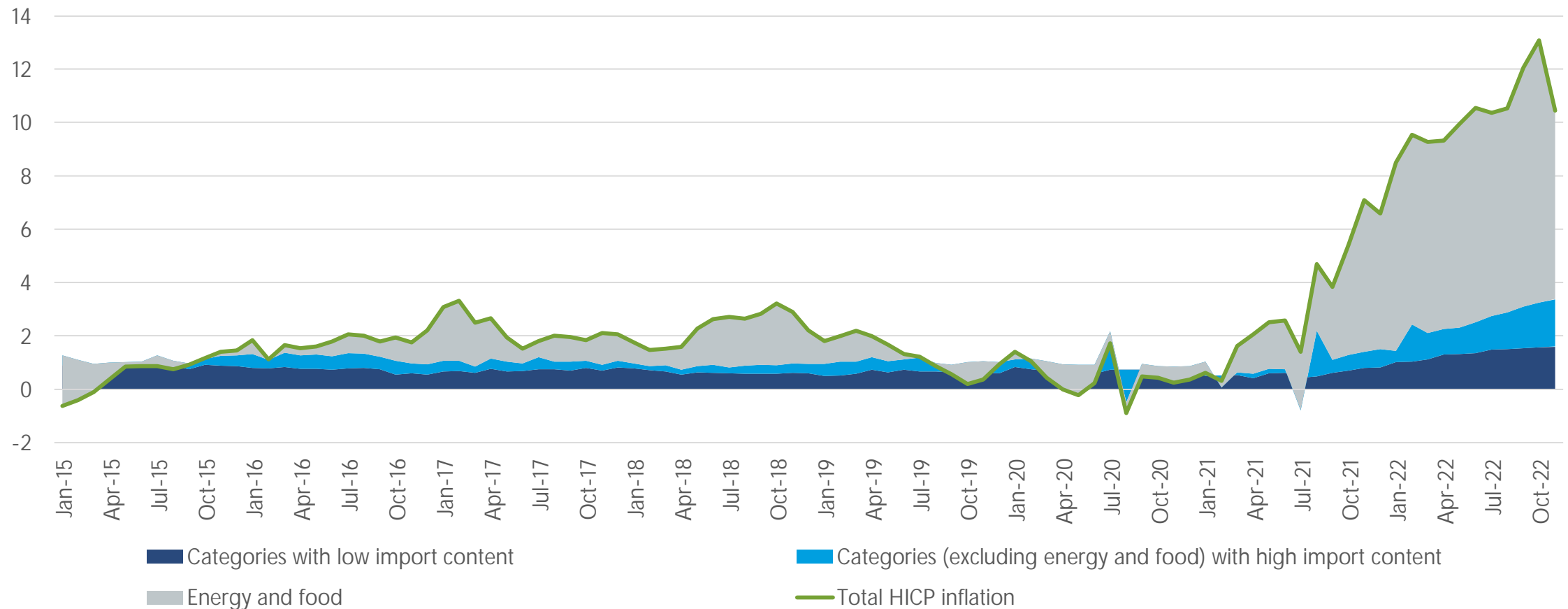
¹ The health index is the national consumer price index (NICP) excluding motor fuels, alcoholic beverages and tobacco. The dotted lines are the NBB forecasts of the December BMPE.

Remark: for the calculation of electricity and gas inflation, only new contracts are taken into account. This is in line with Eurostat recommendations for the construction of the HICP index. See [Energy prices and inflation: it's complicated | nbb.be](https://www.nbb.be/energy-prices-and-inflation-its-complicated) for more information.

Inflation is becoming increasingly widespread and more “domestic” through indirect effects from higher energy prices and wages

Contribution of inflation by different components according to import content

(in percentage points, unless otherwise mentioned)



Prévisions pour la Belgique

Prévisions de croissance

	date	2022	2023	2024	2025
BFP	sept	2,6	0,5		
BPN	sept	2,6	0,5	1,4	
FMI	oct	2,4	0,4	1,4	1,2
OCDE	nov	2,9	0,5	1,1	
CE	nov	2,8	0,2	1,5	
Consensus	déc	2,6	0,2	1,6	
BNB	déc	3,1	0,6	1,7	1,8

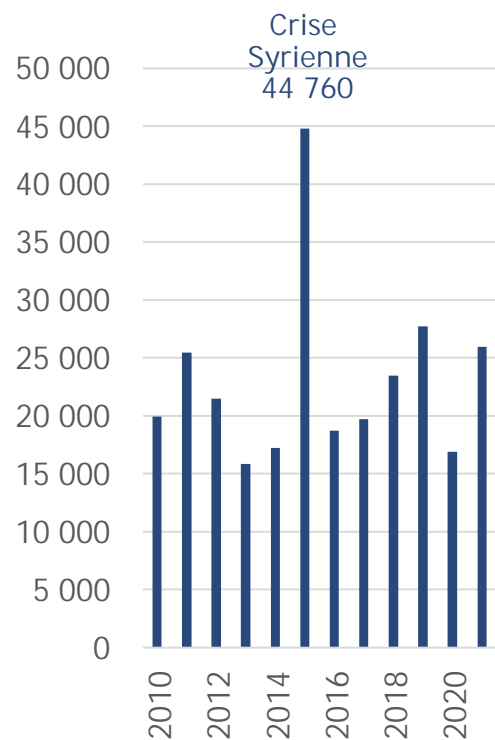
Prévisions d'inflation (IPCH)¹

	date	2022	2023	2024	2025
BPN	sept	9,2	4,8	2,0	
FMI	oct	9,5	4,9	1,8	1,7
OCDE	nov	9,9	6,6	4,1	
CE	nov	10,4	6,2	3,3	
Consensus	déc	10,1	6,5	2,1	
BFP ²	déc	9,6	5,3		
BNB	déc	10,4	4,4	2,4	1,1

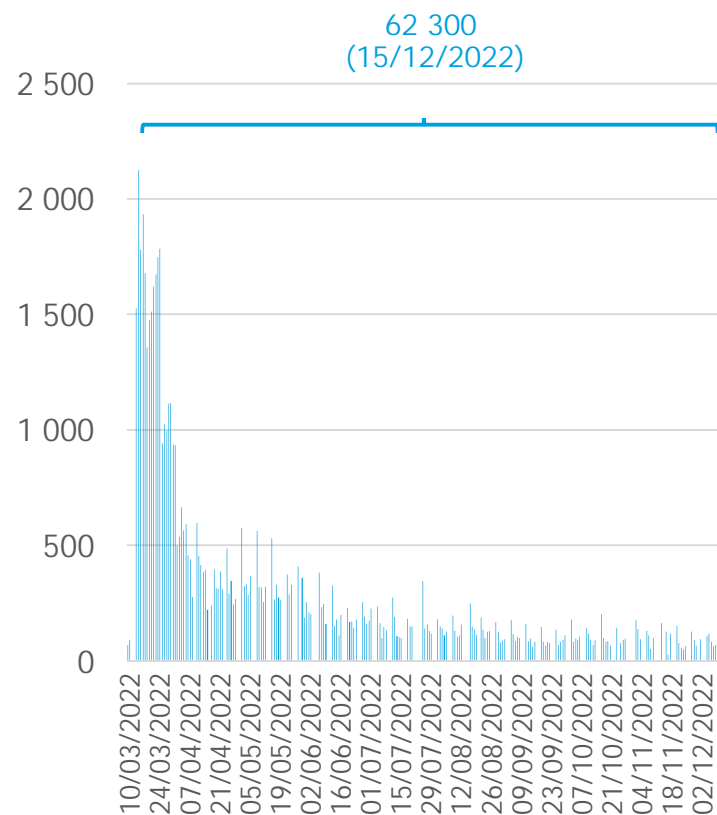
Plus de détails sur les estimations BNB: [Projections économiques BNB automne 2022](#)

L'arrivée de réfugiés ukrainiens s'est nettement ralentie

Demandes d'asiles
(données annuelles)



Protections temporaires¹
(données journalières)



Structure par genre et par âge des
bénéficiaires (essentiellement Ukrainiens)
du régime de protection temporaire
(moyenne depuis le 10 mars 2022)

	Hommes	Femmes
0-17 ans	17 %	16 %
18-64 ans	20 %	41 %
65 ans et plus	1 %	4 %
Total	39 %	61 %

Par rapport aux flux passés, la composition de la population réfugiée ukrainienne compte proportionnellement plus de femmes et d'enfants



6. Energy markets in Belgium



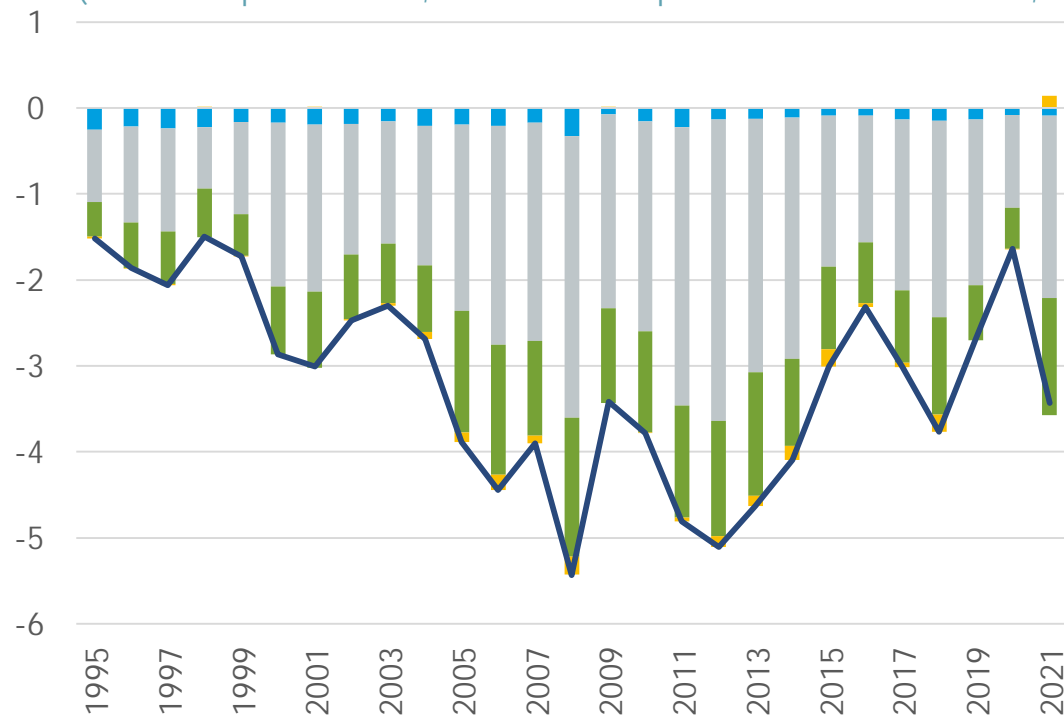
All options are used at EU level to ensure security of supply (SoS) for gas through the winter heating season and ahead

- EU natural gas supply and demand adjust following the RU crisis
 - Compensation for accelerated decline of RU deliveries by other suppliers (by pipeline and LNG)
 - New floating storage and regasification units to allow LNG landing to replace piped Russian gas
 - Reduction/destruction of gas demand by decreasing/stopping production on behalf of (large) industrial consumers and residential consumers driven by high prices and conservation measures
 - ! Market conditions remain tight with spot gas prices reacting to the first sign of trouble (cold snap, maintenance on suppliers' infrastructure, etc.)
- Need to save gas/energy
 - 08/2022: EU European Gas Demand Reduction Plan: Member States (MS) agreed to reduce voluntarily their gas consumption by 15 % by end-March 2023 – becomes mandatory if 'Union alert'
 - Emergency planning by MS to safeguard their natural gas (and electricity) SoS
- Boosting the roll-out of renewables and speeding up permitting processes on renewables infrastructure
- New intra-EU pipeline infrastructure available

La facture énergétique nette a augmenté vis-à-vis de l'étranger

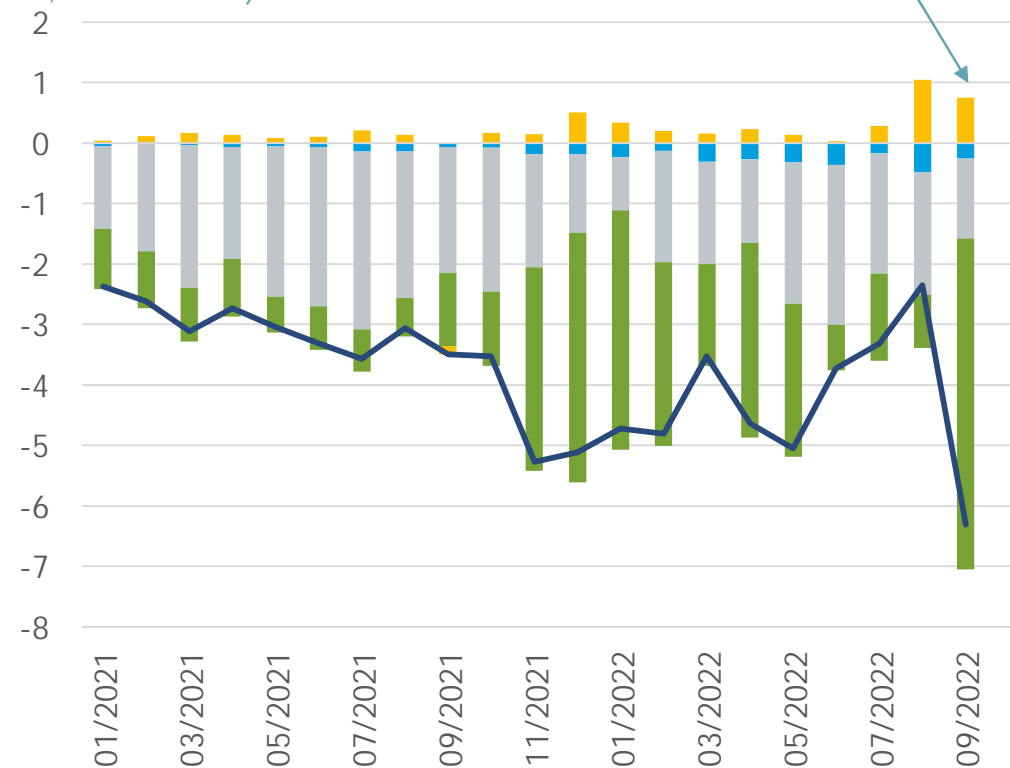
Exportations nettes de produits énergétiques

(données à prix courants, selon la statistique du commerce extérieur, concept national, en % du PIB¹)



- Houilles, cokes et briquettes
- Gaz naturel et gaz manufacturé
- Total combustibles, minéraux, lubrifiants et produits connexes

Les données mensuelles récentes sont provisoires



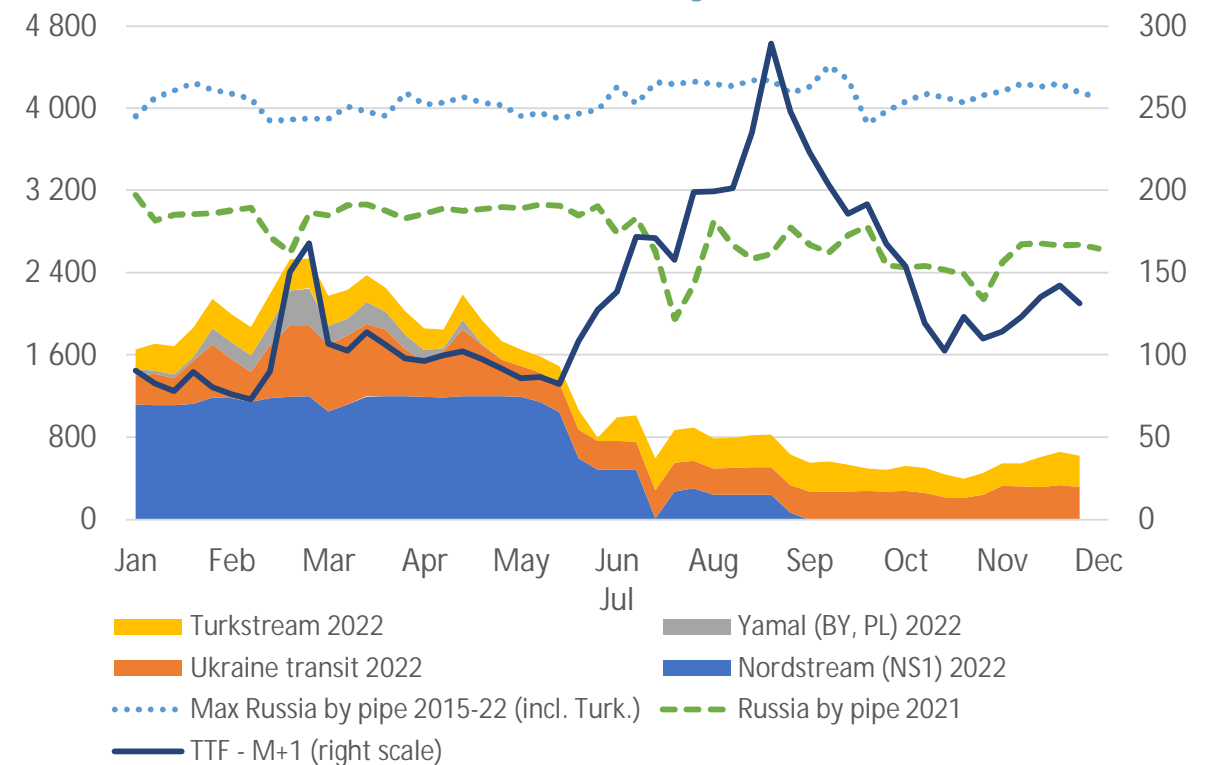
- Pétrole, produits dérivés du pétrole et connexes
- Energie électrique

Sustained gas supply during the summer period to fill in EU gas storages – next year outlook still driven by tight fundamentals

- Russia reduced gas supplies by pipeline to EU; Russian pipeline deliveries could drop to zero
- Flows from Norway subject to planned and unplanned outages
- US Freeport LNG export plant (damaged on 08/06) expected to be back 12/2022 and to full plant operations in 03/2023
- Tight global LNG market and possible competition with Asia (recovering of Chinese LNG imports) to secure supply
- Pressure on prices both in Europe & Asia

Weekly European gas imports from Russia by pipe vs European gas price

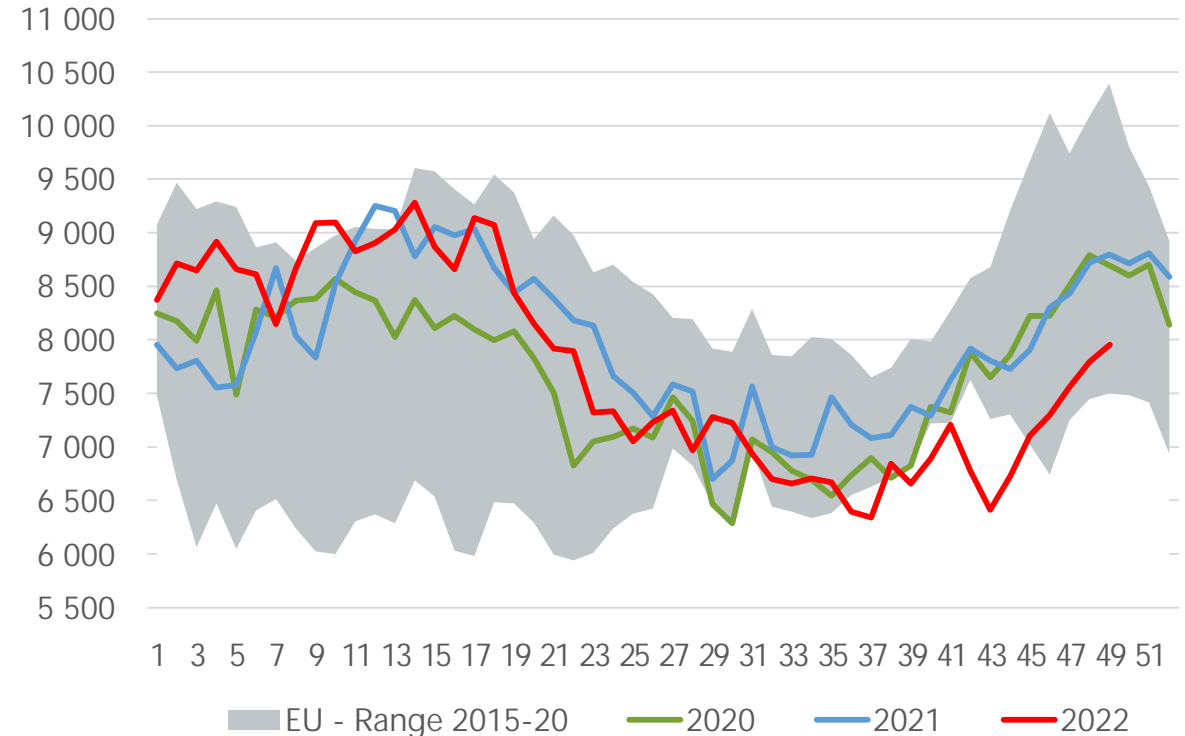
(in million m³ left scale and EUR/MWh right scale)



EU total natural gas imports remain at the bottom of the 2015-20 range

- (Temporary) pick-up of Russian supplies after invasion to almost 30 % of extra-EU imports
- Since April 2022
 - RU supply cuts on LT contracts (PL, BG, FI, NL, DK, DE, IT, AT, FR, CZ, SK)
 - Reduced transmission capacity: lower transit via UA and no flows through Yamal (May), NS1 progressively reduced to 0 (June to Sept)
 - RU = 9 % of current extra-EU imports
- Mainly LNG has taken over

Extra-EU weekly natural gas imports
(in million m³ and RU share in 2022 in %)



week	1	10	20	30	40
% RU 2022	20	29	21	13	8

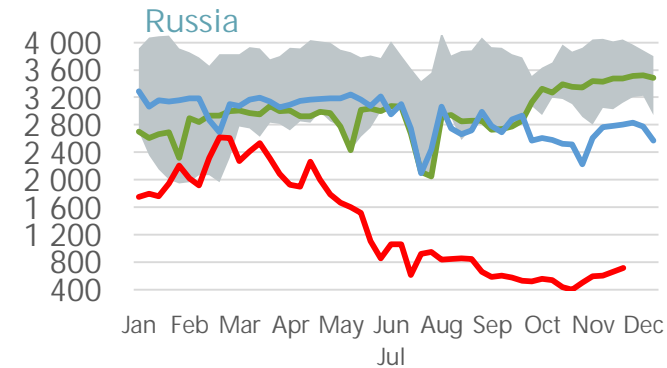
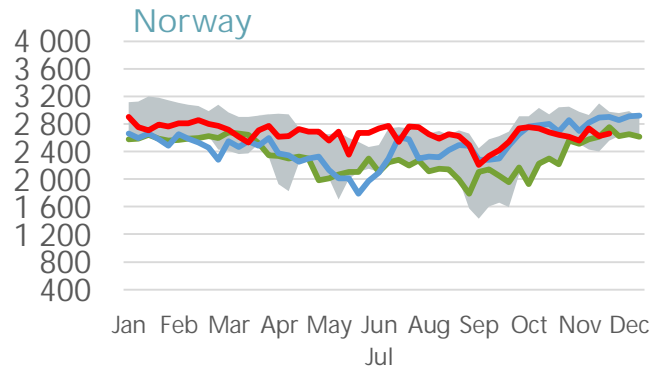
- Week 49 = 9 % of total extra-EU natural gas imports

