Belarus Economy Monitor:
trends, attitudes and expectations

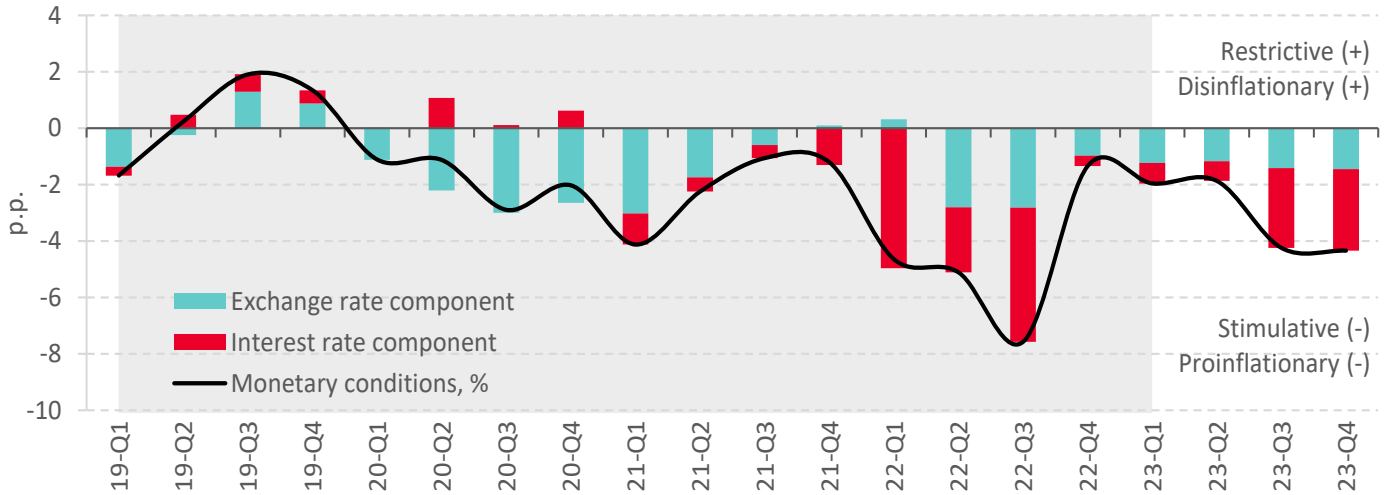
Monetary Environment Review
Q1-2023

May 2023

Loose monetary conditions amplify inflationary risks

In Q1-2023, monetary conditions kept stimulating economic activity and were pro-inflationary (Figure 1). Interest rates on Belarusian ruble loans and deposits rewrote their historical lows again in the context of the National Bank's implementation of its extra-soft monetary policy. The expansionary monetary policy resulted in a rapid growth in the money supply, associated with a "dangerous" change in its structure: cash and current account funds reached a record share in the Belarusian ruble money supply in 20 years. The Belarusian ruble remained undervalued in Q1-2023; however, the exchange rate support provided to Belarusian producers weakened compared to last year. Monetary conditions will remain soft for the remainder of 2023 if there are no significant shocks.

Figure 1. The nature of the monetary conditions of the Belarusian economy



Source: The calculations are based on the Quarterly Projection Model (QPM) for Belarus.
Note: Monetary conditions are estimated as a combination of deviations of real interest rates on the Belarusian ruble assets and of the real effective Belarusian ruble exchange rate from their equilibrium levels. Positive monetary condition values indicate their restraining-economic-activity and disinflationary nature, and negative monetary condition values indicate their stimulating-economic-activity and pro-inflationary nature. We use one of the possible ways to assess monetary conditions, and its results critically depend on the type of the selected macroeconomic model (QPM), its structure, and parameter calibration. We are aware of the limitations of our approach.

The Monetary Environment Review Bulletin presents an expert analysis of the monetary and foreign exchange rate policies and the resulting monetary conditions in the Belarusian economy. The bulletin reviews the actions under the monetary and exchange rate policies, their impact on the economy, the nature of monetary conditions, and provides their short-term forecast. The methodological basis for the analysis is the Quarterly Projection Model (QPM) for the Belarusian economy.

1 Monetary policy: measures, direction, nature

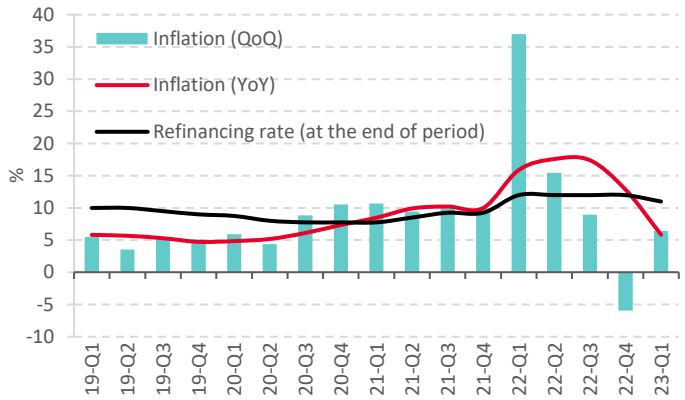
In Q1-2023, monetary policy remained focused on supporting economic activity without regard to inflationary risks

The National Bank has reduced the refinancing rate by 0.5 percentage points four times since the beginning of this year, lowering it to 10% in early May 2023 (Figure 2.a). The National Bank's approach to liquidity regulation maintained: auction transactions and standing facilities were banned and not made. As a result, the banking system continued to operate in the context of significant excess and non-withdrawable (by the National Bank) liquidity (Figure 3.b).

