



NARODOWY
BANK POLSKI

Economic Analysis and Research Department

Inflation and economic growth projection of Narodowy Bank Polski based on the NECMOD model

Warsaw / 5th July 2024





Outline:

Projection 2024 – 2026

- Economic conditions abroad
- Economic perspectives for Poland
- Inflation

Uncertainty

Projection 2024-2026

Economic conditions abroad

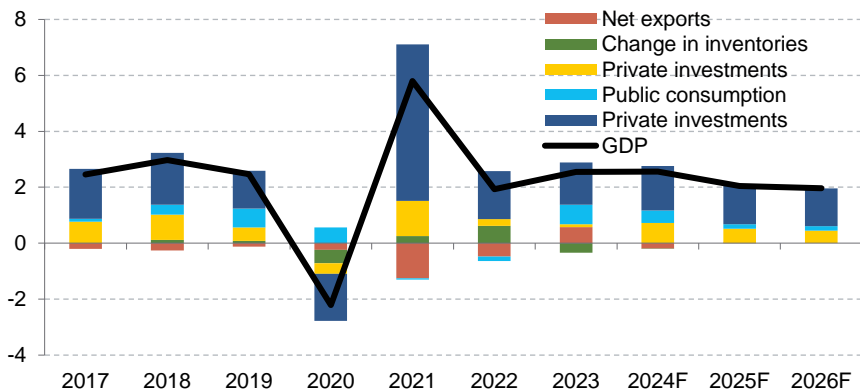
European economies are expected to accelerate GDP growth from its current low level, and in the United States the "soft landing" scenario will continue.

GDP growth in the main economies – NBP forecast (%)

	2023	2024F	2025F	2026F
Euro Area	0.6	0.8 (0.7)	1.3 (1.3)	1.3 (1.2)
Germany	0.0	0.3 (0.2)	1.1 (1.2)	1.2 (1.0)
UK	0.1	0.9 (0.3)	1.2 (1.1)	1.4 (1.4)
USA	2.5	2.5 (2.3)	2.0 (1.9)	2.0 (1.9)
China	5.2	4.9 (4.8)	4.6 (4.5)	4.2 (4.0)

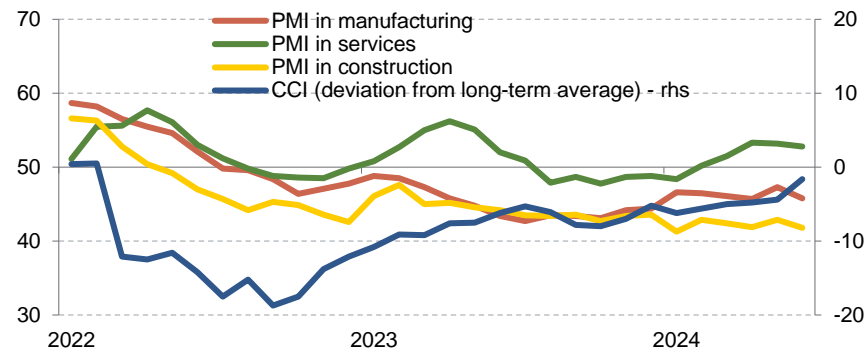
Values from the March projection are given in brackets (seasonally adjusted). Indicators with values higher than in the March projection are marked green, and indicators with lower values are marked red.

US real GDP growth decomposition (% , pp.)

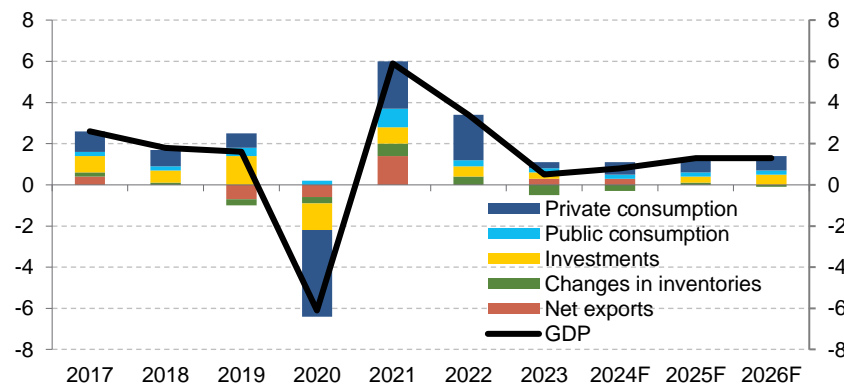


Source: S&P Global, BEA, ONS, LSEG, Eurostat, NBP calculations.

PMI and CCI Euro Area (points)

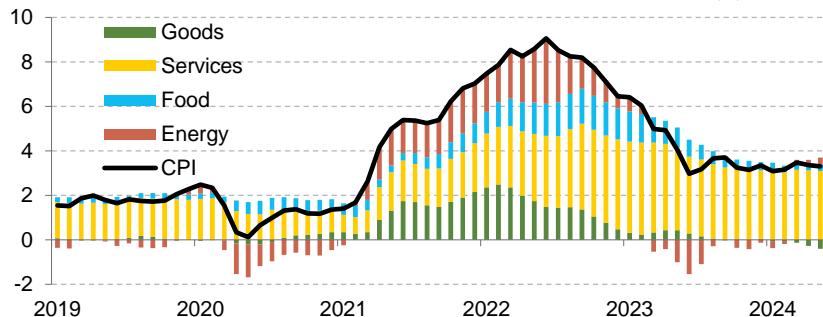


Euro area real GDP growth decomposition (% , pp.)

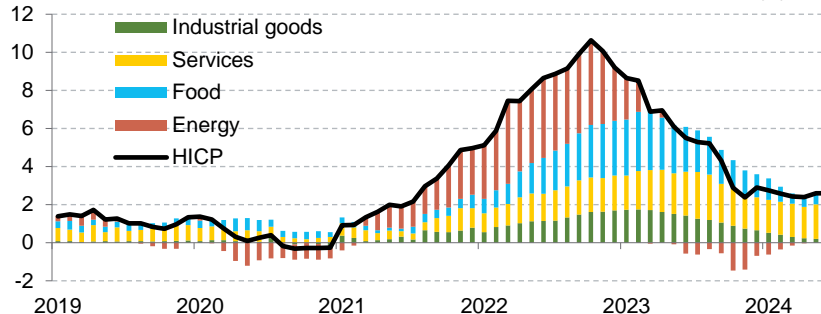


In 2024-2026 inflation will decline gradually, while being constrained by the persistence of service price inflation.

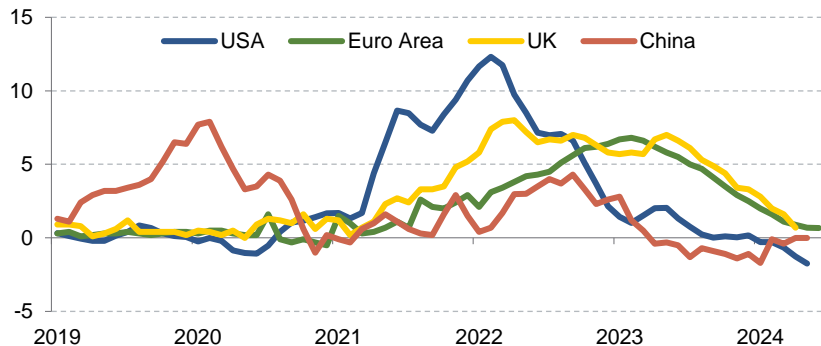
Decomposition of the CPI inflation in the USA (% pp., y/y)



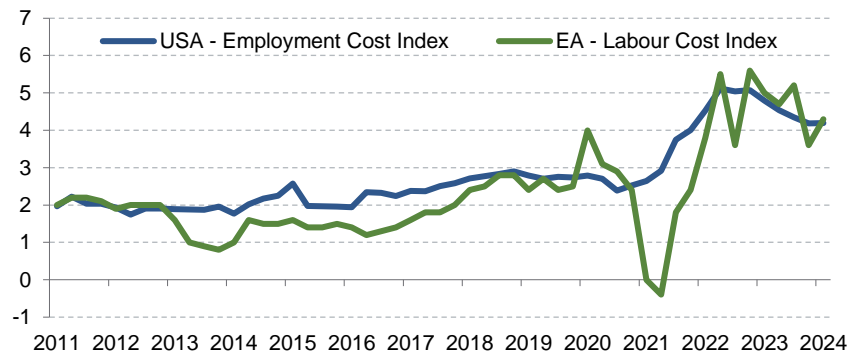
Decomposition of the HICP inflation in the Euro Area (% pp., y/y)



Price dynamics of industrial goods in selected economies (% y/y)



Nominal wages in the USA and the Euro Area (% y/y)



Note: Price dynamics of industrial goods according to the CPI basket in the United States and China, according to the HICP basket in the Euro Area and according to the CPIH basket in the United Kingdom.
Source: BLS, Eurostat, LSEG, ONS.



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Projection 2024-2026

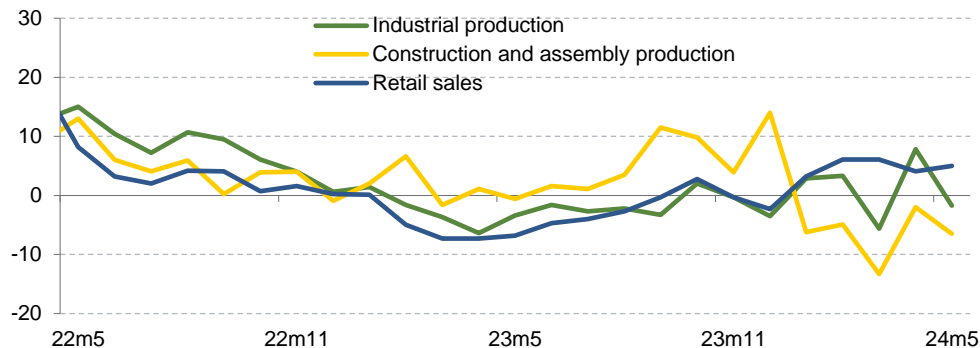
Economic perspectives for Poland

Gradual recovery of economic activity in the first half of 2024, mainly due to consumer demand

