CNB's New Forecast

Monetary Policy Report – Winter 2024

Meeting with Analysts

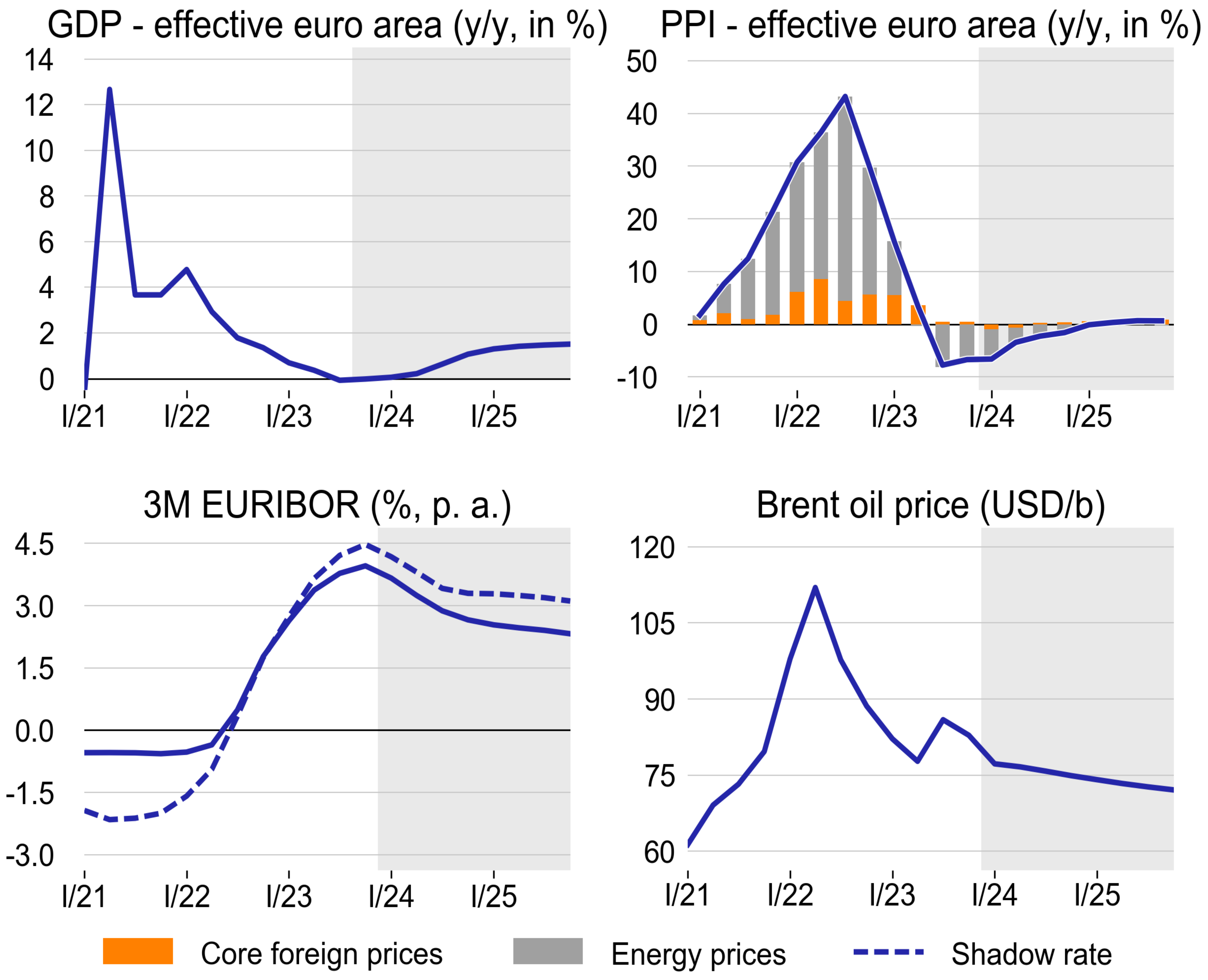
9 February 2024

Jakub Matějů (Deputy Director, Monetary Department)

Presentation Outline

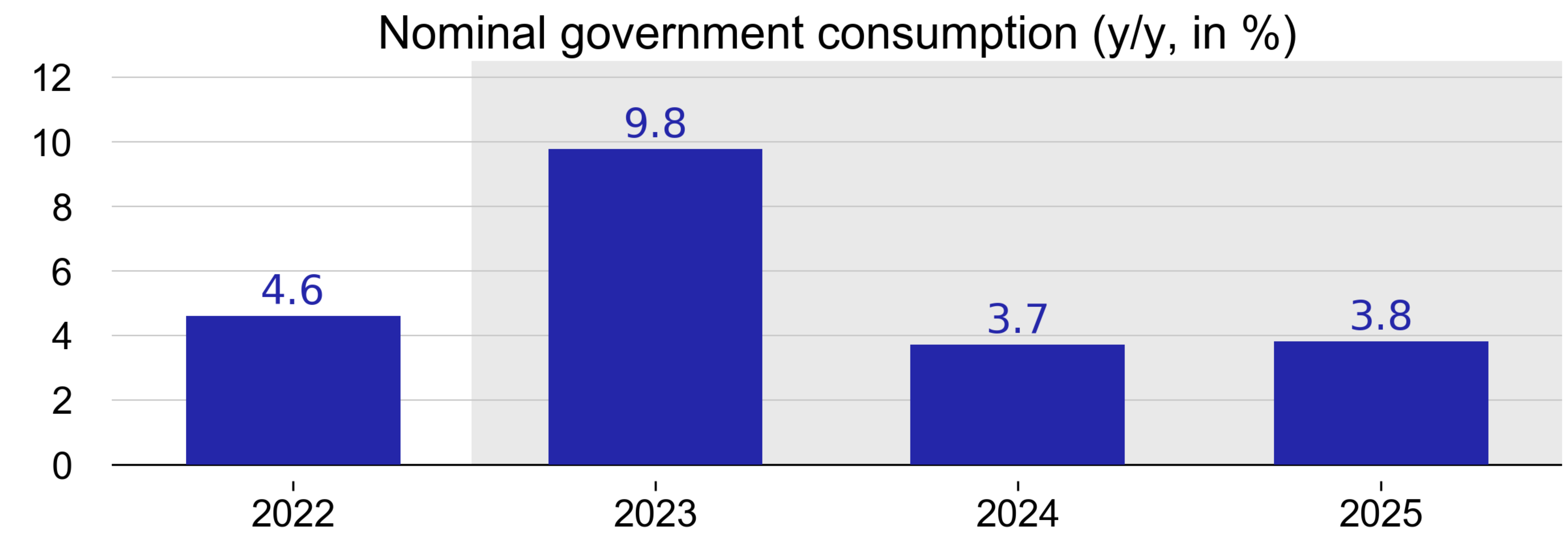
1. **Assumptions of the Forecast**
2. The New Macroeconomic Forecast
3. Comparison with the Previous Forecast
4. The Updated g3+ Core Forecasting Model and the Shadow Forecast
5. Further Scenarios

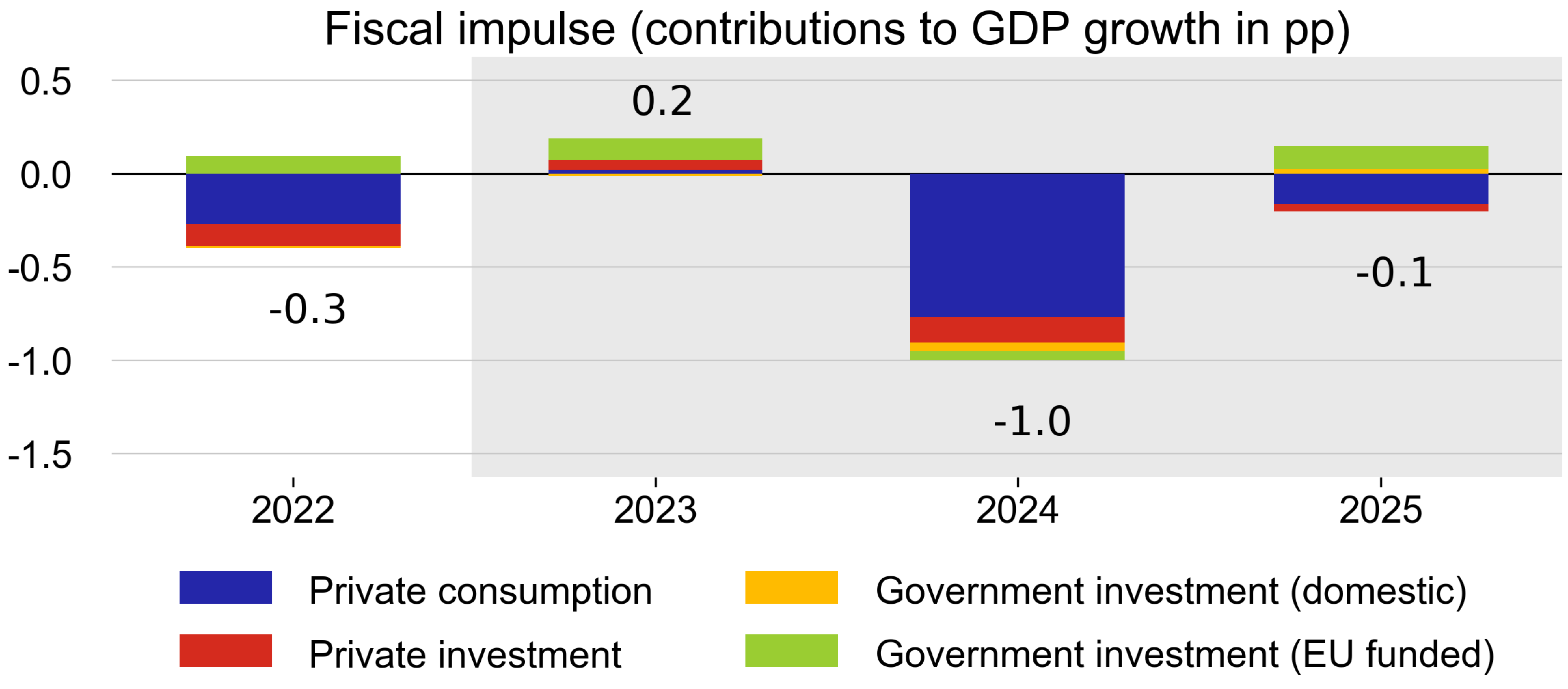
Foreign Environment Outlook



- The **effective euro area** economy will revive in the second half of this year on the back of improving global demand and consumer purchasing power, while monetary conditions will ease slightly.
- The year-on-year decline in **industrial producer prices** in the effective euro area will be driven by the energy component this year.
- According to the financial markets, **3M EURIBOR** interest rate will go down this year, but the decline in the shadow rate will be held back by the declining rate of reinvestments.
- The outlook for the **Brent crude oil** price is slightly decreasing.

Fiscal Policy





- Growth in **nominal general government consumption** will slow due to the announced freeze of public sector wage bill and cuts in operating expenditure related to the consolidation package.
- **Fiscal policy** will significantly dampen GDP growth this year, due mainly to the consolidation package.
- The negative **fiscal impulse** is expected to amount to -1 p.p. to GDP growth in 2024 and roughly neutral in 2025

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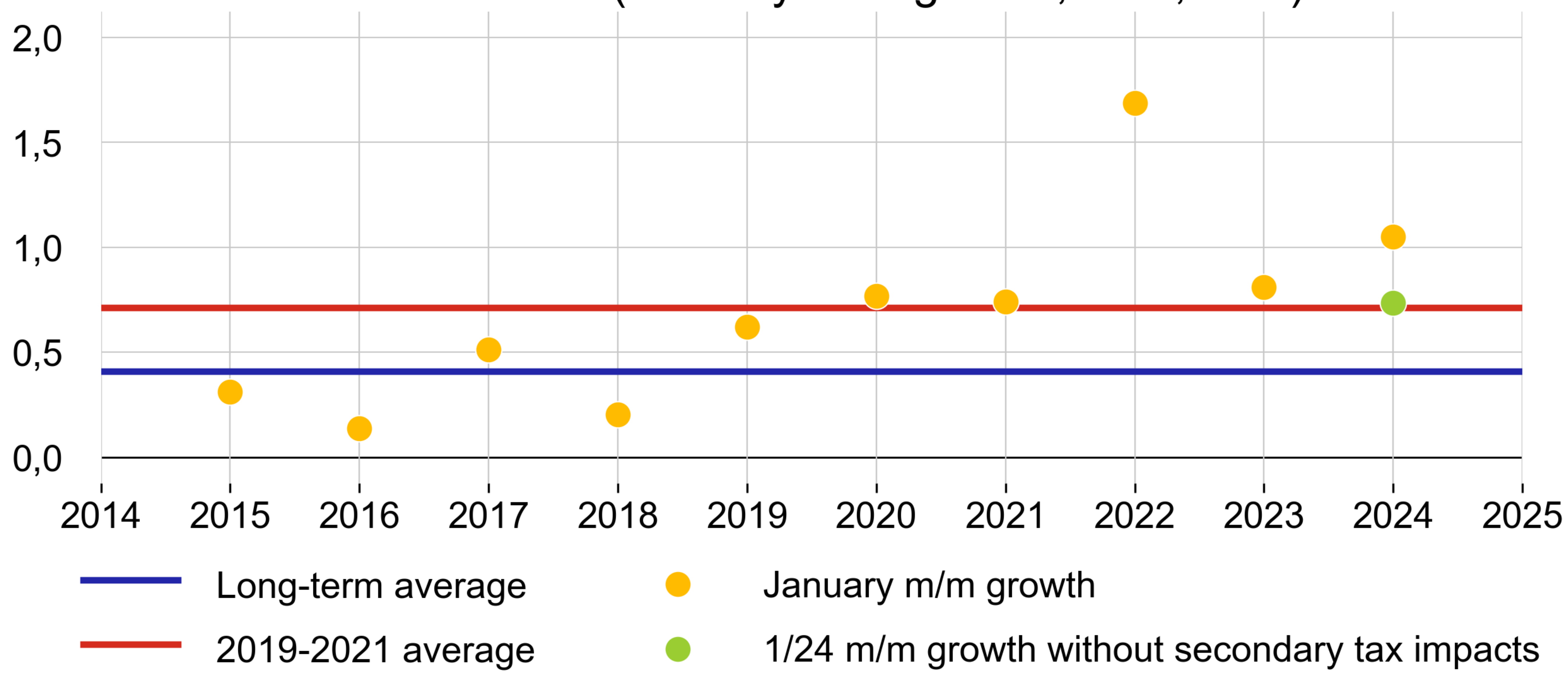
Assumption of January Repricing and Short-Term Inflation Outlook

Core inflation (January m/m growth, in %, s. a.)