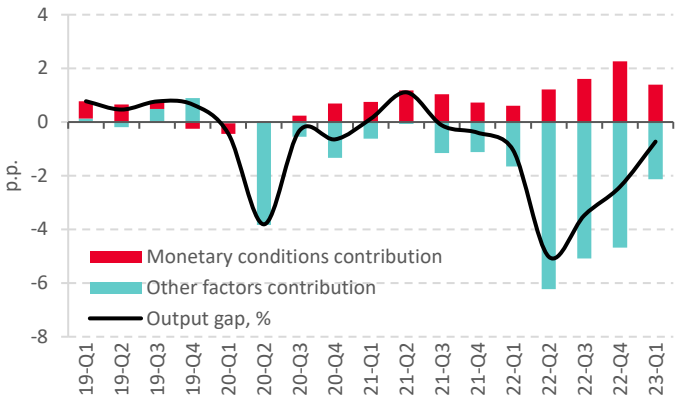
The actions of the National Bank look consistent within the scope of its chosen behavior strategy: maximum engagement of monetary incentives to promote domestic demand (Figure 2.b) with a high degree of tolerance to the inflationary consequences of such a policy. At the same time, the excessive softness of the monetary policy increases the vulnerability of the Belarusian economy to macroeconomic shocks.

Figure 2. Dynamics of monetary policy indicators

a) refinancing rate and inflation;



b) contribution of monetary conditions to the output gap.



Source: The calculations are based on the data by Belstat, National Bank of Belarus, QPM.

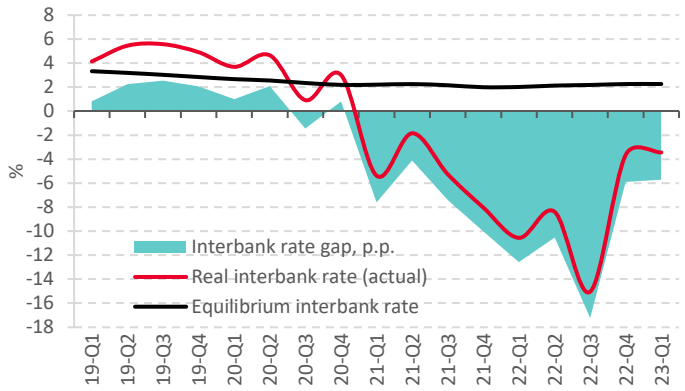
Note: Hereinafter, YoY is the growth rate in the last month of the quarter versus the last month of the corresponding quarter of the previous year; QoQ is the annualized growth rate in the last month of the quarter versus the last month of the previous quarter, seasonally adjusted. The X13 procedure 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).

Addressing the issue of excess liquidity without the National Bank's interventions is challenging in the short term

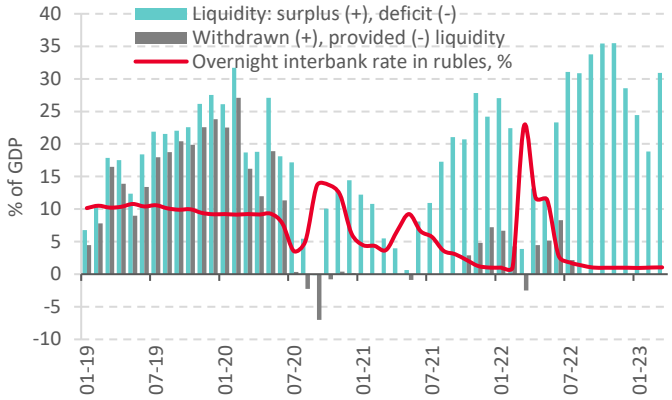
In the context of a large-scale amount of excess and non-withdrawable (by the National Bank) liquidity, the interest rate of the Belarusian ruble interbank market (hereinafter, interbank rate) was 0.99% in Q1-2023, thus remaining close to the historical low of the previous quarter (Figure 3.b). The interbank rate remained deeply negative in real terms: it was significantly below the equilibrium value estimated through the Quarterly Projection Model (QPM) (Figure 3.a). This indicates the extreme softness of the interest rate policy of the National Bank. A soft policy makes sense in the context of the Belarusian economy transforming due to the changed operating conditions. However, the extreme softness of the interest rate policy of the National Bank exposes the economy to increased risks of high inflation and strong volatility if exposed to new serious shocks.

