Belarus Economy Monitor: trends, attitudes and expectations

Inflation Review Q3-2024

October 2024



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Inflation in Belarus slowed in Q3-2024 and is expected to settle within the 5.5–6.0% range by the end of the year

Annual inflation stood at 6.0% YoY in September 2024 (Fig. 1). The annualized quarterly price growth (seasonally adjusted) dropped from 6.0% QoQ in Q2-2024 to 4.9% QoQ in Q3-2024. Overheated demand, a tight labor market, and rising inflation in Russia continued to exert pressure on cost growth in the Belarusian economy. However, this did not fully translate into higher consumer prices due to the government's stringent price control measures.

Excess demand in the economy and a labor shortage will continue to exert inflationary pressure in Q4-2024 and into 2025. The accumulated inflationary overhang will also gradually seep into prices. As a result, inflation is forecast to be within the 5.5–6.0% YoY range by the end of 2024 and 6–8% YoY in 2025 (Fig. 1). A full pass-through of inflationary factors into actual price growth is not expected, as price controls are likely to remain in place in 2025, though they may be slightly relaxed. The balance of risks remains skewed towards inflationary pressures.

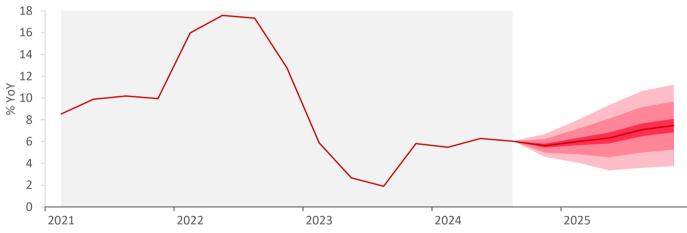


Figure 1. Dynamics and forecast of consumer inflation in Belarus, % YoY

Source: The BEROC's calculations are based on the BEROC's Quarterly Projection Model (QPM) for Belarus. **Note:** The figure shows a seasonally adjusted indicator. The X13 procedure in the JDemetra+ app was applied to make a seasonal adjustment. As new data are published, the indicator dynamics can be updated. The ranges in the figure correspond to the 15%, 50% and 75% confidence intervals.

The Inflation Review Bulletin is an expert analysis of inflationary processes in the consumer market. The bulletin depicts the dynamics of price indices, analyzes the drivers of inflationary processes, assesses the nature of monetary conditions, and provides a short-term inflation forecast. The methodological basis for the analysis is the Quarterly Projection Model (QPM) for the Belarusian economy. See: WP BEROC no. 82: <u>Quarterly Projection Model for Belarus: Methodological Aspects and Practical Applications</u>.

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1 Dynamics of inflationary processes

Inflation in Belarus remained subdued in Q3-2024

In Q3-2024, consumer prices grew by 4.9% in annualized terms (seasonally adjusted) following a 6.0% growth in Q2-2024 (hereinafter, "% QoQ"; Fig. 2.b).ⁱ The slowdown in quarterly inflation is linked to the authorities' conservative approach to raising regulated prices and tariffs. Their annualized growth rate decreased from 6.1% QoQ in Q2-2024 to 4.6% QoQ in Q3-2024, which resulted in a deceleration of non-core inflation (Fig. 2b).

Annual inflation (according to the Consumer Price Index; CPI) fluctuated around 6.0% YoY between July and September (hereinafter, "% YoY"; Fig. 2.a). The actual annual inflation rate in September was 0.4 p.p. lower than <u>the August 2024 forecast</u>. This is mainly due to smaller than expected increases in regulated prices and tariffs (which fully explains the negative contribution of other shocks in Fig. 2c), as well as by a stronger dynamics of the Belarusian ruble exchange rate (Fig. 2c).