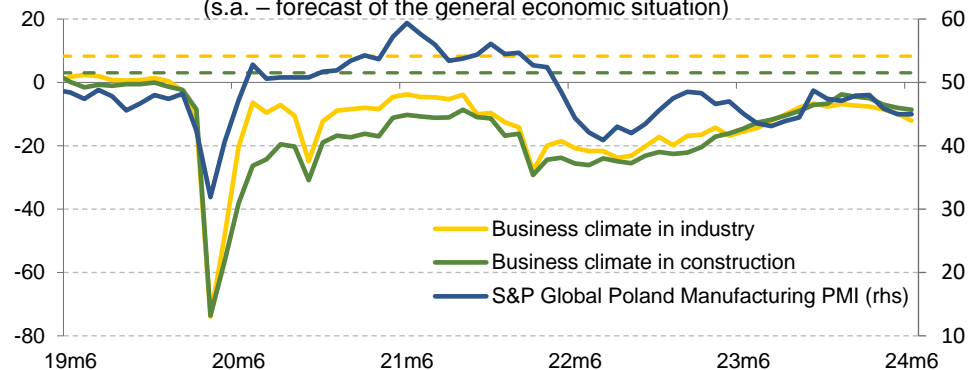
	24q1		24q2	
GDP (y/y, %)	2.0	(2.1)	2.9	(3.6)
Domestic demand (y/y, %)	1.7	(1.5)	3.3	(4.1)
Household consumption (y/y, %)	4.6	(2.8)	4.6	(3.7)
Public consumption (y/y, %)	10.9	(1.1)	10.4	(6.5)
Gross fixed capital form. (y/y, %)	-1.8	(1.6)	-0.2	(3.0)
Change in inventories contrib. (y/y, pp)	-2.8	(-0.7)	-1.6	(-0.1)
Net exports contribution (y/y, pp)	0.4	(0.4)	-0.1	(-0.1)
Exports (y/y, %)	0.5	(-3.6)	2.0	(1.1)
Imports (y/y, %)	-0.1	(-4.9)	2.5	(1.5)

Values from the March projection are given in brackets (seasonally adjusted). Indicators with values higher than in the March projection are marked **green**, and indicators with lower values are marked **red**.

Growth rates of industrial production, construction and assembly production, and retail sales (constant prices, y/y, %)



Business climate indicators in industry and construction (s.a. – forecast of the general economic situation)



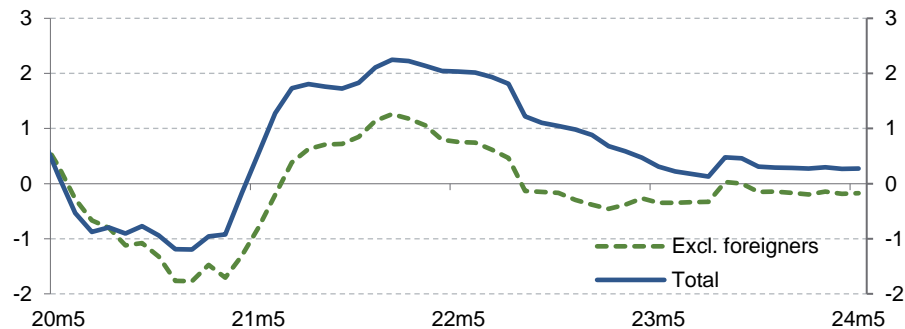
Note: dashed lines mark long-term averages of business climate indicators in industry (yellow) and construction (green).

Economic activity slackening in 2023 translated into reduction in labour demand with a delay

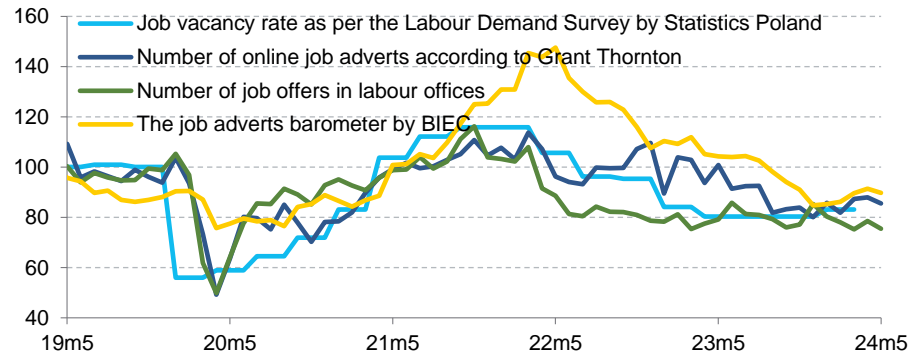
Average number of working hours, average employment in enterprise sector and hours worked in the economy according to LFS (y/y, %)



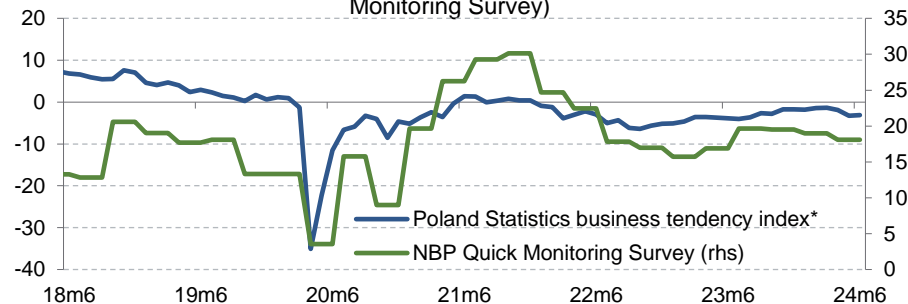
No. of employees registered for pension and disability insurance by The Social Insurance Institution (ZUS) – in total and excluding foreigners (y/y, %)



Labour demand measures (index 04.2019=100, sa)

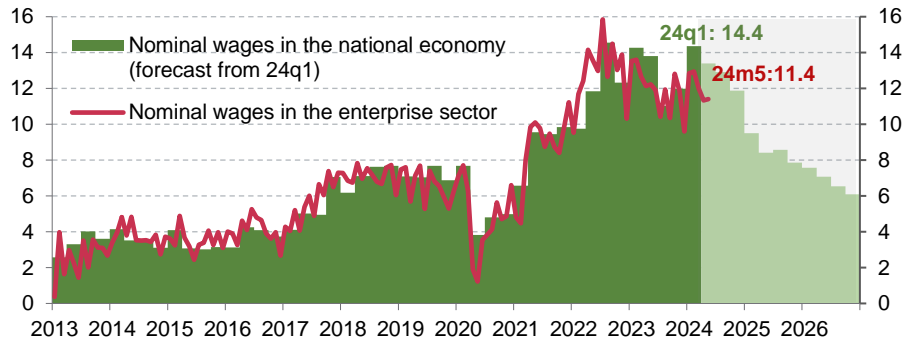


Index of expected changes in employment over the next 3 months (Statistics Poland business tendency survey) and in the next quarter (NBP Quick Monitoring Survey)

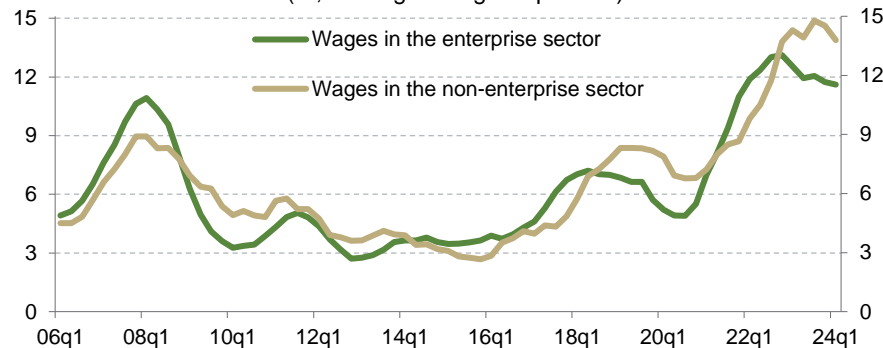


Nominal wage dynamics this year supported by a high increase in the growth of the minimum wage and salaries in the public sector, the real wage growth rate has significantly accelerated

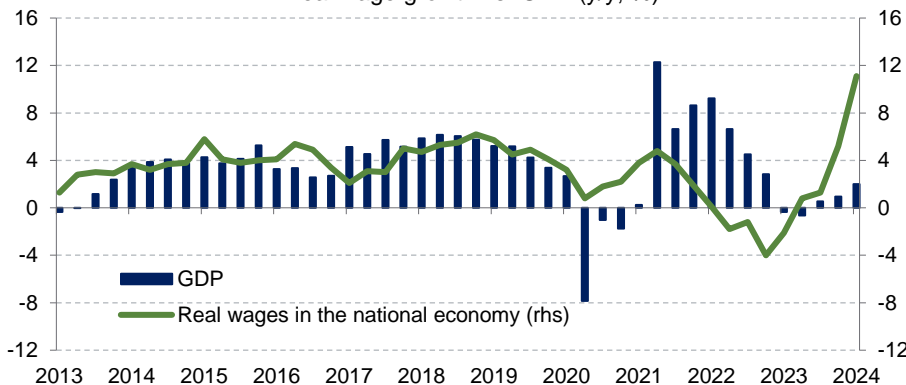
Nominal wage growth (% , y/y, national economy data as of 24q1, data from enterprise sector as of April 2024)



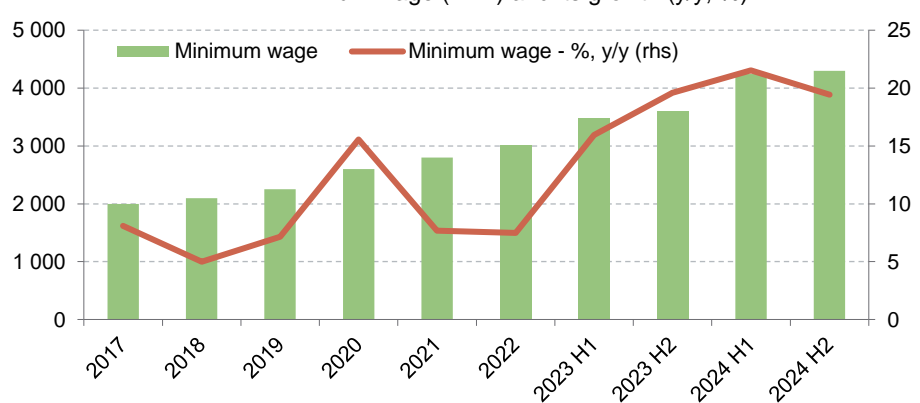
Annual growth rate of wages in the enterprise and non-enterprise sector (% , moving average 5-quarters)