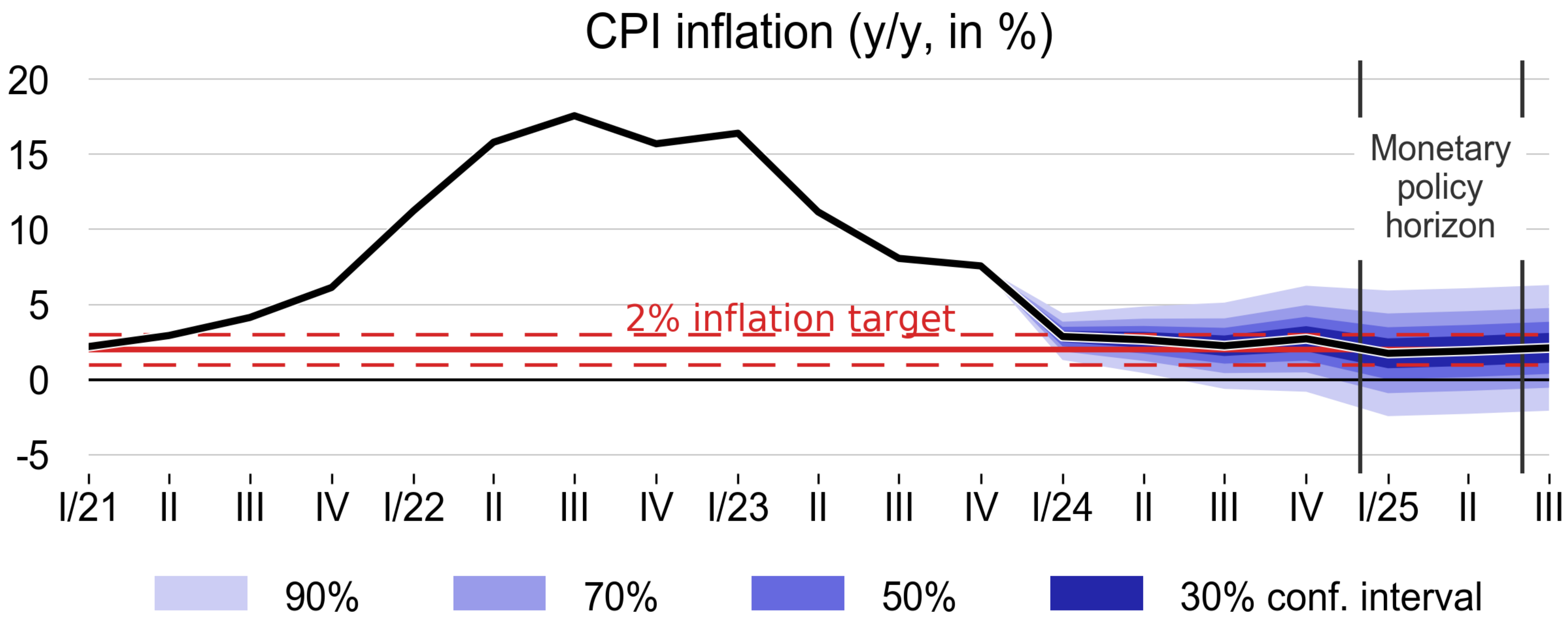


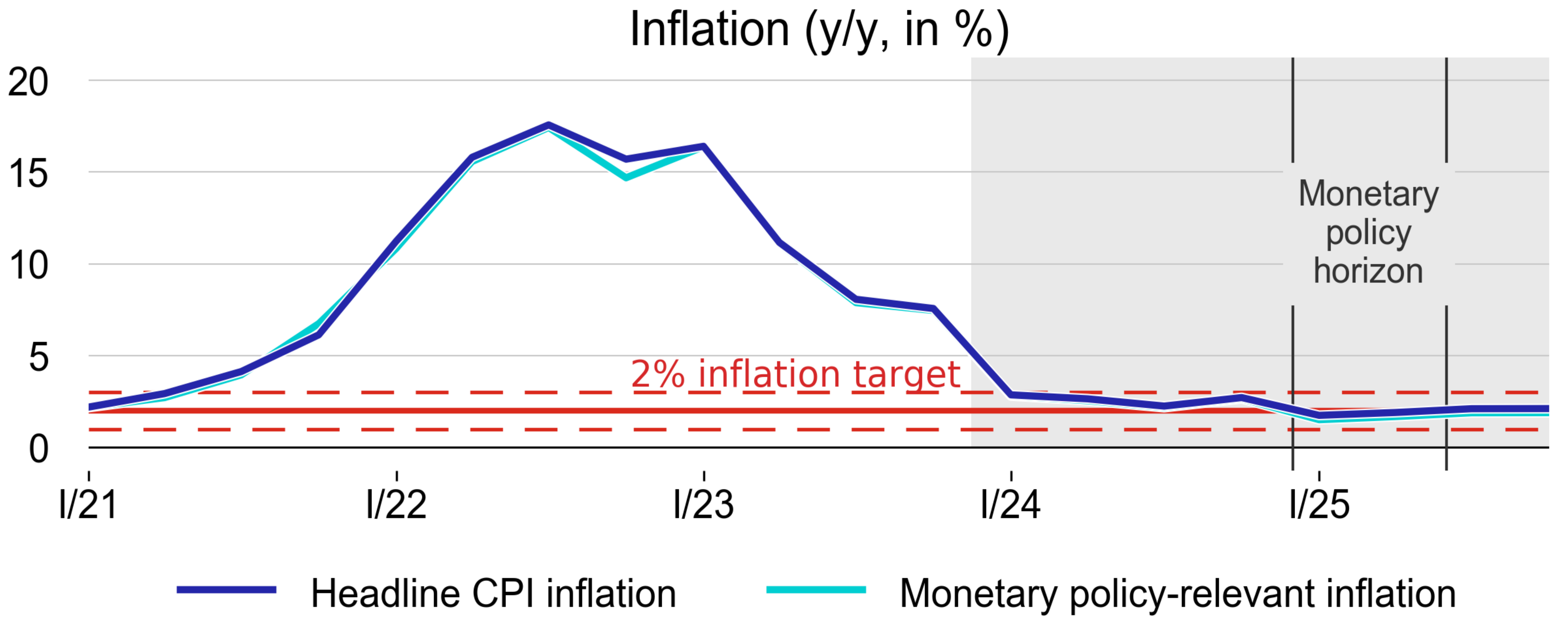
Short-term inflation outlook (y/y, in %)

	January	February	March	Q1
CPI inflation	3.0	2.8	2.9	2.9
Administ. prices	8.4	8.6	9.5	8.8
Net inflation	1.9	1.5	1.4	1.6
Core inflation	3.8	3.5	3.3	3.5
Food prices	-1.3	-1.8	-2.0	-1.7
Fuel prices	-3.2	-4.4	-1.6	-3.1
MP inflation	3.0	2.7	2.8	2.8

- The forecast assumes a **similar repricing in core inflation** in January as before the energy crisis, i.e., during the years 2019-2021.
- The high-frequency indicators (data from petrol stations, e-commerce price data, etc.) indicate that the risk of excessive **repricing at the start of the year** has receded
- The short-term inflation outlook predicts CPI inflation to be slightly below 3% in the following months.

Headline and Monetary Policy-Relevant Inflation

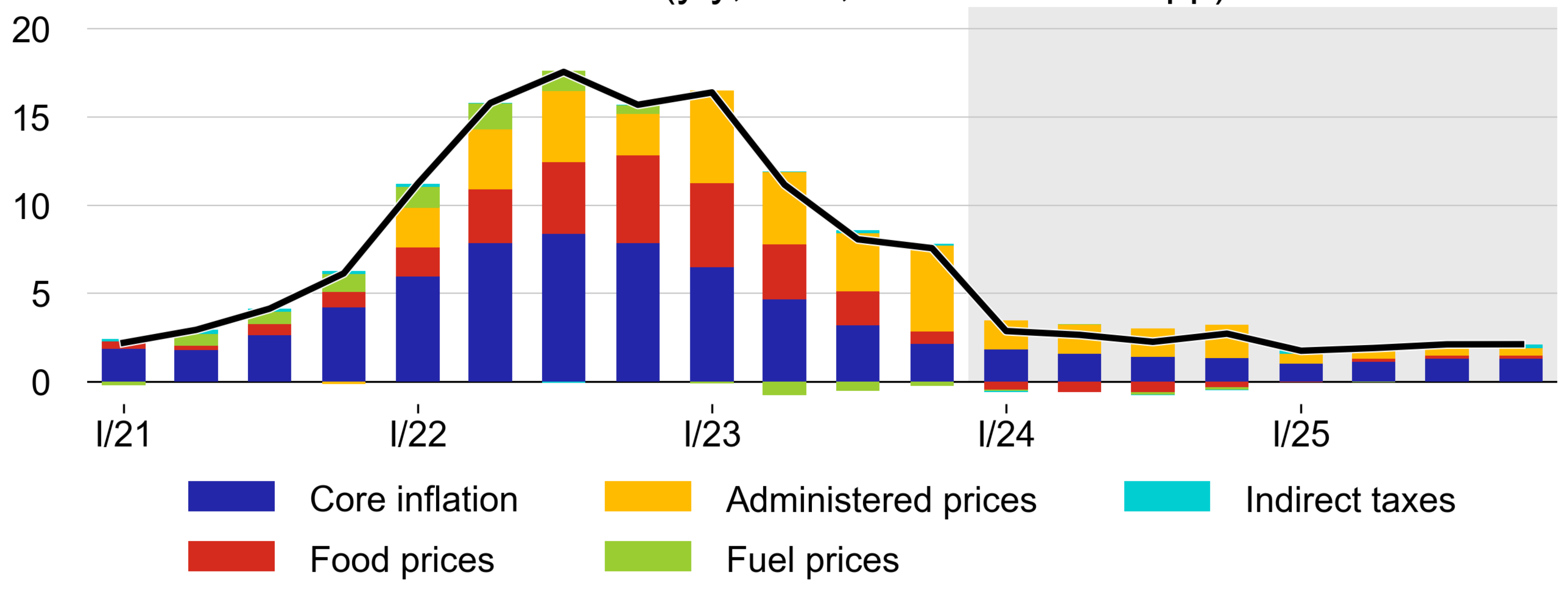




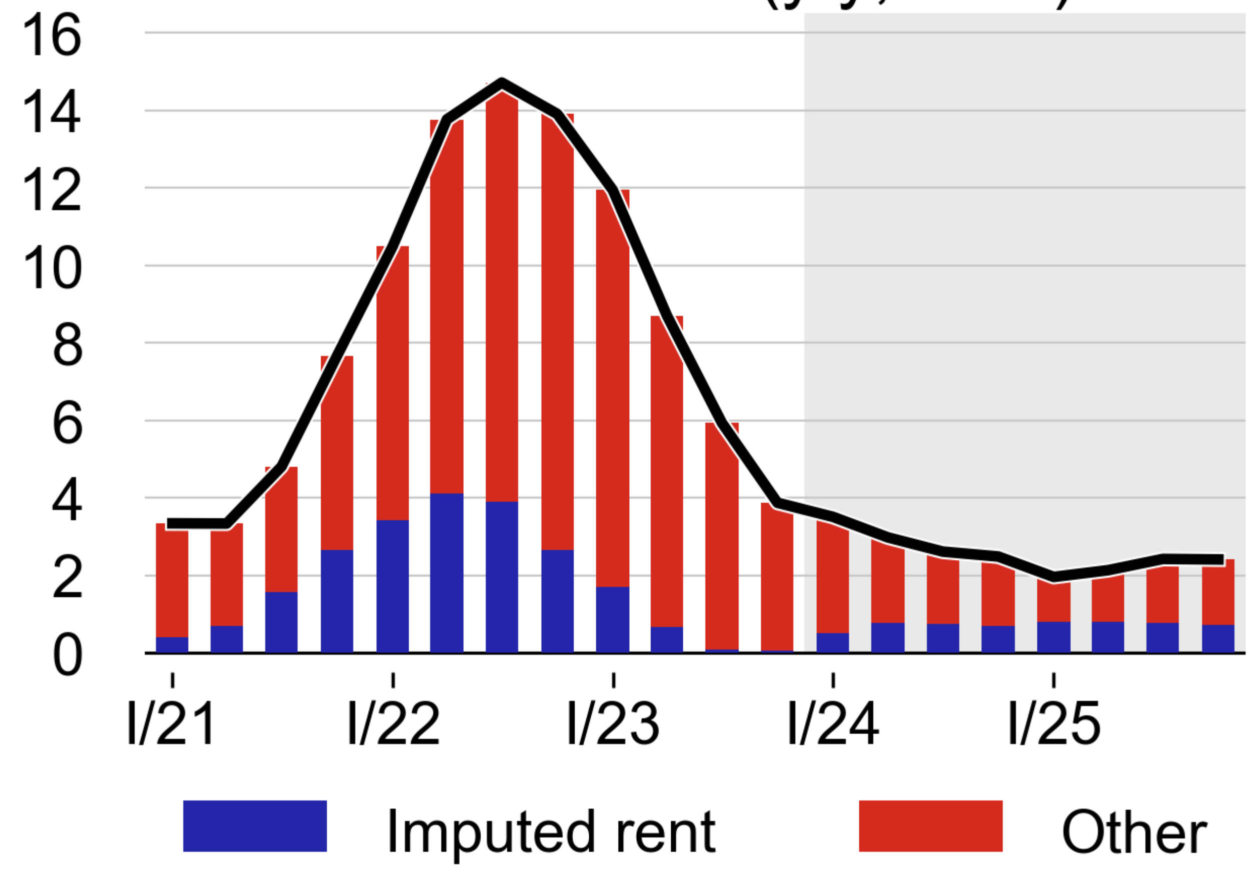
- **Inflation** will fall towards the upper boundary of the tolerance band at the start of this year.
  - The contribution of administered prices will decrease significantly, although their growth will remain somewhat elevated.
  - The contribution of market prices will also fall due to subdued cost pressures from abroad and the rapid dissipation of the inflationary effects of the domestic economy.
  - The previous increase in the profit margins of domestic producers, retailers and service providers is undergoing a correction.
- Headline inflation will be slightly above **monetary policy-relevant inflation**.