EU gas supply: switch to Norwegian and LNG deliveries in 2021-22 – stronger reliance next years

Extra-EU weekly natural gas imports by source

Norway

- Pipelines operating close to nameplate capacity
- 09/2022 maintenance work

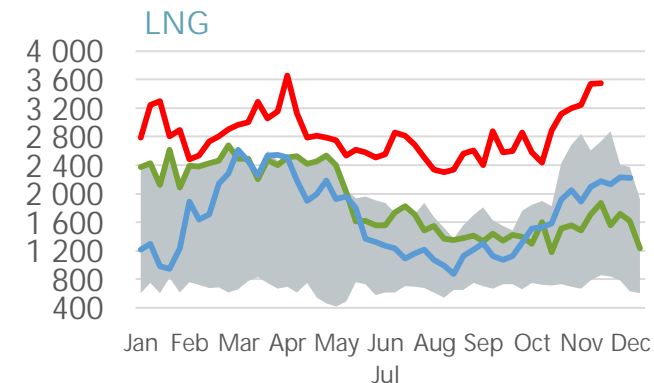
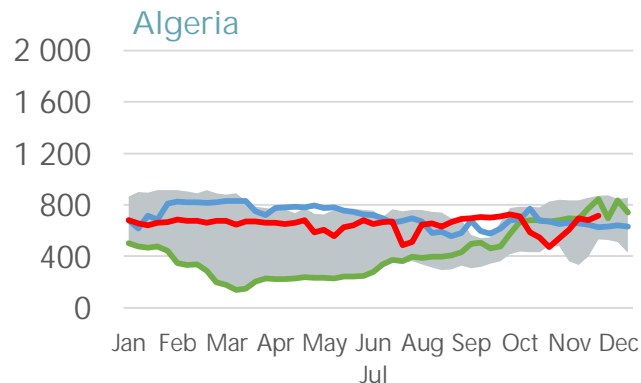


Russia

- Pipeline gas deliveries steadily decreasing since March
- Begin 11/2022: -90 % compared to 2015-20 avg
- PS: Russia still exports LNG to EU (+ Northeast Asian countries which have LT LNG contracts)

Algeria

- Growing domestic market + LT contracts customers to supply
- Constrained on the ability to produce more



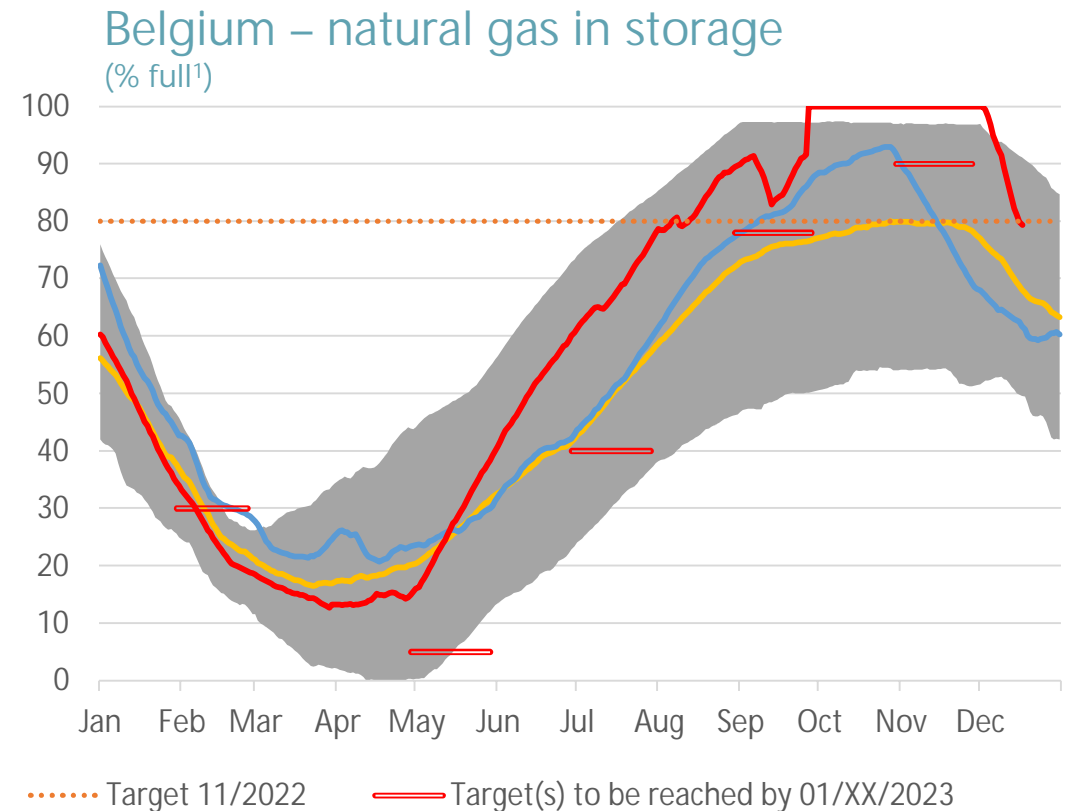
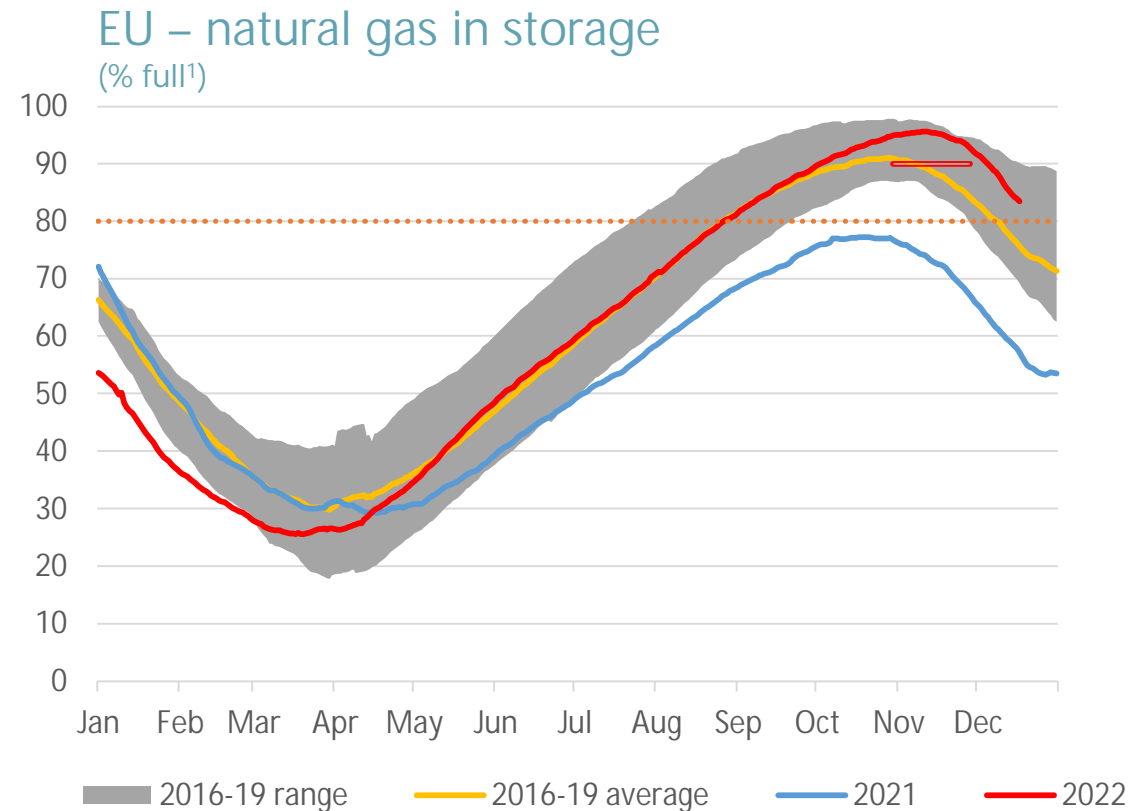
LNG cargoes

- US deliveries to EU to the rescue
- 2022 ahead = diversion from other markets – ramp-up of US and African liquefaction projects

Intra-EU flows benefit from improved infrastructure with 4 new interconnectors to become operational (Baltic pipe, interconnectors Poland-Lithuania, Poland-Slovakia, Bulgaria-Greece)

Gas storage filling achieved before the set deadline is still at comfortable levels

- Gas storage filling exceeded the 80 % target by 01/11 but at a high cost
- Gas levels remain comfortable despite the mid-Dec. cold snap – ! Limited storage capacity in BE = limited potential to adjust to a (too) high demand if prolonged freezing t° (& UK gas delivery stop) = emergency plan enforceable)
- 2023 intermediate gas storage filling targets have been fixed ahead of a more challenging 2023-24 winter

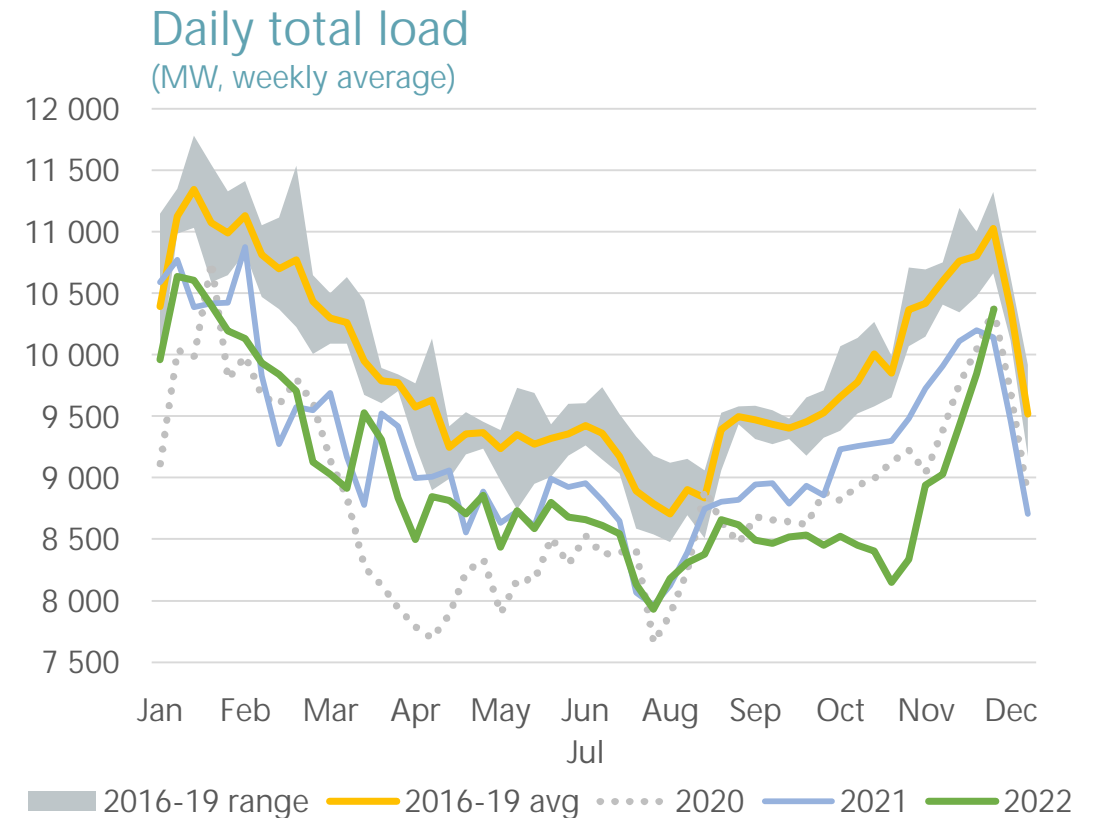


Belgian emergency gas plan to preserve security of supply

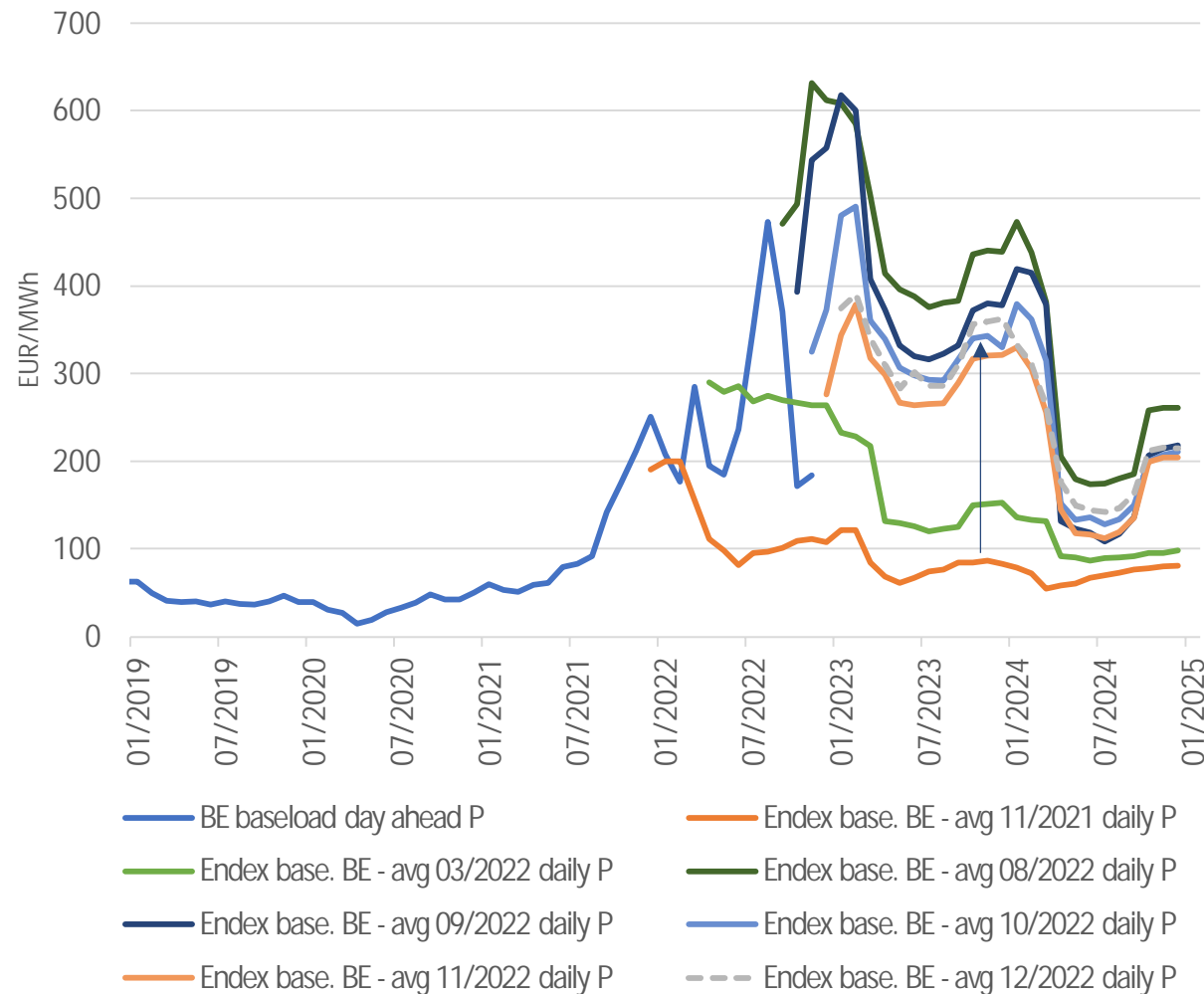
- Russian gas = ~6 % Belgian gas imports
- Availability of Zeebrugge gas hub + direct connections with UK, NO and NL suppliers
- Information campaign to encourage citizens to reduce their consumption
- Information to industries about emergency plan in 3 stages (early warning, alert and emergency stage)
 - the most critical stage 3 foresees rationing measures in the event of a break/significant drop of supply
 - 1st affected: installations directly connected to the Fluxys transportation grid (no gas cut-off but consumption reduction to a level still above their historical minimum consumption)
 - 2nd: large gas consumers connected to the distribution grids (preserving public administration, social services, etc.)
 - Last resort: cutting off physically certain sections of the gas network (but excluding gas power plants)
- Solidarity principle between and within EU countries
 - Bilateral solidarity agreements governing coordination between national authorities (only 9 MS signed)
 - Emergency plan identifies measures to adjust excessive demand (preserving protected customers) – 09/2022 update has to include planned demand-reduction measures to meet the -15 % gas reduction
- NB: high gas prices lead manufacturers to stop their production processes before the emergency stage due to profitability and infrastructure managing (harmful if sudden stops) issues

Electricity consumption remains below the 2016-19 range, at a lower level than during the COVID period

- Total load on the Transport System Operator grid
 - similar to its 2020 level until 09/2022
 - did not follow the seasonal consumption upturn after
 - growing gap to the average 2016-19 consumption (! not t° adjusted)
09/22: -9 %; 10/22: -14 %; 11/22: -16 %
- winter freeze pushes demand up begin December



Expectations of higher electricity prices compared to the past remain



Electricity prices increased from ~50 EUR/MWh in the past to 200 EUR/MWh end 2021 and peaked 08/2022

- enhanced uncertainty on 2022-23 winter supply has pushed prices to 600++ in Aug./Sept. 2022
- prices for delivery in summer 2023 remain high compared to the past
 - ≈ 400 EUR/MWh based on Aug. transactions
 - ≈ 265 EUR/MWh based on Nov. transactions

Electricity prices driven by

- dominating effect of gas prices on electricity prices with 'Pay as you clear' or marginal pricing model
- generation issues in neighbouring countries

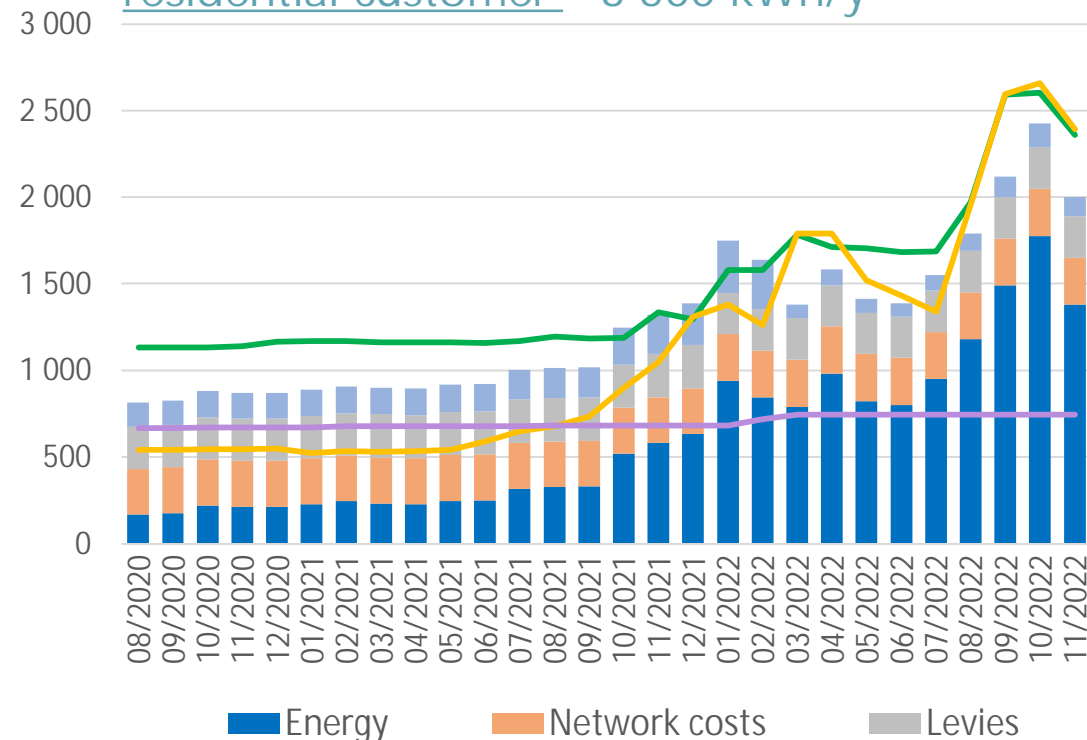
European power markets resilient to winter heating period and cold t° in Nov. and Dec. 2022

- return of French nuclear generation (which should improve further)
- rebounding coal and gas-fired generation
- ! very low wind and limited solar generation

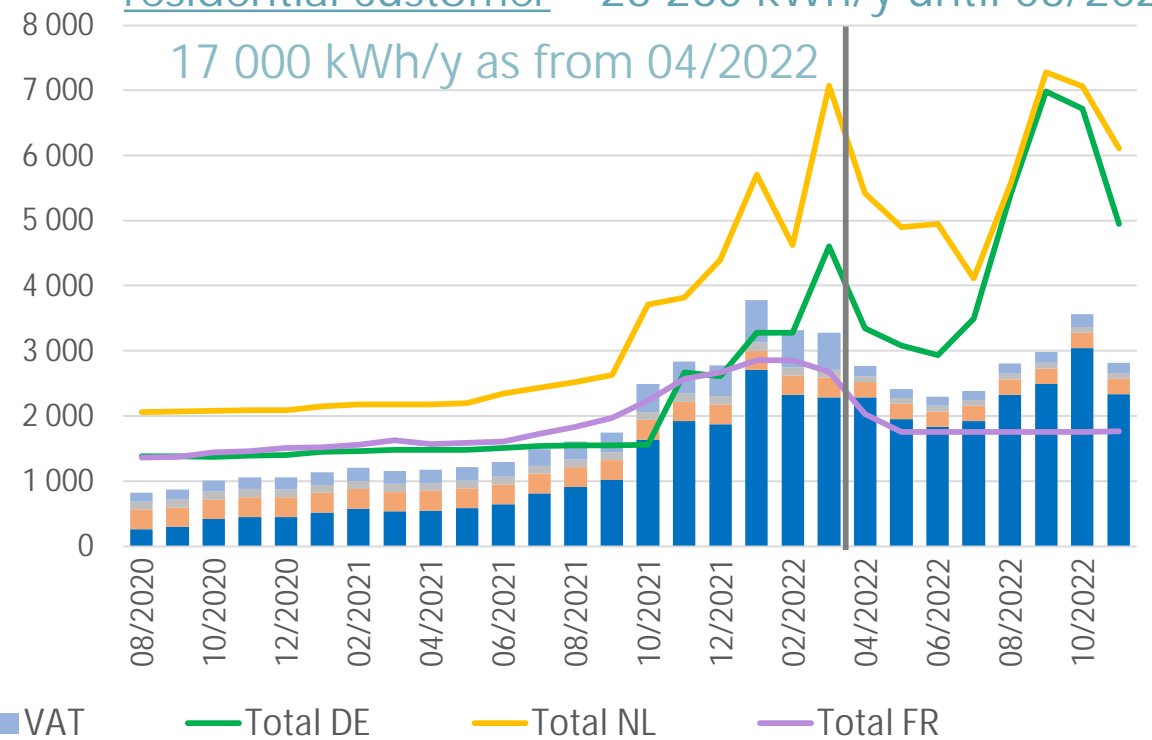
Strong rise of the energy component in electricity and gas prices for residential customers except in France

