



Dzmitry Kruk, BEROC
May 2017

Monetary Policy Puzzle in the Presence of a Negative TFP Shock and Unstable Expectations

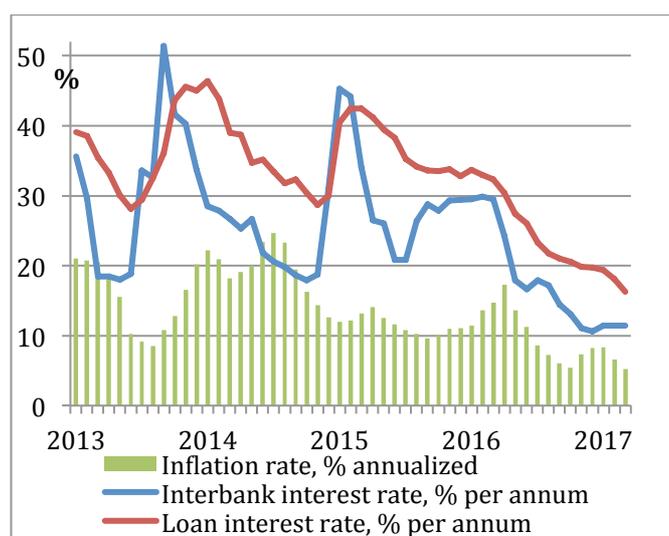
The Belarusian economy has given birth to a very interesting phenomenon of extremely high real interest rates in a prolonged recession. Despite an expected intuitive guess about the linkage between them (high interest rates cause recession), the reality turned out to be more difficult. The era of high real interest rates was due to past mistakes in economic policy, which undermined the credibility of the latter and gave rise to high and volatile inflation expectations. However, the adverse output path following the too high interest rates was not essential. The recession was mainly predetermined by a negative Total Factor Productivity (TFP) shock. The shock itself forms a disagreeable and contradictive environment for monetary policy. Together with unanchored inflation expectations, this makes monetary policy ineffective and too risky.



Unusually high real rates and recession

Since the painful currency crisis of 2011, the Belarusian monetary environment has become extremely vulnerable in many respects. In 2011 and early 2012, the country faced (once again) a 3-digit inflation rate. While the inflation rate later went down gradually, it was not sufficient to enhance monetary stability in a broader sense. For instance, for nominal interest rates, the level of 20% per annum was an unachievable lower bound until 2016. Moreover, in 2013—2016, upside jumps in the nominal interest rates took place regularly (see Figure 1).

Figure 1. Nominal interest and inflation rates, % per annum



Source: Belstat. Note: Inflation rate is calculated on average basis for last three months on a seasonally adjusted basis and then annualized

Such combination of nominal interest and inflation rates has resulted in an extremely high and volatile level of real interest rates throughout the last 4 years. Real returns at the Belarusian financial market fluctuated in 2013—2016 within the range of 10-30% per annum. For instance, a median (monthly) value of the real interest rate on new loans in 2013—2016 was 17.6% per annum (in the beginning of 2017 it approached the level of 8-10% per annum). So, one may say that the real

monetary conditions have been extremely tight in the last couple of years.

At the same time, in 2015—2016 Belarus has dipped into a prolonged and deep recession. During the last two years, the country has lost roughly 7% of its output. The combination of high real interest rates and a recession gave rise to a naive, but acceptable diagnosis: the excessively high interest rates caused (or at least contributed to) the recession. This view became popular in the domestic policy discussions. Furthermore, often this story transformed into a claim that ‘too tight monetary policy causes (or at least contributes to) recession’. Given this pressure, the National bank of Belarus (NBB) became accustomed to justifying its policy stance by considerations of financial stability given financial fragility. So, the economic policy discussion got into the discourse of these two extremes. Finally, it boiled down to the question whether ‘the monetary environment has stabilized enough in order to soften monetary policy’.

However, a naive story about the stance of monetary policy and the business cycle is not (fully) true in the case of Belarus in several respects.

Unanchored expectations drive interest rates

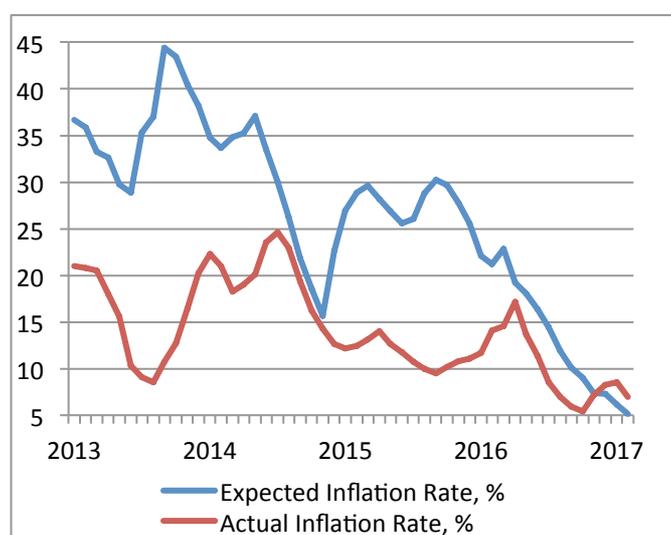
First, high interest rates at the financial market were not because of the excessively high policy rate of the NBB. It happened due to volatile, but still persistently high inflation expectations (Kruk 2017, 2016a). The latter visualized the loss of monetary-policy credibility by the general public.