CPI Inflation, Core Inflation and Administered Prices

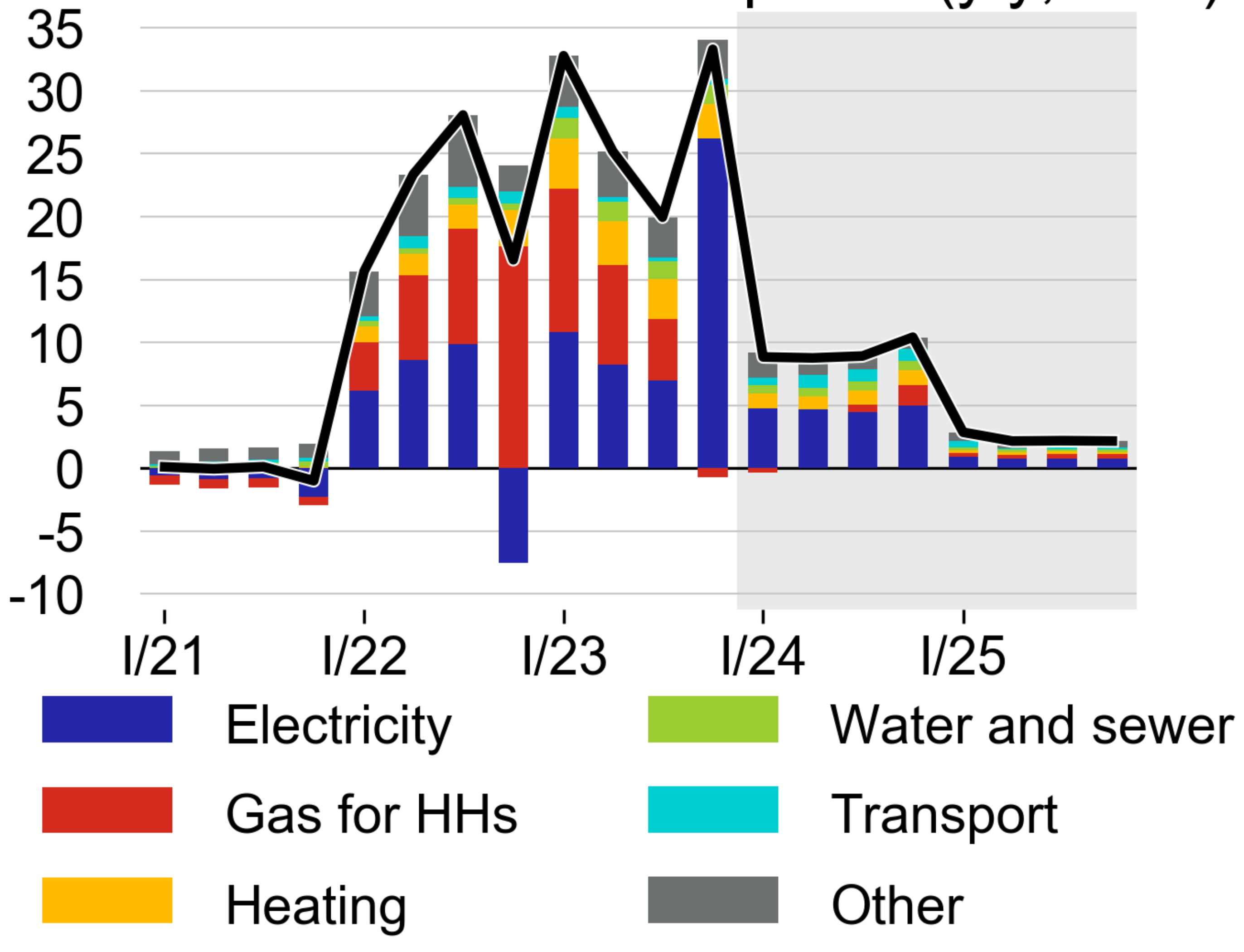
CPI inflation (y/y, in %, contributions in pp)



Core inflation (y/y, in %)



Growth of administered prices (y/y, in %)

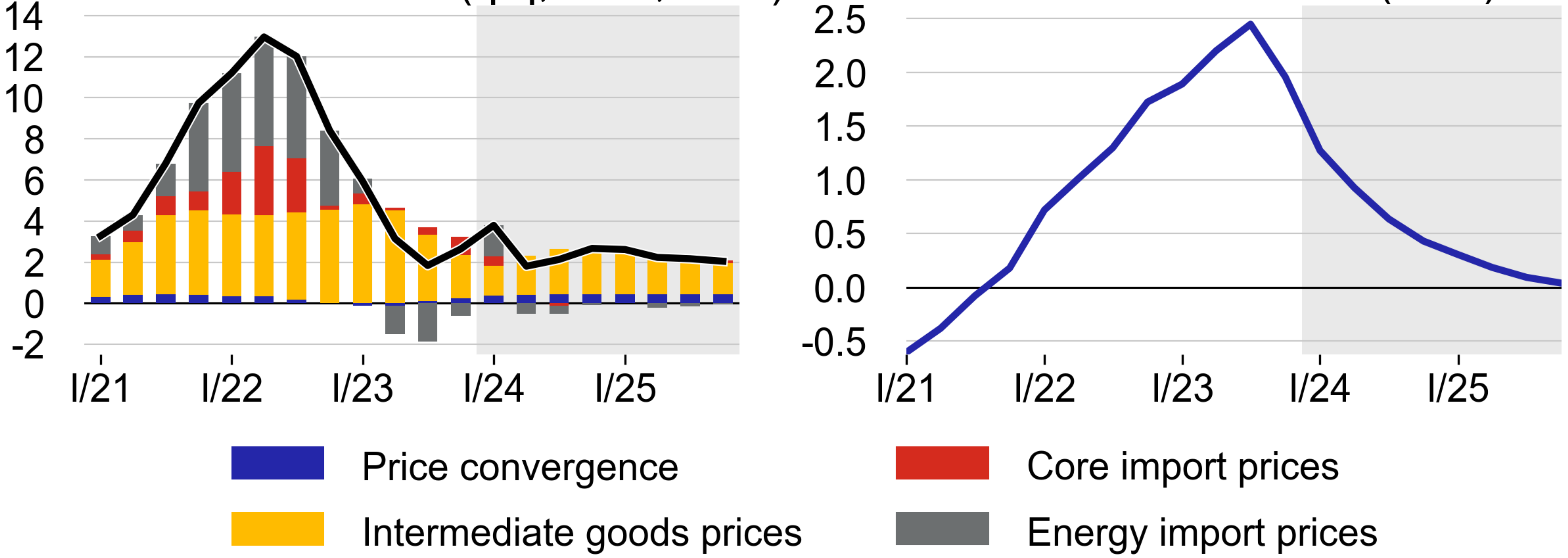


- **Consumer price inflation** will slow sharply at the start of this year, with most components contributing to the decline.
- **Core inflation** will continue to slow this year due to fading inflation pressures. Presently low contribution of imputed rent will revive only partially.
- **Administered price inflation** will fall sharply at the start of 2024 as the base effect drops out, but will remain elevated from a longer-term perspective.

Cost Pressures and Profit Mark-ups

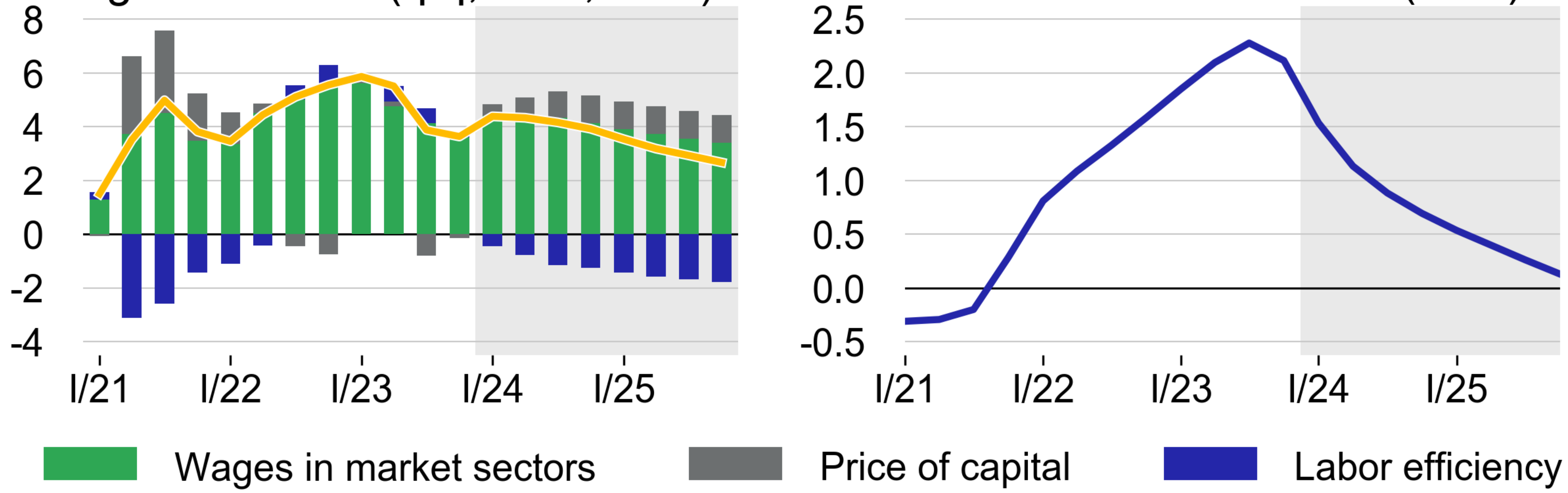
Nominal marginal costs in consumer sector (q/q, in %, ann.)

Gap in profit mark-ups in consumer sector (in %)



Nominal marginal costs in intermediate goods sector (q/q, in %, ann.)

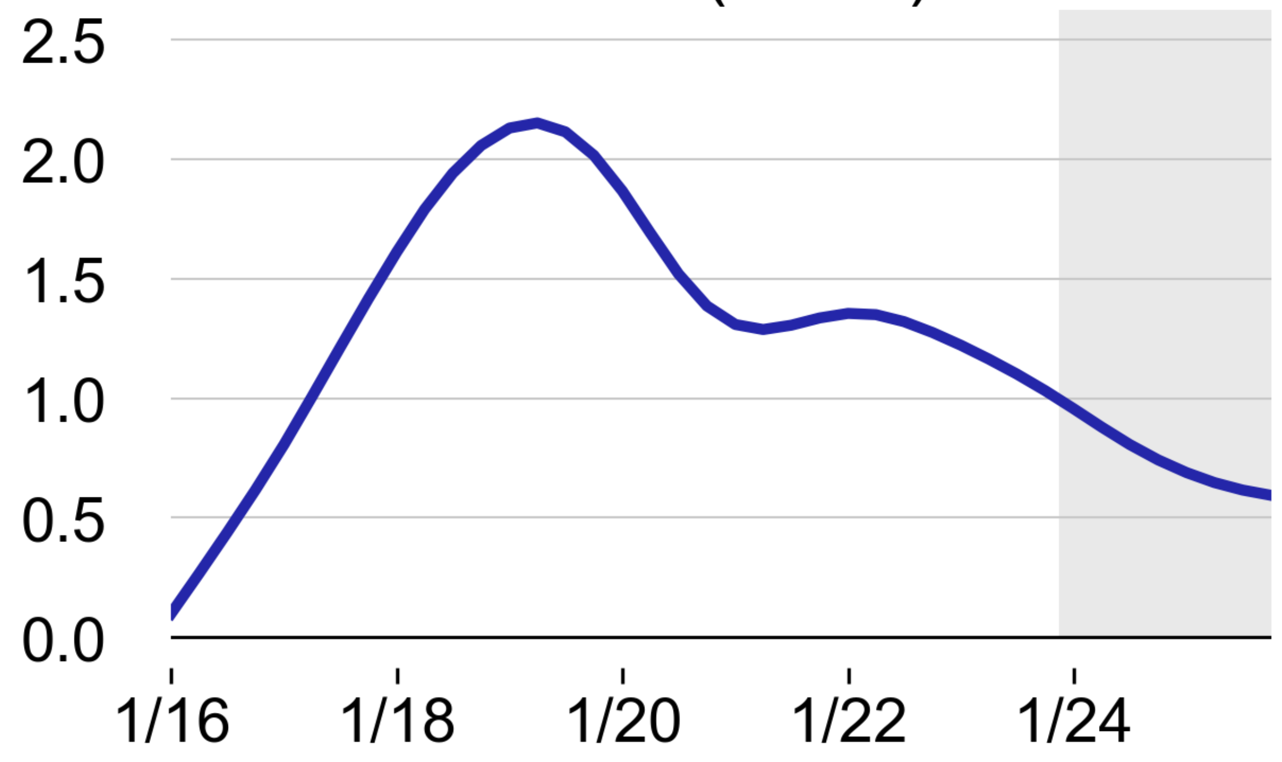
Gap in profit mark-ups in intermediate sector (in %)