Figure 3. Nature of the interest rate policy of the National Bank

a) real and equilibrium interbank rate (quarterly average);



b) banking system liquidity (monthly average).



Source: The calculations are based on the Quarterly Projection Model (QPM) for Belarus.
Note: Hereinafter, real rates are calculated by adjusting nominal rates for the projected annual inflation in the coming quarter estimated through the Quarterly Projection Model (QPM).

Interest rates on deposits in Belarusian rubles are below the neutral level

Interest rates on new term Belarusian ruble deposits fell by an average of 0.5 percentage points in Q1-2023, thus reaching a new historic low.[1] The profitability of Belarusian ruble deposits has remained low in the face of a large amount of "excess" money in the banking system: banks still lack incentives to offer high yields to raise funds. The real average interest rate on fixed-term Belarusian ruble deposits remained negative in Q1-2023, which was below its equilibrium value estimated through the QPM (Figure 4.b). This signals that these interest rates are not an incentive to deposit Belarusian rubles.

Business deposit interest rates remained extremely low, less than 2%, in Q1-2023. Unlike households, firms are forced to place their money in banks, and the need to maintain working capital and complicated disinvestment from the country can reduce their response sensitivity to changes in interest rates and exchange rates compared to individuals. However, average interest rates on fixed-term Belarusian ruble retail deposits also decreased amid excess liquidity.

Availability of credit resources has increased

The nominal average rate on new market loans in Belarusian rubles decreased by 1.5 percentage points in Q1-2023, and in March, it updated the minimum value for the entire observation period again: 9.4%.[2] A large excess liquidity nudges banks to discount credit resources, but this can also be an incentive for them to soften non-price lending conditions (e.g., collateral requirements, financial standing of borrowers, expanding the range of products, extending loan terms, etc.).

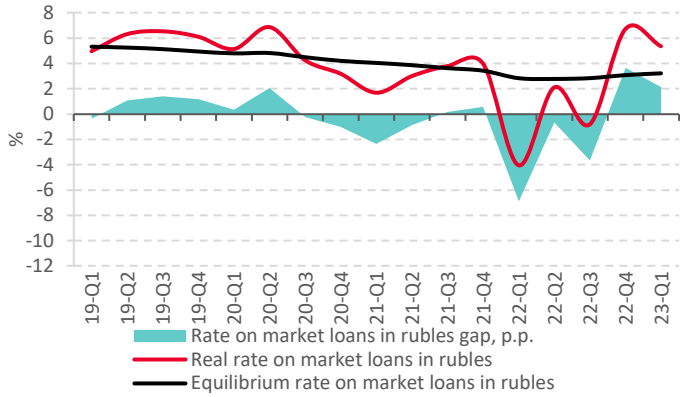
[1] The nominal average interest rate on new term Belarusian ruble deposits lowered from 3.6% on average in Q4-2022 to 3.1% in Q1-2023; in particular, the rate on households' deposits lowered from 9.9% to 8.8%, and the rate on firms' deposits remained at 1.9%.

[2] The nominal average interest rate on new market bank loans in Belarusian rubles decreased from 11.3% on average in Q4-2022 to 9.8% in Q1-2023, including retail lending (lowered from 12.2% to 11.4%) and business lending (lowered from 11.2 to 9.6%).

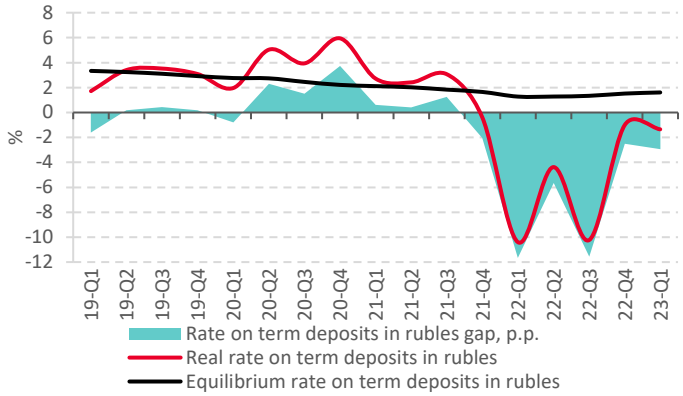
Despite a historically low level of a nominal average lending rate, the QPM-based estimates indicate that the real average rate was higher than neutral in Q1-2023 (Figure 4.a). Assessment of the real rate continued to be affected by the administrative decline in prices in Q4-2022, which led to a strong decrease in rational inflation expectations used when calculating real rates in the model. It is likely that Belarusian ruble lending pricing conditions stimulated domestic demand in Q1-2023 in an environment dominated by inflationary risks over the medium term and in the context of historically low nominal rates.