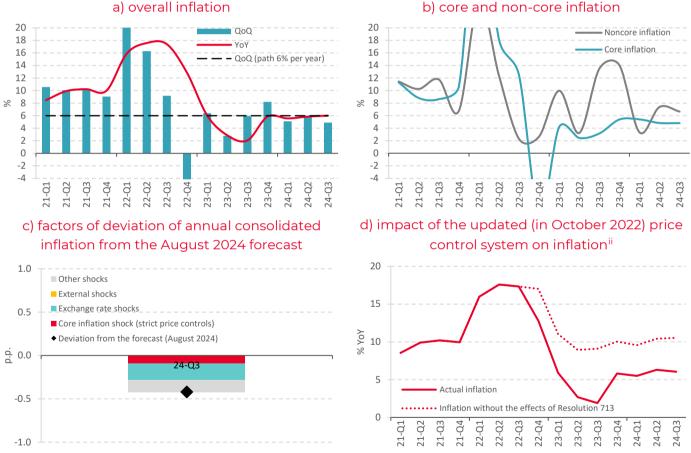


Figure 2. Dynamics of consumer inflation

Source: The BEROC's calculations based on the data from Belstat, QPM BEROC.

Note: Hereinafter, YoY is the growth rate in the last month of the quarter versus the last month of the corresponding quarter of the previous year; QoQ is the annualized growth rate in the last month of the quarter versus the last month of the previous quarter, seasonally adjusted.

Core inflation in Q3-2024 remained at 4.8% QoQ (Fig. 2b), while the median inflation rate was 3.1% QoQ (Fig. 3a)

The distribution of price changes across items in the consumer basket stayed close to the 2019 pattern (Fig. 3b), when inflation was consistently around 5% YoY. This distribution, along with the rates of core and median inflation, is relatively low given the economic conditions of 2024, which are marked by significant overheating of the Belarusian economy, a labor shortage, and high wage cost growth. Additionally, inflation in Russia, a key economic partner, was approximately three times higher than in 2019.

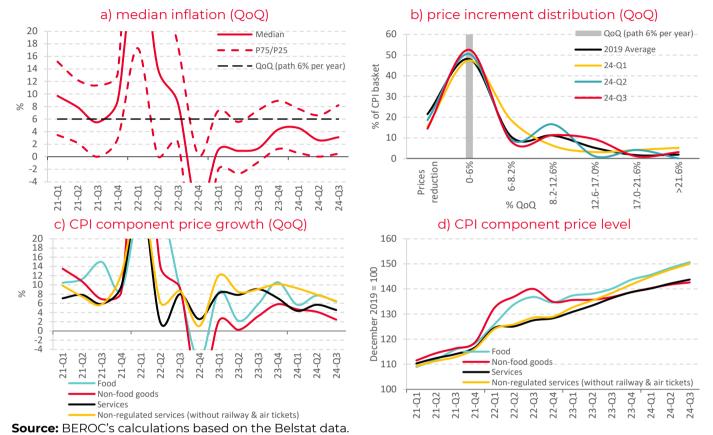


Figure 3. Dynamics of median inflation and prices of aggregated CPI components (seasonally adjusted)

Note: QoQ (quarter-on-quarter) is the annualized growth rate in the last month of the quarter vs the last month of the previous quarter, seasonally adjusted. Median inflation and price increment distribution are calculated using data from aggregated commodities in the CPI basket. P75 and P25 are the 75th and 25th percentiles, respectively (prices for 25% of goods rise faster than the inflation of the 75th percentile, and prices for another 25% of goods rise slower than the inflation of the 25th percentile).

Total price controls significantly slowed and limited the pass-through of rising costs into consumer prices, particularly for non-food items

The price growth for non-food goods slowed from 4.2% QoQ in Q2-2024 to 2.5% QoQ in Q3-2024 (Fig. 3c). The median inflation in this segment was 2.5% QoQ in Q3-2024, highlighting weak price dynamics for most items (Fig. 4b). Meanwhile, the prices for consumer goods produced by manufacturers increased by 8.6% QoQ in Q3-2024, following a 7.1% QoQ rise in Q2-2024. The high costs growth indicates the prevalence of inflationary factors, while the weak pass-through of these costs to non-food consumer prices is due to strict regulation of trade and import markups. As a result, profitability in wholesale and retail trade was low during January – August 2024 (1.2%), compared to the average level seen from January – August 2018–2021 (2.3% on average).