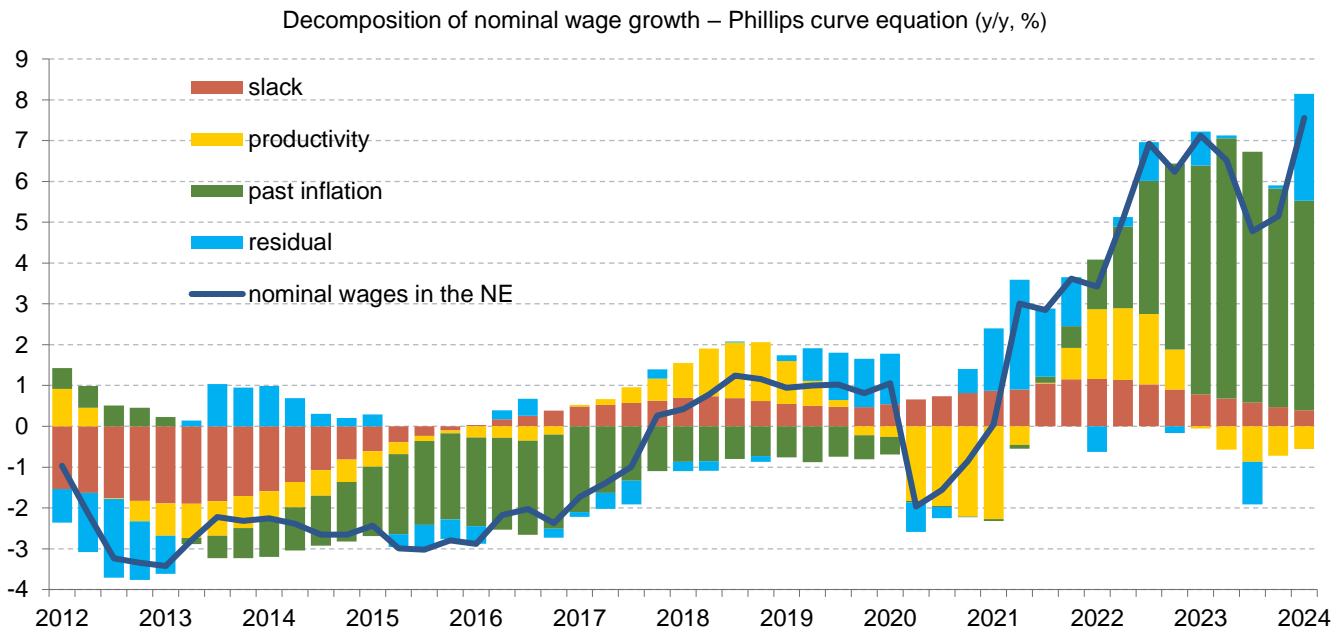
Real wage growth vs. GDP (y/y, %)



Minimum wage (PLN) and its growth (y/y, %)



Decomposition of nominal wage growth

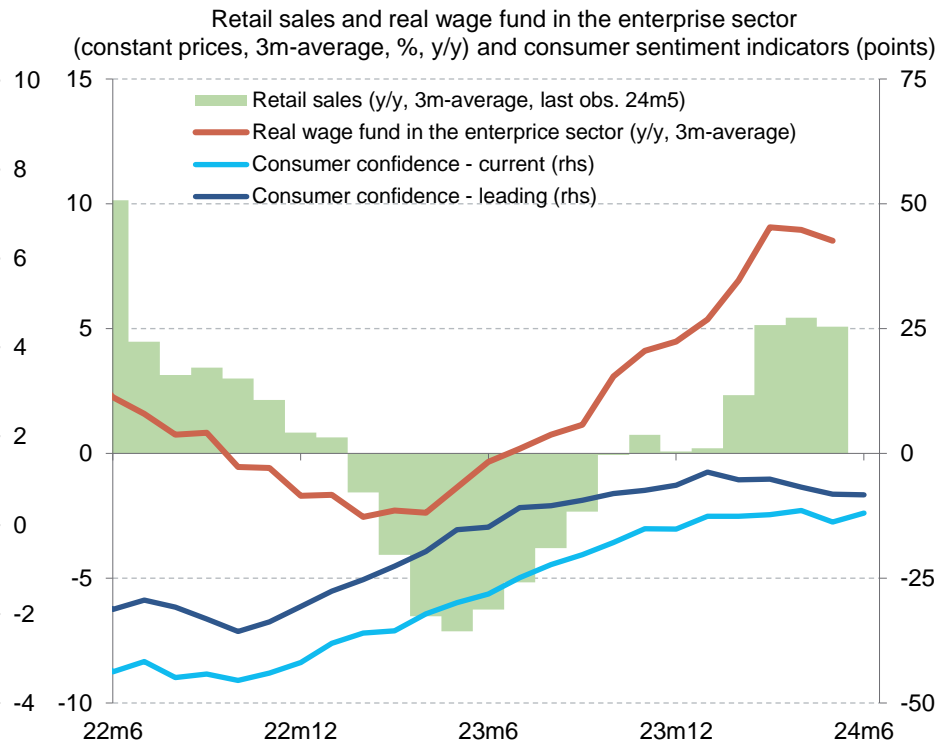
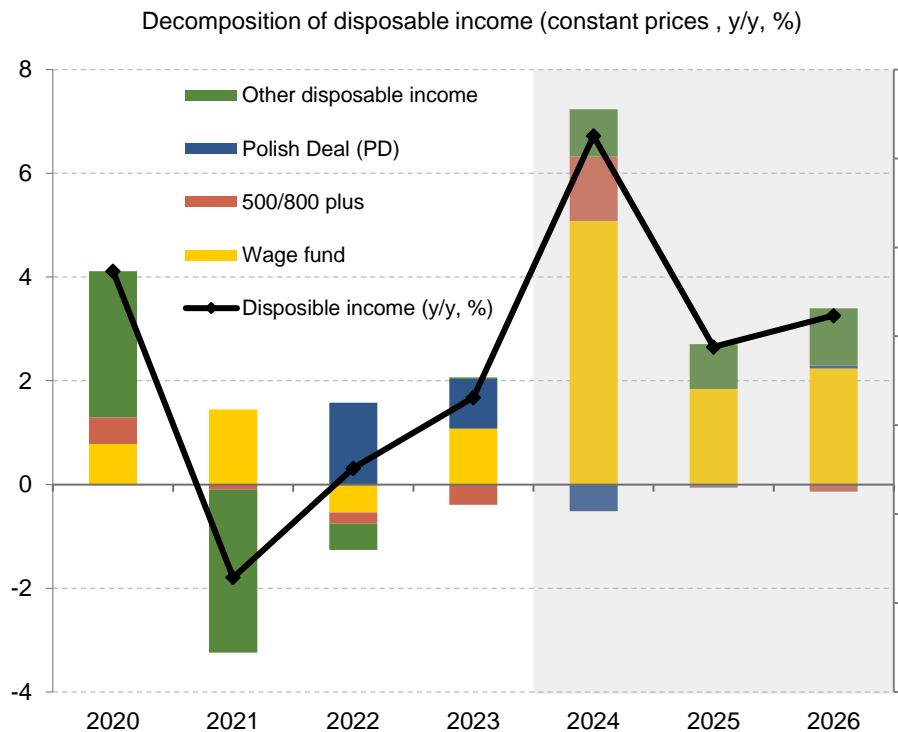


Remarks: The graph shows the decomposition of the annual dynamics of nominal wages (in deviations from the average dynamics) based on the regression equation:

$$\pi_t^w = c + \alpha \pi_{t-1}^w + \beta prod_t + \gamma u_t + \delta \pi_{t-1} + \varepsilon_t,$$

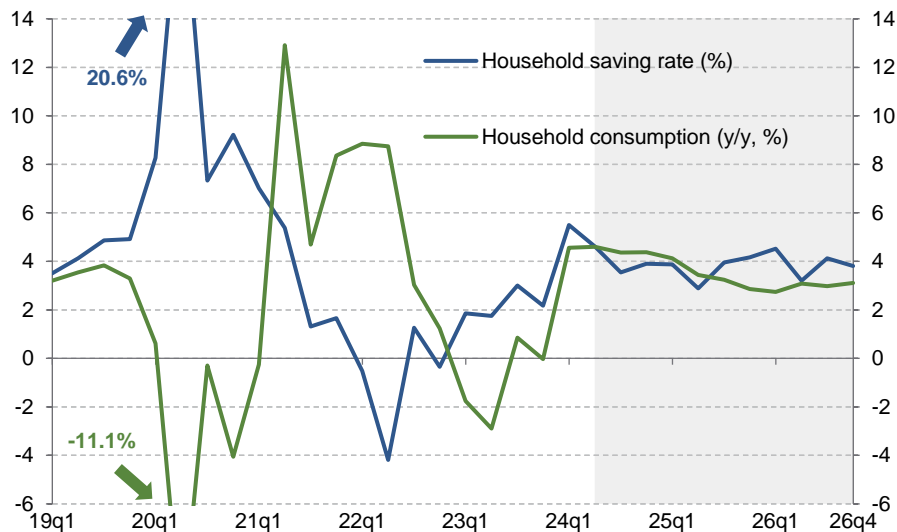
where π_t^w denotes the annual dynamics of nominal wages in the national economy, $prod_t$ – annual dynamics of productivity measured by the ratio of real GDP and the number of people employed according to LFS, u_t – labour market slack measured by the unemployment gap from the NECMOD model and π_{t-1} – lagged annual dynamics of the CPI index.