Figure 4. The nature of real interest rates on Belarusian ruble loans and fixed-term deposits of banks

a) average rate on new market Belarusian ruble loans (quarterly average);



b) average rate on new fixed-term Belarusian ruble deposits (quarterly average).



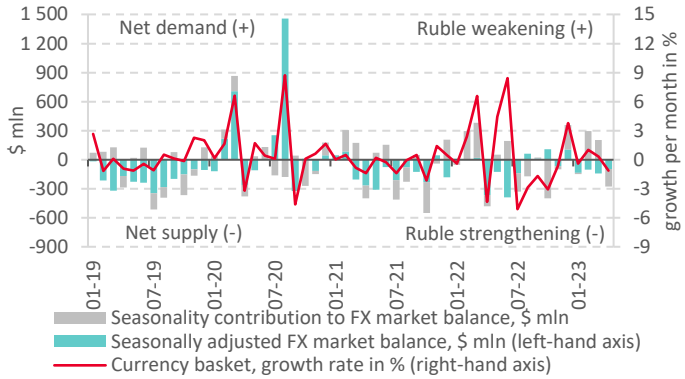
Source: The calculations are based on the Quarterly Projection Model (QPM) for Belarus.
Note: Real interest rates in Figures 4.a and 4.b have been calculated on the basis of average nominal interest rates for businesses and households (according to the National Bank data) and the expected annual inflation in the next quarter (QPM-based).

2 Exchange rate policy: measures, direction, nature

The Belarusian ruble moderately weakened on average in Q1-2023

Figure 5. Dynamics of the foreign currencies basket and of international reserve assets

a) forex market and foreign currencies basket;



b) international reserve assets (at the end of the period)

Source: The calculations are based on the data by the National Bank of Belarus.
Note: Figure 5.a shows the basket of 3 currencies (US dollar, euro and Russian ruble) from January 2018 to June 2022, and the basket of 4 currencies (US dollar, euro, Russian ruble, and Chinese yuan) from July 2022 onwards, and the basket of 3 currencies (US dollar, Russian ruble, and Chinese yuan) from January 2023 onwards. The X13 procedure in the JDemetra+ app was applied to make a seasonal adjustment. As new data are published, the dynamics of the indicators for the previous periods is updated.

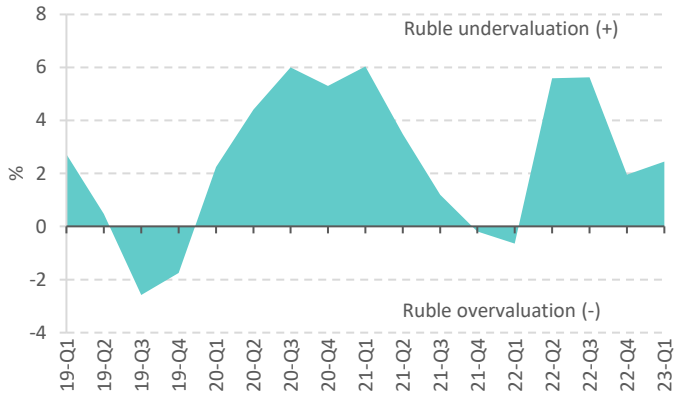
On average, the value of the basket of 3 foreign currencies (Russian ruble, US dollar, and Chinese yuan) increased by 0.9% in Q1-2023 versus Q4-2022. In terms of the nominal effective exchange rate, the Belarusian ruble depreciated by 3.3% over the same period (Figure 6.b). The Belarusian ruble weakened due to the seasonal net domestic demand for foreign currency (Figure 5.a). Foreign exchange rate fluctuations against some currencies echoed the dynamics of their forex cross-rates in foreign markets: over Q1-2023 on average, the Belarusian ruble depreciated by 10% against the US dollar, by 16.4% against the euro, and by 14.8% against the yuan while strengthening by 5.4% against the Russian ruble. The National Bank smoothed out the volatility of the national currency through foreign exchange interventions: its sale of foreign currency (together with the Ministry of Finance) amounted to $108 million in Q1-2023.

The Belarusian ruble remained somewhat undervalued in Q1-2023

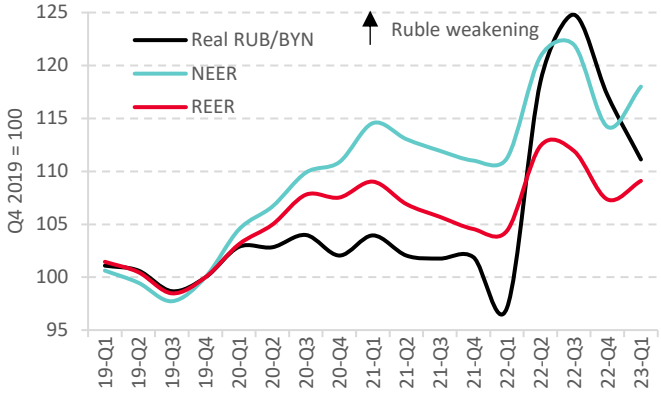
The real effective exchange rate of the Belarusian ruble exceeded its equilibrium level estimated through the QPM by about 2.4% on average in Q1-2023 (Figure 6.a). Such a scale of the national currency undervaluation generally indicates that its value relative to the currencies of the main trading partner countries was close to equilibrium. Unlike previous year, when excessive devaluation of the Belarusian ruble (mostly against the Russian ruble) had stimulated exports, that positive effect noticeably weakened at the beginning of this year. At the same time, the indirect pro-inflationary impact of the foreign exchange rate also decreased compared to 2022.