Median inflation in the food segment was 5.5% QoQ in Q3-2024. Most food items saw moderate price increases due to price controls (Fig. 4a), despite rising costs: producer prices for agricultural products rose by 11.6% QoQ in Q3-2024 (9.7% QoQ in livestock production). At the same time, price increases in Q3-2024 remained high in the public catering sector (nearly 11% QoQ), driven by strong consumer demand, and for coffee and confectionery (around 30% and 12% QoQ, respectively), influenced by rising global prices. Grains, bread, bakery, and pasta products also saw price increases, potentially reflecting the impact of last year's poor grain harvest and a modest yield in 2024. Additionally, fruit and vegetable prices rose by over 20% QoQ. The sharp increase in fruit and vegetable prices may be linked to import difficulties (including phytosanitary products), prioritization of exports over the domestic market due to price controls, and potentially the negative impact of this year's climate conditions on the harvest.

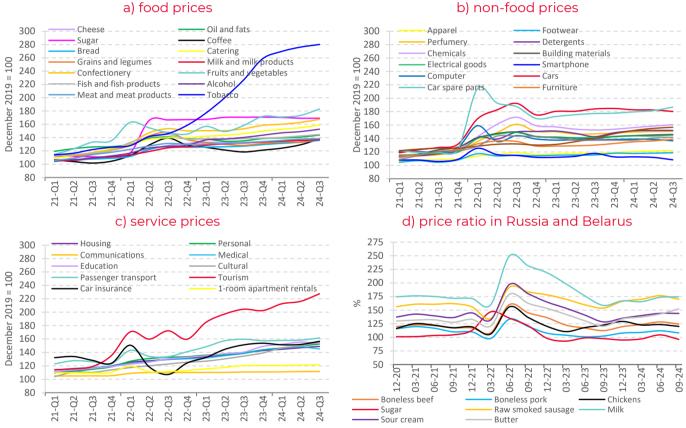


Figure 4. Price dynamics for individual consumer basket items (seasonally adjusted)

Source: The BEROC's calculations are based on the data by Belstat, the National Bank of Belarus, and Rosstat. **Note:** The ratio of prices in Russia and Belarus has been calculated as the ratio of the average price in Russia — recalculated at the average official foreign exchange rate of the Belarusian ruble to the Russian ruble — to the average price of goods in Belarus, multiplied by 100.

Inflation in the services sector slowed to 4.6% QoQ in Q3-2024 (Fig. 3c)

The authorities maintained a conservative approach to increasing regulated prices and tariffs to ensure the inflation target of no more than 6% by the end of the year. In the segment of non-regulated services, inflation slowed from approximately 7.9% QoQ in Q2-2024 to around 6.5% QoQ in Q3-2024 (excluding highly volatile international rail and air transportation).

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This deceleration is linked to the government's directive changes in pricing approaches for certain medical services starting in July 2024, which resulted in lower prices for these services between July and September (Fig. 4c). Without this factor, inflation in non-regulated services would have remained at the Q2-2024 level, significantly exceeding price growth rates in the goods segment and the National Bank's inflation target. The heaviest non-regulated service category, market household services, saw prices rise by about 10% QoQ in Q3-2024. On average, these services have increased by over 10% MoM throughout the year. This substantial price growth is driven by rising costs amid excess demand and labor shortages. As a result, the price level for non-regulated services in September 2024 was more than 5% higher than that for non-food goods, indicating the accumulation of inflationary overhang (Fig. 3d).

2 Inflation drivers

Raw material prices did not have a significant inflationary impact on the Belarusian market

The World Bank Commodity Price Index (in USD) decreased by 3.8% in Q3-2024 compared to Q2-2024. Both energy and non-energy commodities dropped by the same amount (Fig. 5.a). As a result, the impact of commodity markets on inflation in Belarus was generally neutral in Q3-2024. At the same time, the reduction in the discount of Russian Urals oil relative to the Brent benchmark – from around \$14/bbl in Q2-2024 to approximately \$11/bbl in Q3-2024 – continued to negatively affect the financial results of Belarusian oil refineries. Thus, the profitability of sales in Novopolotsk was minus 7.4% in January-August 2024, and in the Mozyr region - minus 2.7%. The risk of another increase in fuel prices on the domestic market remains relevant.