- Gas prices in Germany (high procurement costs to replace Russian gas) and the Netherlands twice as high as in Belgium and France
- Slight decrease from the late summer spike but current prices remain x2 / x3 higher compared to two years ago

Yearly average invoice in € – electricity to residential customer – 3 500 kWh/y



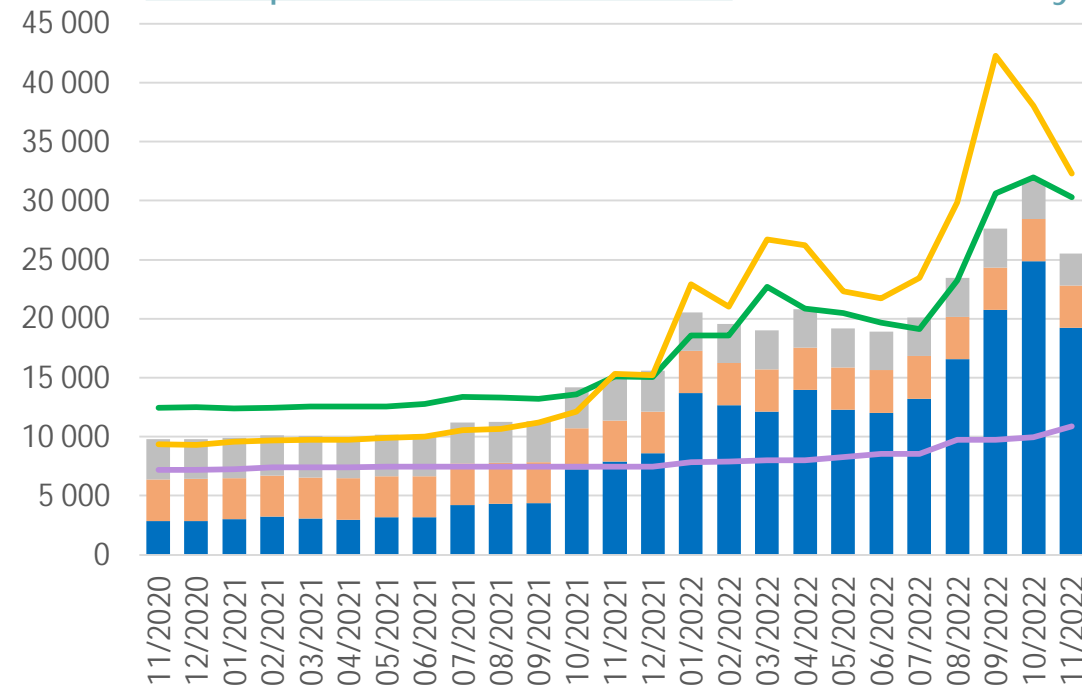
Yearly average invoice in € – natural gas to residential customer – 23 260 kWh/y until 03/2022



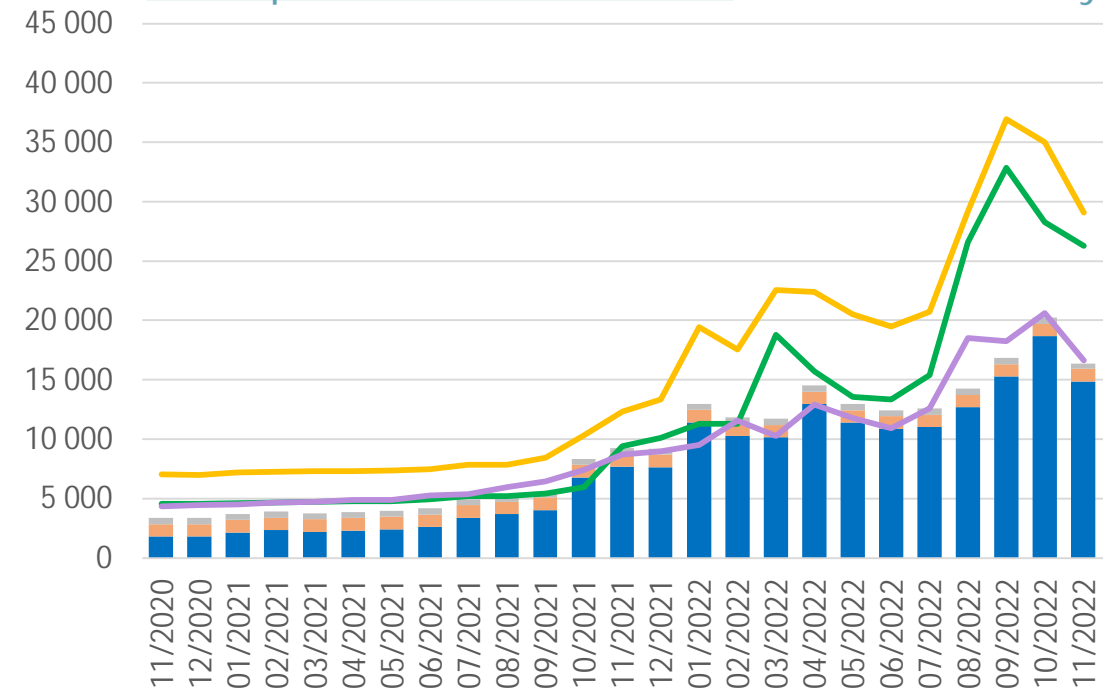
The energy component has significantly pushed up the electricity and gas prices charged to small business customers too ...

- ... except in France, where the price charged for electricity has changed little
- Strong difference too for gas prices charged to German and Dutch customers compared to French and Belgian ones

Yearly average invoice in € – electricity to small professional customer – 50 000 kWh/y



Yearly average invoice in € – natural gas to small professional customer – 100 000 kWh/y



Network costs

Levies

Total DE

Total NL

Total FR

09/2022: policy measures decided at EU level to address high energy prices and strengthen EU's winter preparedness

EC proposals (07/09)

- Smart savings on electricity by reducing electricity use at peak hours
- Cap the revenues of non-gas/low cost power generators through a windfall tax and use it to curb consumer bills
- Solidarity contribution to be paid on unexpected profits made by fossil fuel companies
- Help utilities exposed to liquidity problems (high collateral requirements for margin calls on derivatives in a high and volatile price context) – enabled by state guarantees
- Proposal to cap price of Russian gas → *could lead to an immediate stop of RU gas supplies – !! some countries unwilling to risk losing that supply*

EU leaders and Energy ministers' meetings (Q4 2022)

- discussions on reducing energy demand, enhancing SoS and guaranteeing affordable prices
- strengthen EU's next winters preparedness

Council regulation on an emergency intervention (06/10)

- 01/12/2022 to 31/3/2023: overall reduction target of -10% of gross electricity consumption + mandatory reduction target of -5 % during peak hours
- cap market revenues at 180 €/MWh for electricity generators using inframarginal technologies (renewables, nuclear and lignite)
- contribution on fossil fuel companies' taxable profits of fiscal years 2022/2023 above a 20 % increase on the avg profits of previous 3 years – in addition to regular taxes and levies

New temporary measures to contain high prices (24/11)

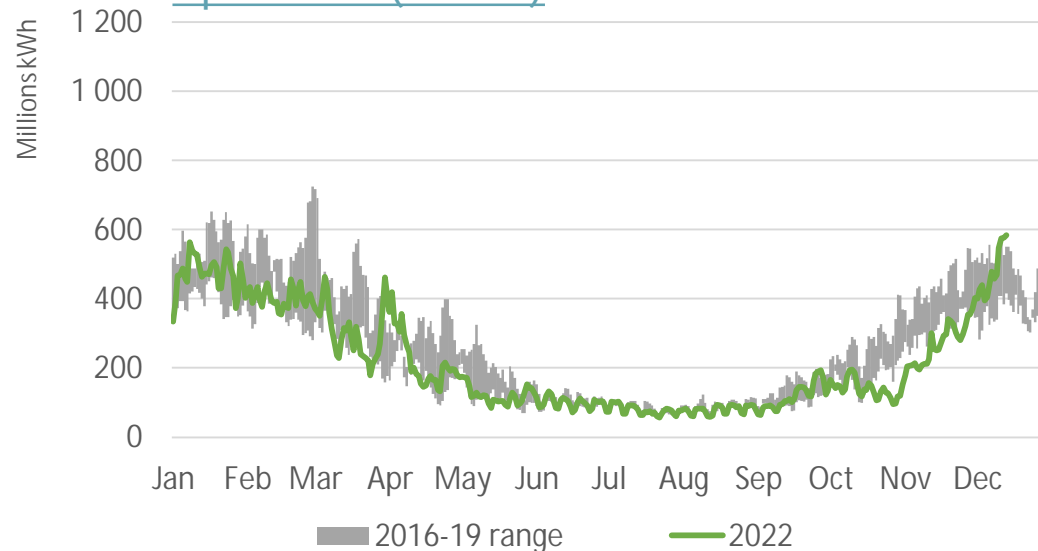
- Agreement on joint purchases of gas: pooling demand at EU level. In a 2nd step: gas purchase through the platform – RU gas excluded
- new price benchmark for stable and predictable pricing for LNG transactions – available 31/03/2023
- 19/12: temporary 'market correction mechanism' to limit TTF price spikes: if $TTF_{M+1} > 180$ €/MWh or LNG price > 35 €/MWh for 3 days → dealings in TTF contracts on EU trading places suspended for 20 days except if adverse effects (↑ margin calls, ↑ gas consumption, ↓ trading or ↓ LNG imports)

At Belgian level: supporting measures to cope with the burden of rising energy prices

- Authorities are confident about Belgium's energy supply
 - availability of gas infrastructure: i.e. fully operational gas terminal and gas storage for balancing
 - availability of electricity infrastructure by postponing their maintenance until after the winter period
- Policy response at federal level to help citizens and businesses experiencing rising prices (cf. slide 8)
 - extend existing supporting measures to citizens until 31/03/2023
 - larger target group benefiting from the social tariff, 6 % VAT on electricity and gas, lower excise duties on petrol and diesel, similar financial compensation for heating oil, propane and pellets
 - 11 & 12/2022: reduction of electricity bill (-135 €/month) and gas bill (-61 €/month) – conditional support for the middle class – extended until 03/2023
 - support to companies (by building on the measures implemented during the COVID crisis)
 - bridging fee in case of an activity cut-off due to unbearable energy costs
 - adjustment of social security payments and provisional contributions (deferral of payments, reduction/exemption of provisional contributions and possible settlement plan)

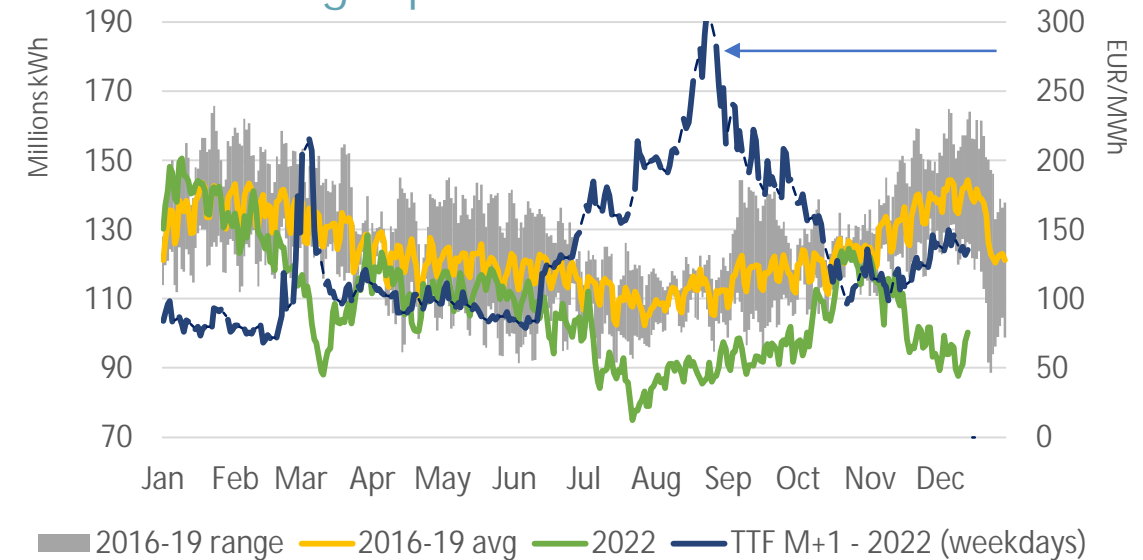
Reduced natural gas offtakes in 2022 by Distribution Network Operators & large industrials whose consumption remained lower than 2016-19 average ...

Daily offtake by distribution network operators (DNOs)



- DNOs' gas offtake did not bounce as strong as usual when entering the winter 2022-23 heating period
 - Consumption adjustments to high prices, impact of conservation measures and mild weather
 - Mid-December deep freeze drove gas demand

Daily offtake by industrial customers & natural gas price

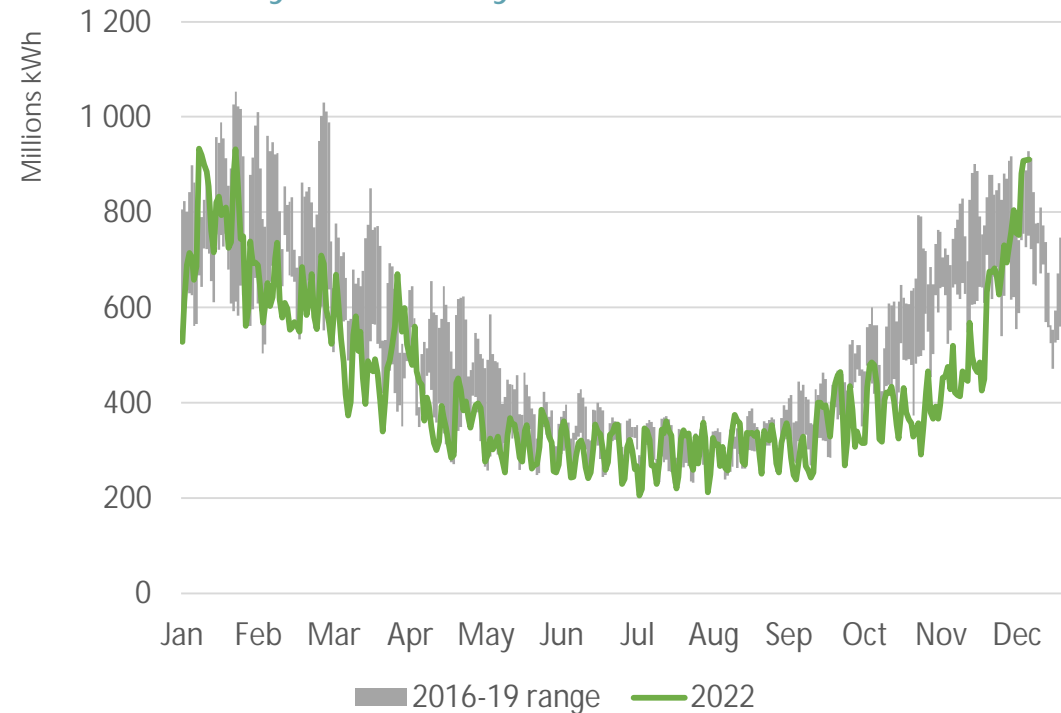


- After having recovered from its mid-March dip, April to mid-June industrial consumption stayed some 6 % below the 2016-19 avg
- From mid-June on, industries adjust consumption following higher prices: offtake 18 % below the 2016-19 avg, with consumption at its lowest in late July (-30 % below 2016-19 avg)
- End-October consumption shortly back to its average but again depressed (-32 %) end December. Gas prices not as high as in summer but still x7 their pre-crisis level

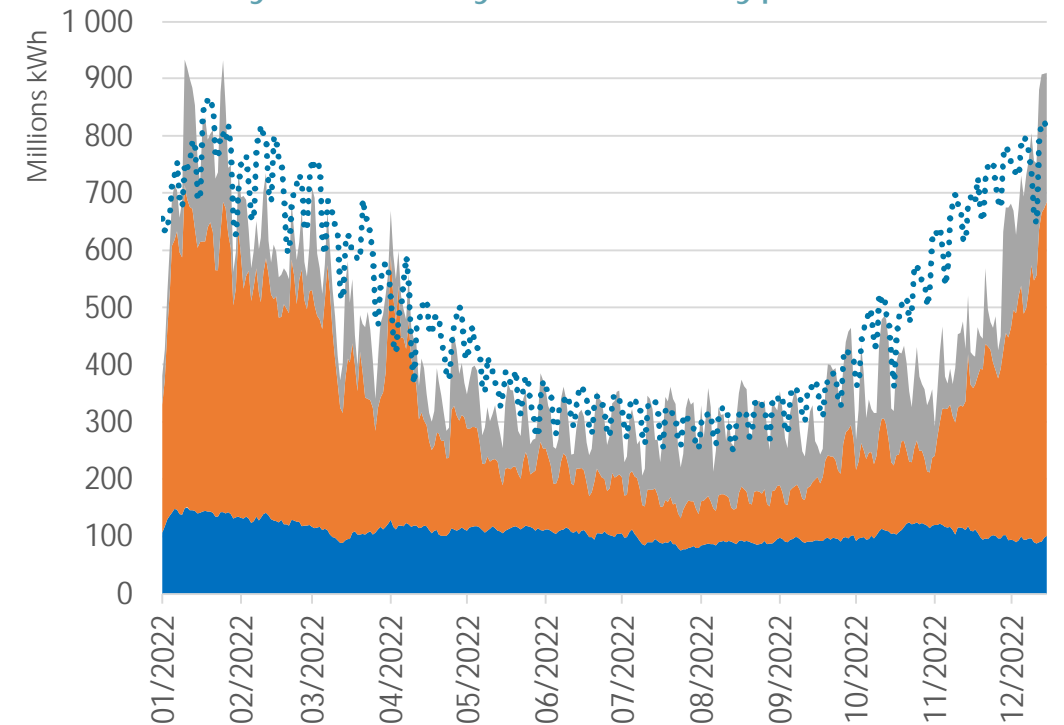
... partially offset by stronger offtakes for gas-fired electricity generation

- Natural gas offtake remains at the lower bound of its 2016-19 range since UA invasion (8 % lower than 2016-19 avg (! not t° adj.))
- During the summer, gas-fired electricity generation stayed high despite high gas prices in a European context with low FR nuclear generation, low hydropower and slow increase of coal-fired generation (Belgian electricity exports to France)
- Q4 2022: total offtake remains on average 22 % lower with a noticeable surge in offtakes by DSOs and power plants in response to freezing weather mid-December

Daily offtake by all customers

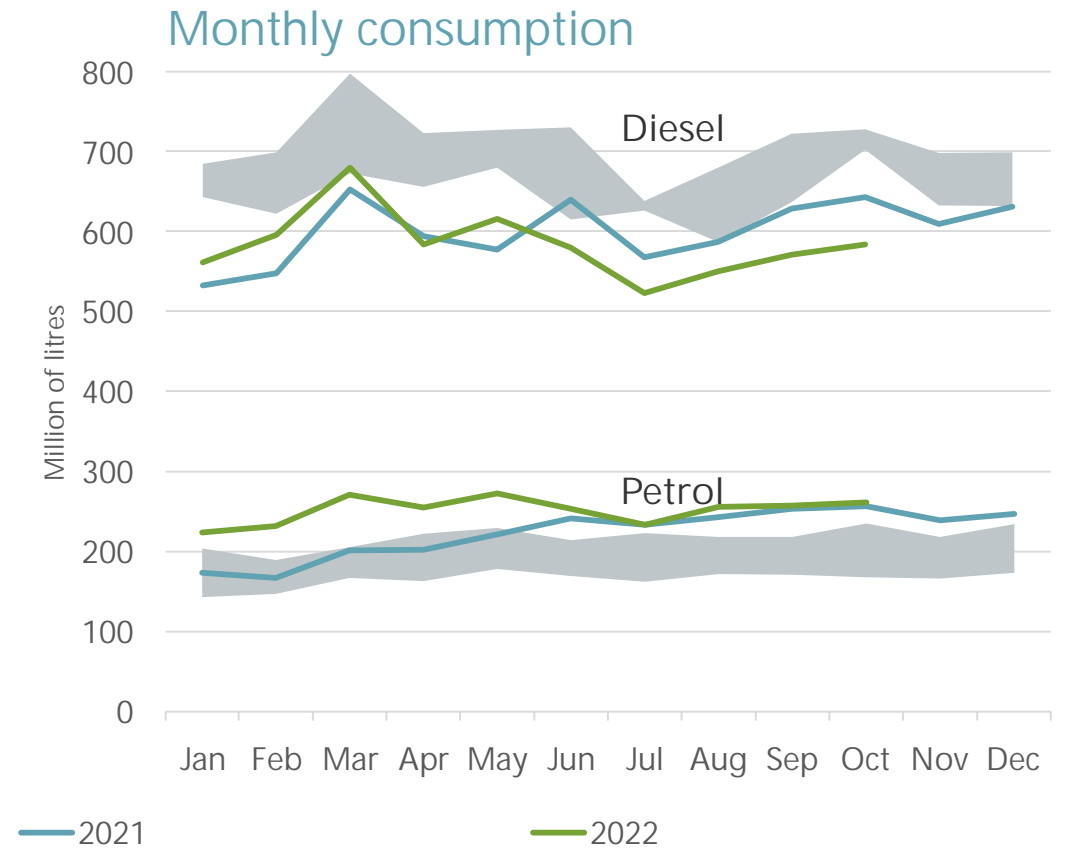
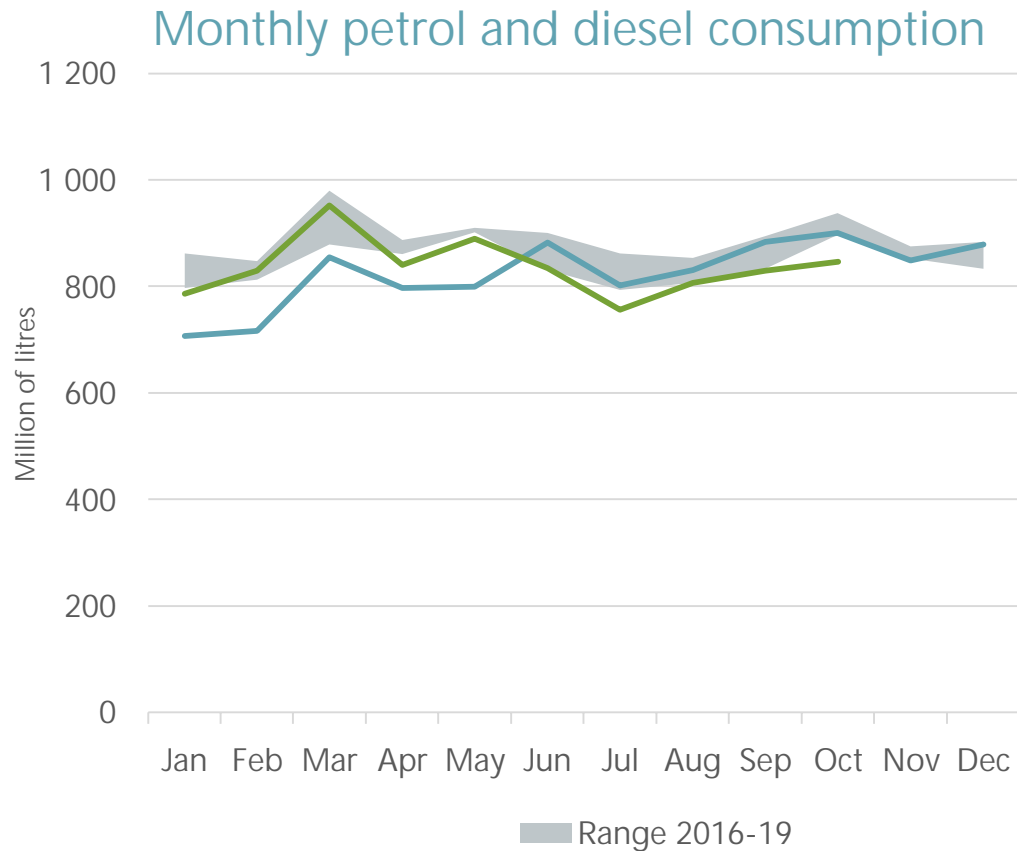