Figure 6. Effective Belarusian ruble exchange rates and deviations of the Real Effective Exchange Rate from the equilibrium level (QPM-based)

a) deviation of the Real Effective Exchange Rate from its equilibrium;



b) Belarusian ruble exchange rates.



Source: The calculations are based on the data by the National Bank of Belarus, QPM for Belarus.
Note: These are the Nominal Effective Exchange Rate (NEER) and the Real Effective Exchange Rate (REER) of the Belarusian ruble.

International reserve assets did not decrease in Q1-2023 due to the scheme of Eurobonds' redemption in Belarusian rubles

Despite the National Bank sold foreign currency, gold and foreign exchange reserves increased by $169 million in Q1-2023 (Figure 5.b). There were three reasons for the reserves' dynamics. Firstly, the National Bank could intervene with a significant amount in Russian rubles; and the Russian ruble is not in the reserve basket of currencies. Secondly, in the global market, gold price increased by almost 8% in Q1-2023, which could contribute to an increase in reserves by ≈$250 million. Thirdly, the scheme proposed by the Belarusian government to redeem Eurobonds nominated in US dollars through a dedicated account in Belarusian rubles at Belarusbank did not put pressure on gold and foreign exchange reserves in Q1-2023.

Thus, the National Bank's foreign exchange liabilities to the Government decreased by $741 million in February. However, the Ministry of Finance received funds in Belarusian rubles, not in foreign currency, which were credited to a dedicated account at Belarusbank and then placed by Belarusbank on the dedicated accounts for reporting regulatory provisions at the National Bank. In fact, there was a sterilized issue; this will put pressure on the foreign exchange rate and the reserves once investors show demand and get access to these resources.

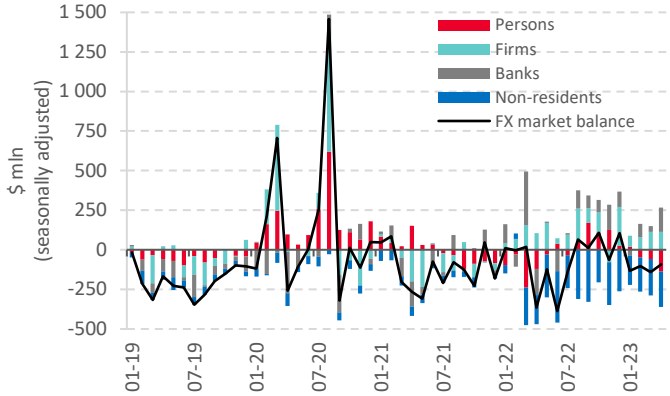
Once seasonally adjusted, the foreign exchange market enjoyed a net foreign currency supply in Q1-2023, which continued in April

Non-residents remained the main foreign currency donors (Figure 7.a). As noted above, this may be due to the schemes of payment for parallel imports to Russia through Belarus. Probably such schemes also lead to higher demand for foreign currency among domestic resident firms, which retained their status of the main net foreign currency buyer in the market in Q1-2023 (Figure 7.a). Thus, stemming from the rapid growth of imports of goods since autumn 2022 and due to the deterioration of trade in services, the surplus of foreign trade in goods and services (seasonally adjusted) in Q1-2023 was the lowest since Q4-2019. Resident firms have been ensuring net demand for foreign currency due to their active liability repayments in foreign currency, and that has been another factor.

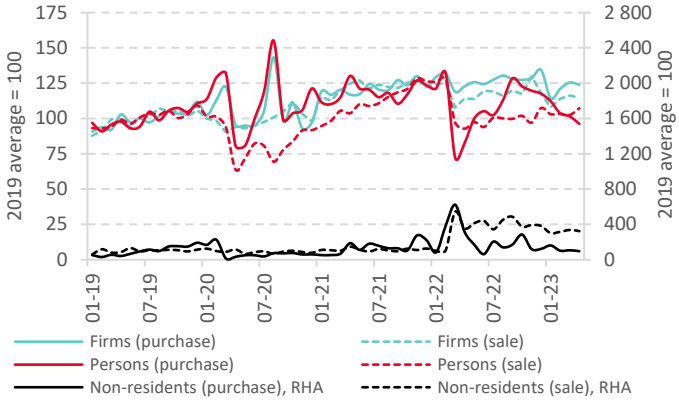
The population was a net seller of foreign currency in Q1-2023 (Figure 7.a). Shaping of the net foreign exchange supply by the general public is associated with low foreign currency demand, which has fallen to the 3-year-old lows (Figure 7.b). At the same time, individuals also had a low sale of foreign currency at the beginning of the current year (Figure 7.b). Such dynamics of the population's foreign exchange transactions may indicate deteriorating welfare and higher uncertainty. In addition, the demand for foreign currency could be significantly affected by the relocation of IT workers and by a decreasing distorting effect on demand caused by speculative schemes of using foreign payment systems.