The situation in global supply chains remained stable. Shipping costs adjusted downward after increasing in Q2-2024, and the global supply chain pressure index stayed in the neutral zone during Q3-2024 (Fig. 5.b).

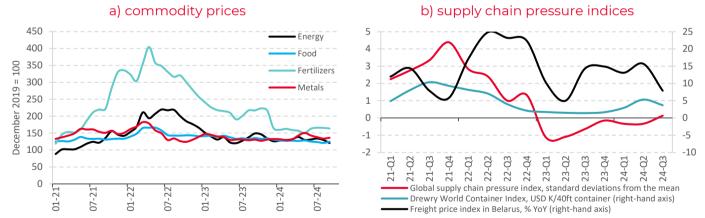


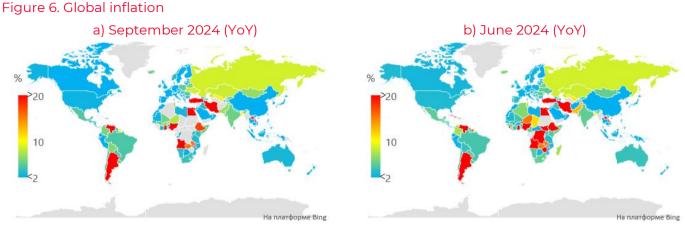
Figure 5. Global commodity prices and price pressures in supply chains

Source: Belstat, World Bank, FRBNY, Drewry World Container Index and Supply Chain Advisors. **Note:** The World Container Index is for the last week of the month.

Inflationary pressure from the Russian market continued to rise

Inflation in Russia accelerated again in Q3-2024, estimated at around 10.1% QoQ (Fig. 7.b). The significant increase in interest rates in Russia since summer 2023, and their prolonged maintenance at high levels, proved insufficient to quell the strong inflationary impulse caused by an overheated economy and labor market.

Amid increased military spending and a stimulative fiscal policy, the transmission of tighter monetary conditions to economic activity and inflation appears to have weakened and lengthened. High price growth in Russia exerted inflationary pressure on prices in Belarus, mainly through its effect on import costs (Fig. 7.a).



Source: Trading Economics, national statistical agencies. **Note:** YoY is the growth rate in the last month of the quarter vs the last month of the same quarter of the prev. year.

Exchange rate dynamics limited the inflationary impact of rising prices in Russia on the Belarusian market in Q3-2024

In Q3-2024, the Belarusian ruble nominally strengthened by 0.1% against the average level of Q2-2024 when measured by a basket of currencies (Fig. 8.b). This only modest quarterly strengthening was largely due to the notable weakening of the Belarusian ruble against the Russian ruble in June, which raised the value of the currency basket at the start of Q3-2024. However, in August-September, the Belarusian ruble significantly strengthened against the Russian ruble due to a net supply in the domestic FX market. As a result, despite significantly higher inflation in Russia compared to Belarus, the price gap for traded goods between the Russian ruble's exchange rate helped limit the inflationary effects of Russia's accelerated price growth (Fig. 7.a). At the same time, the desynchronization of inflation between Belarus and Russia (Fig. 7.b), partly due to administrative interventions in price setting in Belarus, remains a significant risk factor for price stability in the Belarusian market.