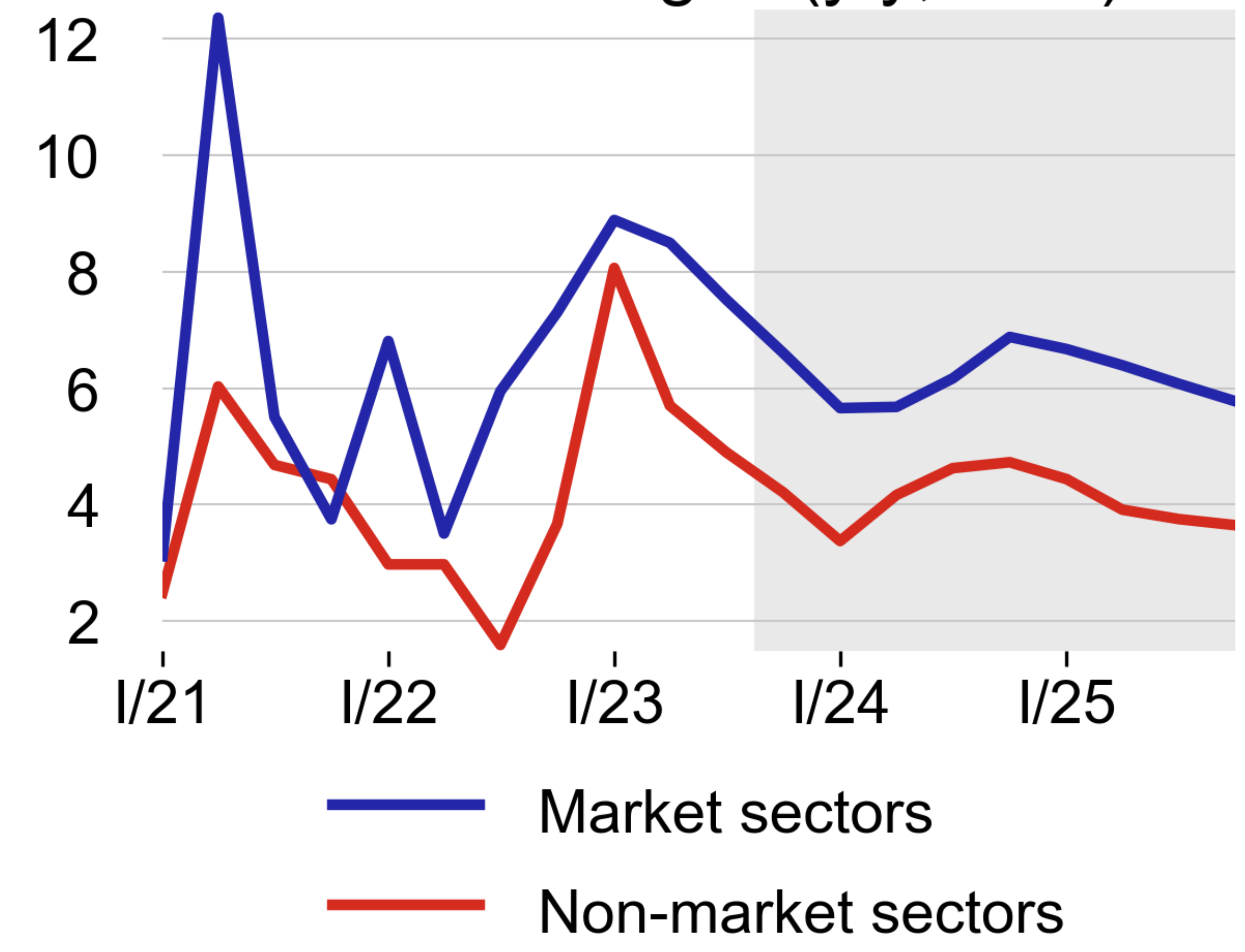
- The **overall cost pressures** will strengthen temporarily at the start of the year due to an increase in the administered component of **energy prices for firms** and a weakening **koruna**.
- Once the effect of the increase in the administered component of energy prices for firms at the start of 2024 fades out, growth in total costs will slow. In 2025, it will fall gradually to the steady-state level consistent with the fulfilment of the inflation target.
- The **domestic cost pressures** will ease gradually from the end of this year onwards as **wage growth** steadily decreases.
- The positive **gap in mark-ups** has started to narrow noticeably amid only slowly recovering domestic demand.

Labour Market

LUCI (index)

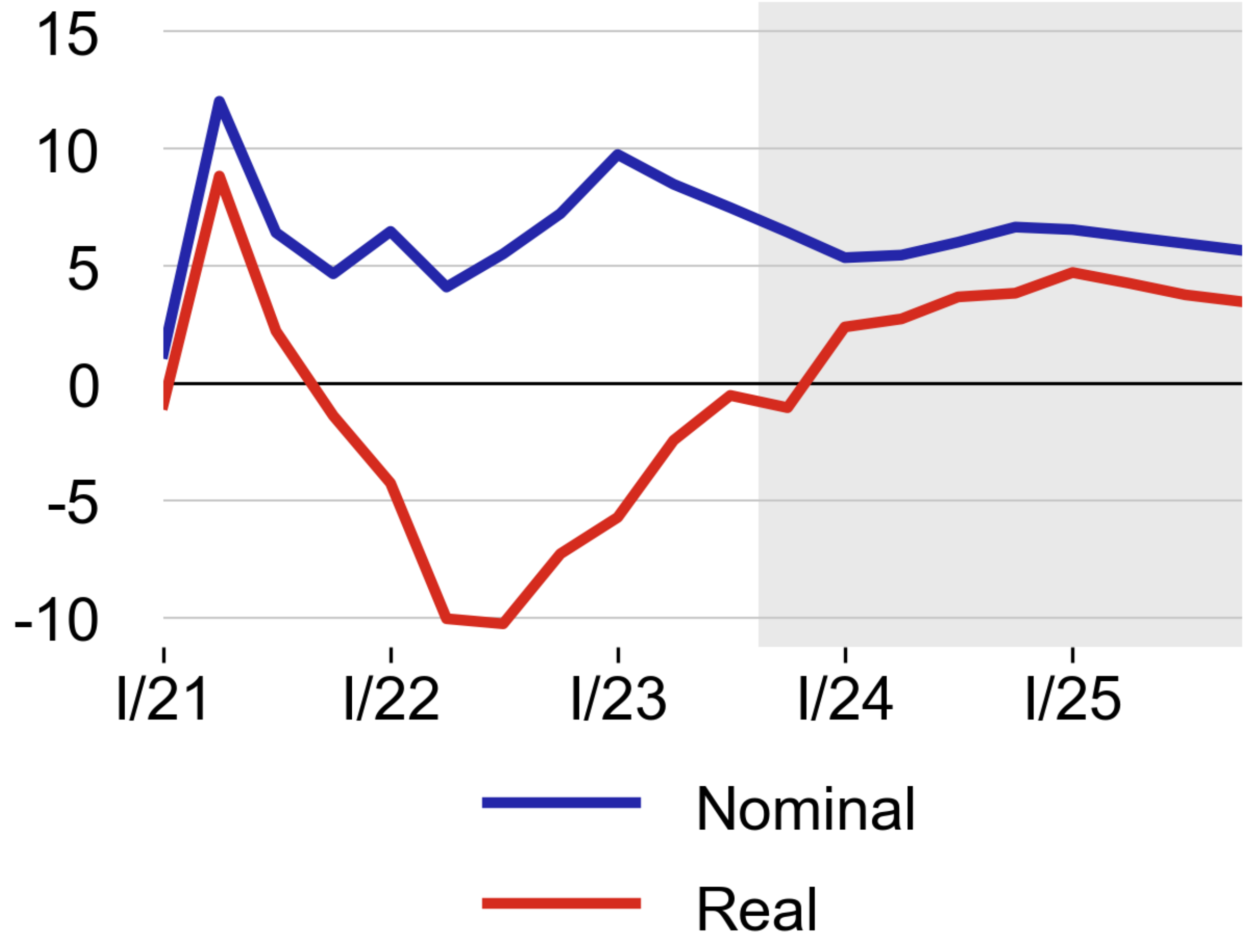


Nominal wages (y/y, in %)



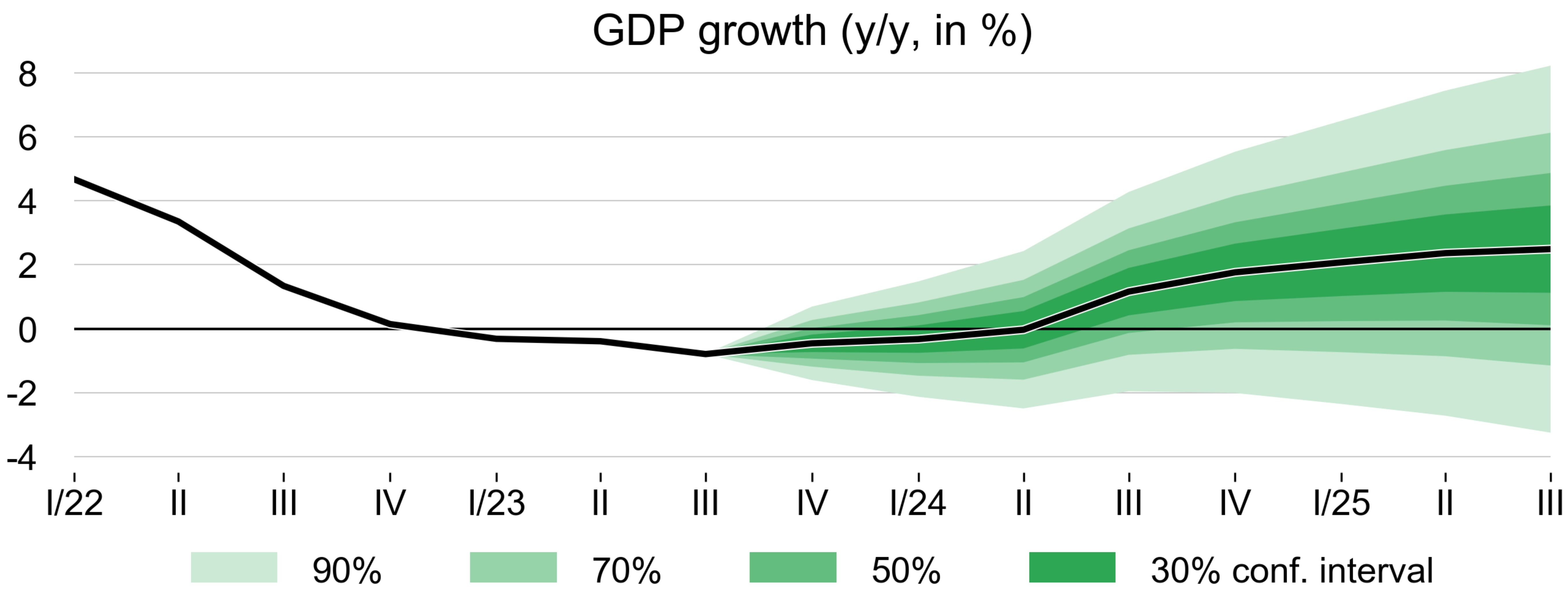
Employment and unemployment rate (y/y, in %, s. a.)

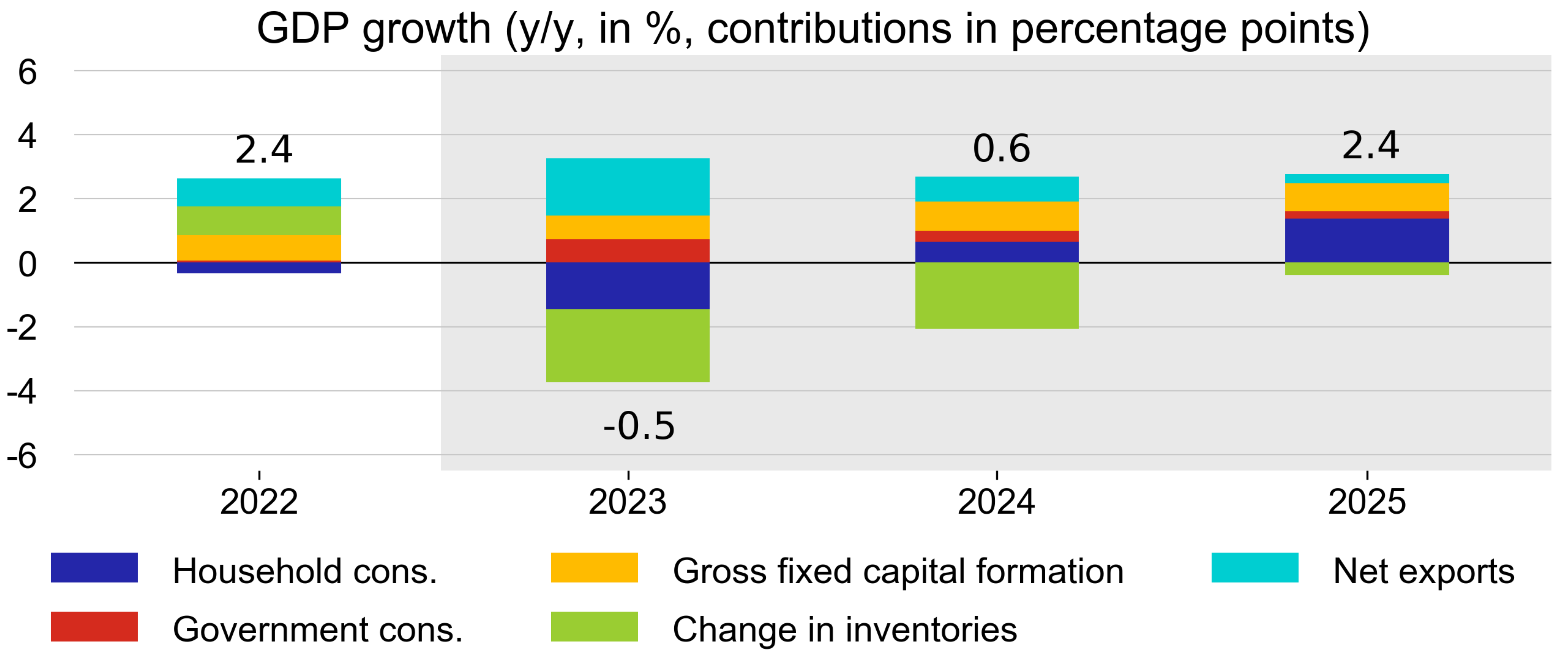
Volume of wages and salaries (y/y, in %)



- From the perspective of the **LUCI**, the tightness in the labour market will moderate gradually but will remain significant.
- **Nominal wage growth in market sector** will remain slightly elevated from the long-term perspective.
- On average, **employment** will stagnate this year, with **unemployment** increasing slowly.
- The **real wage** will grow at the start of 2024 after more than two years of decline and will rise slightly further over the outlook horizon. This will be due mainly to a marked slowdown in inflation amid still slightly elevated nominal wage growth.
- Growth in the **real wage bill** will thus contribute to the recovery in household consumption.