In 2024 household consumption growth accelerates due to the improvement of their income situation

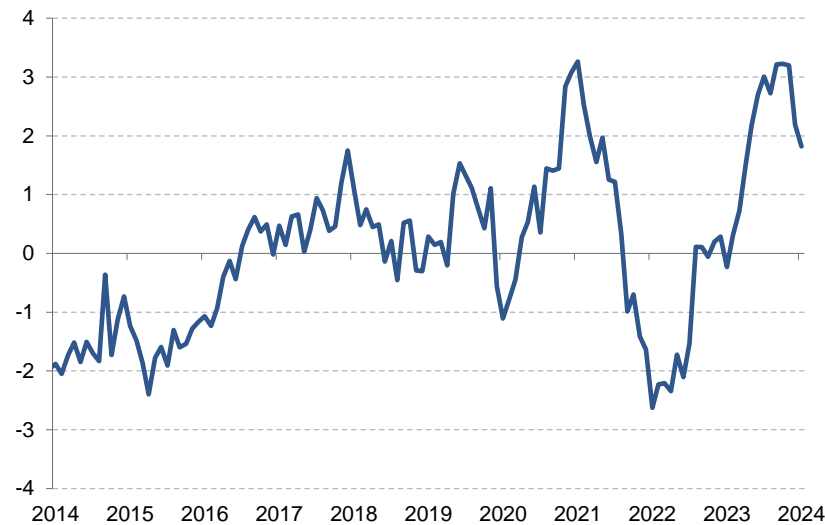


In 2025-2026 household consumption influenced by lower income growth and increase in real interest rate, which translates into a propensity to save

Household saving rate and consumption in projection (%)



Propensity to save index adjusted for the impact of the household's current financial situation



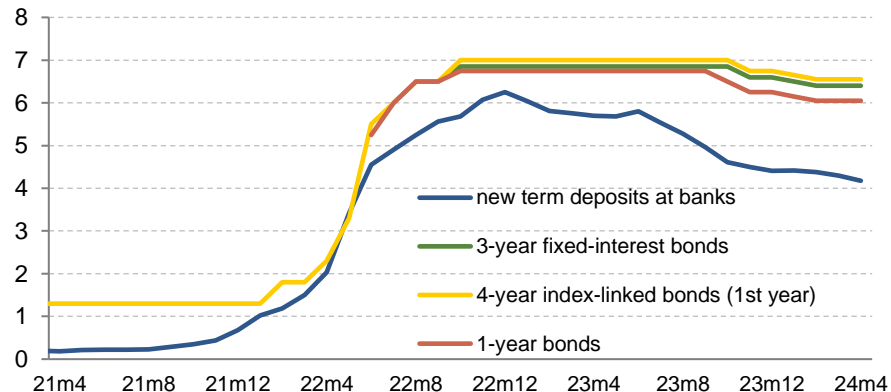
Notes: indicator determined from linear regression estimates in which the dependent variable was the "Future Money Saving" index (KGD, Statistics Poland) and the set of explanatory variables included the aggregate percentages of individual responses to the question, "Which of the following statements best describes your household's current financial situation?" (1) we can save a lot, (2) we are saving a little, (3) with our current income we are making ends meet, (4) we have to use our savings, (5) we are going into debt, (6) I don't know."

Relatively high real interest rate translates into an increased interest in bonds among households

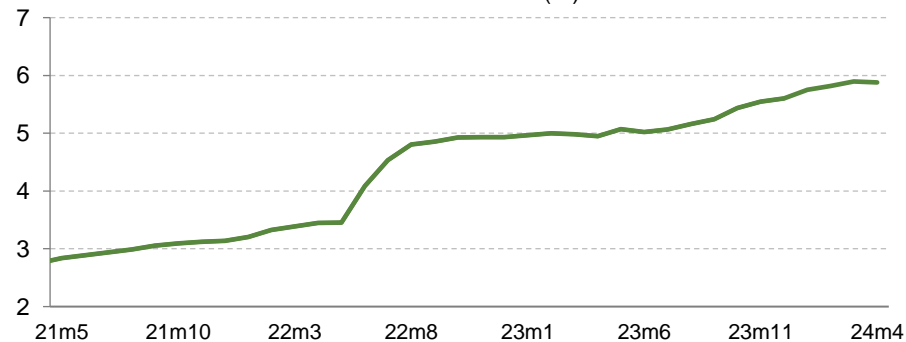
Real interest rate *ex-ante* (deflated with 4-quarter-ahead financial sector analysts' inflation expectations, %)



Average interest rates on new bank deposits and retail bonds (%)



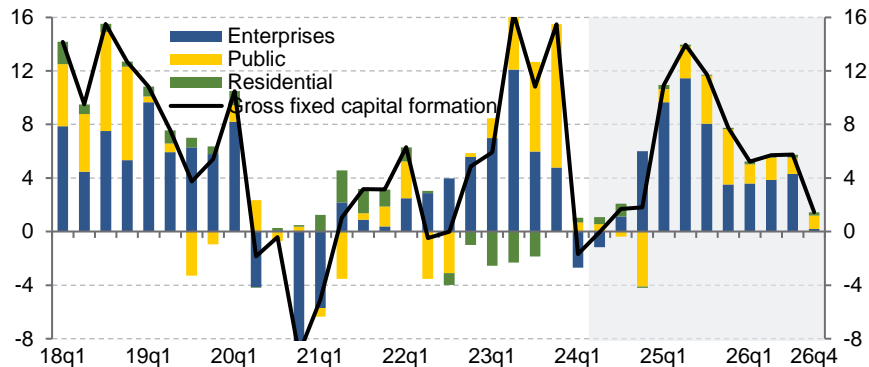
Share of government bonds in domestic financial assets of households (%)



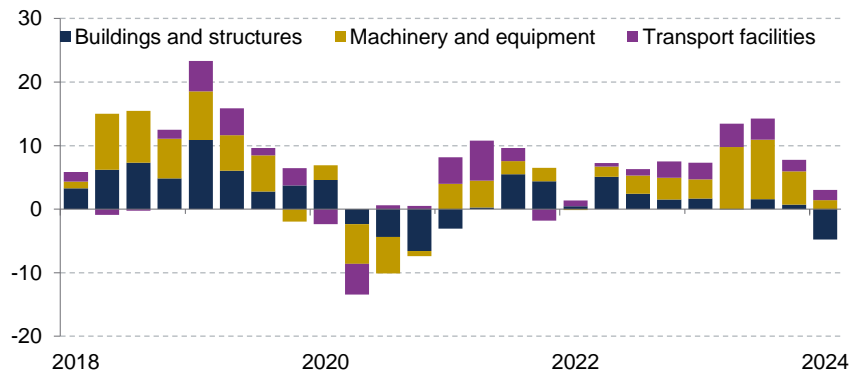
Source: Ministry of Finance, NBP calculations.

Decrease in gross fixed capital formation in 2024 Q1 due to the lower than in the previous quarter public and corporate (mainly of public and large enterprises) investment dynamics

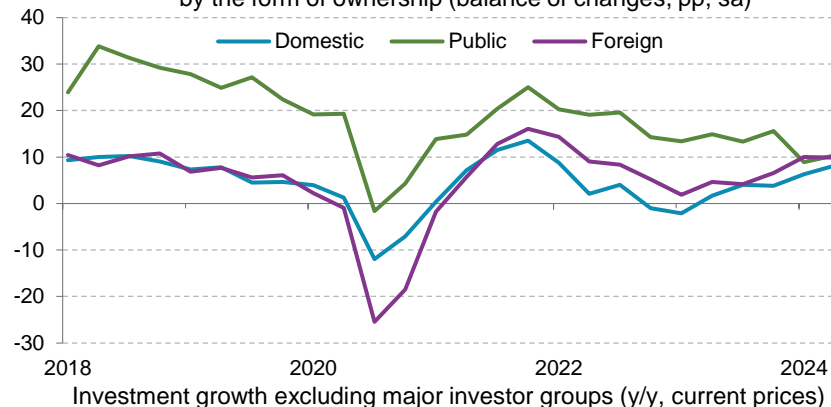
Decomposition of gross fixed capital formation (y/y, %)



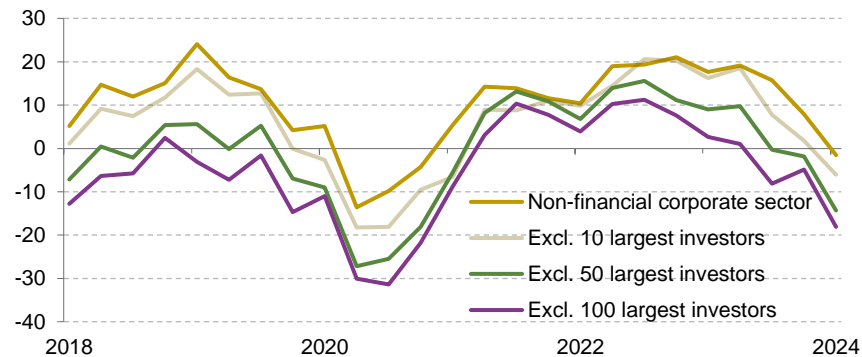
Contribution to real investment growth by type (y/y, pp)



Planned change in the scale of investment in the outlook for the year by the form of ownership (balance of changes, pp, sa)

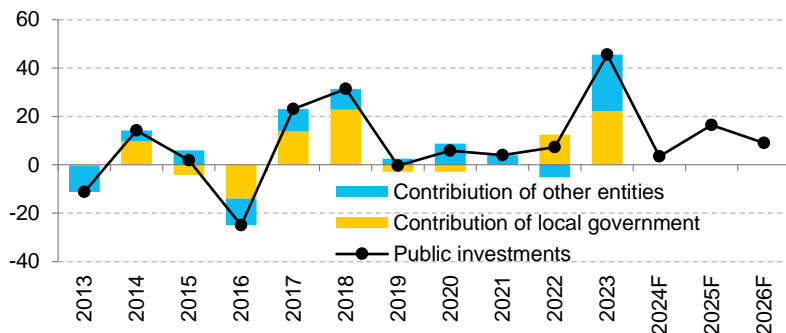


Investment growth excluding major investor groups (y/y, current prices)

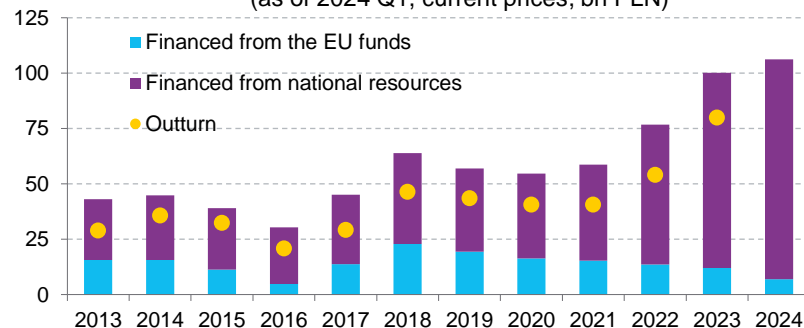


In 2023 a substantial rise in local government and military investments. In 2024 public investment expected to slow down due to the initial phase of the new EU perspective.