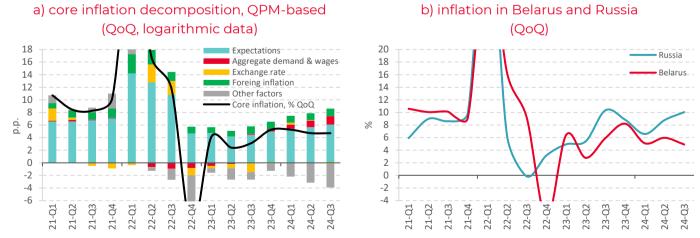


Figure 7. Decomposition of core inflation in Belarus and inflation in Russia

Source: The BEROC's calculations based on QPM BEROC, the data from Belstat and Rosstat. **Note**: The contributions of the factors are calculated considering momentum; QoQ (quarter-on-quarter) is the annualized growth rate in the last month of the quarter vs the last month of the previous quarter, seasonally adjusted.

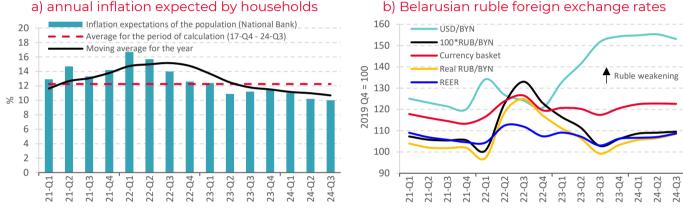
Inflation expectations of households did not trigger inflation acceleration in Q3-2024

In September 2024, the population's expected price growth over the next year was 10% (Fig. 8.a). The stability of the Belarusian ruble's exchange rate and strict price controls in the consumer market contributed to keeping inflation expectations relatively low compared to previous years.

Price controls strengthened disinflationary effects in Q3-2024

The negative contribution of factors unexplained by the BEROC model (which account for government price regulation) to core inflation increased in Q3-2024 (Fig. 7.a). Strict government regulation continued to prevent prices from rising in line with the growth in production costs for goods and services. Without the impact of stringent price controls, annual inflation in September 2024 would have been close to 10.5% YoY, instead of the actual 6% YoY (Fig. 2.d). The inflationary overhang – the potential for accelerated price increases in the future – grew in Q3-2024 and could exceed 7%.





Source: The BEROC's calculations are based on the data by the National Bank of Belarus. **Note:** REER is the Real Effective Exchange Rate of the Belarusian ruble.

Excess demand in the economy remained significant in Q3-2024, sustaining pressure on costs and consumer prices

The positive output gap was around 3.2% in Q3-2024 (Fig. 9.a). The deviation of GDP from its balanced trajectory stopped widening, indicating the likely peak of economic expansion. However, the scale of economic overheating remained severe, approaching its highest point in the past decade. Increased budget spending, rapid wage growth, and high credit activity continued to fuel excess demand in the Belarusian economy, particularly in the consumer sector. The record overheating of the Russian economy since 2008 also remained a significant factor in the overutilization of production capacities in Belarus.ⁱⁱⁱ

As a result, inflationary pressure from excess demand remained substantial (Fig. 9.b). The passthrough of these rising costs to consumer inflation remained highly constrained due to the government's limitations on trade markups and overall strict price controls. The combination of severe economic overheating and stringent price regulation significantly reduces the resilience of the economy and financial system to external shocks.

Inflationary pressure from the labor market intensified in Q3-2024

Unemployment in Q3-2024 hit a new historical low, dropping to 2.95% of the labor force (seasonally adjusted). The ratio of unemployed individuals to job vacancies also reached a new minimum, falling to 0.9 unemployed per vacancy (seasonally adjusted).

This indicates a deepening labor shortage amid excess demand for goods and services. In such conditions, real wages continued to rise rapidly – their level in Q3-2024 was already more than 9% above the equilibrium (or inflation-neutral) level (Fig. 9.a). As a result, inflationary pressure from the labor market intensified (Fig. 9.b) and spread through three channels: increased labor costs for businesses, sustained excess consumer demand, and restricted ability of producers to meet high demand due to labor shortages.

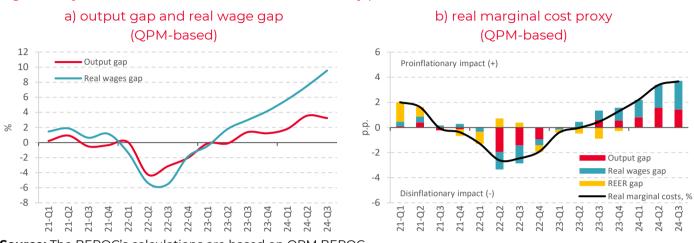


Figure 9. Dynamics of indicators of internal inflationary pressure

Source: The BEROC's calculations are based on QPM BEROC.