Figure 7. State of the domestic foreign exchange market

a) FX market balance (seasonally adjusted);



b) dynamics of the FX market indicators (seasonally adjusted).



Source: The calculations are based on the data by the National Bank of Belarus.
Note: The X13 procedure in the JDemetra+ app has been applied to make a seasonal adjustment. As new data are published, the dynamics of the indicators for the previous periods is updated.

3 Impact of the monetary conditions on the credit and deposit market

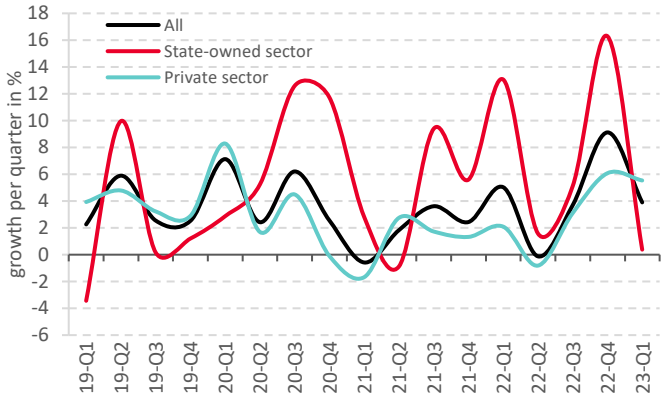
Credit impulse remained positive in Q1-2023, and it was significant in the private sector

Low interest rates and easing of non-price lending conditions contributed to maintaining high lending activity in the private sector: Belarusian ruble loans continued to grow at the beginning of the year (Figure 8.b). As in the previous year, borrowings in Belarusian rubles have increased partly because of the replacement of foreign currency liabilities by firms due to the challenged transactions of banks and enterprises in US dollars and euros amid the imposed sanctions. Retail lending also grew rapidly, both in the consumer and mortgage segments. In addition to lower rates, the activity of individuals could be affected by the recovery in wage growth and the gradual recovery from the shock caused by Russian aggression against Ukraine. Belarusian ruble loan arrears of the private sector also increased in Q1-2023, but to a lesser extent compared to loan disbursements (Figure 8.a). This means that new loans were largely used to pay off existing liabilities, probably as part of debt restructuring amid low interest rates on new loans.

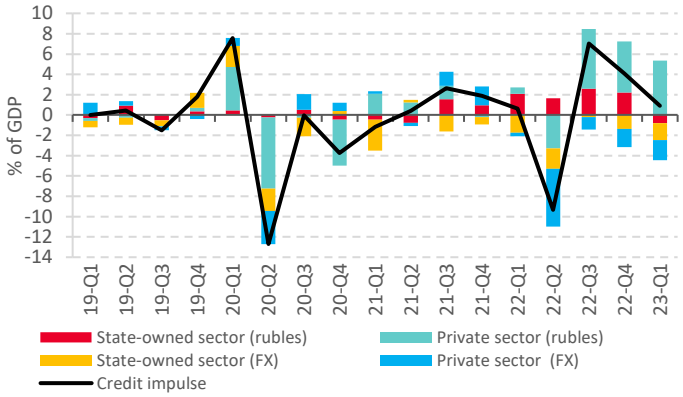
Lending activity weakened in the SOEs segment in Q1-2023 (Figure 8.b). It is likely that such dynamics are largely corrective in nature after a record-breaking surge in lending at the end of last year (Figure 8.a). It cannot be ruled out that a noticeable recovery in industrial production helped improve the working capital situation of state-owned enterprises and temporarily reduced the need for short-term lending.

Figure 8. Loans' and credit impulse dynamics

a) liabilities nominated in the Belarusian ruble (QoQ growth, seasonally adjusted);



b) credit impulse (QoQ, seasonally adjusted).



Source: The calculations are based on the data by the National Bank of Belarus.

Note: The credit impulse has been calculated as follows: $ci_t = 100 * \left(\frac{cr_t}{ngdp_t} - \frac{cr_{t-1}}{ngdp_{t-1}}\right)$, where ci_t is the credit impulse during period t; cr_t is the seasonally adjusted volume of newly issued loans during period t; $ngdp_t$ is the seasonally adjusted volume of the nominal GDP during period t. The X13 procedure in the JDemetra+ app was applied to make a seasonal adjustment. The indicator dynamics updates once new data are published.