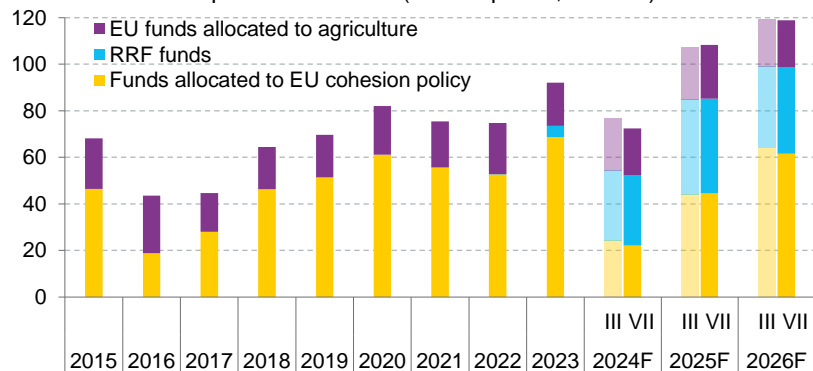
Nominal growth rate of public investment and contribution of its main components (current prices, y/y and pp)



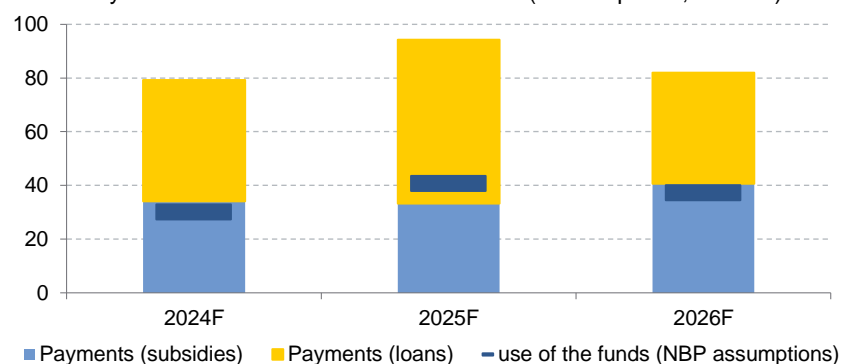
Planned local governments investment spending (as of 2024 Q1, current prices, bn PLN)



Total absorption of EU funds (current prices, bn PLN)

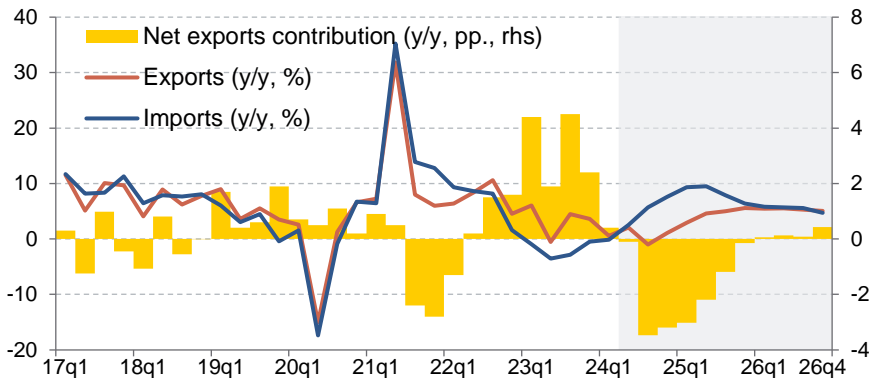


Payments from RRF and use of the funds (current prices, bn PLN)

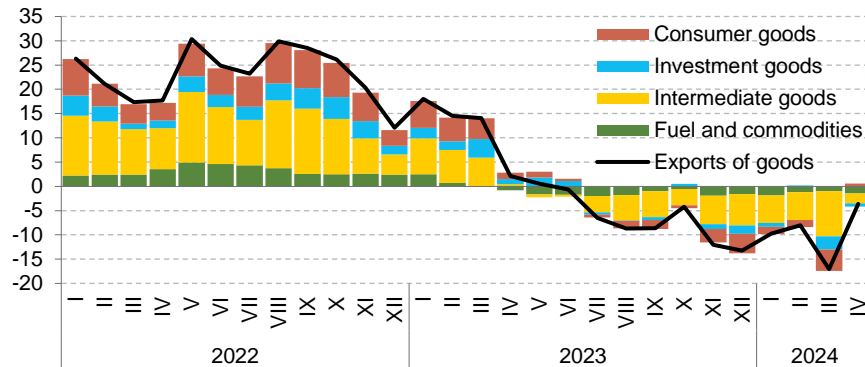


After a historically high outturn in 2023, the contribution of net exports to GDP growth turns negative again in 2024-2025.

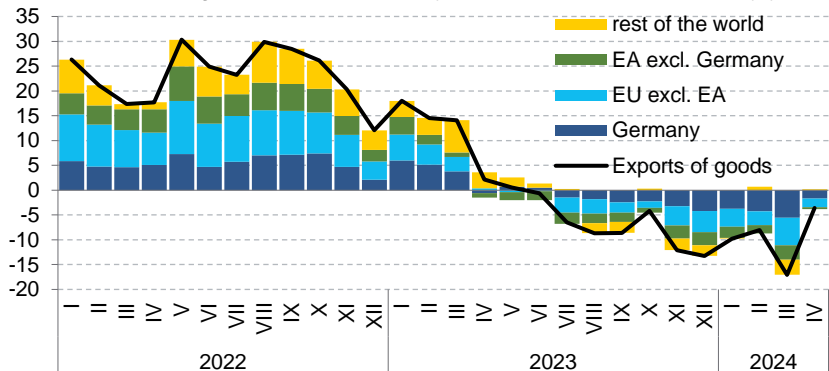
Net exports contribution to GDP growth rate



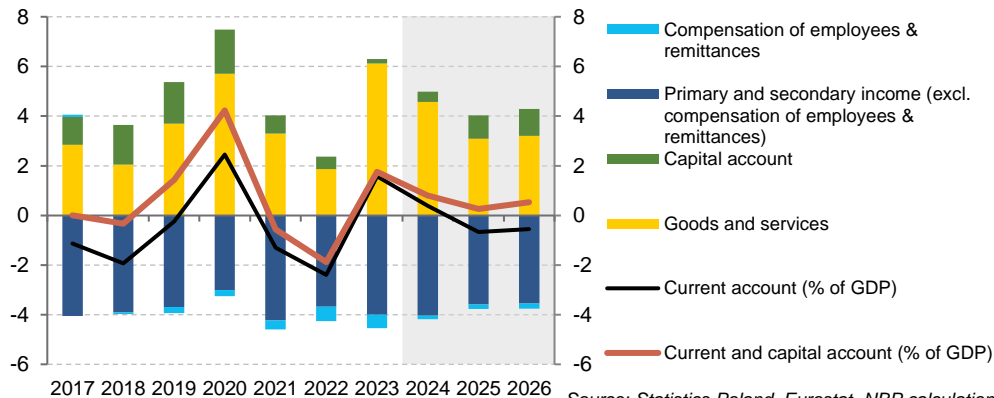
Exports of goods (contributions by products, current prices, %, y/y)



Exports of goods (contributions by direction, current prices, %, y/y)

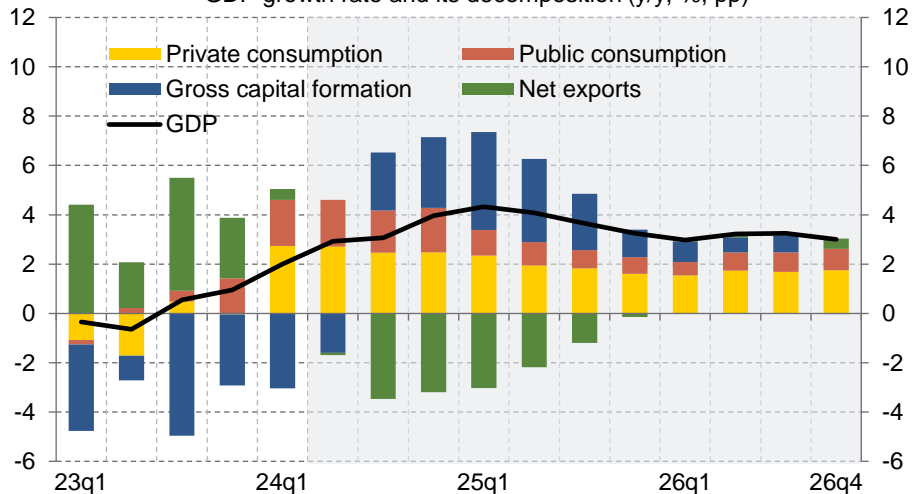


Current and capital account balance (% of GDP)

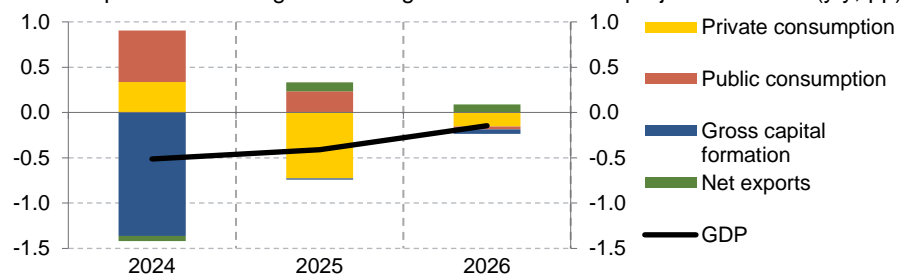


After a marked slowdown in 2023, growth rebounds in subsequent years, weaker than expected in the March round.

GDP growth rate and its decomposition (y/y, %, pp)



Decomposition of changes in GDP growth rate between projection rounds (y/y, pp)



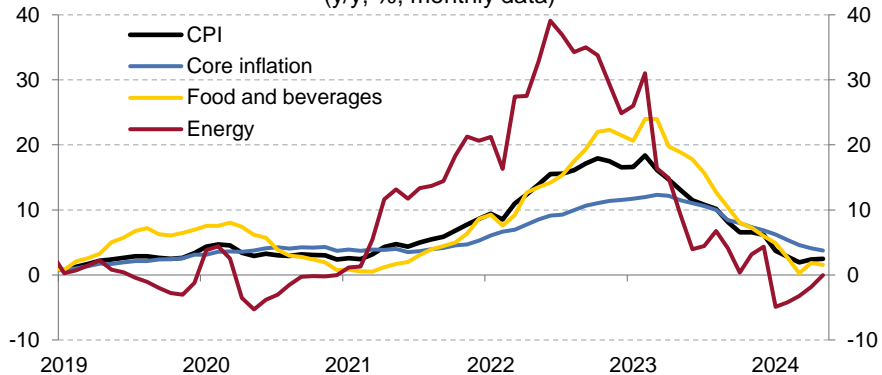
Factors determining domestic activity over the projection horizon:

- ↑ **receding impact of supply shocks** on global energy commodity markets
- ↑ **high wage growth and fiscal measures** that increase households' disposable income
- ↑ **sharp influx of UE funds** in 2025 under the new financial perspective 2021-2027
- ↑ **limited recovery in Poland's external economic environment**
- ↓ **restrictive monetary policy**, assuming rates remain unchanged
- ↓ **increase in propensity to save**