Daily offtake by customer type

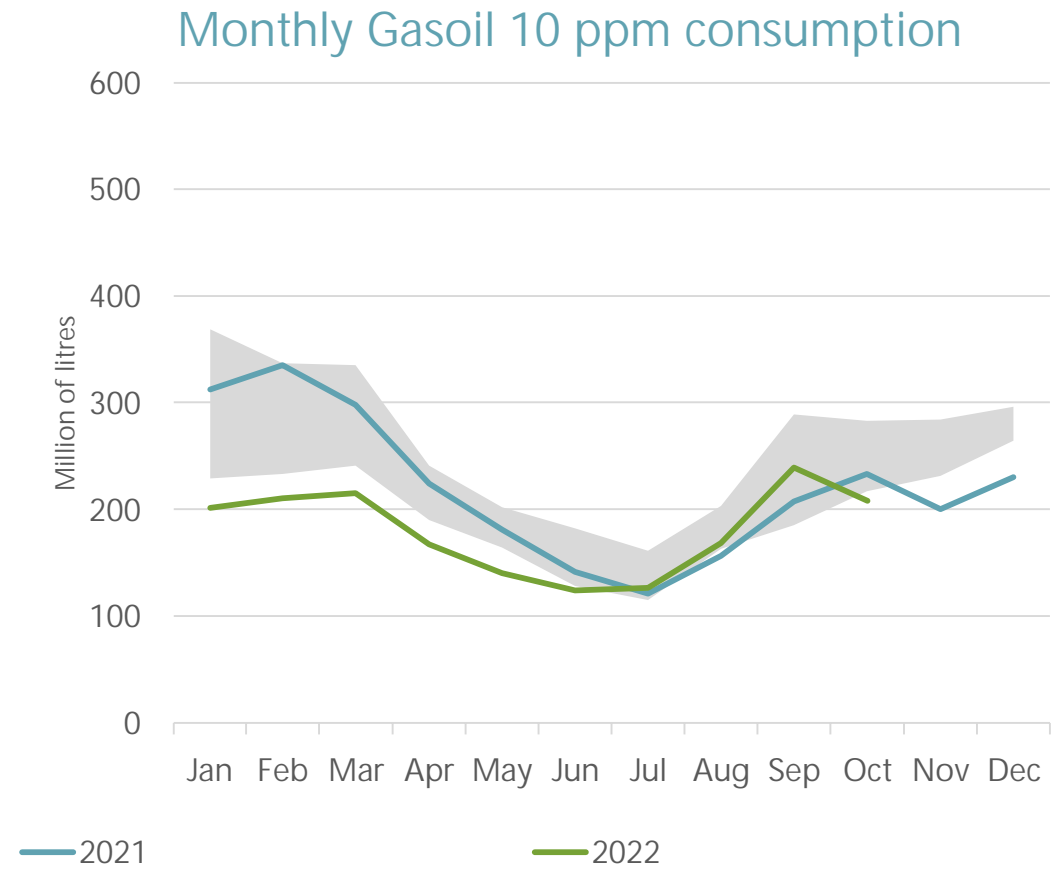
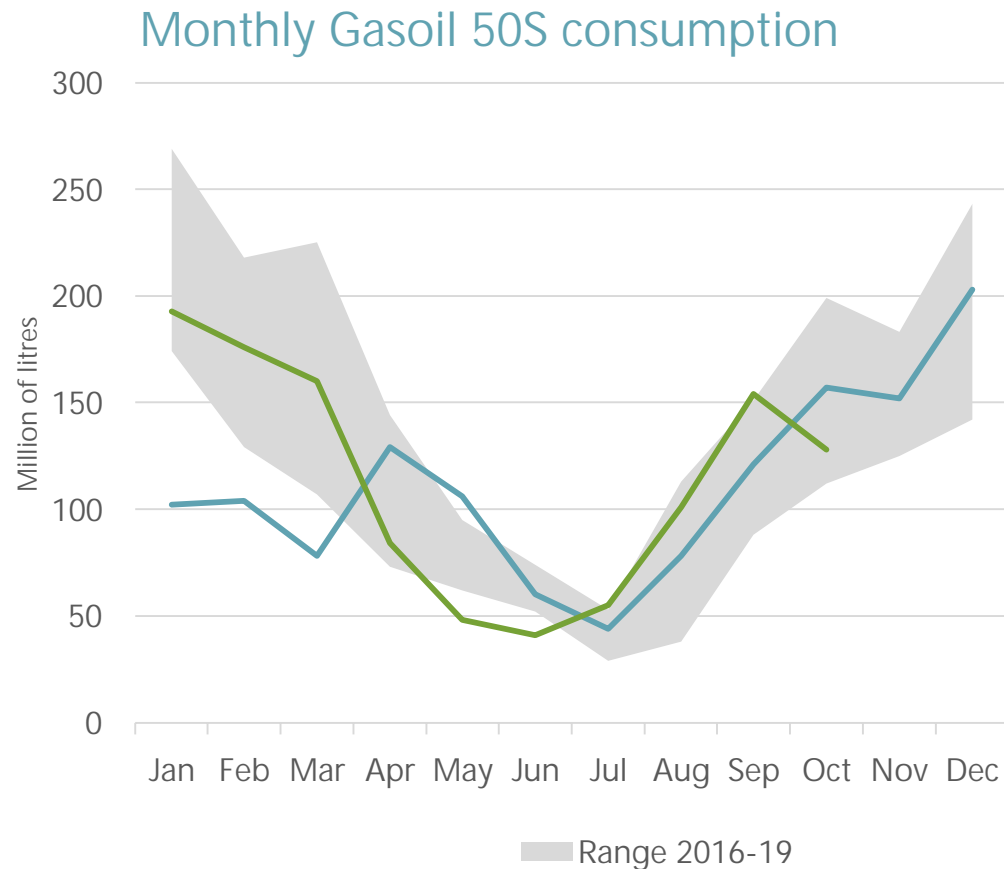


- Industrial customers
- Distribution network operators
- Power plants
- 2016-19 average

Monthly petrol and diesel consumption for road transport below the 2016-19 range due to a much lower use of diesel, while petrol use remains steady



Gasoil 50S "consumption"¹ for heating at the upper limit of the 2016-19 range while consumption of gasoil 10 ppm (includes other applications)² remains low



Source: FPS Economy (Energy administration).

¹ "Consumption" refers to the volumes of fuels released for consumption. The time of sale to final consumers and, even more so, of actual consumption is often later than the time of release for consumption (especially for gasoil used for heating).

² Gasoil 10 ppm for heating and other applications: for agricultural equipment, for temporary construction sites and for stationary engines in industry.

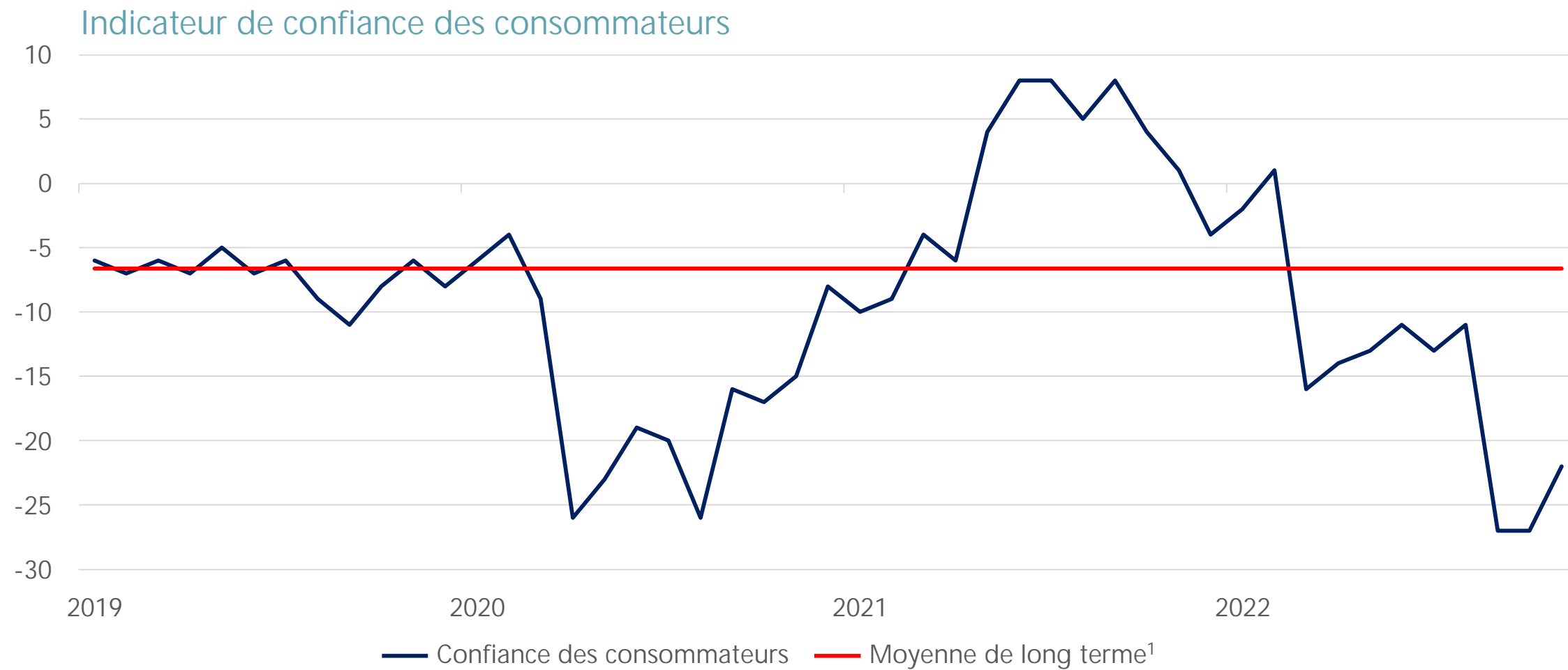


7. Households

Une incertitude importante pèse sur les ménages

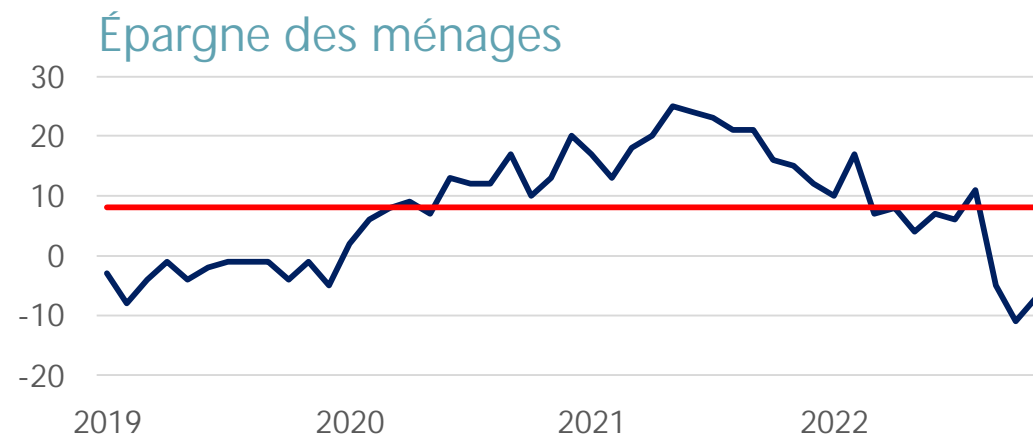
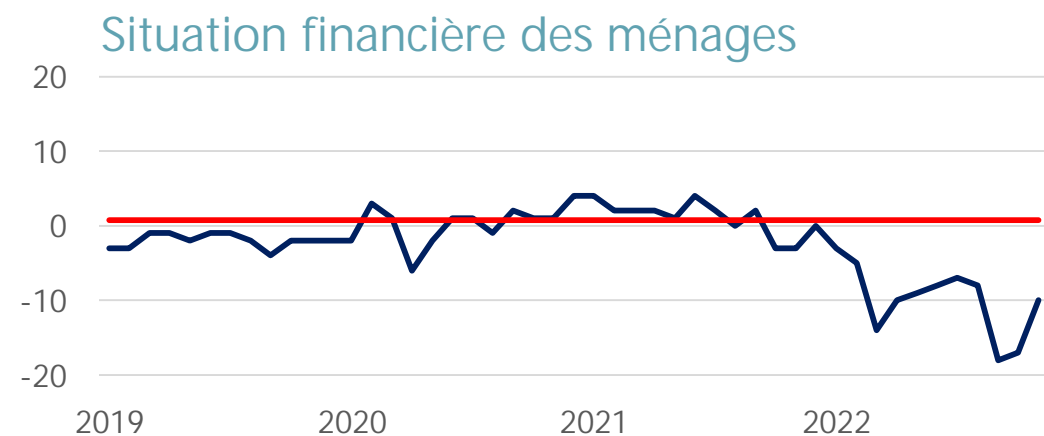
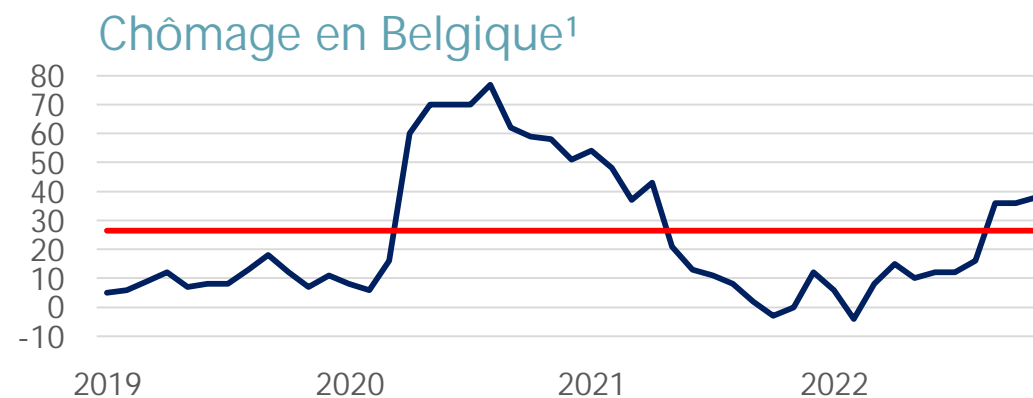
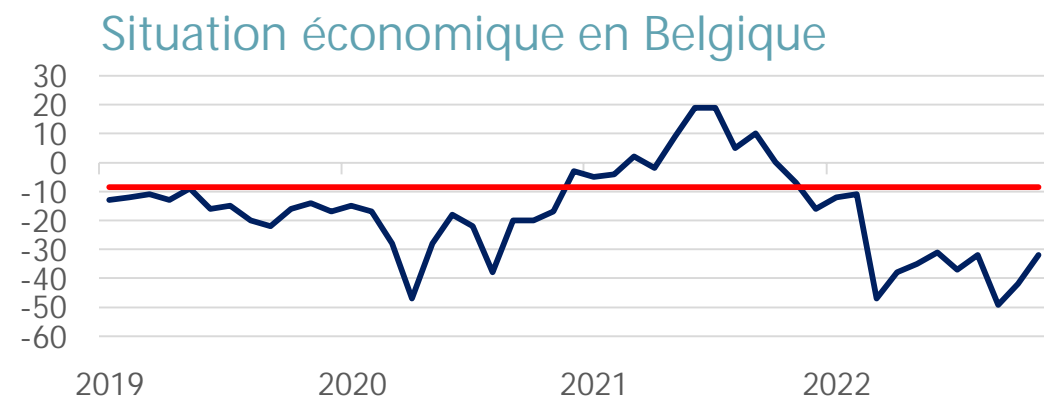
- Les ménages sont confrontés à des grandes incertitudes parmi lesquelles:
 - la hausse des prix (notamment énergétiques) qui pèse sur leur pouvoir d'achat
 - la guerre en Ukraine et ses répercussions économiques
- Celles-ci sont notamment matérialisées au travers de:
 - l'indice de confiance des consommateurs qui est sous son niveau de moyenne historique
 - la consommation des ménages qui est (au moins temporairement) freinée par la lente croissance du pouvoir d'achat (qui est toutefois mieux protégé que dans d'autres pays) mais soutenue par la baisse du taux d'épargne et le mécanisme d'indexation des salaires et des allocations sociales (qui compense mais avec retard)
- Tous les ménages ne subissent pas l'inflation selon la même ampleur:
 - à l'exception des bénéficiaires du tarif social, les ménages à plus bas revenus sont les plus touchés

Malgré sa remontée en novembre, l'indicateur de confiance reste à un niveau historiquement bas, reflétant le scepticisme qui prévaut parmi les ménages



Le regain de confiance des ménages en novembre s'explique par des attentes plus favorables quant à la situation économique et leur situation financière futures

Indicateur de confiance des consommateurs – novembre 2022



— Prévisions au cours des douze prochains mois

— Moyenne de long terme²

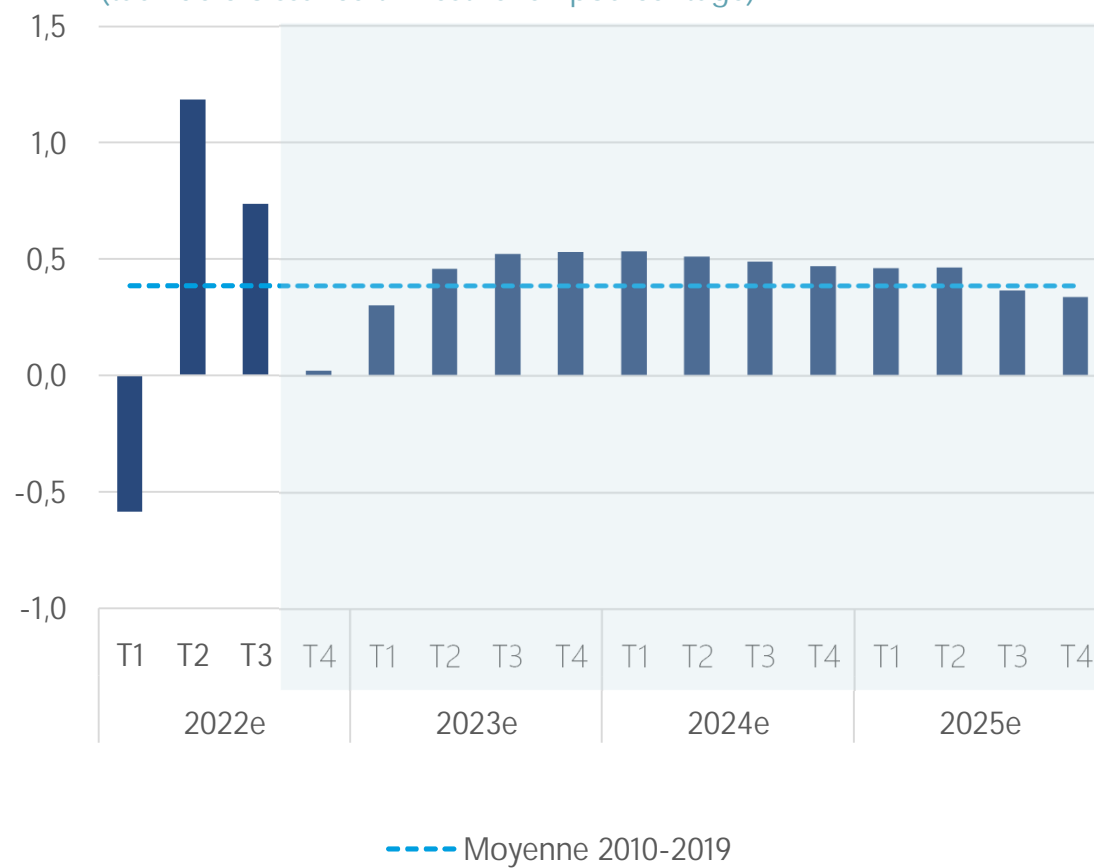
Source: BNB, dernières données disponibles: 22 novembre 2022.

¹ En ce qui concerne la question relative aux prévisions de chômage, une augmentation indique une évolution moins favorable tandis qu'une diminution indique une évolution plus favorable.

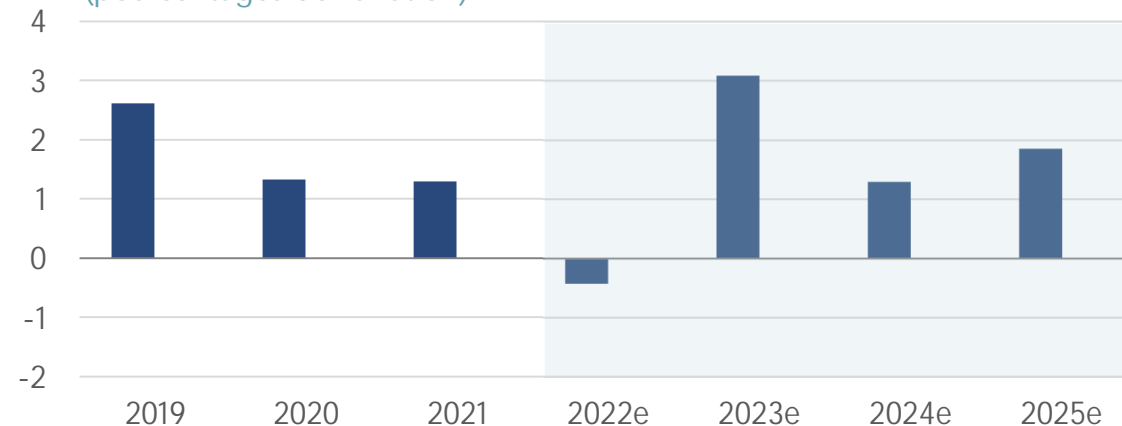
² La moyenne de long terme est calculée sur la période 1990-2021.