Money supply grew at an accelerated pace in Q1-2023 mainly due to the active component

Broad money supply (M3) increased by ≈9.1% in nominal terms or by ≈7.4% in real terms in March 2023 versus December 2022 (all indicators are seasonally adjusted). Over the past decade, faster quarterly real growth of M3 was seen only in 2015, when it was fully explained by the revaluation of the foreign exchange component due to the devaluation of the Belarusian ruble. In early 2023, in addition to the revaluation effect, the rapid growth of the Belarusian ruble funds continued contributing significantly to the M3 increase (Figure 9.b): the Belarusian ruble money supply (M2*) grew by ≈ 8.2% in nominal terms or by ≈6.5% in real terms in Q1-2023 (Figure 9.a).

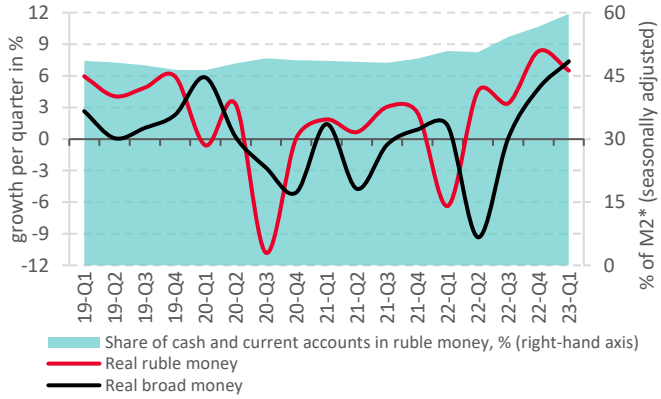
In the context of extremely low interest rates, the growth of the Belarusian ruble money supply is ensured by the rapid growth of "hot" money: the money supply structure is becoming more and more vulnerable to shocks

Cash and funds on current accounts increased by ≈14% in nominal terms or by ≈12.2% in real terms in Q1-2023. As a result (seasonally adjusted), the share of cash and current accounts in the ruble money supply in March reached its maximum value over the past 20 years: 59.7% (Figure 9.a). A comparable share of "hot" money in the M2* structure was last noted in Q1-2003, when digital finance technologies were not as developed as today.

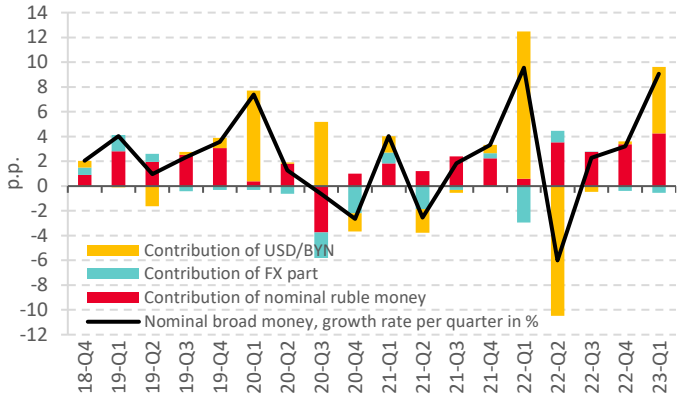
If soft monetary conditions continue to support the increased money supply growth associated with a high share of the active component in its structure, inflationary risks will increase significantly in the second half of 2023. Low interest rates and a large-scale liquidity surplus in banks become the prerequisites for "gouging" domestic demand above its equilibrium level, and these factors discourage long-term savings. At that, the predominance of "hot" money in the Belarusian ruble money supply makes it less resistant to shocks.

Figure 9. Average money supply dynamics (seasonally adjusted)

a) real money supply dynamics;



b) decomposition of the nominal broad money growth.



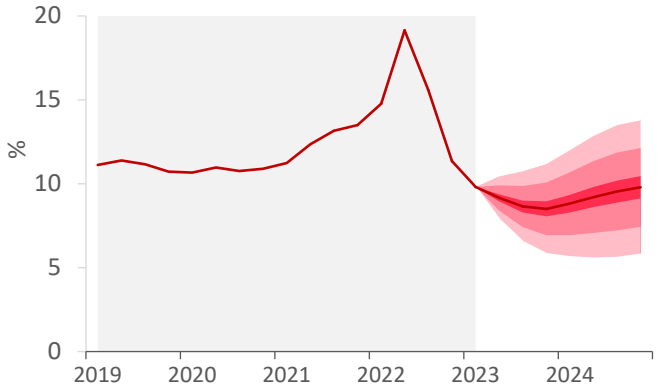
Source: The calculations are based on the data by the National Bank of Belarus and Belstat.
Note: M3 is a broad money supply. M2* is a ruble money supply. The X13 procedure in the JDemetra+ app was applied to make a seasonal adjustment. The indicator dynamics updates once new data are published. The real money supply growth has been calculated by deflating the nominal increase (the last month of the quarter versus the last month of the previous quarter) by the quarterly change in the Consumer Price Index.