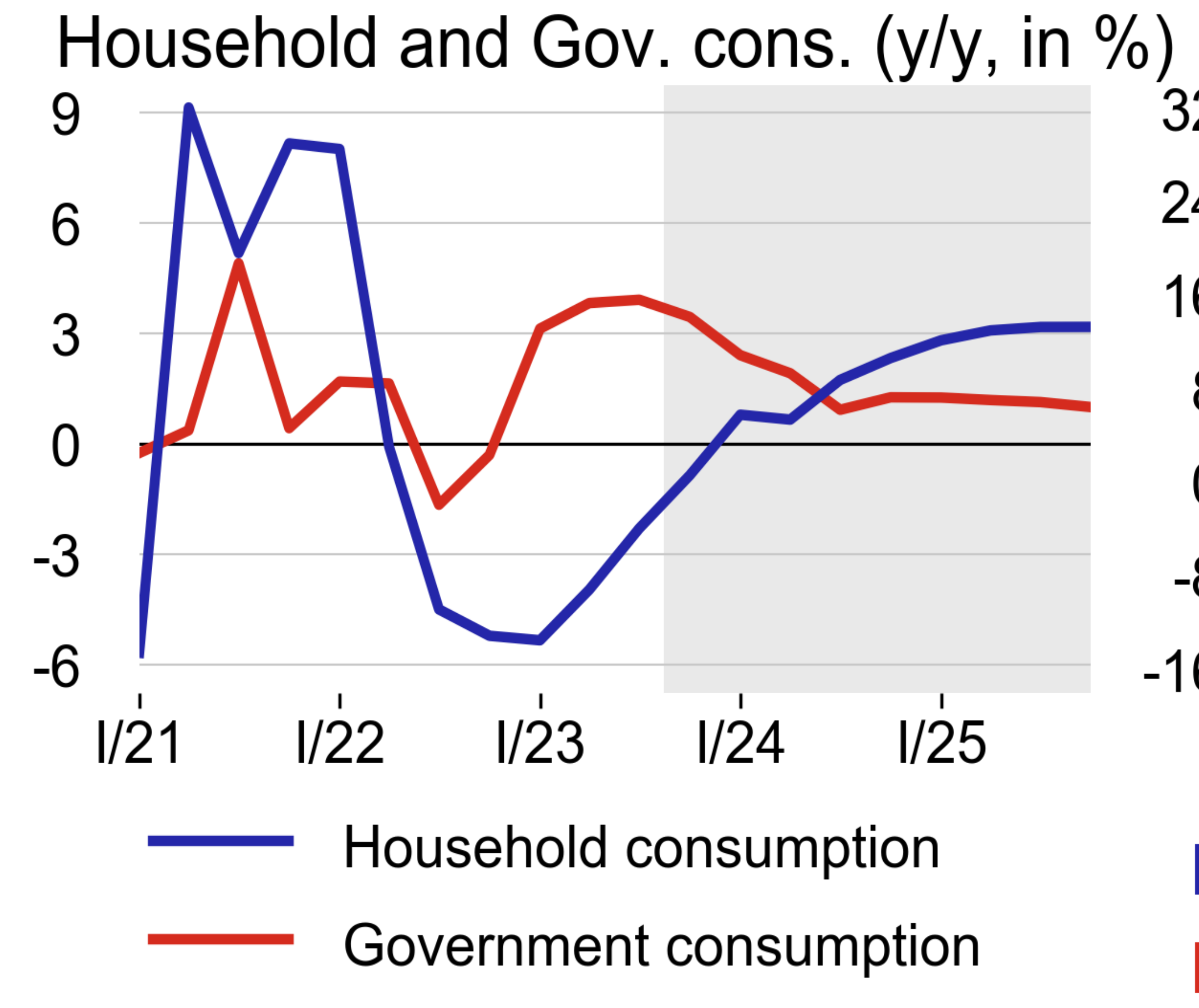
GDP Growth Forecast

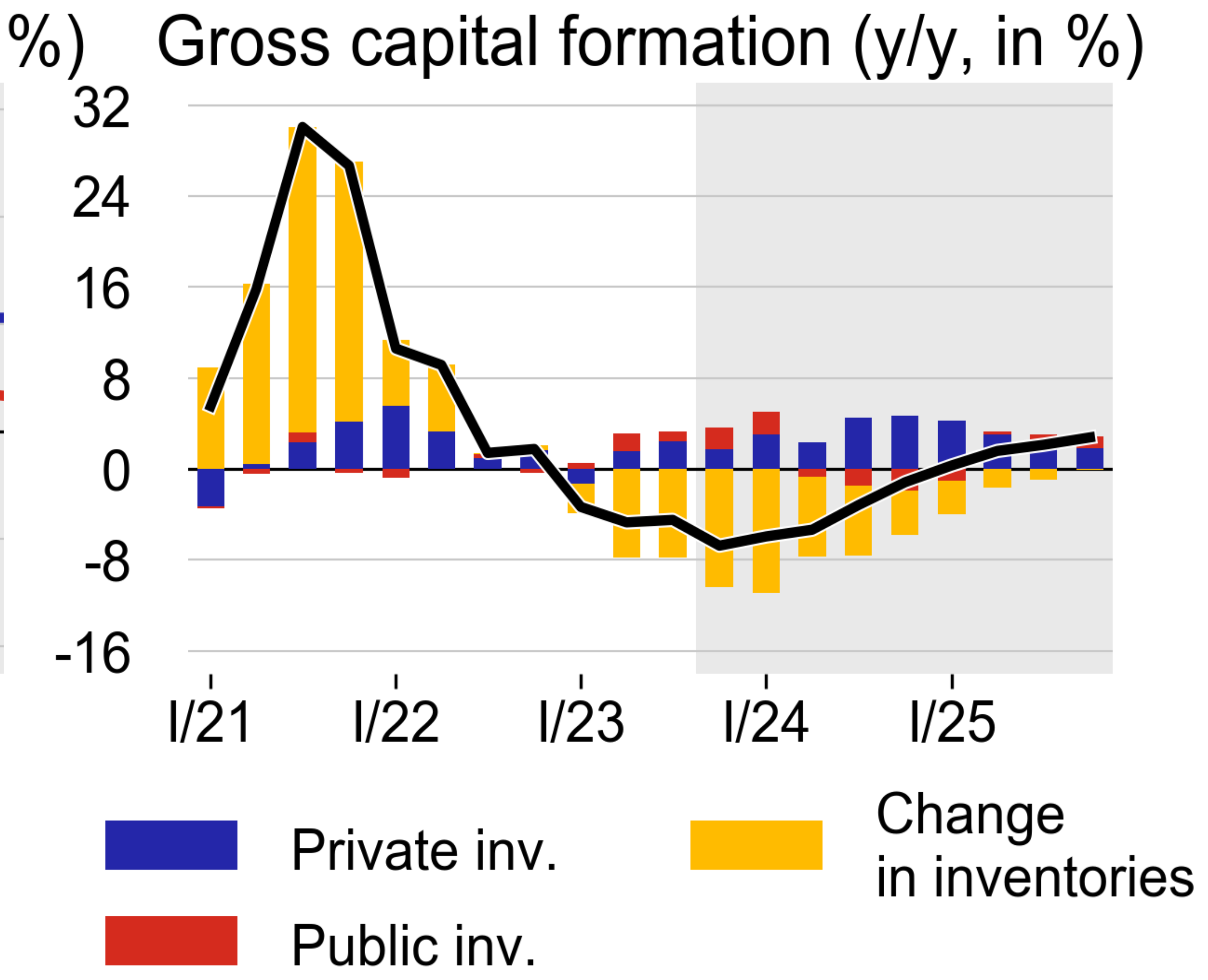


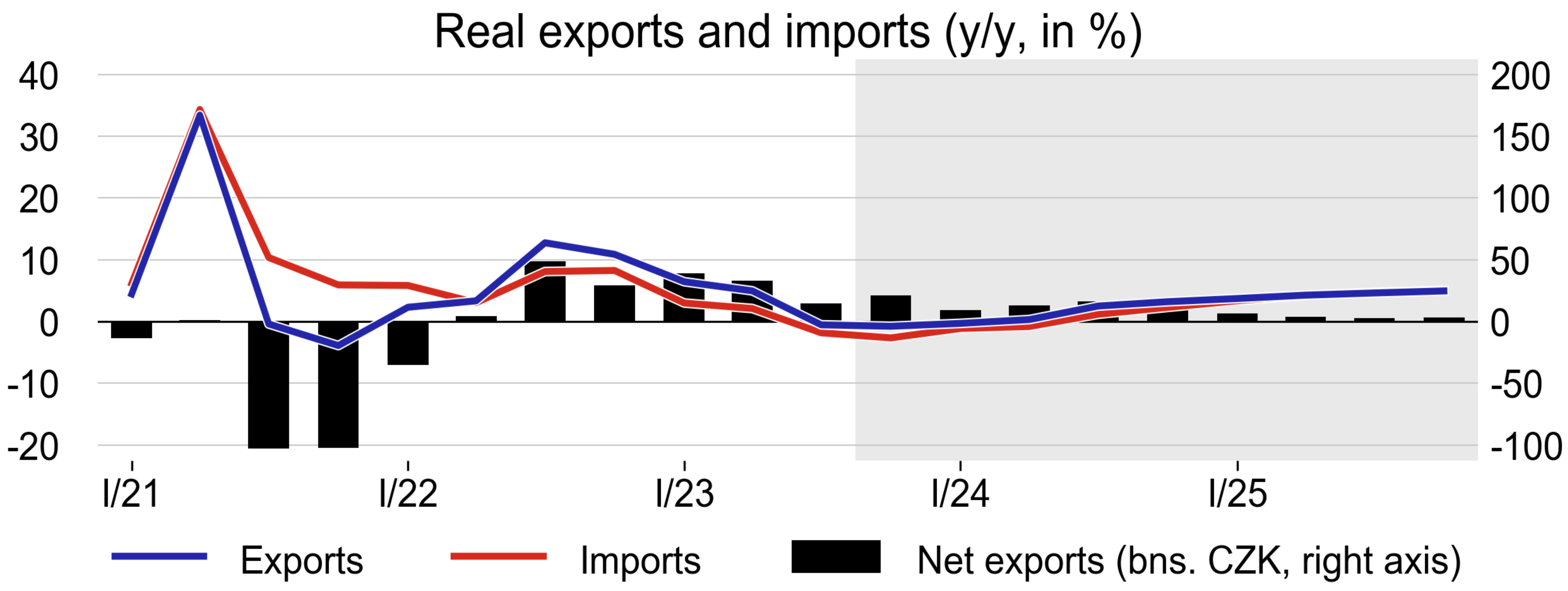


- **Economic activity** declined in 2023; it will return to growth but the recovery will be very modest and gradual.
- This year, **GDP** will grow by **0.6%.** In 2025, the growth will pick up to **2.4%**. The recovery will be dampened also by the consolidation package.
- Important factor is also the expected further decline in the accumulation of **inventories** as the supply-side constraints fade and firms return to standard modes of operation
- According to a preliminary CZSO estimate, the Czech GDP increased by 0.2% quarter-on-quarter and decreased by -0.2% year-on-year in 2023 Q4. This is only slightly higher than the CNB forecast.

GDP Components

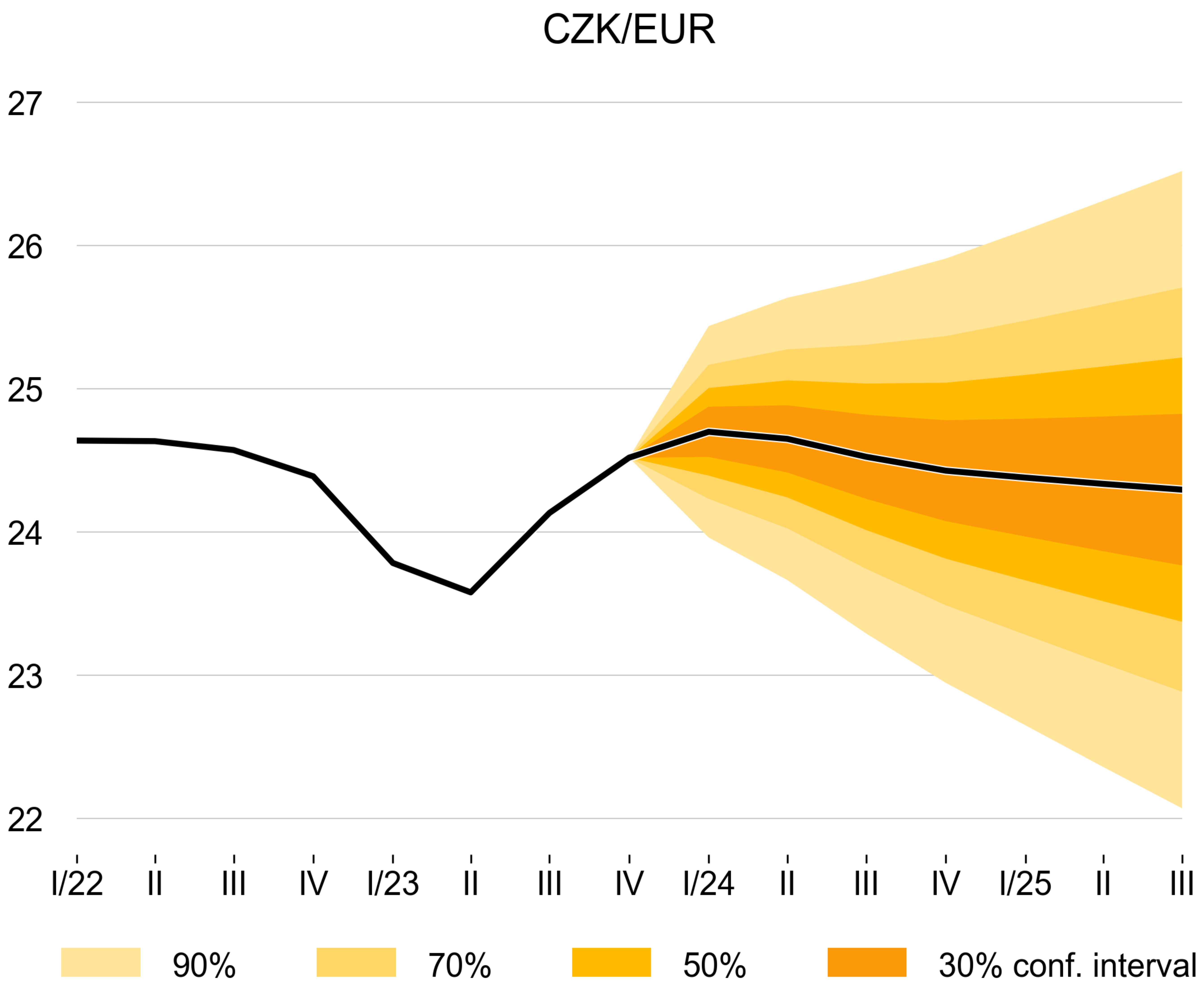






- **Household consumption** will return to year-on-year growth this year on the back of recovering purchasing power
- **Government consumption** will grow at a subdued pace in real terms reflecting the fiscal consolidation efforts.
- Growth in **total gross investment** will be negatively affected by **change in inventories** until the end of 2024, while private investment will grow with the easing of financial conditions and improving foreign demand.
- **Export** and **import** will return to growth only gradually. Net export will continue to contribute positively to the GDP growth.