La consommation des ménages ne ralentirait que faiblement et temporairement et repartirait à la hausse en 2023 grâce à la nette progression du pouvoir d'achat

Consommation des ménages¹ (taux de croissance trimestriel en pourcentage)



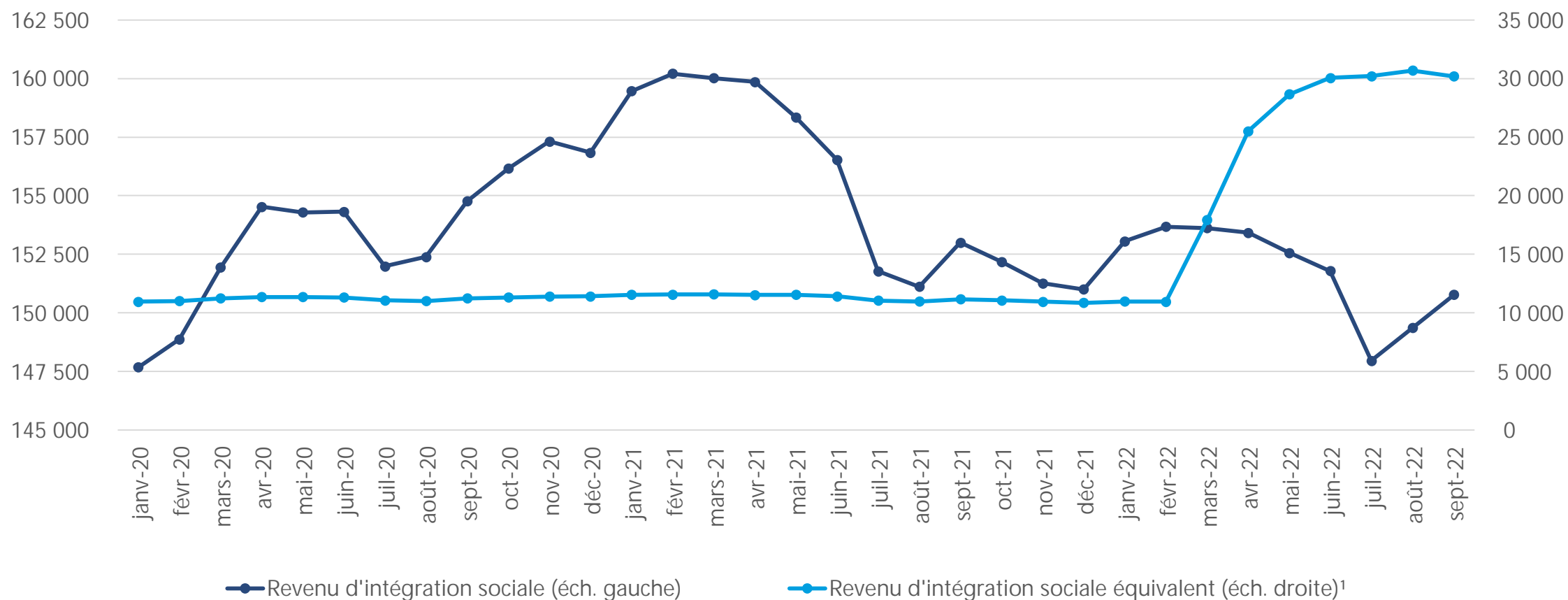
Pouvoir d'achat des ménages (pourcentages de variation)



Taux d'épargne des ménages (en pourcentage du revenu disponible brut)



Hausse des bénéficiaires de l'équivalent du revenu d'intégration sociale suite à l'arrivée des réfugiés ukrainiens



Source: WG SIC, à partir des données du SPP Intégration sociale et des enquêtes des CPAS (données provisoires à partir d'août 2022).

¹ À partir de mars 2022 hausse liée à l'octroi de l'équivalent du revenu d'intégration aux réfugiés ukrainiens qui bénéficient du régime de protection temporaire (données provisoires à partir de mars 2022).

8. Labour markets and wages



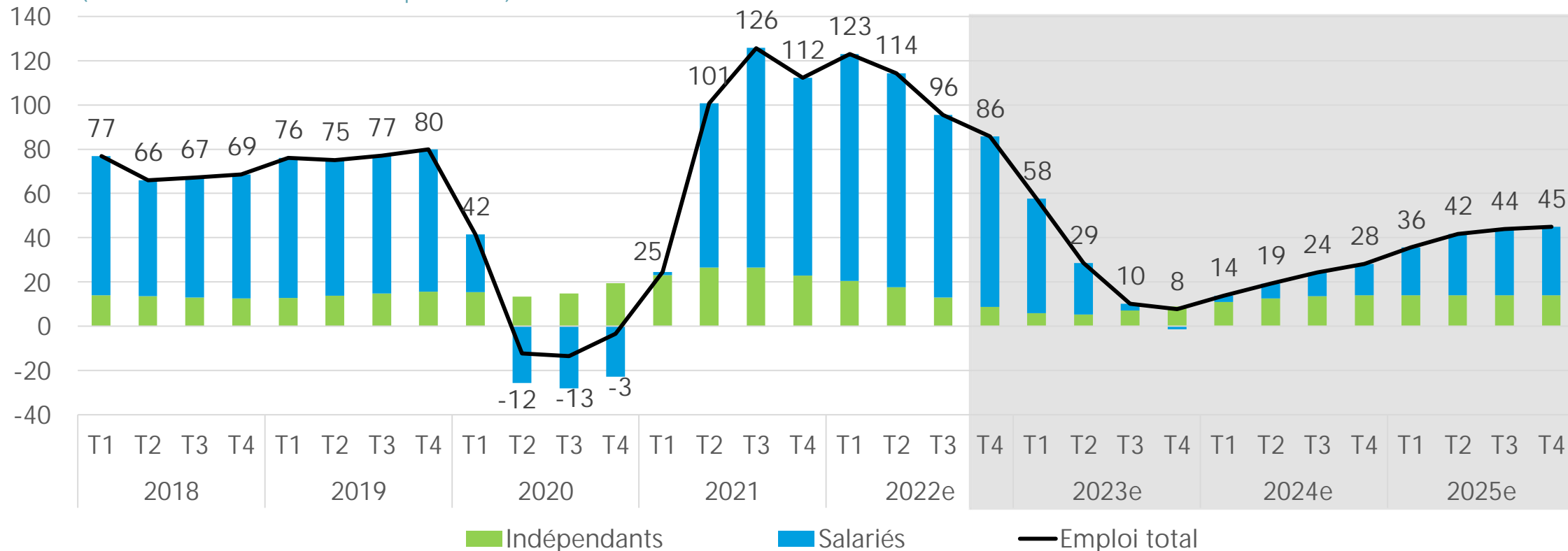
Marché du travail et salaires: les risques s'accumulent

- Les effets de la crise sanitaire sont en grande partie résorbés
 - L'emploi n'a jamais été aussi élevé
 - La plupart des branches d'activité font face à des pénuries de main-d'œuvre sans précédent
- On semble toutefois s'approcher d'un point de retournement
 - Indicateur avancé du dynamisme du marché du travail, l'intérim s'inscrit en recul
 - Le nombre de demandeurs d'emploi est reparti à la hausse depuis septembre
 - Selon les dernières projections (décembre 2022) de la BNB ce refroidissement se prolongerait en 2023 et 2024
- Via l'indexation, les salaires connaissent une hausse exceptionnelle par sa rapidité et son ampleur. Cela assure une relative protection du pouvoir d'achat mais crée un risque majeur pour la compétitivité des entreprises belges, dont les coûts salariaux augmenteront plus que chez les voisins en 2022 et 2023

Depuis son rebond en 2021, la croissance de l'emploi reste forte mais elle devrait progressivement ralentir jusqu'à la fin de 2023

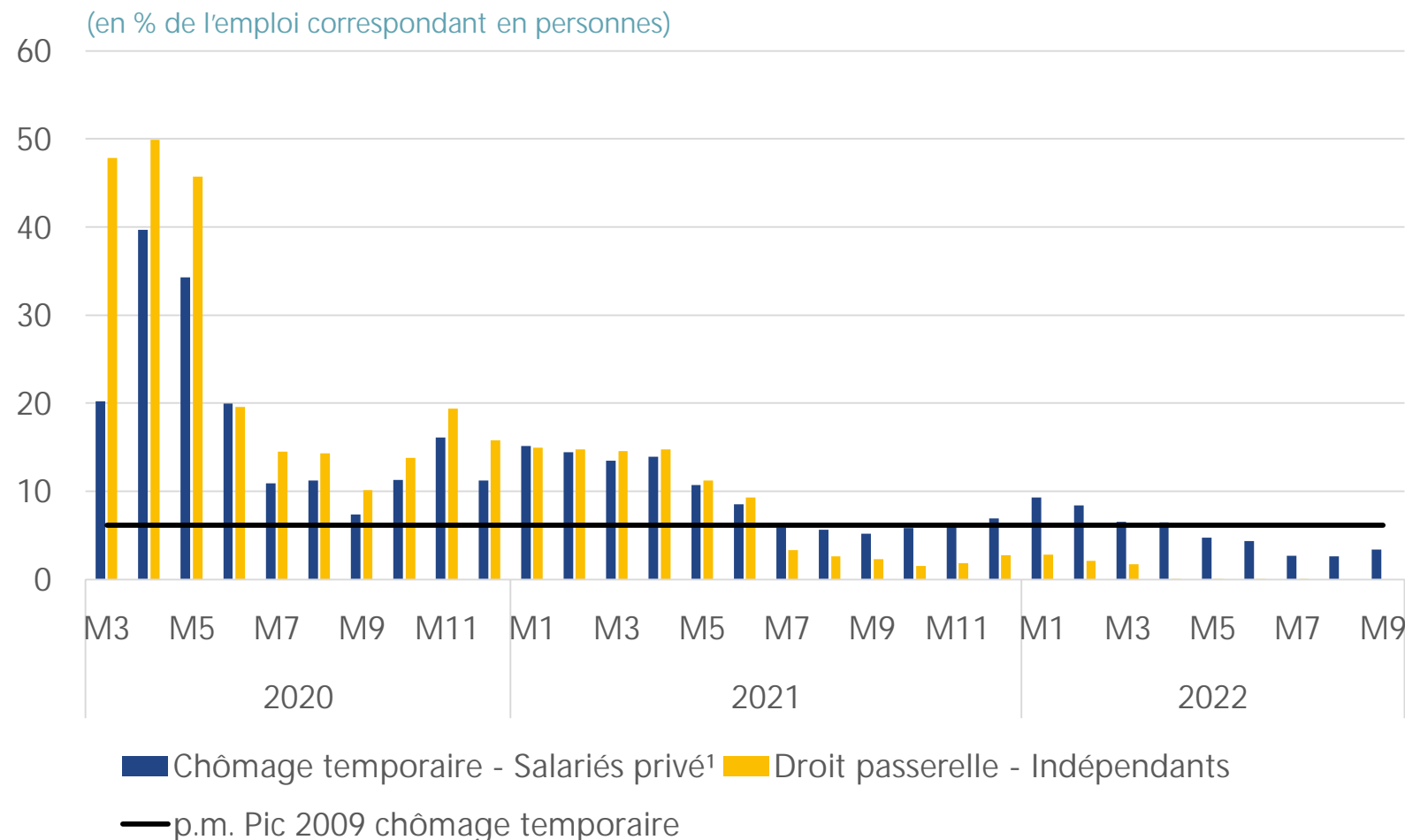
Evolution de l'emploi selon le statut professionnel

(variation annuelle en milliers de personnes)



Niveau record: 5 100 000 personnes en emploi en T3 2022!

Retour à la normale pour le chômage temporaire et le droit passerelle



Selon des chiffres provisoires, 142 000 travailleurs ont été au moins un jour en chômage temporaire en novembre, dont 19 000 sous le dispositif « énergie »²

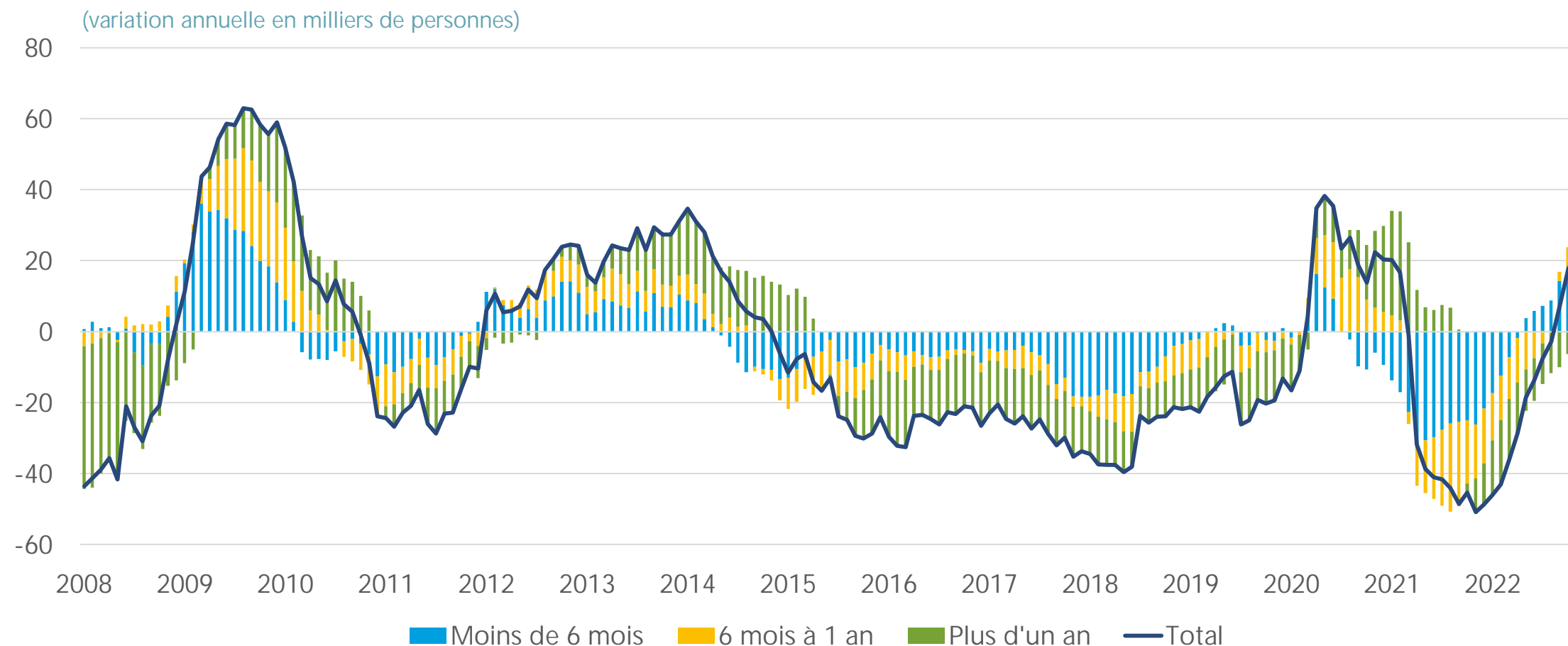
Pour mémoire, en mars 2020, 1 200 000 travailleurs avaient été placés en chômage temporaire « coronavirus »

Sources: ICN, INASTI, ONEM, SPF Sécurité Sociale (dernières données disponibles juillet 2022 pour le droit passerelle et septembre 2022 pour le chômage temporaire).

¹ La procédure souple en matière de chômage temporaire pour force majeure qui s'appliquait depuis mars 2020 a été arrêtée en juillet 2022.

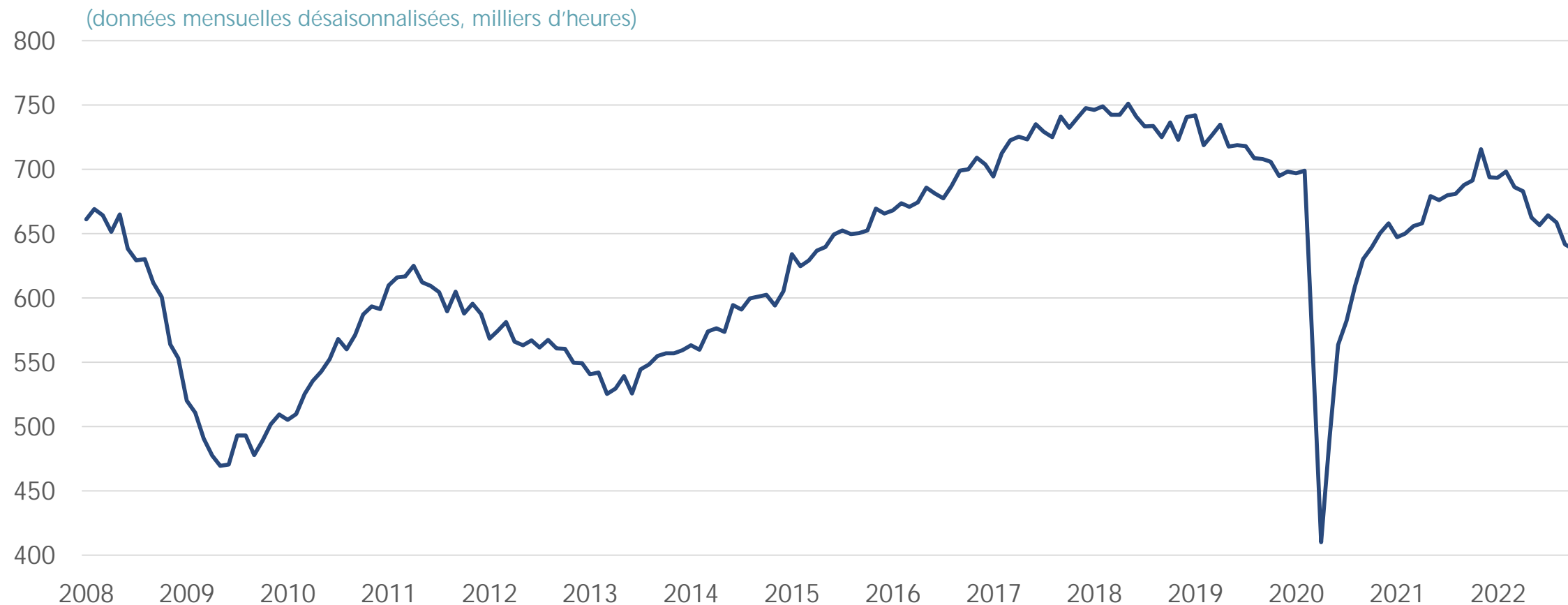
² Depuis le 1^{er} octobre 2022, une nouvelle formule pour la crise énergie a été mise en place.