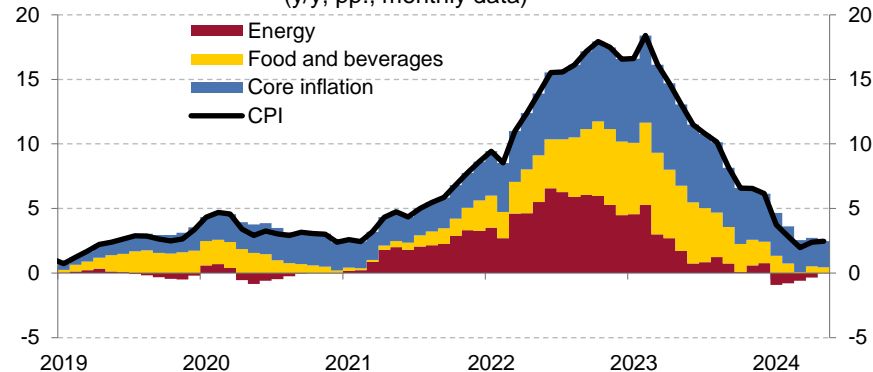
GDP, y/y, %	2022	2023	2024	2025	2026
July 2024	5.6	0.2	3.0	3.8	3.1
March 2024	5.3	0.2	3.5	4.2	3.3

Since February 2024 inflation CPI consistent with the inflation target

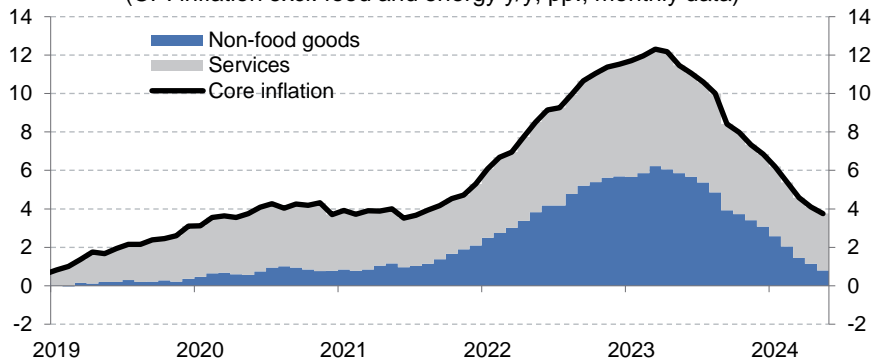
Consumer price dynamics
(y/y, %, monthly data)



CPI inflation decomposition
(y/y, pp., monthly data)



Decomposition of core inflation
(CPI inflation excl. food and energy y/y, pp., monthly data)



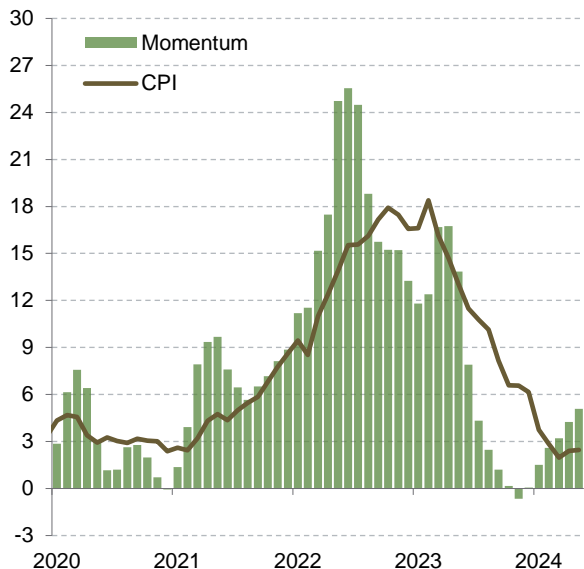
Inflation in 2024 Q1 compared to the March projection (y/y, %)

y/y, %	23q4	24q1	(3.2)
CPI inflation	6.4	2.8	(3.2)
Core inflation	7.4	5.4	(5.6)
Food prices inflation	7.1	2.6	(3.0)
Energy prices inflation	2.6	-4.1	(-3.5)

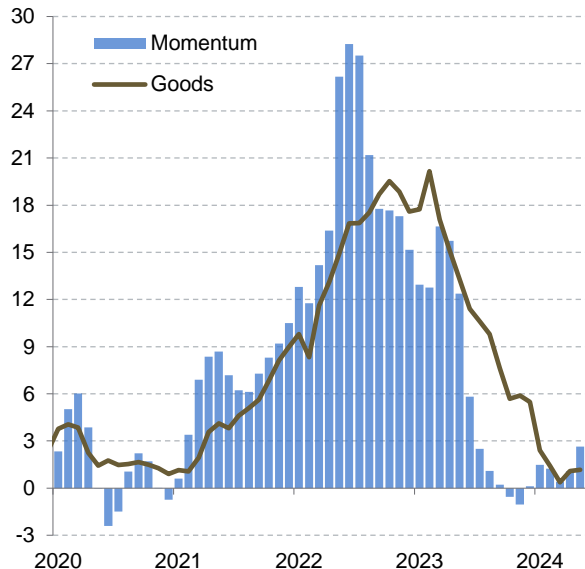
Values from the March projection are given in brackets (seasonally adjusted data). Indicators with values higher than in the March projection are marked green, whereas indicators with lower values are marked red.

Decline in inflation CPI in the last months whereas service prices dynamics remain elevated

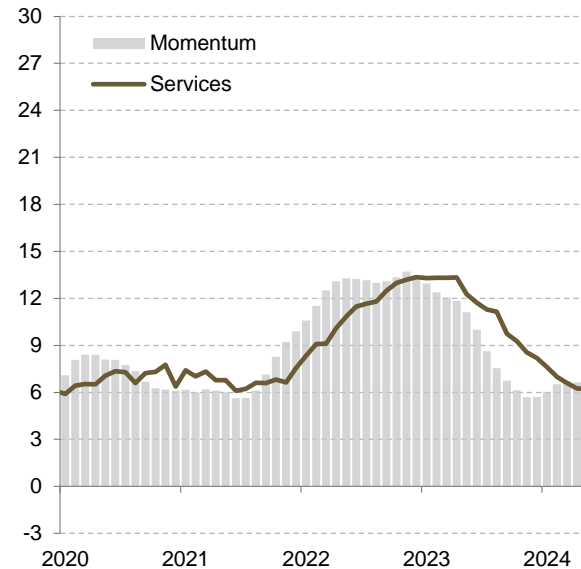
Inflation CPI and momentum
(y/y, %)



Inflation of goods and momentum
(y/y, %)



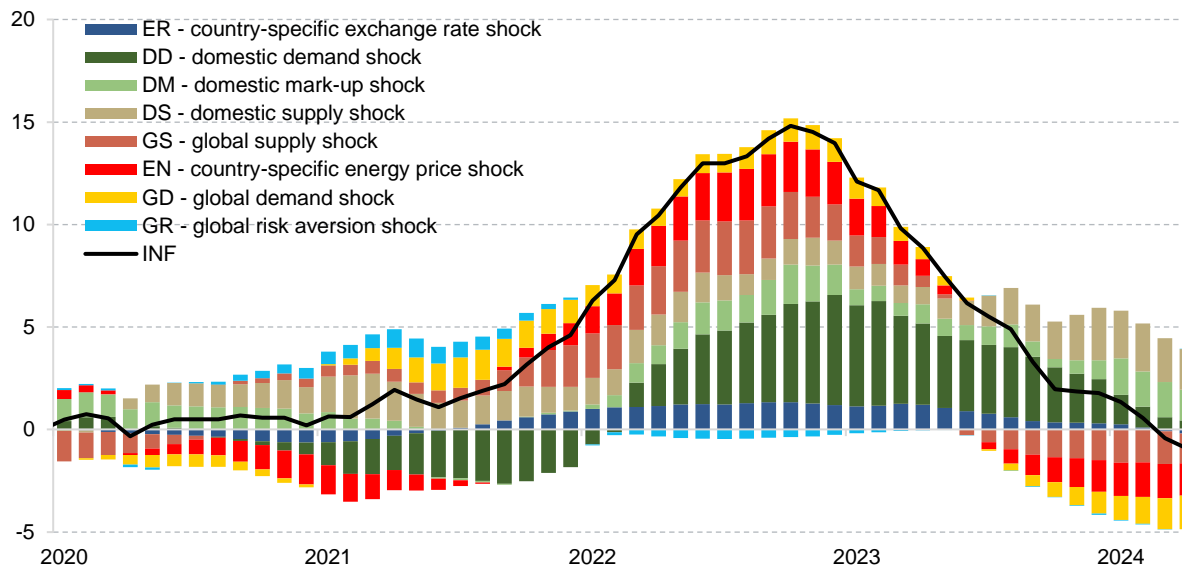
Inflation in services and momentum
(y/y, %)



Note: Momentum: annualised 3m-o-3m percentage changes. The CPI was decomposed into goods (including food and non-alcoholic beverages, non-food goods and energy) and services.