Exchange Rate CZK/EUR



- Following an initial weakening, the koruna will **appreciate** slightly over the outlook horizon, mostly reflecting favorable current account developments.
- The improvement in the goods and services balance will be due to initially still very subdued domestic demand amid a gradual pick-up in export activity linked with recovering foreign economies.
- The appreciation will be partially offset by a narrowing **interest rate differential** vis-à-vis the euro area which will close at the end of the year.
- Towards the end of the year, the koruna is forecasted to average 24.4 EURCZK.

Interest Rate Path (3M PRIBOR)

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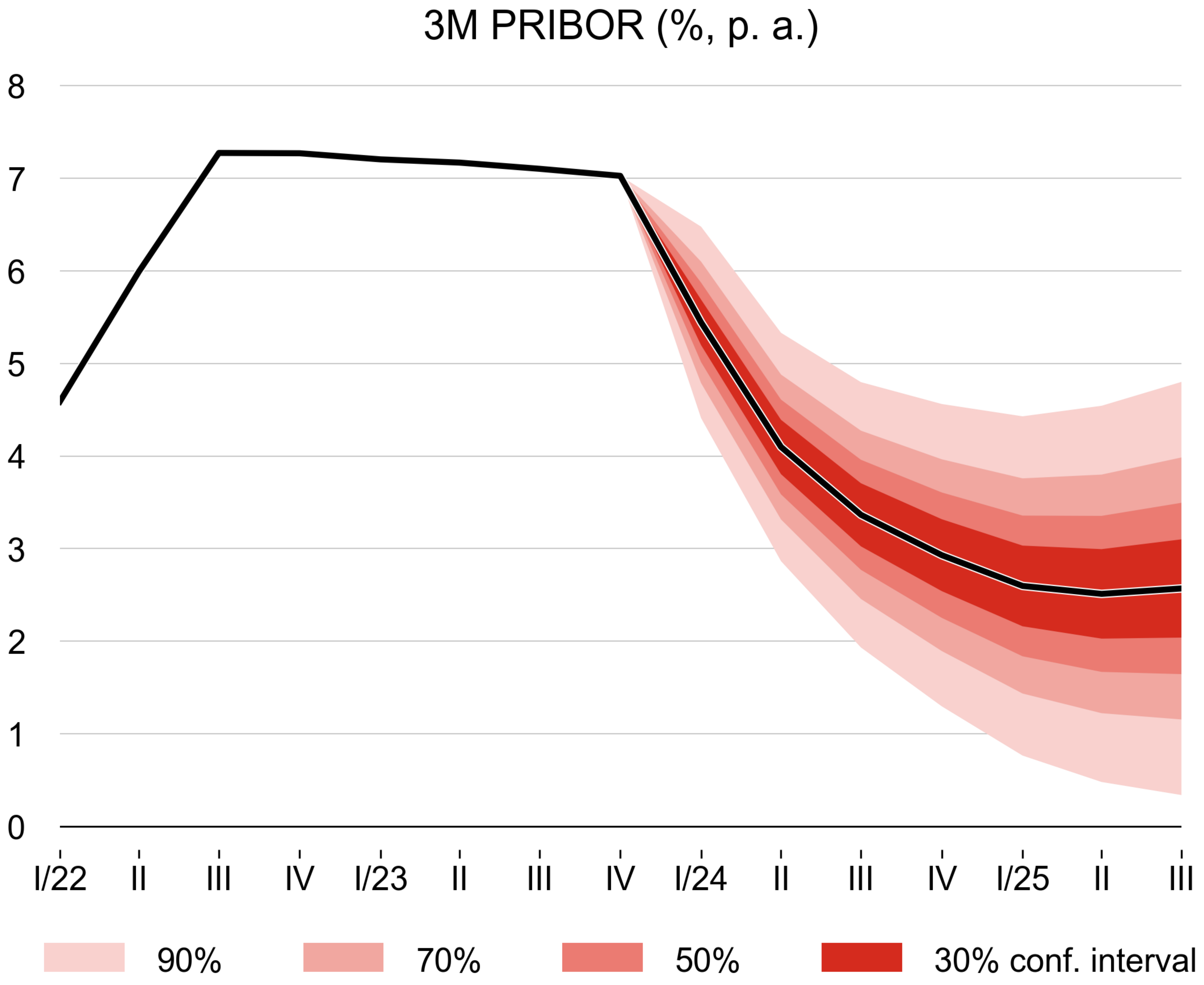

- Consistent with the baseline scenario of the forecast is a rapid decline in **market interest rates** in the course of this year.
- The extraordinary cost pressures from the foreign environment have faded and domestic demand stays subdued.
- These factors lead to the return of a **low-inflation environment**, which is maintained over the monetary policy horizon.
- A temporary increase in cost pressures in early 2024 will not prevent consumer price inflation from declining towards the upper boundary of the tolerance band around the CNB’s target early this year.
- In 2024 Q4, 3M PRIBOR is forecasted to average 2.9 %.

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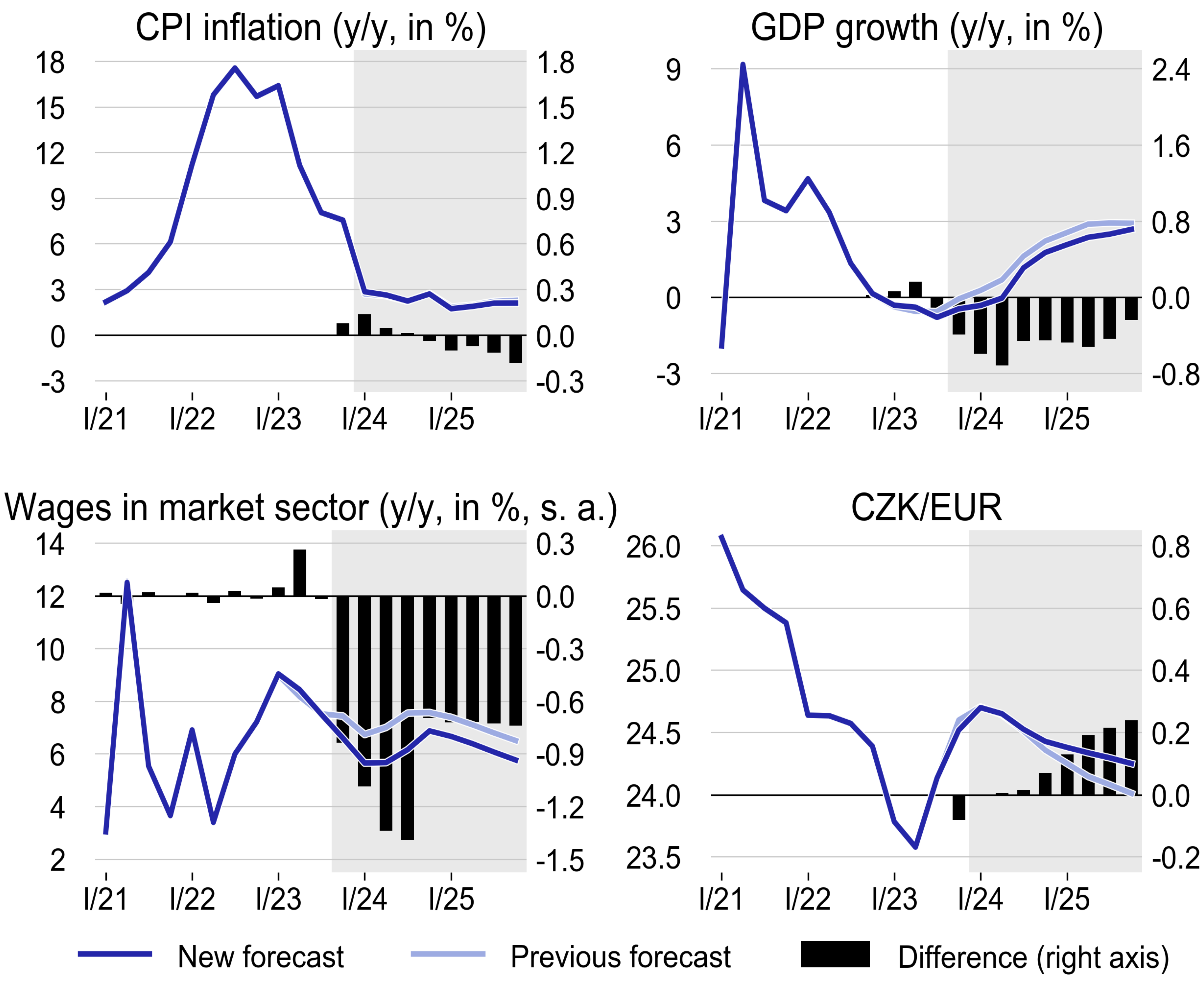
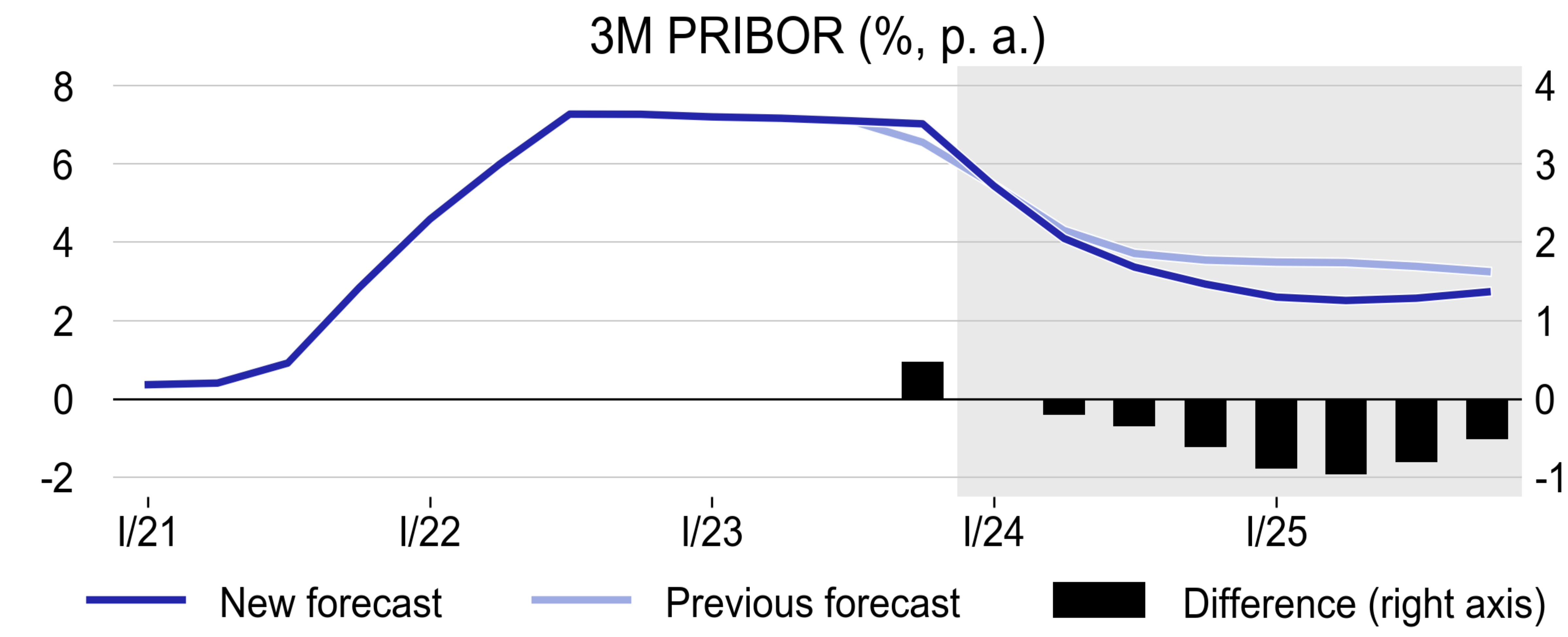
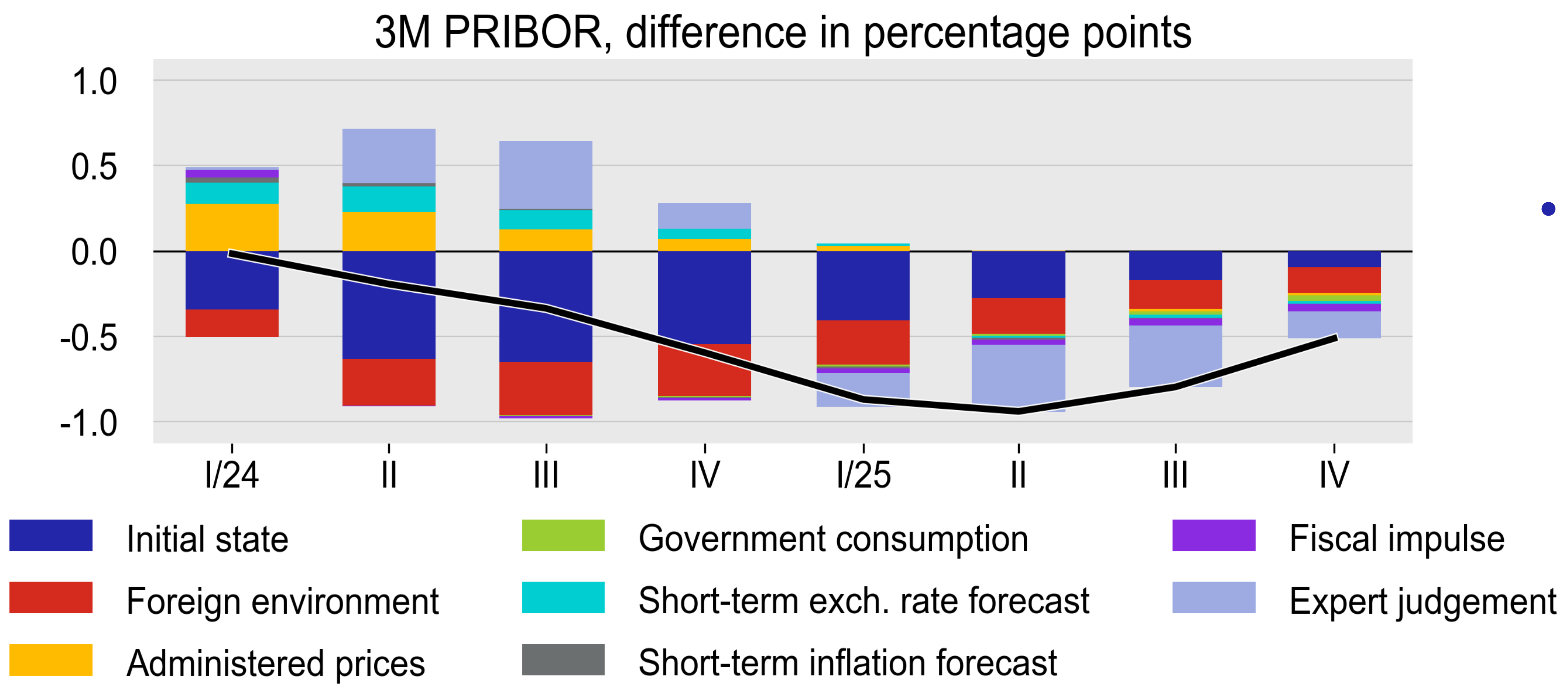
Comparison with the Previous Forecast: Domestic Economy