Note: The gaps are re-evaluated once data are available. The real effective exchange rate gap (REER gap) is adjusted for the deviation of relative prices (the ratio of the core CPI to the composite CPI) from the trend.

3 Monetary conditions

Monetary conditions approached neutrality for economic activity and inflation in Q3-2024

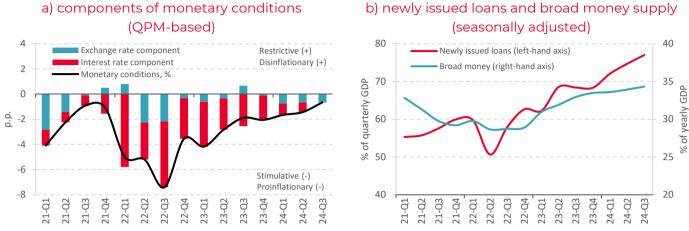
In Q3-2024, the National Bank raised the overnight lending rate and the estimated values of standard risk for market loans to businesses and households by 0.5 p.p., while also increasing the reserve requirement on banks' foreign currency liabilities by 2 p.p. These measures resulted in average interest rates for ruble-denominated market loans and time deposits rising by 0.7 and 1.7 p.p., respectively, to 10.8% and 8.3% on average in July–September 2024. As a result, credit and deposit market rates reached levels neutral for economic activity and inflation (Fig. 10.a).

Despite the rate hikes, credit activity remained high. The volume of new loans relative to GDP reached a new high of around 77% on average in Q3-2024, and the money supply grew faster than GDP (Fig. 10.b). On the one hand, the transmission of higher interest rates to credit activity is expected to strengthen toward the end of this year and into next year. On the other hand, government spending continued to rise, and to support this, the National Bank purchased Br1.3 billion worth of government bonds on the secondary market in Q3-2024. These operations, combined with the issuance of rubles through foreign currency purchases by the National Bank (over \$0.6 billion in Q3-2024), more than offset the impact of increased reserve requirements on banking system liquidity, which remained excessive. This maintained a low interbank market rate and likely stimulated non-price lending conditions. As a result, even with neutral credit rates, credit activity continued to expand, contributing to excess demand in the economy.

The Belarusian ruble remained moderately undervalued in Q3 2024 – by about 1.3% relative to the level of the equilibrium real effective exchange rate (Fig. 10.a)

The exchange rate factor continued to provide modest support to the price competitiveness of Belarusian producers, while its indirect impact on inflation remained near neutral (Fig. 9.b).

Figure 10. Monetary conditions



Source: The BEROC's calculations based on QPM BEROC, data from the National Bank of Belarus. **Note:** The dynamics of monetary conditions may change once new data are available.

4 Short-term forecast

Inflation is forecasted to be around 5.5–6.0% YoY for 2024 and 6–8% YoY in 2025

The baseline scenario envisions a gradual "cooling down" of the overheated economy. The positive output gap is expected to shrink from about 3.2% in Q3 2024 to around 2.6% by Q4 2025. Fiscal policy is projected to remain stimulative, at least until the end of the presidential electoral campaign in 2025. Monetary conditions are expected to stay close to neutral, especially concerning interest rates in the credit and deposit markets. As a result, while these rates will no longer stimulate credit and economic activity, they won't be restrictive either.

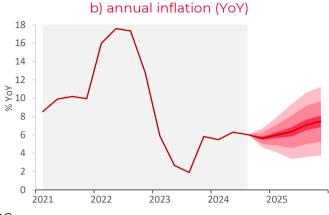
Demand from Russia is expected to gradually weaken due to significant interest rate hikes and the reduction of fiscal stimulus, but the correction toward a balanced state will be slow due to high military expenditures. On one hand, this will continue to support high levels of Belarusian exports to Russia (though without significant growth due to production limitations in Belarus) and prevent the "cooling" of overall demand in Belarus. On the other hand, rising prices in Russia will remain a pro-inflationary factor on the Belarusian market.