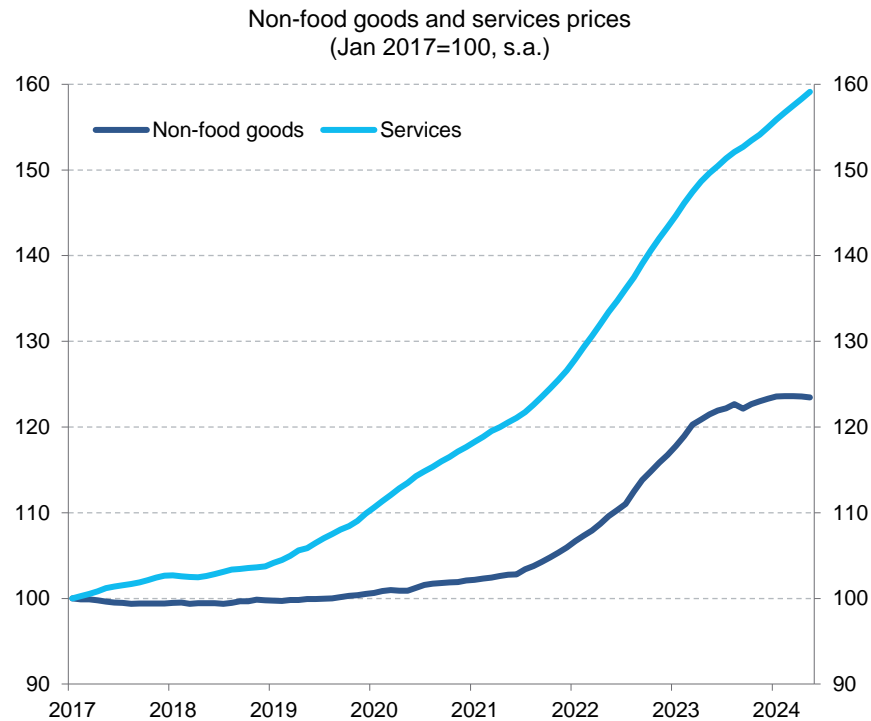
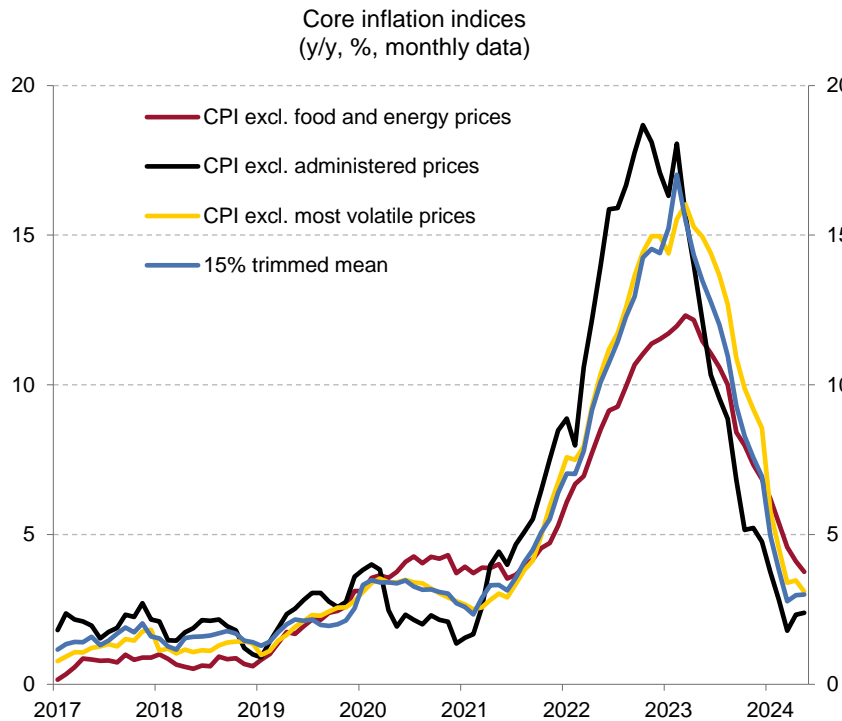
Model estimates validate the disinflationary effects of foreign shocks on inflation in Poland

Model decomposition of the HICP inflation at constant taxes
y/y, log growth rates, deviations from long-term mean in pp



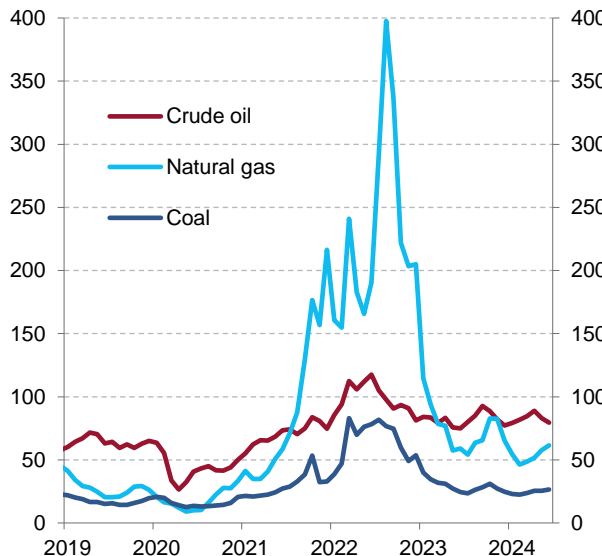
Note: model decomposition of the log growth rate in HICP at constant taxes (INF) from a structural BVAR model, in which shocks are identified with timing and sign restrictions. The model, featuring eight endogenous variables, has been estimated with Bayesian methods on a sample from January 2003 to April 2024. Foreign variables are assumed to be block exogenous. Details can be found in Szafranek, Szafrński & Leszczyńska-Paczesna (2024).

Simultaneously core inflation decreased, mainly as a result of a non-food goods price growth slowdown



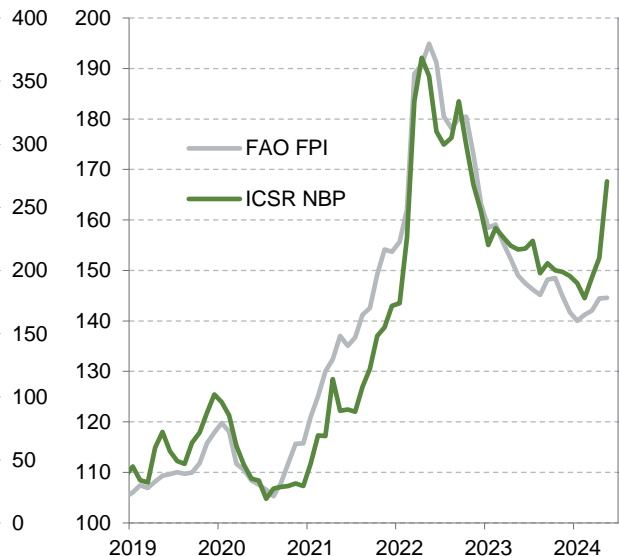
In recent months, the commodity prices have increased amid supply constraints

Oil, gas and coal prices
(USD/boe, monthly data)



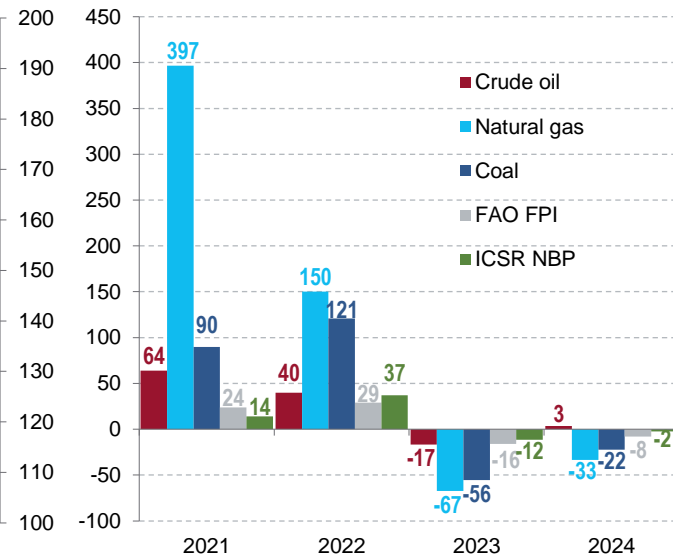
Note: boe - barrel of oil equivalent.
Last observation: 10/06/2024.

FAO FPI and NBP ICSR
(indices May 2010=100, EUR, monthly data)



Note: Last observation: 31/05/2024.

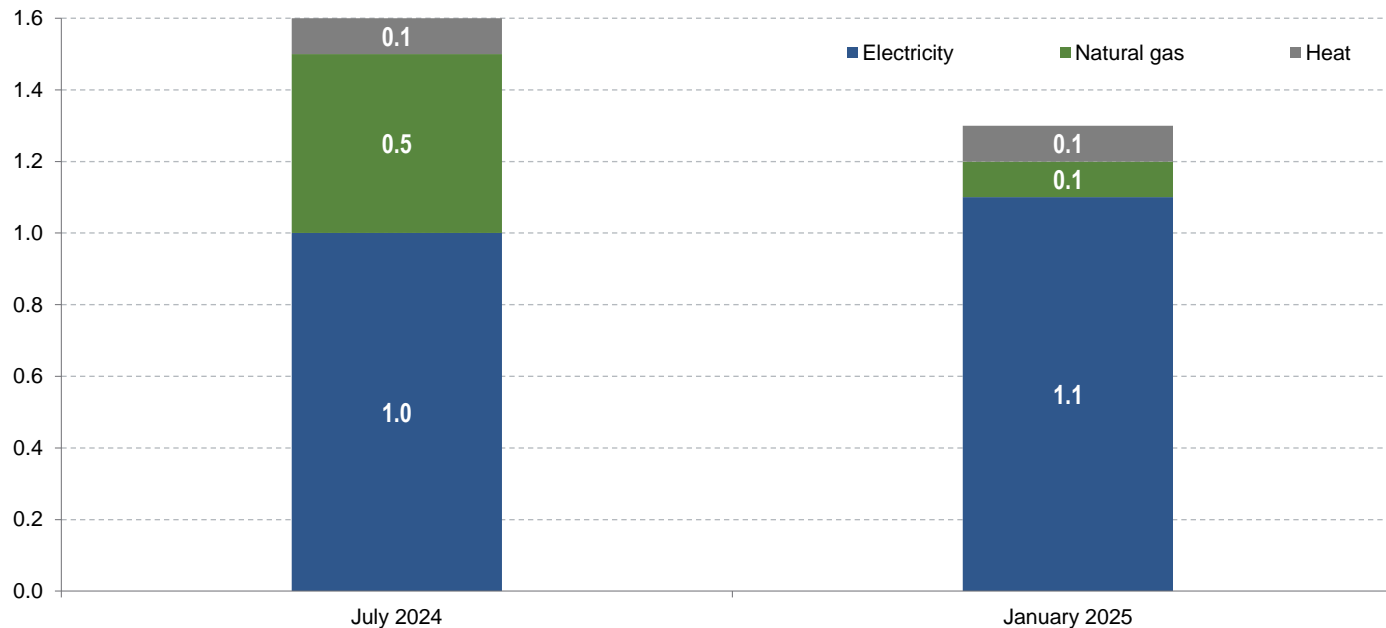
Average annual price dynamics
of energy and agricultural commodities between
2021 and 2024 (%)