- The **inflation** forecast remains unchanged this year, with higher expected administered price inflation offset by lower growth in market price inflation.
- The **GDP growth** is lower due to weaker domestic and external demand.
- The weaker expected **wage growth** reflects its slower growth at the end of 2023 and more subdued economic activity over the entire horizon.
- The short-term **exchange rate** forecast mainly reflects the earlier observed levels. The exchange rate forecast moves towards a weaker koruna for the next year.
  - Depreciation pressures, caused by later recovery in **external demand for domestic exports,** overweigh the opposite effect of reduced expert judgements dampening the impact of the **interest rate differential** vis-à-vis the euro area.

Comparison with the Previous Forecast: 3M PRIBOR





- The **initial state** of the domestic economy fosters lower rates due to lower observed wage growth, more subdued GDP growth and lower observed growth of energy import prices. The smoothing in the interest rate rule acts in the opposite direction.
- The negative contribution of the **foreign environment** mainly reflects a lower outlook for ECB interest rates.
- The positive contributions of **administered prices** reflect higher energy prices for households.
- **Expert judgements** foster higher rates initially but have the opposite effect next year.
  - The removal of some of the expert judgement which had reduced the negative effect of the interest rate differential and also a lower labour efficiency foster higher rates; Reduced wage growth and speed of economic recovery act in the opposite direction.

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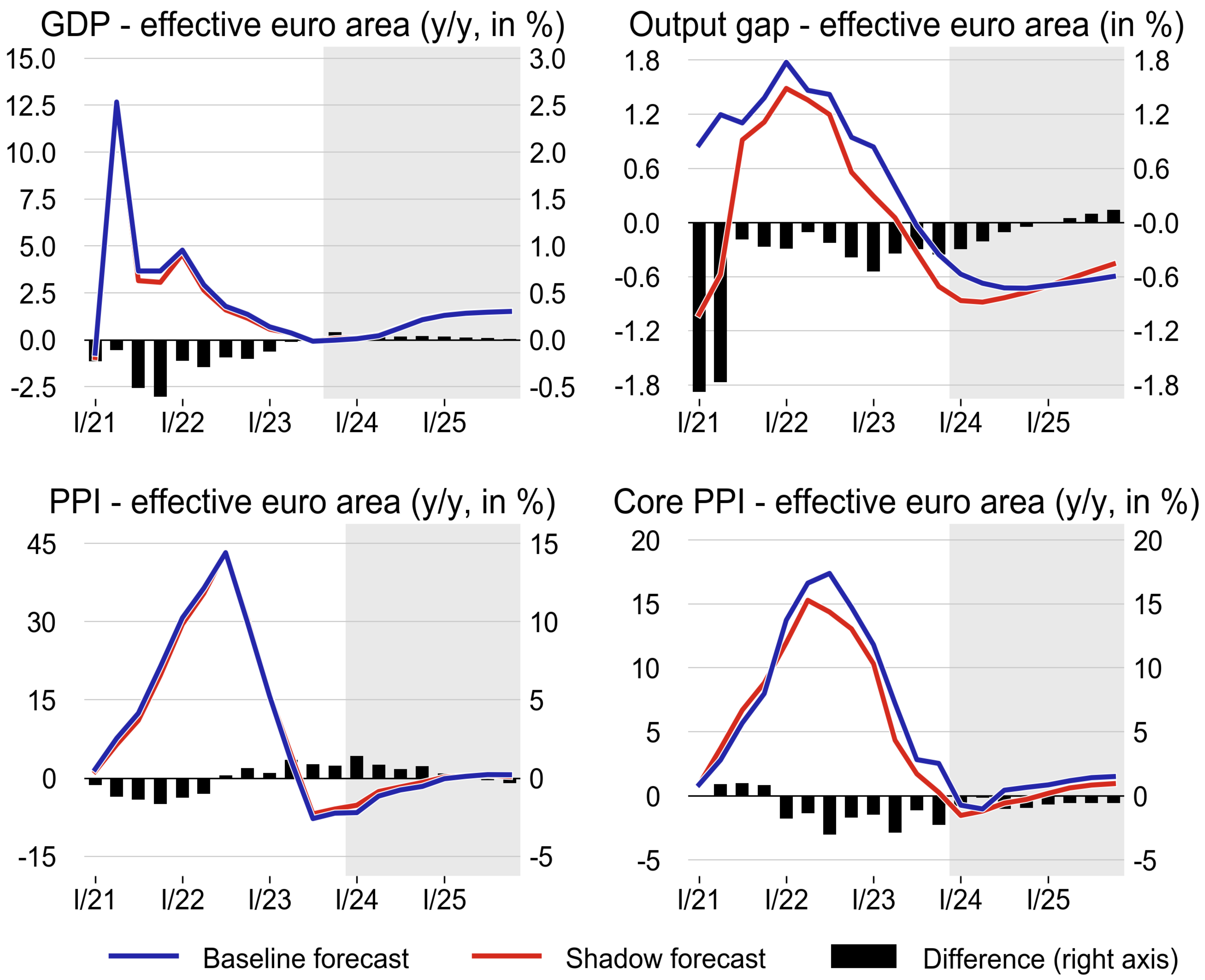
The Updated g3+ Core Forecasting Model

- **Steps for implementing the updated g3+ core forecasting model into practice**
  - MPR – Winter 2024: preparation for model implementation, shadow forecast using the updated model and presentation of the main model changes in the appendix of the MPR.
  - MPR – Spring 2024: baseline scenario using the updated model.
  - Throughout this year: Preparation of a research article describing the change in detail in the form of CNB WP.

- **Benefits of the updated model**
  - More direct representation of foreign and domestic developments in the model structure (including treatment of the extraordinary economic events in recent years).
  - Eg. consistency of effective euro area aggregate on the history and forecast (EA6), endogenous filtering of foreign output gap, explicit treatment of imported energy prices, recalibrations etc.
  - Replacement of some existing expert judgements with new connections in the model.

- **Improved forecasting properties:** The updated model shows better forecasting properties for most macroeconomic variables (e.g., components of GDP, wages, exchange rate).

Shadow Forecast: Foreign Assumptions



- The higher **consistency of effective euro area aggregates** from EA17 on history and EA5 for the forecast, to EA6 over the whole sample, along with **new structural relationships**, lead to slightly different external assumptions in the shadow forecast.
- **Foreign GDP growth** shows only slight differences compared to the baseline scenario, due to an increase in the eff. EA weights of countries that grew at slower rates. Given the similar potential output growth for the two aggregates, the lower GDP growth is reflected in a **more negative output gap**.
- Growth of **core PPI** is lower, while growth in **energy PPI** is less negative than in the baseline scenario. The path of total PPI is similar to that in the baseline scenario.

Shadow Forecast: Domestic Variables

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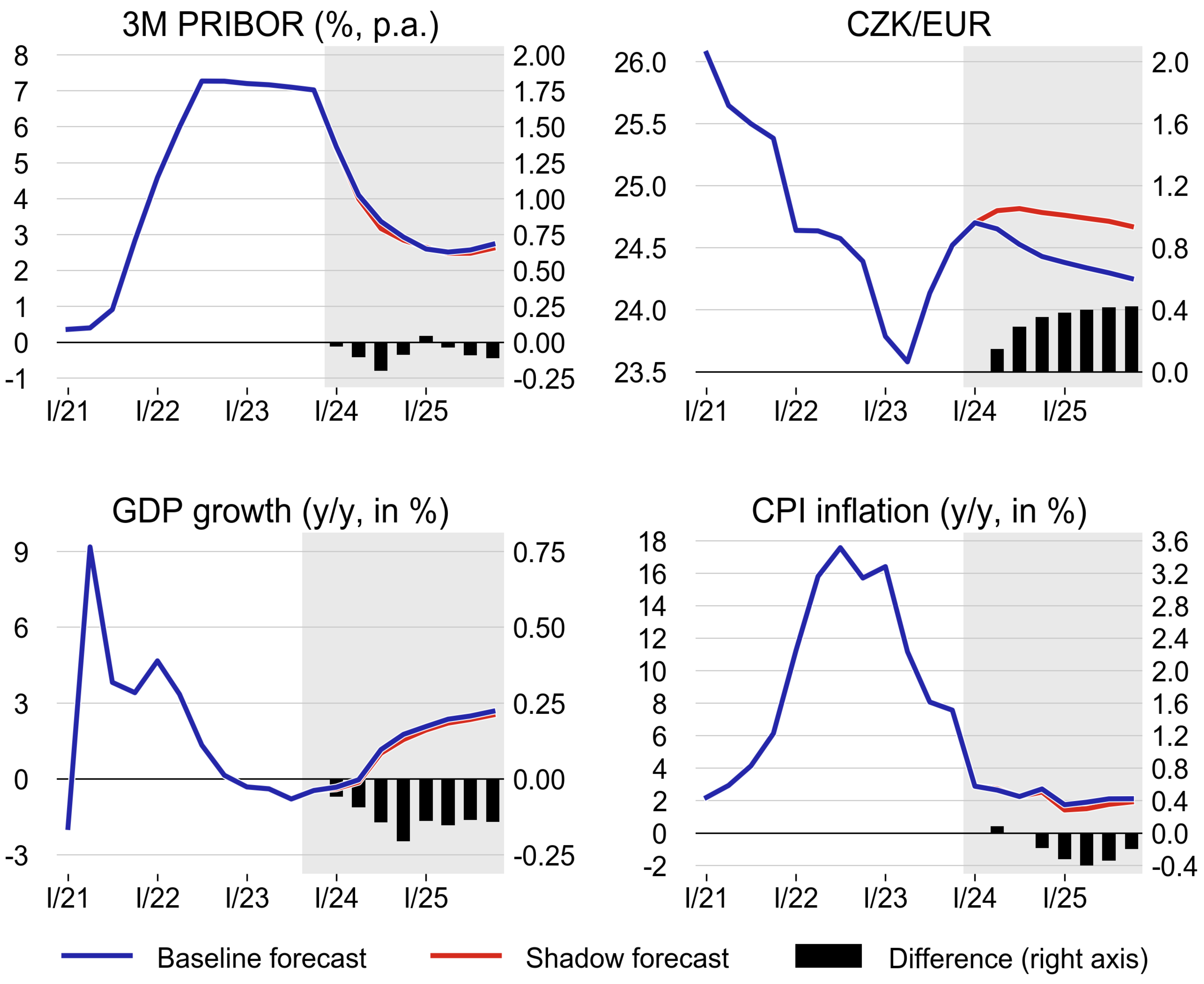

- The shadow forecast made using the updated g3+ model provides a similar view of the present state and future path of the domestic economy.
- **GDP growth** is predicted to be slightly lower in the shadow forecast, due to weaker domestic investment and export activity, reflecting a wider negative output gap in the effective euro area this year and the modified structural relationships in the updated model.
- The weaker domestic demand results in somewhat lower **inflation**.
- Despite the rather weaker inflationary pressure, the decline in **interest rates** is similar as in the baseline scenario.
- The lower export activity caused by the more negative foreign output gap leads to a more pronounced depreciation of the **koruna** this year.