The labor market will continue to be inflationary through 2024–2025, as the labor shortage, exacerbated by declining employment and sustained excess demand for goods and services, will persist. Additionally, adapting to new sanctions, which complicate logistics and financial transactions, will keep applying upward pressure on costs.

The pass-through of inflationary factors into actual prices will be constrained by price controls. The baseline scenario assumes a gradual easing of these controls in 2025 to avoid a significant deterioration in the financial position of firms and a drop in output. Due to the accumulated inflationary overhang, the pressure of increased costs will gradually seep into prices (Fig. 11.a). As a result, inflation could accelerate from 5.5–6% YoY at the end of 2024 to about 6–8% YoY in 2025 (Fig. 11.b).

Figure 11. Inflation forecast for Belarus





Source: The BEROC's calculations are based on QPM BEROC.

Note: YoY (year-on-year) is the growth rate in the last month of the quarter versus the last month of the corresponding quarter of the previous year; QoQ (quarter-on-quarter) is the annualized growth rate in the last month of the quarter versus the last month of the previous quarter, seasonally adjusted. The Figure shows seasonally adjusted indicators. The ranges in the figure correspond to the 15%, 50% and 75% confidence intervals.

5 Forecasting risks

The balance of risks for price growth remains skewed toward inflationary pressures

Prolonged support of stimulative economic policies is the key threat to price stability in the medium term. Stronger-than-expected demand in the economy, beyond what is projected in the baseline scenario, would likely lead to increased imports and inflationary pressure rather than boosting domestic production, which is constrained by labor shortages and record capacity utilization.

Easing price controls could result in a stronger rise in inflation than assumed in the baseline scenario. The extent of the inflationary overhang and the speed of its realization when price regulation is loosened are highly uncertain. There is a risk that easing controls could trigger secondary effects, including rising inflation expectations among consumers and businesses.

A low grain harvest this year may have inflationary consequences in 2025. Belarus has seen low grain yields for two consecutive years, raising risks of accelerated food price growth, especially if the quality of the harvest is poor and storage challenges arise.

Inflationary risks from the external sector remain tied to the potential for prolonged elevated inflation in Russia and disruptions in global supply chains. Strong external and/or internal inflationary shocks would severely limit the Belarusian authorities' ability to curb price growth through administrative means. This could require easing price controls due to the accumulated inflationary overhang and the threat of financial destabilization. It's worth noting that in Q3-2024, the inflationary impact of rising prices in Russia was largely mitigated by the strengthening of the Belarusian ruble against the Russian ruble. While the Belarusian ruble remained close to its equilibrium level, any further strengthening below 3.40 BYN per 100 RUB could lead to overvaluation. This would temporarily reduce inflationary pressure in Belarus but negatively affect the competitiveness of Belarusian producers.

The risk of a hard landing in Belarus's overheated economy could have disinflationary effects in the medium term

An economic downturn similar to the 2015–2016 recession is likely to be accompanied by a strong initial inflationary impulse due to the easing of price controls and pressure on the Belarusian ruble as demand for foreign currency temporarily rises. In the medium term, this impulse would subside, leading to disinflationary pressure from reduced domestic demand, rising unemployment, and easing labor shortages. A significant risk in this negative scenario is that the economic downturn could escalate into a full-fledged financial crisis if the financial positions of firms and banks prove insufficiently resilient.

If investments in expanding production capacity and improving labor productivity intensify, the supply side will adjust to high demand more quickly. This would limit price pressures and result in lower inflation in 2025 compared to the baseline forecast.

Maintaining strict price controls amid favorable developments in external markets could be accompanied by lower inflationary pressure in 2025 than the baseline forecast. If export prices rise faster than import prices, firms may be able to function relatively painlessly under strict domestic market restrictions for some time. However, under this scenario, the price disparity between Belarus and external markets would widen, posing risks of a reduced product range and quality domestically, as well as a prolonged period of elevated inflation after price controls are relaxed.