Le nombre de demandeurs d'emploi est reparti à la hausse en septembre

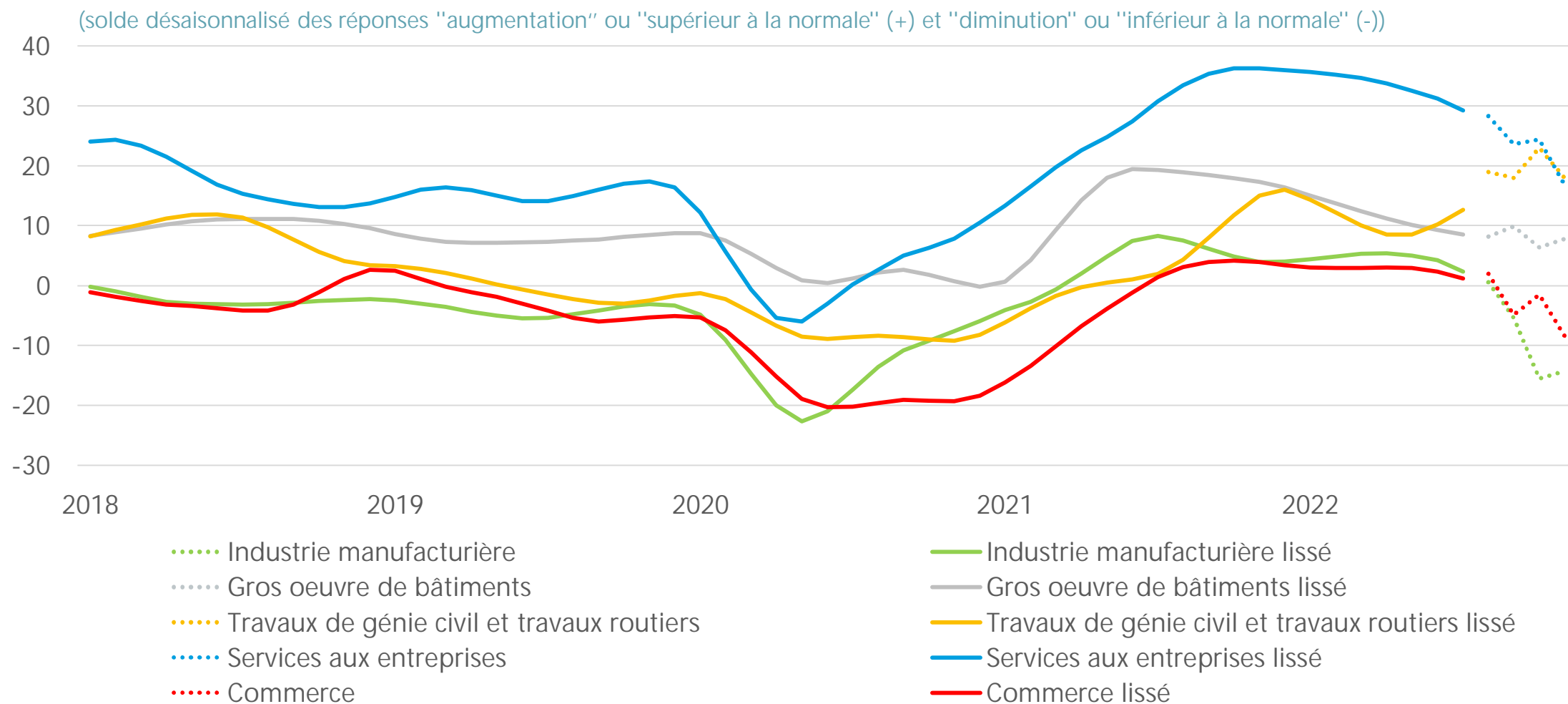


En novembre 2022, on comptait 459 000 demandeurs d'emploi inoccupés

Le travail intérimaire diminue depuis janvier

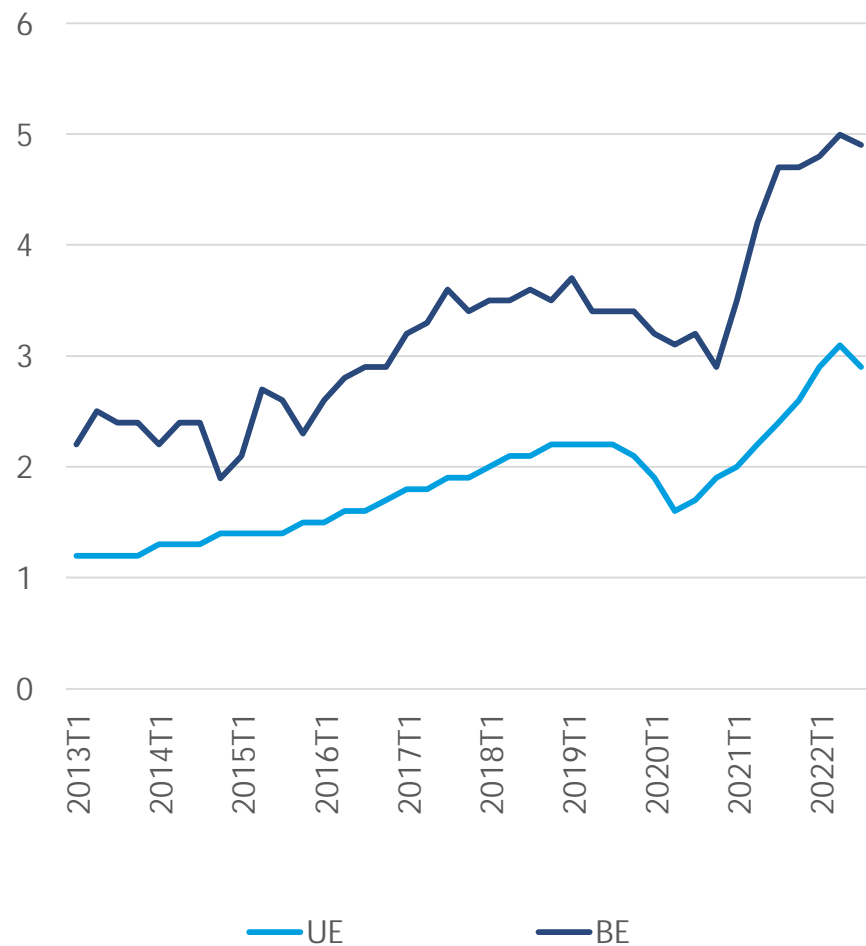


La plupart des secteurs rapportent un net fléchissement des prévisions d'emploi

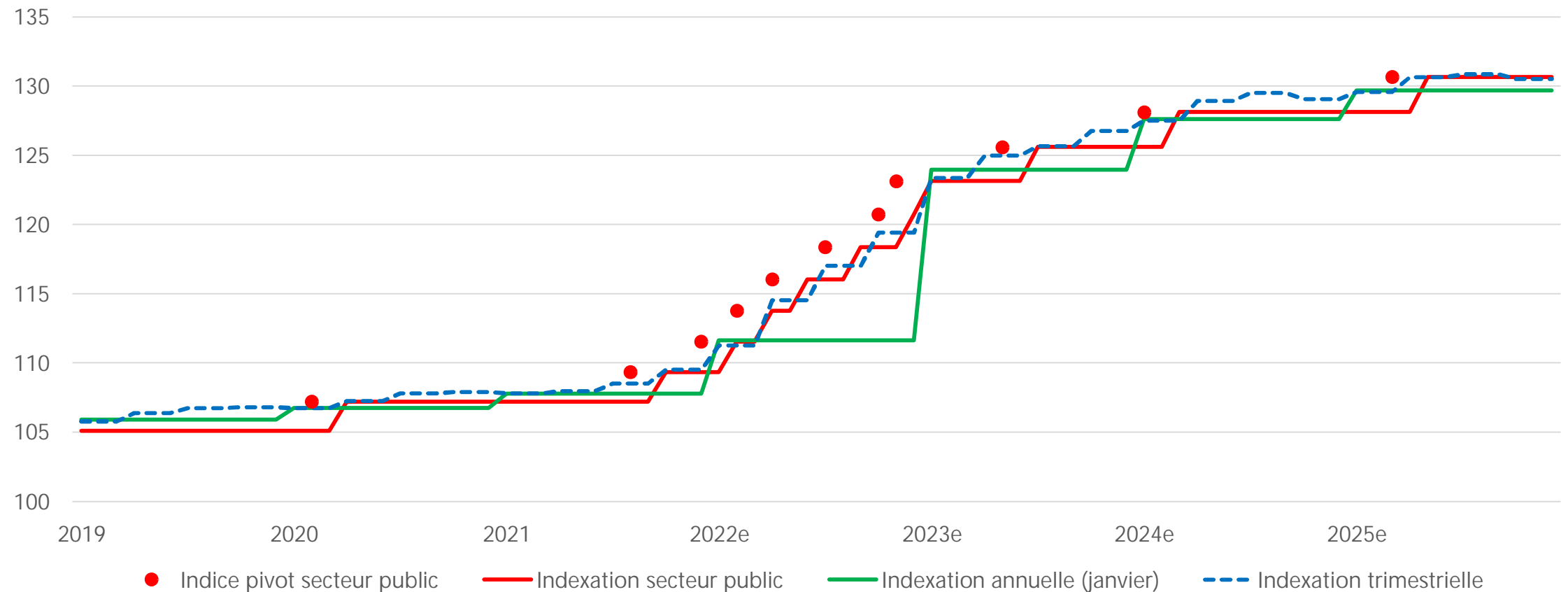


Infléchissement du taux de vacance d'emploi qui demeure historiquement élevé

(en pourcentage des emplois vacants et occupés)



Via l'indexation, l'inflation se transmet automatiquement aux salaires, mais de façon plus ou moins rapide selon les mécanismes propres aux commissions paritaires

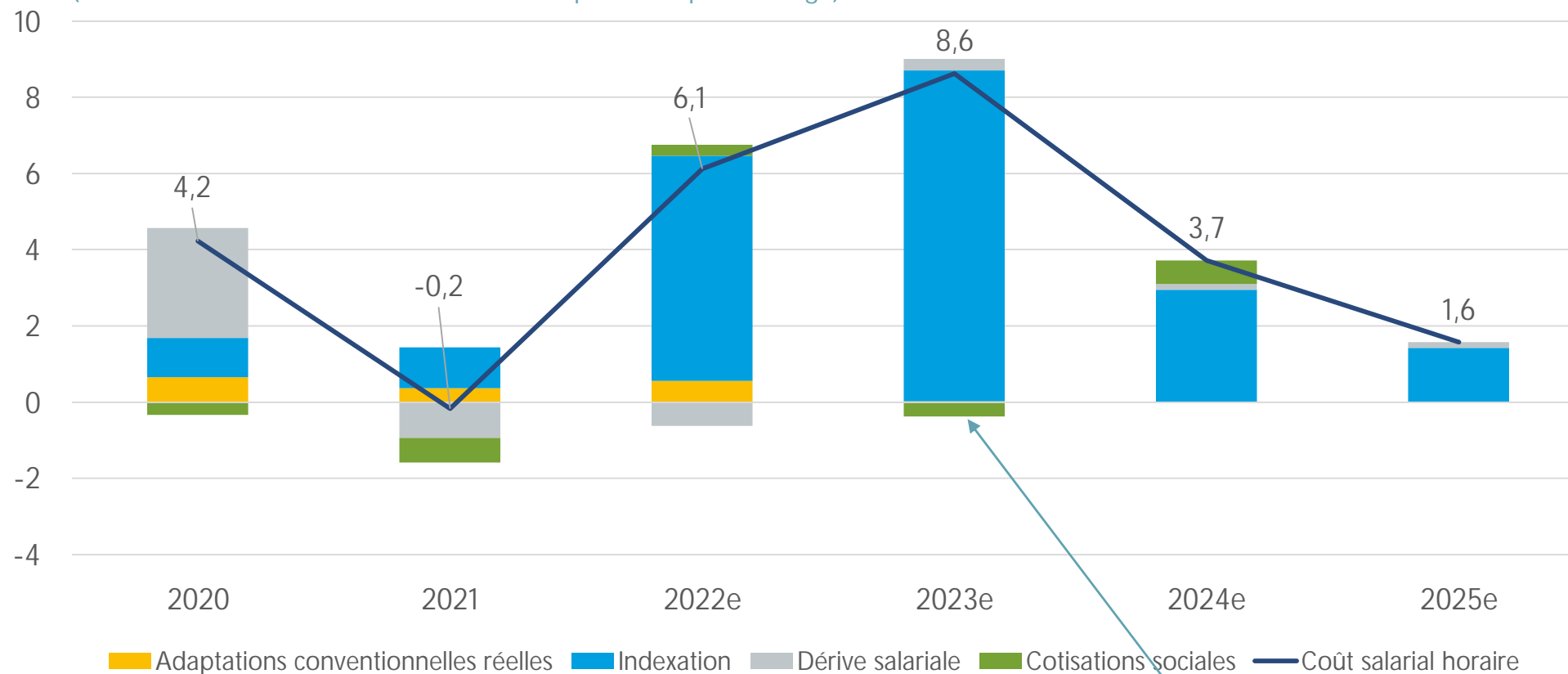


Automatische loonindexering beschermt de koopkracht maar voor meer dan één werknemer op drie gebeurt dat slechts één keer per jaar

Indexeringsmechanisme	% van het aantal werknemers ¹	Aantal werknemers ¹
<u>Spilindex</u>	48,2%	1 462 279
<u>Periodieke indexering</u>		
Eén keer per jaar	40,3%	1 222 182
Twee keer per jaar	2,5%	74 301
Elke vier maanden	0,3%	8 603
Elke drie maanden	5,6%	169 904
Elke twee maanden	1,6%	47 710
Iedere maand	0,6%	19 327

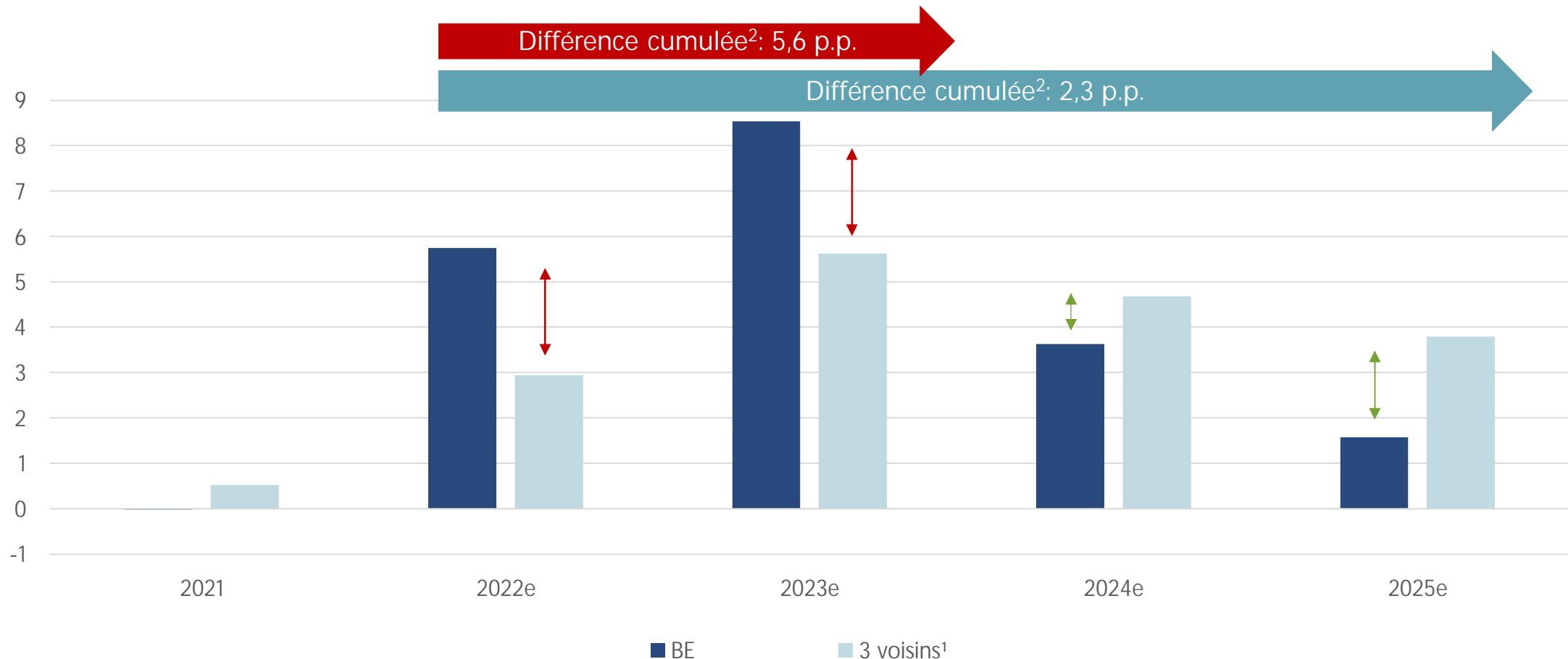
Les coûts salariaux bondissent en 2022 et 2023 du fait de l'indexation...

Coûts salariaux horaires dans le secteur privé
(croissance annuelle en %; contributions en points de pourcentage)



- 2023: croissance la plus élevée depuis 1996
- + 20 % sur une période de 4 ans (2022-2025)

... leur hausse plus rapide que chez les voisins en 2022 et 2023, réduit la compétitivité des entreprises belges



Sources: Eurosystem, ICN, BNB.

¹ Le graphique utilise le concept des comptes nationaux afin de pouvoir établir une comparaison entre les pays.

² Cela correspond à la différence cumulée entre la croissance des coûts salariaux en Belgique et la moyenne des trois pays voisins sur l'horizon de projection d'après la première série de projections des banques centrales nationales. Cela ne correspond pas au calcul officiel du CCE du handicap salarial.

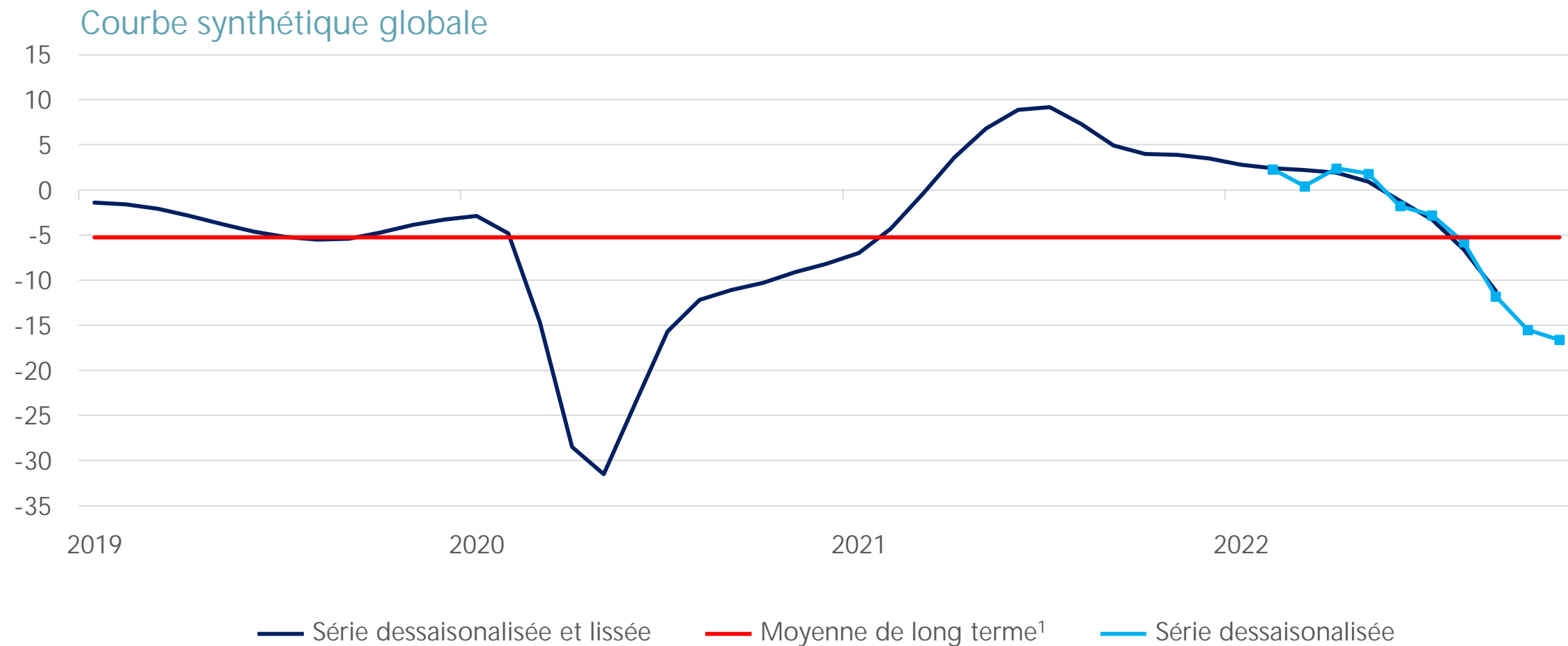


9. Firms

La situation économique pèse sur la confiance des chefs d'entreprise qui reste sous sa moyenne historique

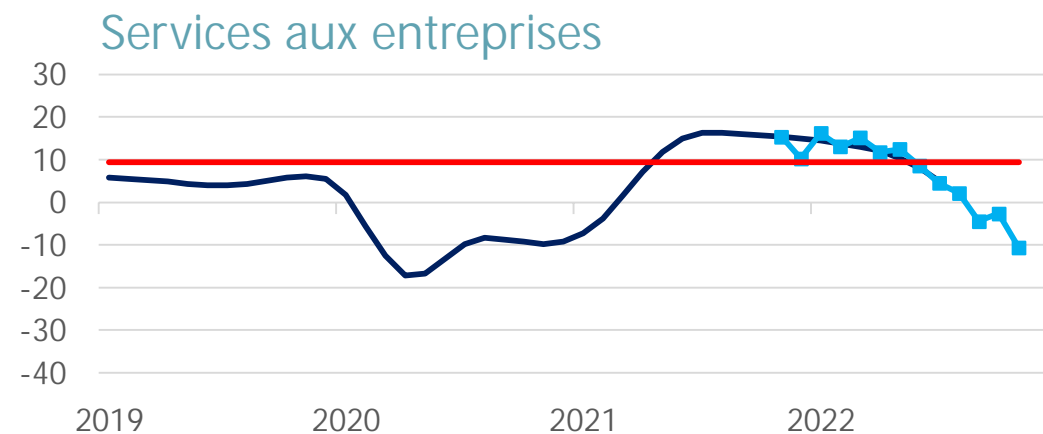
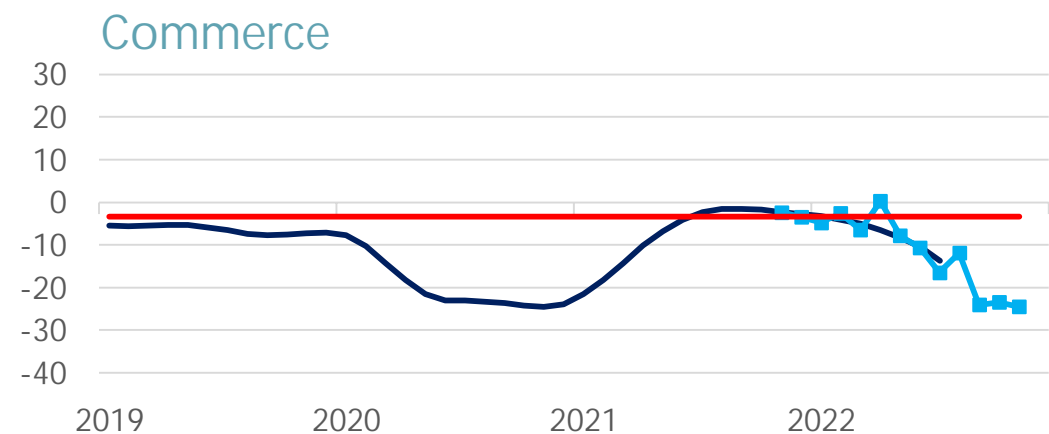
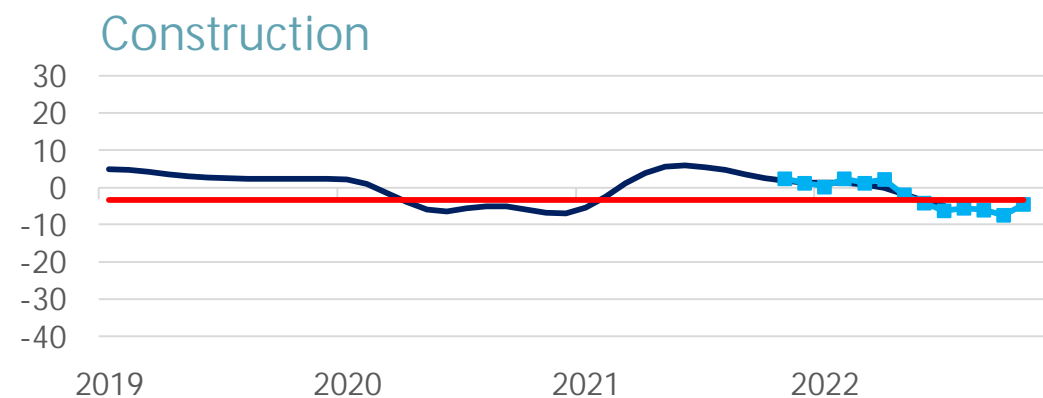
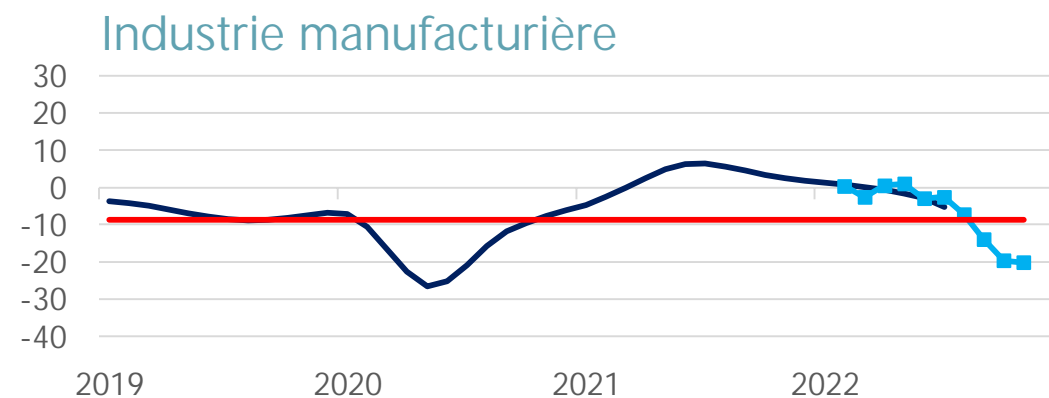
- La confiance des chefs d'entreprise reste en-dessous de sa moyenne historique en novembre, et ce dans l'ensemble des branches d'activité
- Les difficultés auxquelles les entreprises font face sont importantes avec notamment:
 - le coût des intrants qui a fortement augmenté (énergie, intrants alimentaires)
 - l'augmentation des coûts salariaux
- La hausse des prix de l'énergie et des salaires n'impacte pas toutes les entreprises de la même manière. Plus de détails dans l'étude de la BNB: [Les firmes et la hausse des prix énergétiques](#)

La confiance des chefs d'entreprise continue de baisser pour le septième mois d'affilée, fût-ce à un rythme un peu plus lent



Seul le secteur de la construction échappe au mouvement de baisse de confiance au mois de novembre et se rapproche de sa moyenne historique