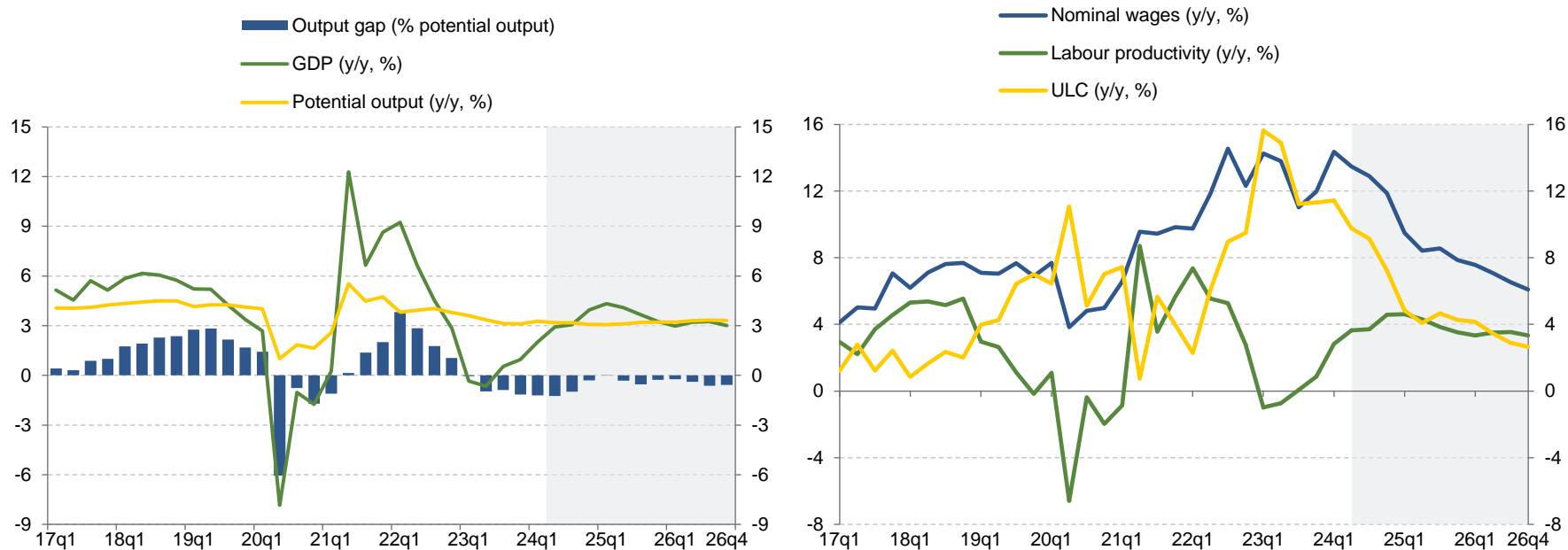
Note: Average annual dynamics in 2021-2023. For 2024 and energy commodities, the average from January-June on an annual basis, in the case of agricultural commodities, the January-May average.

The partial unfreezing of energy prices will contribute to the increase of the inflation CPI in July 2024 and January 2025.

Impact of the expected increase in prices of electricity, natural gas and heat on CPI inflation m/m (pp.)

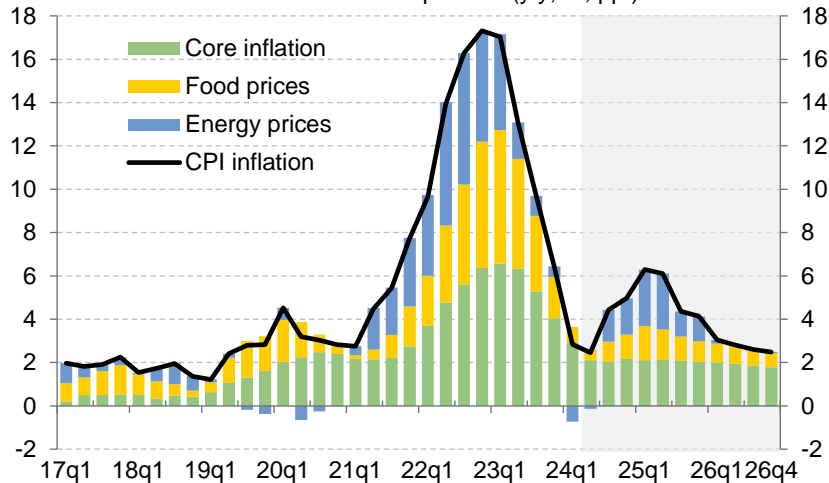


Over the further projection horizon the scale of expected recovery is limited, with the output gap at negative levels.

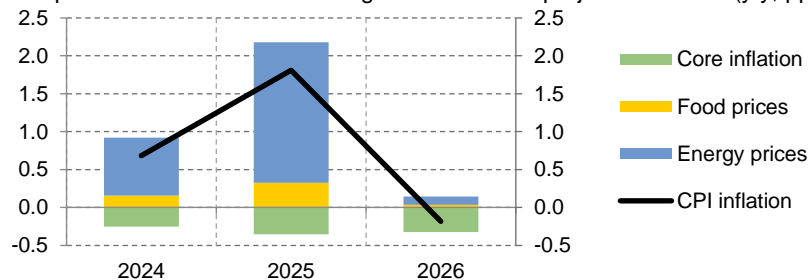


Temporary increase in CPI inflation due to the reduction in the government shielding measures, but a return to the range of deviations from the NBP's inflation target over the projection horizon.

CPI inflation and its decomposition (y/y, %, pp.)



Decomposition of CPI forecast changes between the projection rounds (y/y, pp.)



The inflation path over the projection horizon will be affected by:

to 2025 Q1:

- ⬆ **reduction of anti-inflation shielding measures for energy prices**
- ⬆ **temporary increase in food inflation prices**
 - ⬆ rapidly increasing labour costs
 - ⬆ Increase in VAT rate from 0 to 5% stawki VAT for basic food products
 - ⬆ expected lower harvest of fruits
 - ⬆ increase in agricultural commodity prices at global markets
- ⬆ increase in **economic growth**

from 2025 Q2 to 2026 Q4:

- ⬇ **Fading out of the effects of the energy prices unfreezing**
- ⬇ **Fading out of the factors that were increasing food prices**
- ⬇ **high real interest rate limiting demand pressure**
- ⬇ **decrease in labour costs dynamics**
- ⬇ **limited import prices growth** in relation to low inflation abroad.

CPI, y/y, %	2022	2023	2024	2025	2026
July 2024	14.4	11.4	3.7	5.2	2.7
March 2024	14.4	11.4	3.0	3.4	2.9



Outline:

Projection 2024 – 2026

- Economic conditions abroad
- Economic perspectives for Poland
- Inflation

Uncertainty

Uncertainty

- Risks
- Fancharts

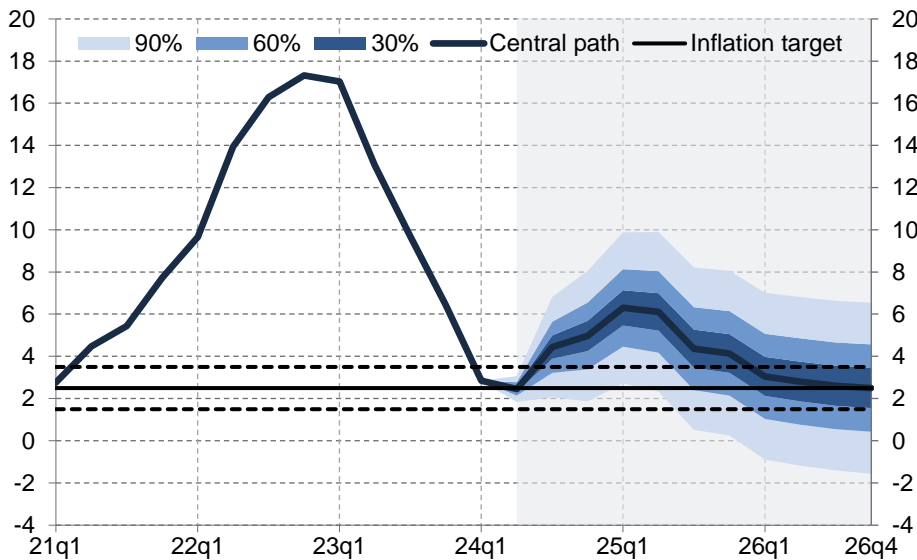
Risks

- **Further government's fiscal and regulatory measures in Poland**
- **Uncertainty regarding the impact of energy price increases on households' inflation expectations and the pace of wage growth**
- **Scale of the pass-through of the current wage growth on private consumption and the increase in demand pressure**
- **Persistence of core inflation, in particular services price inflation**
- **Geopolitical developments and the scale of armed crises in the context of their impact on the future path of commodity prices and economic activity, globally and in Poland**
- **Economic and trade policy in the world's major economies, the future shape of UE policies**

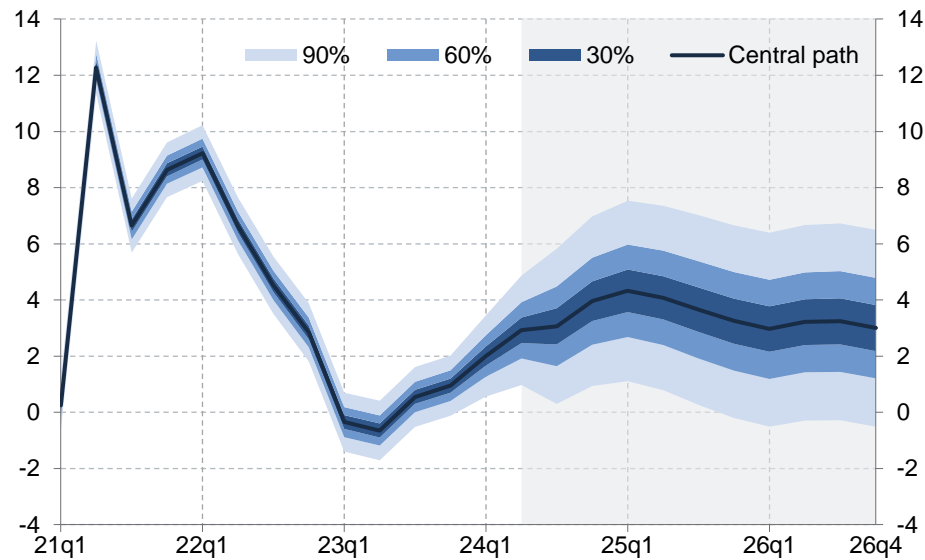
In the July projection horizon there is:

↔ **A close to symmetric distribution of risks to CPI inflation and GDP growth**

CPI Inflation (y/y, %)



GDP (y/y, %)



CPI y/y, %	below 1.5%	below 2.5%	below 3.5%	below centr. path	within 1.5-3.5% range
2024	1%	8%	42%	50%	41%
2025	3%	9%	19%	50%	16%
2026	28%	45%	64%	50%	37%

CPI y/y, %	central path	50% probability interval	
2024	3.7	3.1	4.3
2025	5.2	3.9	6.6
2026	2.7	1.3	4.1

GDP y/y, %	central path	50% probability interval	
2024	3.0	2.3	3.7
2025	3.8	2.8	4.8
2026	3.1	1.9	4.3



**NARODOWY
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