Explainers

Quarterly Projection Model (QPM)

This is a semi-structural macroeconomic model based on the principles of new Keynesianism; it belongs to the class of dynamic stochastic general equilibrium models. The QPM has been widely used for macroeconomic analysis, forecasting and monetary policy designs in central banks, including <u>the National Bank of the Republic of Belarus</u>. The QPM used in the preparation of this material has been developed by the BEROC experts. See: <u>Quarterly Projection Model for Belarus</u>. Methodological Aspects and Practical Applications.

QPM indicators

Monetary conditions

This is an indicator of the state of monetary conditions. It is a combination of gaps between the real effective exchange rate (with the opposite sign) and real interest rates. Positive values of monetary conditions indicate their constraining nature for economic activity, and their negative values indicate their stimulating nature for economic activity.

Output gap

This is a deviation of a real GDP from its potential value. A potential GDP is such a GDP value that leads neither to additional inflationary nor disinflationary pressures. A positive output gap indicates excess demand in the economy, and it is an indicator of inflationary pressure. The opposite is true for a negative output gap.

Wage gap

This is deviation of real wages from their equilibrium level. A positive gap indicates that wages are above the level corresponding to the potential GDP, and it is an indicator of inflationary pressure. The opposite is true for a negative gap.

Interest rate gap

This is a deviation of the real interest rate from its neutral level. A positive gap in the interest rate indicates that the nature of the interest rate policy is restraining to economic activity, while a negative gap in the interest rate indicates that the nature of the interest rate policy is stimulating to economic activity.

Real effective exchange rate gap (REER gap)

This is a deviation of the real effective exchange rate of the Belarusian ruble from its equilibrium level. A positive real effective exchange rate gap indicates an undervaluation of the Belarusian ruble, while a negative real effective exchange rate gap indicates an overvaluation of the Belarusian ruble.

Real marginal costs

This is approximation of the incremental costs of producing an additional unit of output. Real marginal costs are a combination of output, wages, and real effective exchange rate gaps. Output and wage gaps approximate the costs of domestic producers, while the real effective exchange rate gap approximates the costs of importers. Positive values indicate a pro-inflationary pressure, and negative values indicate a disinflationary pressure.

Notes

ⁱ The XI3 procedure in the JDemetra+ app was applied to make a seasonal adjustment. As new data are published, the indicator dynamics in previous periods can be updated. The annualized price increase is calculated as a seasonally adjusted price increase per quarter raised to the fourth power (an annual inflation equivalent). All quarterly inflation values in the Bulletin (unless indicated otherwise) are presented as annualized (annual equivalent).

ⁱⁱ The BEROC Quarterly Projection Model (QPM) was used to estimate (updated in October 2022) the impact of the price regulation system on inflation. A historical decomposition of inflation was based on the model: the dynamics of the indicator were decomposed into the contributions of shocks. The values of actual and synthetic annual inflation were compared. In the latter case, the indicator was calculated by subtracting — starting from Q4-2022 — the contribution of the core inflation shock (which approximated the impact of tightening price regulation) from the actual inflation value. It is noteworthy that the core inflation shock includes not only the impact of price controls, but also other factors not considered in the model directly. However, the magnitude of the core inflation shock is usually small (except the periods of strong shocks), while a large negative shock was identified in Q4-2022, which continued throughout 2023 and Q3-2024.

^{III} According to the Ministry of Economy of Belarus, production capacity utilization in the industrial production sector in September 2023 reached its highest level since 2013 — 70% — and remained close to this level (71% in August 2024, 70% in September 2024, 71% in October 2024). The ratio of the number of unemployed (according to Belstat) to the number of vacancies (according to the Ministry of Labor and Social Protection) was close to 0.9 unemployed per vacancy (seasonality adjusted) in Q3-2024. Until 2022, the indicator sustainably exceeded 2.0 unemployed persons per vacancy.