4 Monetary conditions short-term forecast

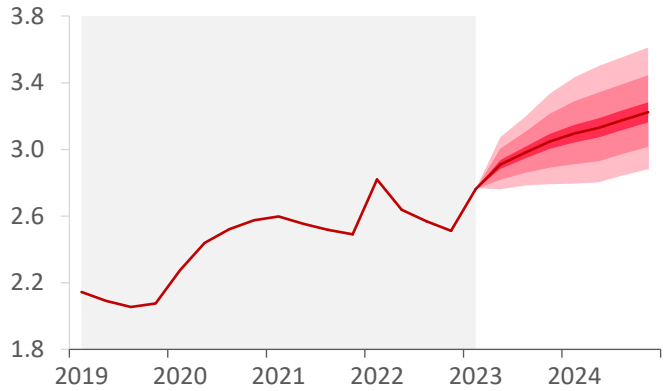
Monetary conditions will remain stimulating this year, provided there are no new serious shocks

Figure 10. The interest rate and foreign exchange rate forecast (QPM-based)

a) the forecast of the average interest rate on the Belarusian ruble market loans (quarterly average);



b) USD/BYN exchange rate forecast (quarterly average).



Source: The calculations are based on the Quarterly Projection Model (QPM) for Belarus.
Note: The ranges in the figure correspond to the 15%, 50% and 75% confidence intervals.

The baseline scenario is based on the assumption that the National Bank will keep restrictions on liquidity regulation operations in 2023, including liquidity withdrawal operations. The easing of restrictions is possible towards the end of 2023 when inflationary risks become more relevant. Money emission will be in the scope not causing a significant imbalance of supply and demand in the economy. That is, the actual risk of a large-scale increase in unsecured emissions in an attempt to achieve the planned GDP growth rate will not materialize fully.

If the baseline scenario fulfills, monetary conditions will remain soft in 2023 (Figure 1). The National Bank will continue to lower the refinancing rate to strengthen domestic demand if there are no new significant shocks. It may get close to 9% by the year-end, but a sharper decline cannot be ruled out. The interbank rate will remain low throughout most of 2023 amid a structural liquidity surplus not withdrawn from the banking system by the National Bank.

The average market rate on new Belarusian ruble loans is projected to be ≈9% in 2023 (Figure 10.a): a significant decrease in interest rates is unlikely in an environment where pro-inflationary risks prevail. Low interest rates will provide limited support to lending activity considering the context of high uncertainty in the economy. The average interest rate on new term Belarusian ruble deposits is expected to be 3–4% in 2023; this is largely due to the extremely low yield on corporate deposits. As a result, the real average interest rate on deposits will remain negative, which will result in a high share of cash and funds on current accounts in the structure of the Belarusian ruble money supply. The probability of a more ambitious (versus the baseline scenario) monetary policy easing and expansion of non-market lending are the risks to this forecast.

Belarusian ruble may remain somewhat undervalued in 2023

In terms of the nominal effective exchange rate, the Belarusian ruble is expected to depreciate by ≈6% in 2023 (Q4-2023 versus Q4-2022) due to the reducing foreign trade surplus and maintaining low interest rates on the assets denominated in Belarusian rubles. The dynamics of the exchange rates of the Belarusian ruble against individual foreign currencies will be largely determined by the changes in their cross rates on the world market. If the USD/RUB rate is close to 80 Russian rubles per US dollar, the USD/BYN rate can be 2.92 Belarusian rubles per US dollar on average in 2023 (Figure 10.b). In this case, the exchange rate of 100*RUB/BYN is projected at 3.74 Belarusian rubles per 100 Russian rubles on average in 2023. Devaluation risks for the exchange rate dynamics remain due to the uncertainty of new manifestations of sanction restrictions and due to the likelihood of excessive easing of the monetary policy in Belarus. In turn, if adapted supply chains continue running and the export of potash fertilizers recovers faster than expected under the baseline scenario, the Belarusian ruble may become stronger this year.

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. Variables unobserved in the QPM (e.g., equilibrium (trendy) components of economic indicators) are estimated through the multivariate Kalman Filter. The QPM has been widely used for macroeconomic analysis, forecasting and monetary policy designs in central banks, including the National Bank of the Republic of Belarus.

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 level. A potential GDP is such a GDP level 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.

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.

Equilibrium (neutral) interest rate

This is the level of the real interest rate corresponding to the growth rate of the potential GDP and the equilibrium real effective exchange rate.

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.

Equilibrium Real Effective Exchange Rate

This is the level of the Real Effective Exchange Rate (REER) that makes neither an additional pro-inflationary impact nor a disinflationary impact.