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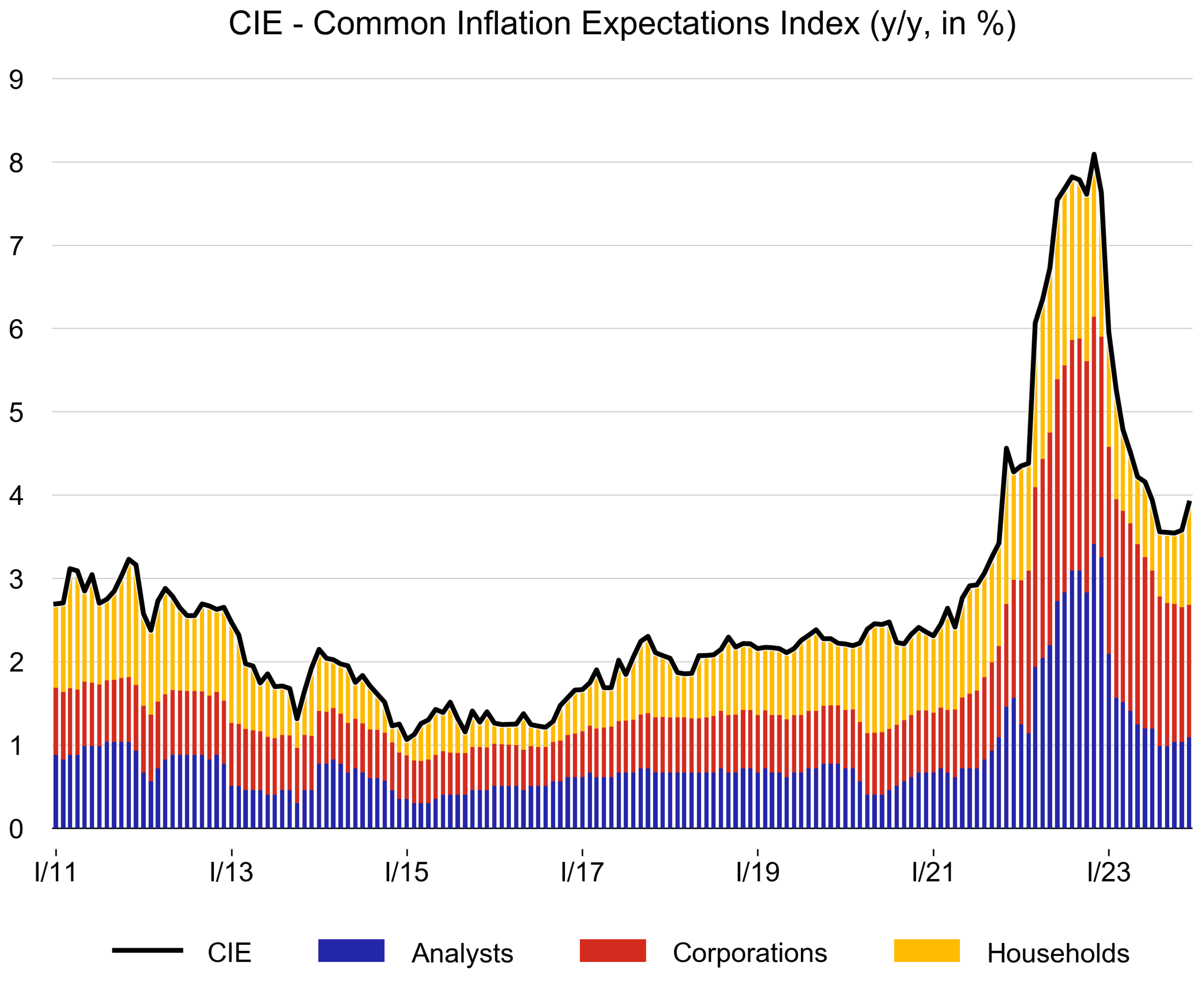
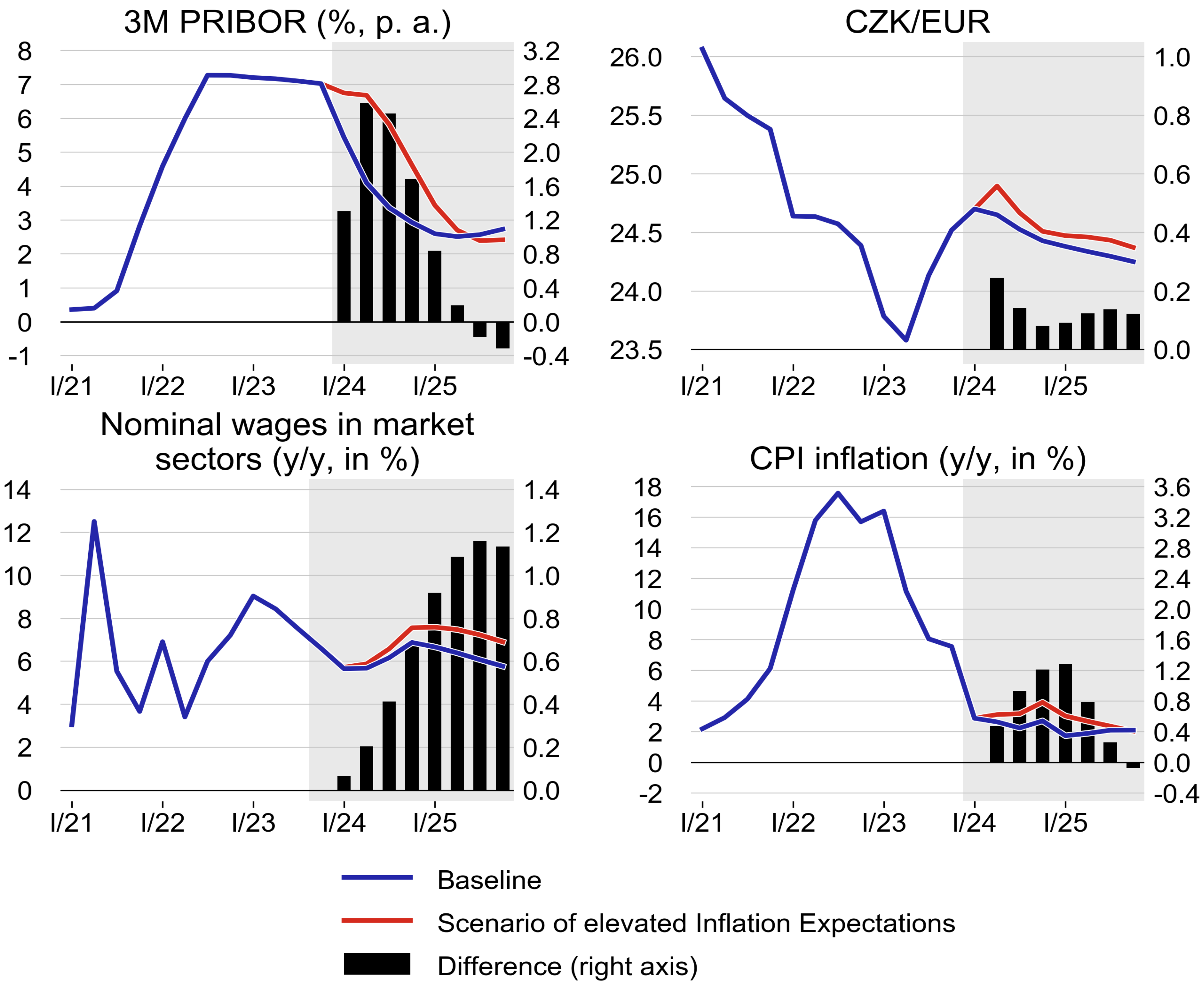
Modelling Elevated Inflation Expectations Using the CIE Index



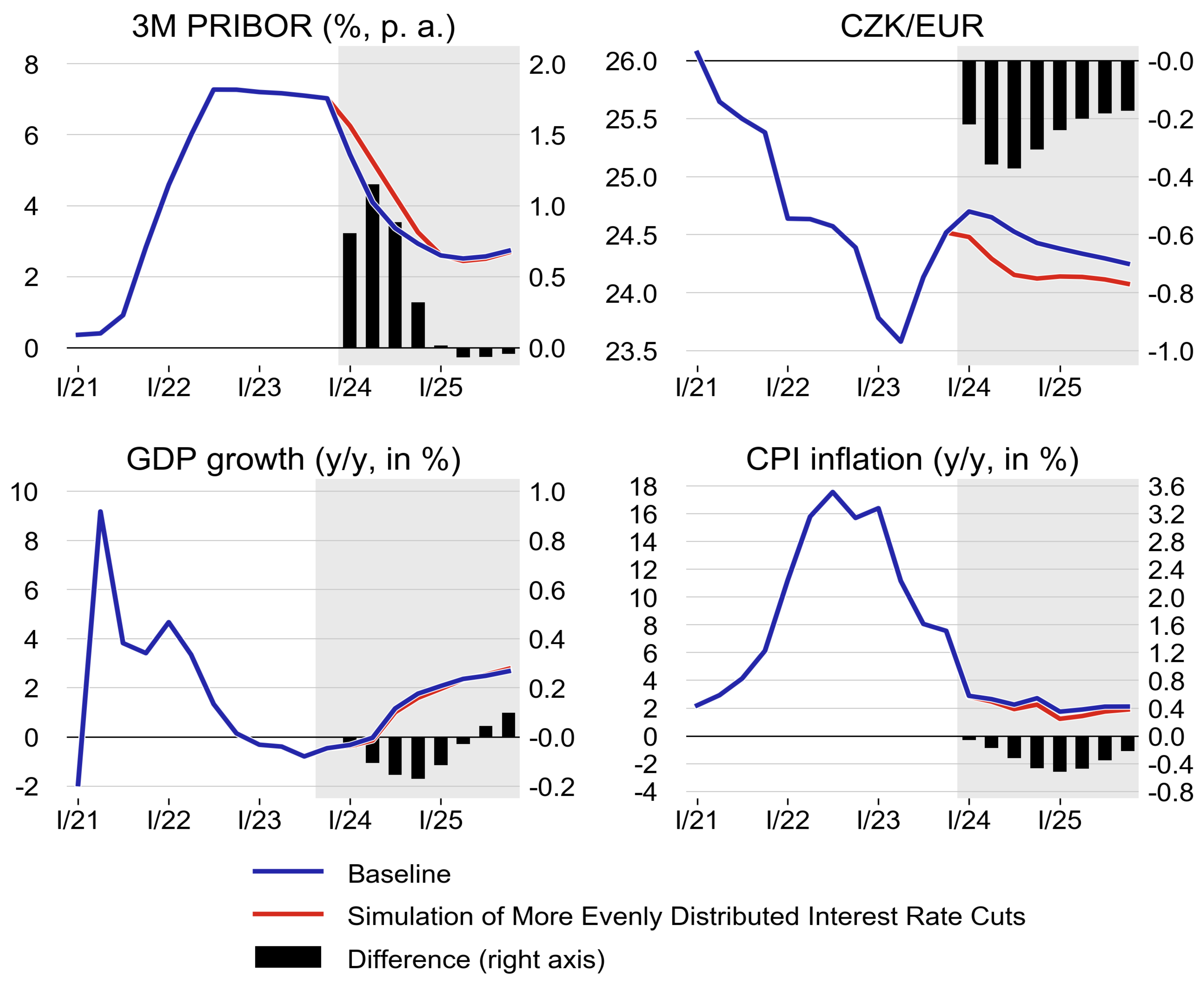
- As in the summer 2023 forecast, the approach to modelling elevated inflation expectations uses the **Common Inflation Expectations (CIE)** index which aggregates data on the expected change in inflation one year ahead taken from the surveys of inflation expectations of the **financial market, businesses** and **households.**
- The values of the index are used as a source of information for making adjustments to inflation expectations in g3+ model. The calibration was chosen so that inflation expectations in the model approximate the course of the CIE index in the recent past.

Scenario of Elevated Inflation Expectations



- The elevated **inflation expectations** fundamentally affect the decisions of economic agents, generating additional inflation pressures in the economy.
- The central bank partially responds by leaving **interest rates** higher than in the baseline scenario. However, this response is not sufficient to offset the effect of the elevated inflation expectations.
- This in turn manifests itself mainly in higher **inflation rate** and higher **nominal wage growth** than in the baseline scenario.
- Additional depreciation pressure due to an increase in the risk premium leads to a slightly weaker **koruna** over the forecast horizon.

Simulation of More Evenly Distributed Interest Rate Cuts



- The simulation assumes a reduction of **interest rates** by 0.5 percentage points at each monetary policy meeting of the bank board this year.
- A slower decrease in interest rates implies a higher interest rate differential with the euro area and leads to a **stronger koruna** compared to the baseline.
- More tightened monetary conditions lead to **lower GDP growth and CPI inflation**, which approaches the lower boundary of the tolerance band around the target.

Thank you for your attention

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Winter 2024 Forecast – summary

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Forecast summary

- Inflation will return close to the 2% inflation target at the start of this year and stay there over the monetary policy horizon.
- Czech GDP will grow only slightly this year and the economy will thus still operate below its potential. Economic activity will return to stronger growth next year.
- Moderate wage growth will reflect a preference for job security over higher pay. Nominal wage growth will outpace inflation this year and the next.
- Consistent with the winter forecast is a rapid decline in market interest rates in the course of this year.

	2023	2024	2025
CPI inflation (%)	**10,7**	**2,6**	**2,0**
	(-0,1)	(0,0)	(-0,1)
GDP	**-0,5**	**0,6**	**2,4**
	(-0,1)	(-0,6)	(-0,4)
Average nominal wage	**7,4**	**5,8**	**5,8**
	(-0,1)	(-0,9)	(-0,1)
Interest rate 3M PRIBOR (in %)	**7,1**	**4,0**	**2,6**
	(0,1)	(-0,3)	(-0,8)
Exchange rate (CZK/EUR)	**24,0**	**24,6**	**24,3**
	(0,0)	(0,0)	(0,2)