Baromètre de conjoncture – Belgique: Branches d'activité – novembre 2022

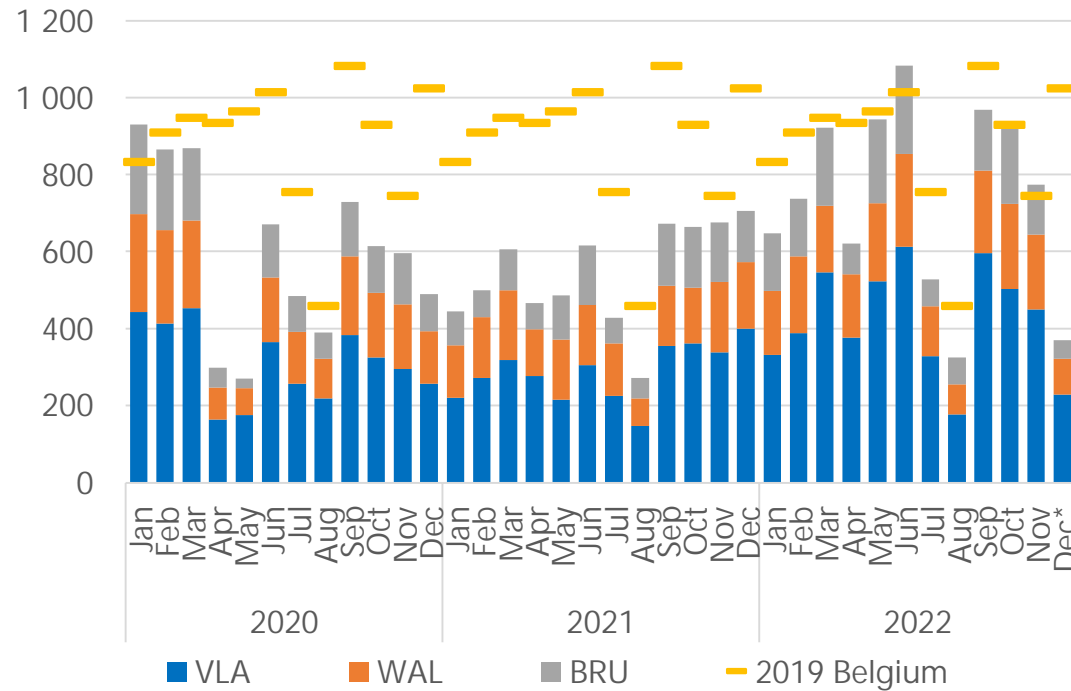


— Série dessaisonnalisée et lissée — Moyenne de long terme¹ -■- Série dessaisonnalisée

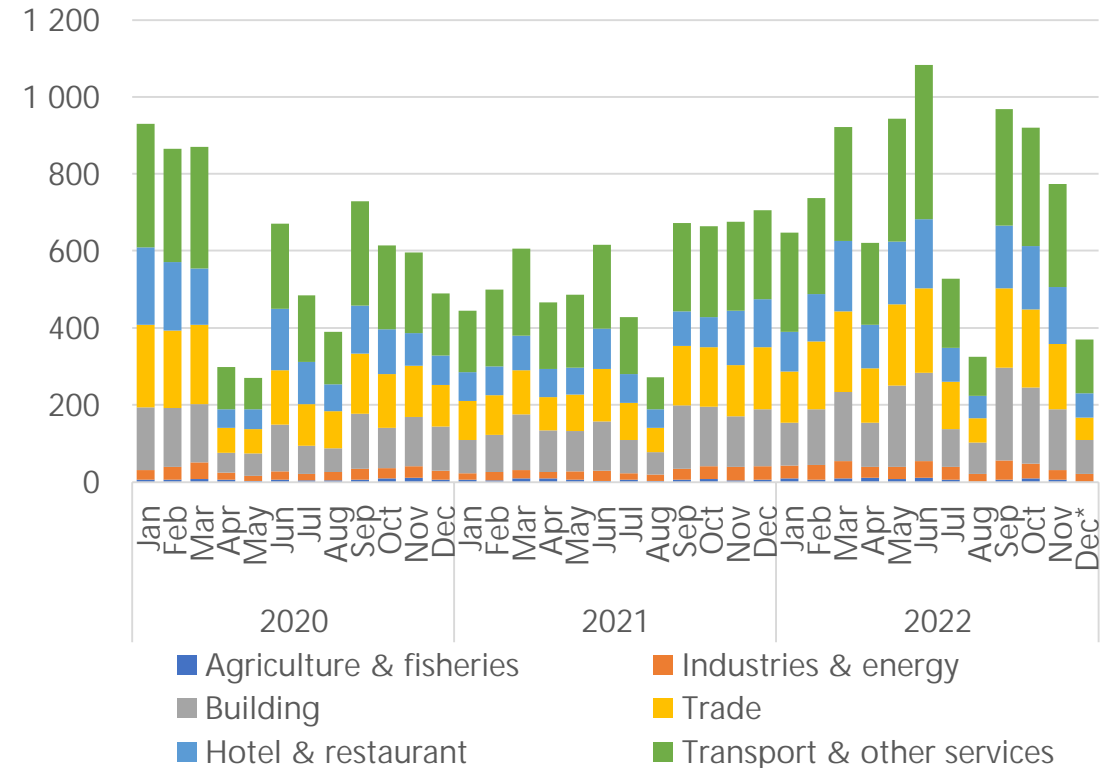
Number of bankruptcies again closer to the pre-COVID levels

Number of bankruptcies¹

By region



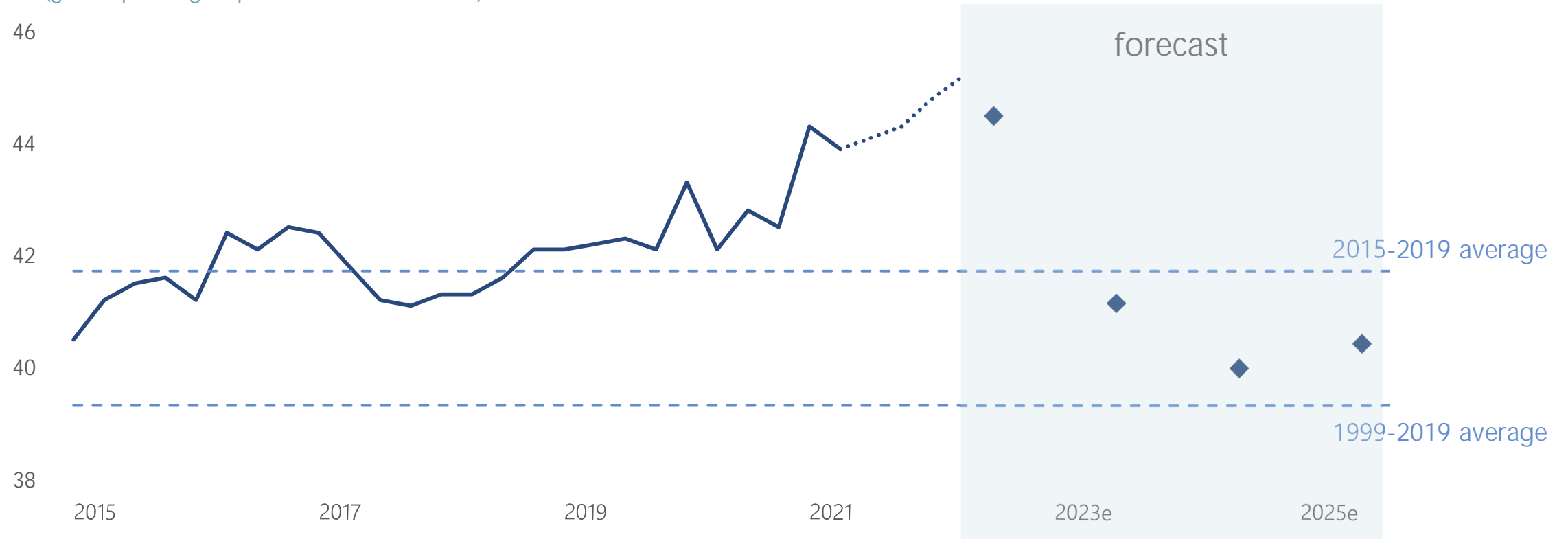
By sector



At the macroeconomic level, firms' gross margin has increased over the past years and is expected to stay above its long-term average ...

Gross margin of non-financial corporations

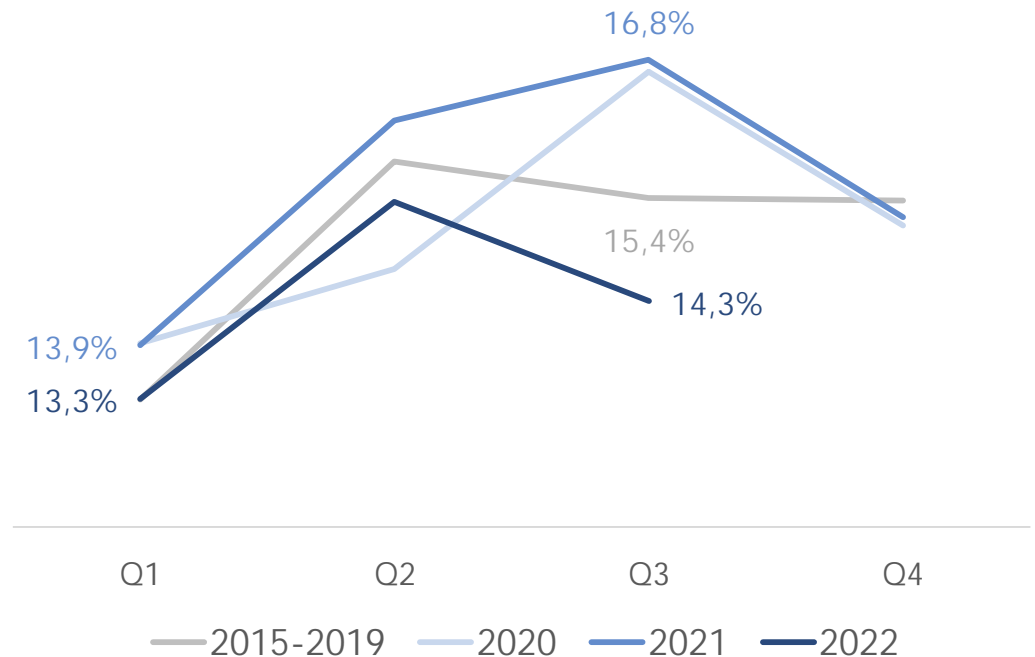
(gross operating surplus as % of added value)



... but a disaggregated analysis shows that 2022 margins for the median firm are relatively weak

- Macroeconomic data are influenced by a small number of very large firms → there are significant differences between companies and sectors and the macroeconomic situation is not necessarily representative of many companies.
- Analysis of median firm margins at a disaggregated sector level shows that in many sectors the median company's margin started to drop during the first three quarters of 2022 and is now below the 2015-2019 average.
- Overall, the decline is more pronounced in manufacturing than in services.

Median simplified gross margin
(% of sales)



10. Financial sector

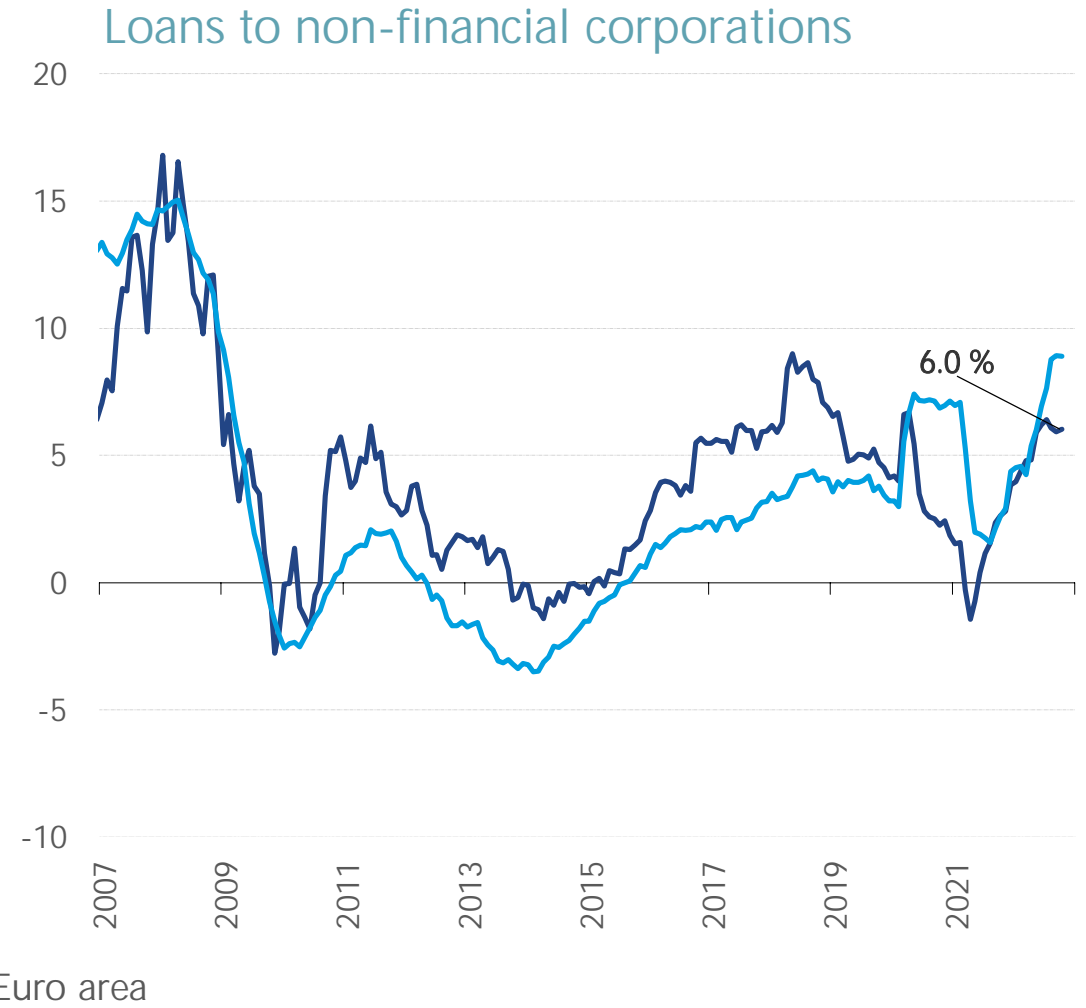
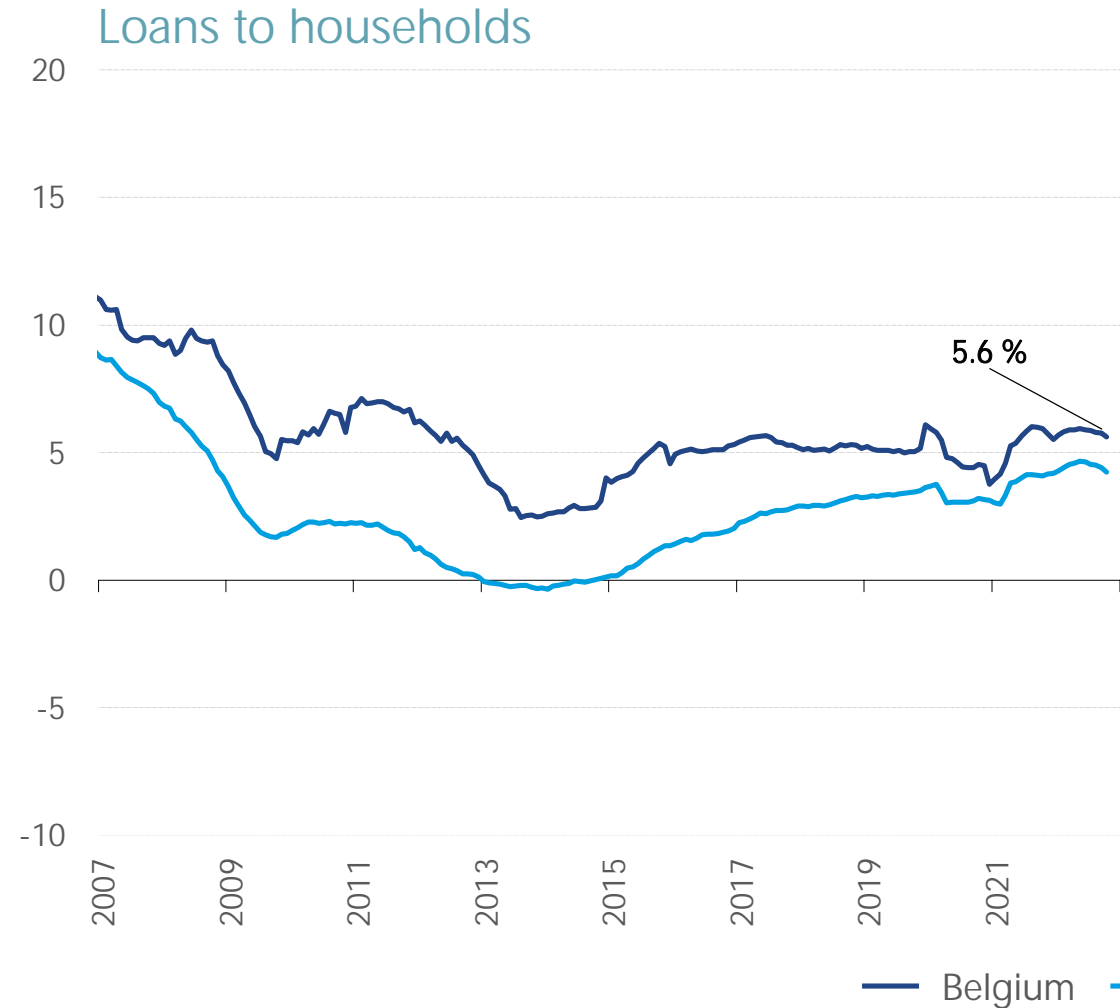


Evaluatie van de risico's voor financiële stabiliteit

- De Belgische financiële sector heeft een zeer beperkte blootstelling aan ...
 - tegenpartijen uit Rusland, Oekraïne en Wit-Rusland
 - energie- en grondstofderivaten (*sterke toename van margin calls*)
- ... en beschikt over ruime kapitaal- en liquiditeitsbuffers om schokken op te vangen
- Eventuele tweederonde-effecten kunnen wel materieel zijn:
 - Verhoogd kredietrisico verbonden aan leningen aan bedrijven en huishoudens met een beperkte financiële buffer om hogere energie- en grondstofprijzen of hogere kosten in het algemeen op te vangen
 - De Belgische banken hebben voor meer dan € 25 miljard leningen verstrekt aan energie-intensieve bedrijven (waarvoor energie meer dan 5 % van de intermediaire consumptie vertegenwoordigt, exclusief loonkosten)
 - Verhoogde volatiliteit en prijscorrecties op financiële markten als gevolg van toenemende risico-aversie en verkrapping van de financiële voorwaarden door stijgende rentevoeten
 - Materialisatie van risico's die eerder werden opgebouwd in de residentiële vastgoedmarkt
 - In dat geval kan de macroprudentiële kapitaalbuffer in de banksector vrijgegeven worden (€ 2 miljard) om banken te helpen de verliezen te absorberen en oplossingen te financieren voor klanten met onoverbrugbare terugbetalingsproblemen.
 - Die verhoogde risico's kunnen leiden tot strengere kredietvoorwaarden en hogere risicopremies in de rentarieven op nieuwe leningen
 - Afgezien van de stijging van de rentevoeten op langetermijnleningen zien we deze effecten echter nog niet in de volumes op de kredietmarkt (behoud dynamische kredietverlening)

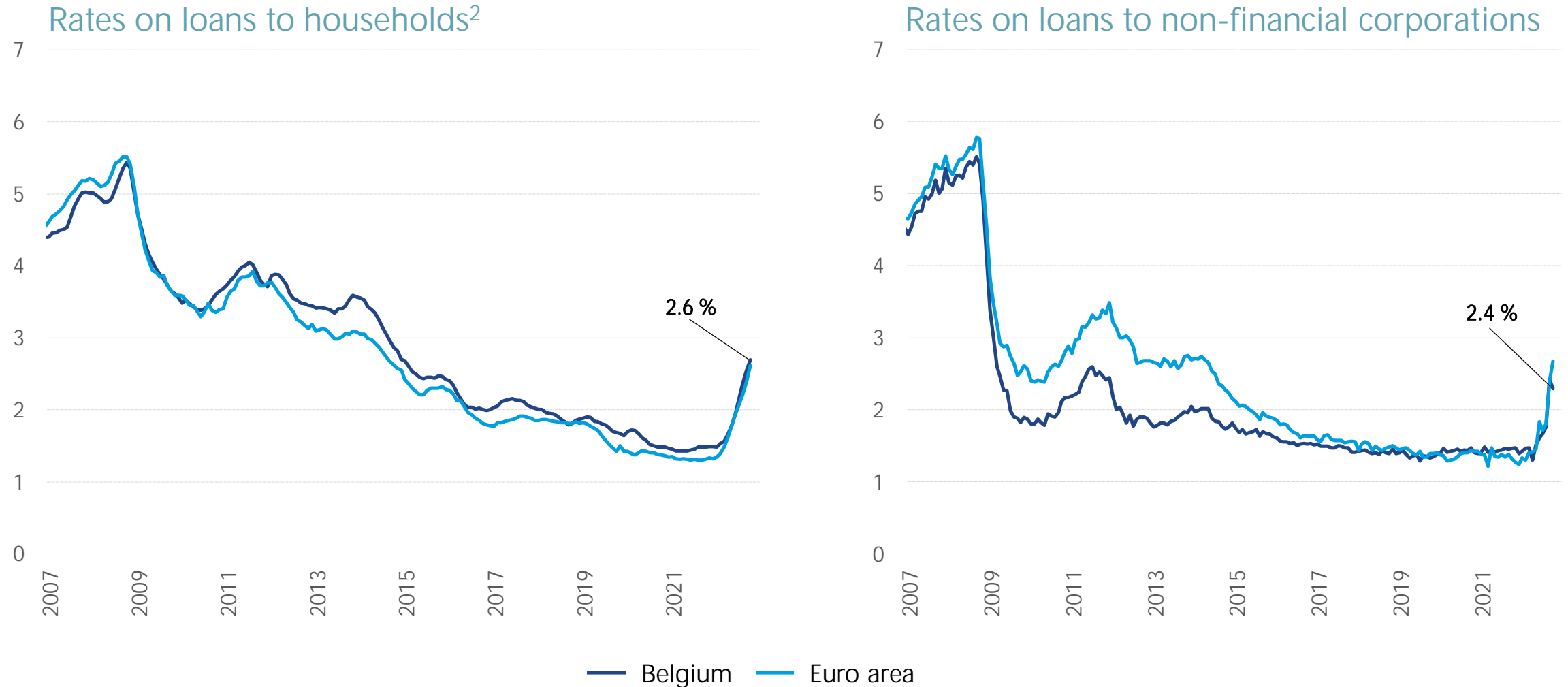
Bank loans to non-financial corporations still growing strongly

(year-on-year % changes¹, up to October 2022)



Rise in interest rates since the beginning of 2022

(weighted averages in %¹, up to October 2022)



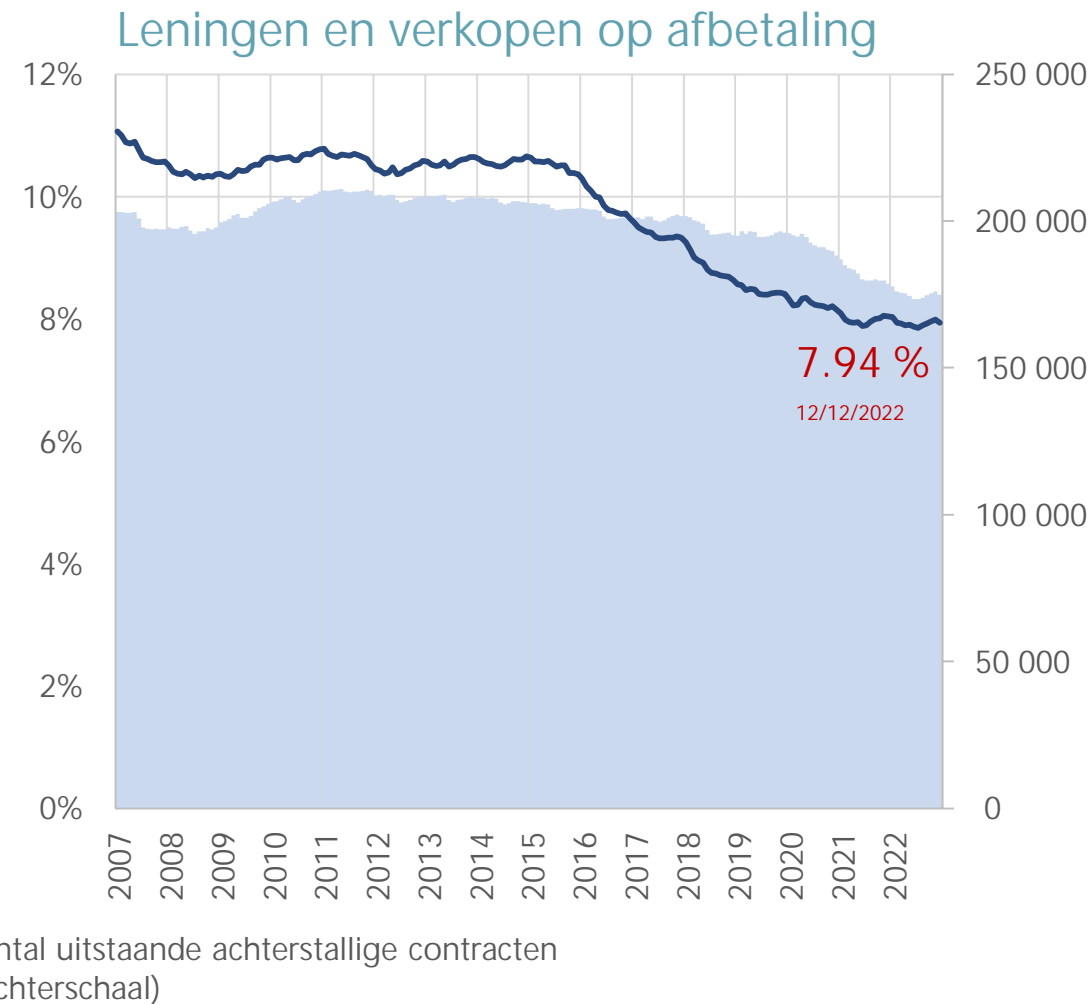
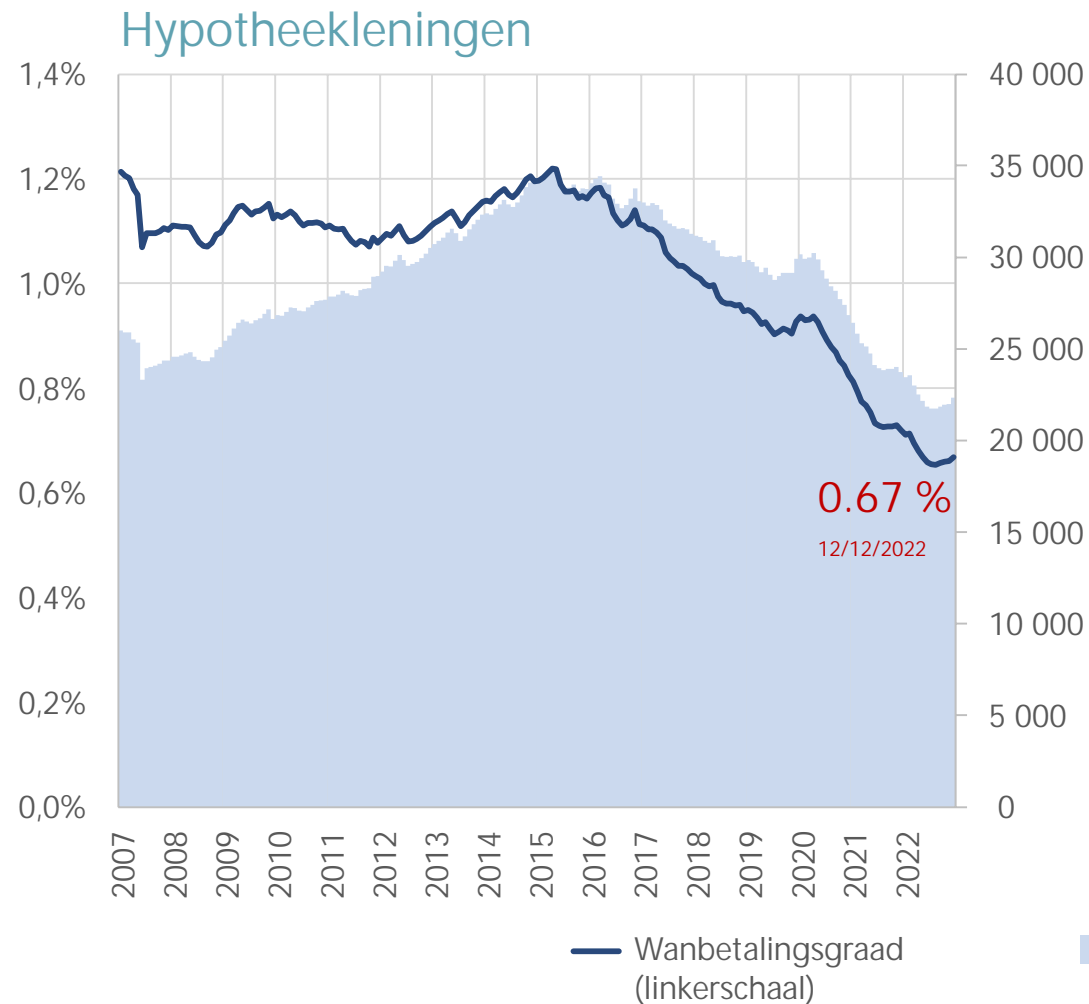
Sources: ECB (MFI Interest Rates Statistics).

¹ Loans granted by resident MFIs to residents, excluding revolving loans and overdrafts, convenience and extended credit card debt (new business).

² Loans for house purchases.

Wanbetalingsgraad van leningen aan huishoudens op historisch laag niveau

(aantal uitstaande achterstallige contracten in % van alle uitstaande contracten)





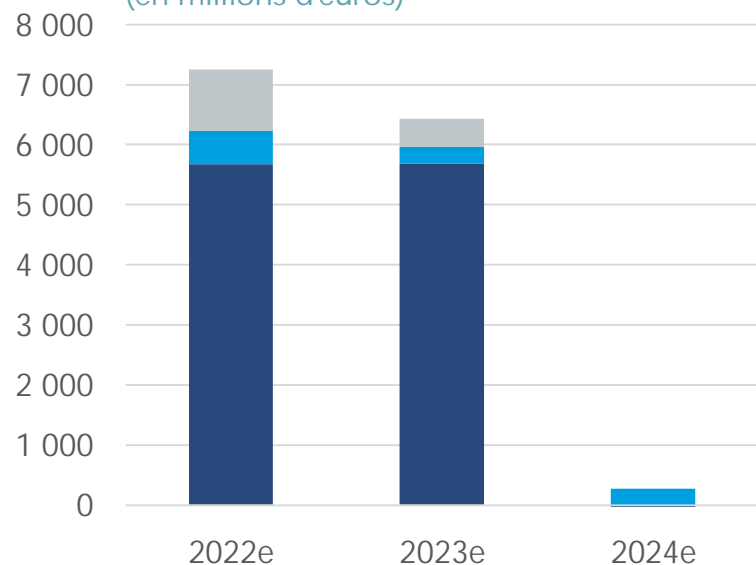
11. Government

De energie- en Oekraïne-crisis zetten de overheidsfinanciën verder onder druk

- Met een persistent hoog begrotingstekort en een opwaartse schulddynamiek waren de Belgische overheidsfinanciën reeds vóór de energie- en Oekraïne-crisis verzwakt
- De marge voor koopkracht-compenserende maatregelen is beperkt. Deze maatregelen worden best enkel gericht op de hardst getroffen gezinnen en zonder het prijssignaal te verstoren
- Momenteel is het grootste deel van de koopkracht-compenserende maatregelen echter gericht op een verlaging van de energieprijis voor een extra eenheid energieconsumptie
- Op korte termijn heeft de hoge (binnenlandse) inflatie een gunstige impact op de schuldgraad dankzij het noemer-effect (een hoger nominaal bbp)
- Op middellange termijn zal de schuldgraad echter toenemen door een groter begrotingstekort en de stijgende rente

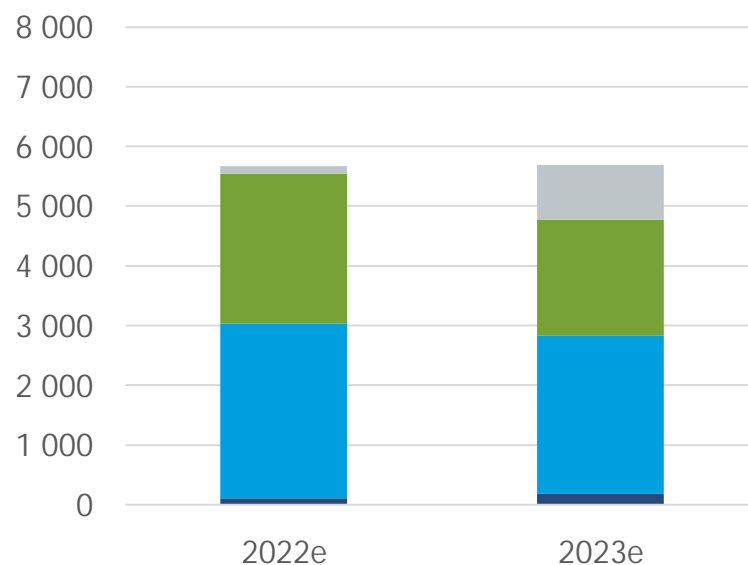
La crise énergétique et la guerre en Ukraine exercent une pression supplémentaire sur les finances publiques en Belgique

Mesures temporaires liées à la crise énergétique et à la guerre en Ukraine (en millions d'euros)



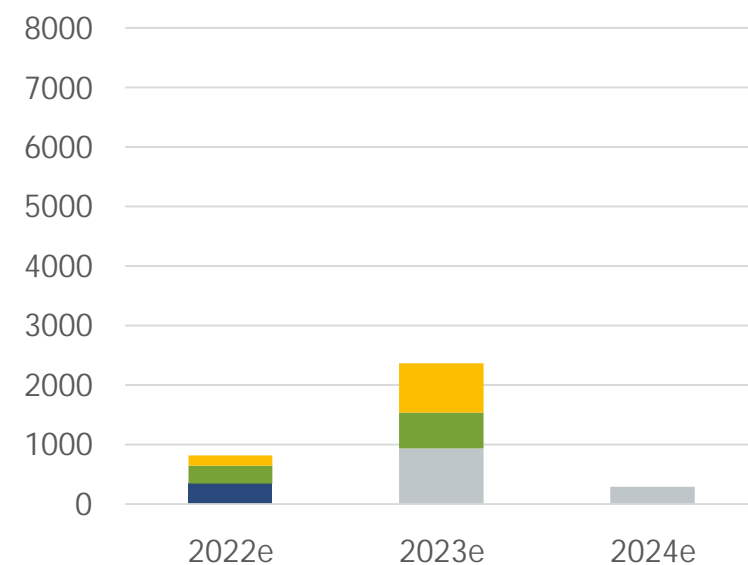
- Energie
- Ukraine - Défense
- Ukraine - Autre

Mesures temporaires liées à la crise énergétique (en millions d'euros)



- Mitiger le coût de l'énergie: soutien aux entreprises
- Mitiger le coût de l'énergie: taxation indirecte
- Mitiger le coût de l'énergie: soutien aux ménages
- Encourager la transition énergétique

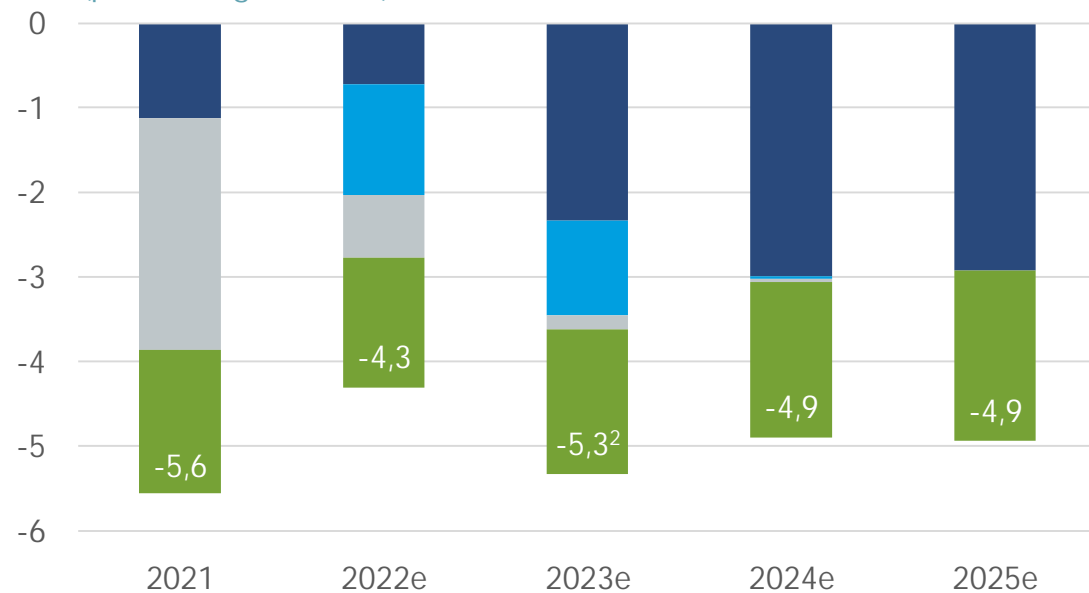
Financement des mesures liées à la crise énergétique (en millions d'euros)



- Taxe sur les surprofits
- Contribution de Fluxys et du secteur pétrolier
- Augmentation de la contribution de répartition
- Autre

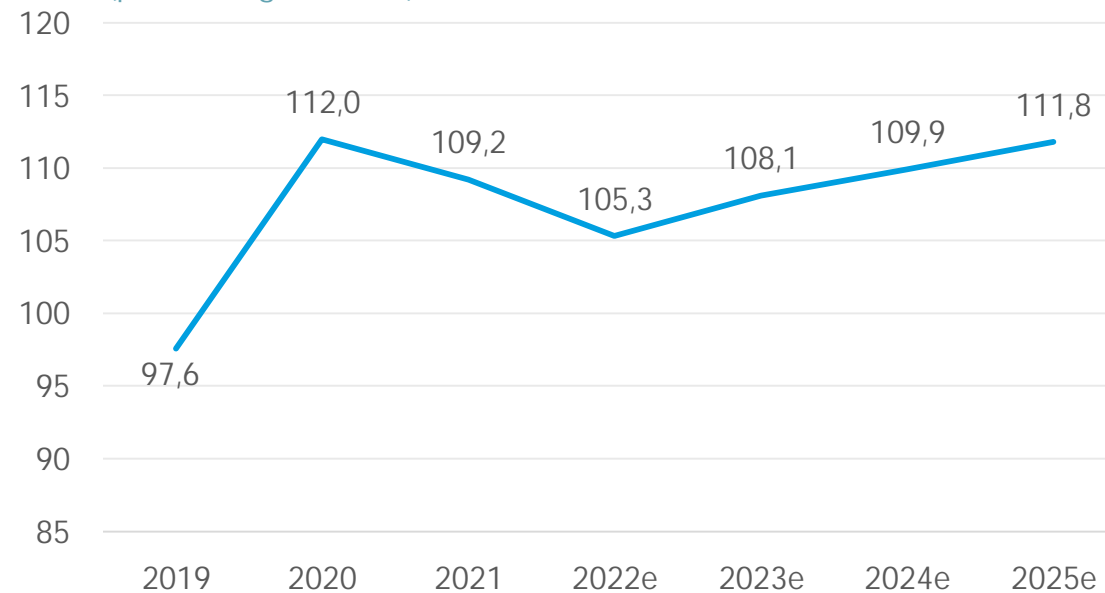
Le déficit reste proche de 5 % du PIB et la dette publique, déjà élevée, augmentera encore à partir de 2023

Le déficit budgétaire¹ reste structurellement élevé (pourcentages du PIB)



- Charges d'intérêts
- Mesures temporaires - Covid 19
- Mesures temporaires - crise énergétique et guerre en Ukraine
- Autres

Le taux d'endettement augmente (pourcentages du PIB)



Sources: ICN, BNB projections de décembre 2022.

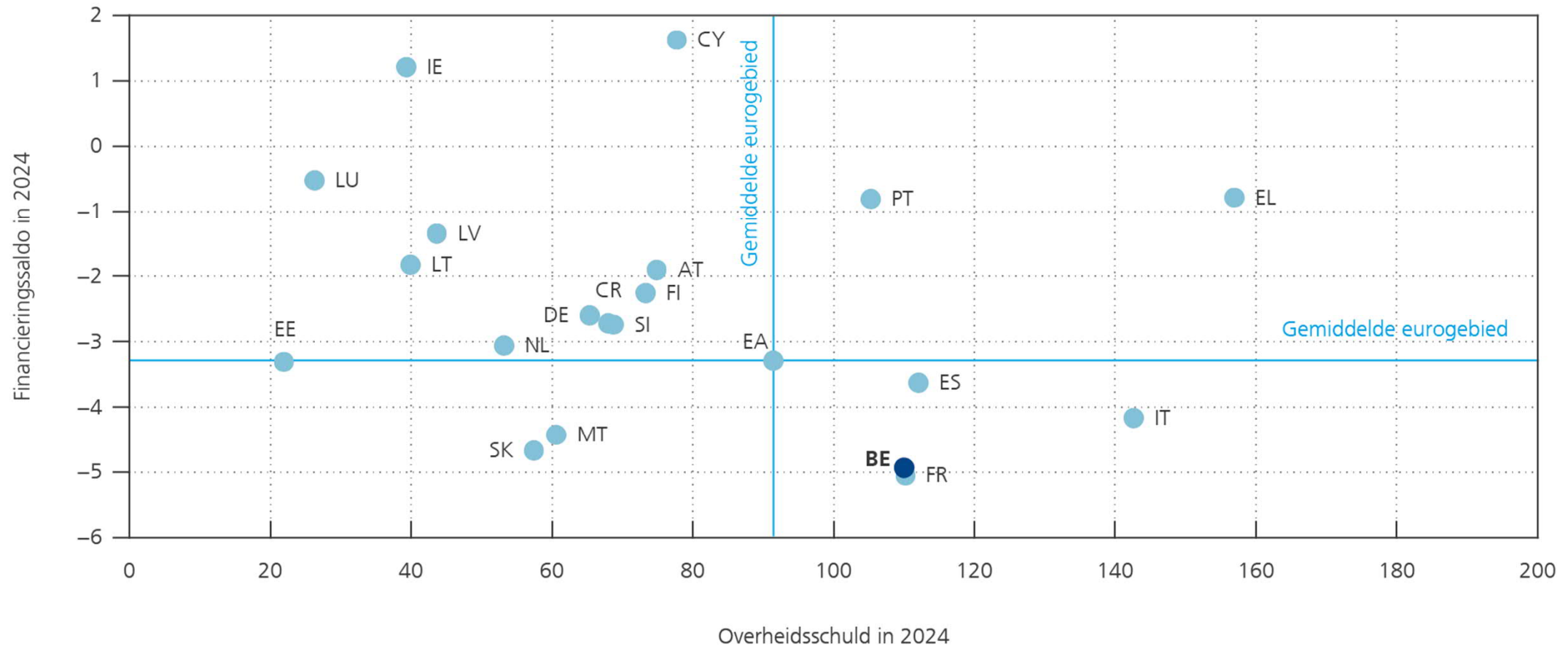
¹ Ces chiffres ne tiennent pas compte du déficit implicite de 0,4 % du PIB en moyenne par an en 2021-2026, pour le financement par la dette des subventions accordées aux États membres de l'UE dans le cadre du programme NGEU.

² Cette projection ne tient pas compte de la décision du gouvernement fédéral soit de prolonger la réduction du taux de TVA sur le gaz et l'électricité à partir du deuxième trimestre 2023, soit de rendre cette réduction permanente et d'augmenter les droits d'accises. Les deux options augmenteront le déficit en 2023 et peut-être au-delà.

De schuldgraad en het financieringstekort van de overheid zijn structureel hoog in België

Financieringssaldo en schuld in 2024

(in % BBP)



Prudence et consolidation restent de mise pour la politique budgétaire

Principaux éléments d'orientation budgétaire dans la recommandation du Conseil pour la Belgique (juillet 2022):

Pour 2023:

- Mener une politique budgétaire prudente, en particulier en maintenant la croissance des dépenses courantes en deçà de la croissance du PIB potentiel à moyen terme ...

Pour la période postérieure à 2023:

- Garantir une réduction crédible et progressive de la dette et la viabilité budgétaire à moyen terme par un assainissement progressif, des investissements et des réformes ...

Evaluation de la CE sur le budget 2023 de la Belgique (novembre 2022):

- Le projet de budget n'est que partiellement conforme aux orientations budgétaires contenues dans la recommandation du Conseil de juillet 2022.
- La Commission invite la Belgique à prendre les mesures nécessaires dans le cadre du processus budgétaire pour que le budget 2023 soit conforme aux recommandations de juillet 2022
- La CE a constaté que la plupart des mesures adoptées en 2022 et 2023 pour contrer l'impact économique et social des hausses exceptionnelles des prix de l'énergie ne semblent pas ciblées sur les ménages et les entreprises vulnérables (c'était également le cas dans la plupart des autres pays de la zone euro).



12. Useful information sources

External sources

- [BIS Annual Economic Report \(June 2022\)](#)
- [Bruegel dataset on natural gas imports](#)
- [Bruegel dataset on national policies to shield consumers from rising energy prices](#)
- [Eurostat European Statistical Recovery Dashboard](#)
- [EC Autumn European Economic Forecast \(November 2022\)](#)
- [Eurosystem Staff Macroeconomic Projections \(December 2022\)](#)
- [NBB Economic Projections for Belgium \(December 2022\)](#)
- [NBB FSR \(June 2022\)](#)