Before 2016, the level of inflation expectations was persistently higher than the actual inflation, demonstrating an extremely slow (if any) convergence (see Figure 2). At the same time, the ex-ante level of real returns has remained relatively stable. When setting its policy rate, the NBB has taken into consideration existing inflation



expectations, otherwise the high expected inflation would have been realized.

Figure 2. Actual and expected inflation, %



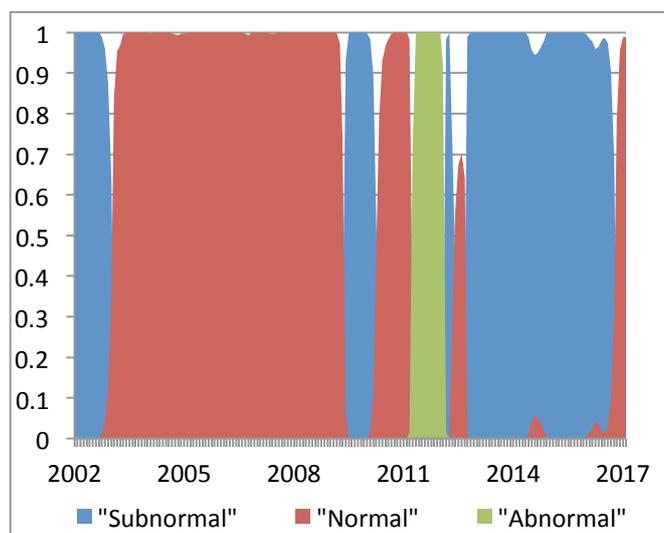
Note: Expected inflation has been estimated according to the methodology in Kruk (2016a).

So, in the recent past, the stance of the monetary policy could hardly be accused of generating too tight monetary conditions through the setting of an improper policy rate. The problem was (is) more severe, and one can argue about the inability (and the lack of willingness) of the NBB to anchor inflation expectations.

However, in the late 2016 and early 2017, the expected and actual inflation rates converged, mainly due to a contraction of the former. This introduced more stability into the monetary environment, in a broader sense. Kruk (2017, 2016a) shows that the turn of 2016—2017 has become a breakpoint for the monetary environment to return into a 'normal' stance (see Figure 3).

The NBB reacted to the milder monetary environment by a number of reductions in the policy rate (from 18% since August 2016 down to 14% since April 2017). However, a shift of both expected and actual inflation into the range between 5% and 9% may be interpreted as there being room for further reductions.

Figure 3. Classification of monetary environment stance in Belarus, probability estimates



Note: Classification and the methodology for estimates are based on Kruk (2016a). 'Normal' regime is characterized by reasonable and relatively stable real interest rates; 'subnormal' – too high real interest rate due to 'inflation expectations premium'; 'abnormal' extremely volatile and mainly huge negative real interest rates due to the swings of actual inflation.

Therefore, as of today, one may argue that the long-expected time for a softening of the monetary policy has come, as the 'expectations overhang' has disappeared. However, such a view might be too optimistic. Kruk (2017) argues that the convergence of expected and actual inflation rates might be a temporary lucky combination, as there is a lack of evidence supporting a growing credibility of monetary policy among the general public. On the contrary, inflation expectations seem to have shrunk due to a depressed domestic demand and lower consumer confidence. So, even if expectations have contracted, they have not been anchored. Hence, 'the expectations overhang' may resurge at any time.

Monetary softening cannot neutralize structural recession

Even if we assume that the 'expectations overhang' has disappeared, it would still not mean that there is room for a new monetary stimuli. A naive story about high real interest rates that cause



recession glitches once again when interpreting this linkage. Most frequently, countries face a cyclical recession (i.e. caused by temporary demand fluctuations). If that is the case, a negative impact of excessively high interest rates on output path is taken for granted.

However, the Belarusian story of recession is different. Kruk and Bornukova (2014) have shown that the country faced a negative TFP shock, which determined the weakening of the long-term growth rate. Kruk (2016b) shows that due to this shock, the long-term growth rate crossed the zero level approximately at the turn of 2014—2015, and dipped into a negative range later on. Hence, the Belarusian recession that started in 2015 was a combination of a negative contribution from both the long-term dynamics and the business cycle. Furthermore, since the second half of 2016, the negative contribution of the business cycle has faded out, and the recession was determined by the negative TFP shock almost solely (Kruk, 2017) so that, by 2017, the recession has become a purely structural phenomena.

From a monetary policy stance, this gives rise to a new challenge. Although the majority of methodologies still assess the output gap to be negative (but not far away from zero), the output gap will soon be closed automatically because of continuing negative TFP shocks (Kruk, 2017). In a sense, the negative TFP shock contributes to the closing of the output gap in the same way as monetary policy does. However, it does this job in an opposite manner (i.e. by squeezing the trend growth, and not by stimulating the business cycle), it leaves almost no room for monetary policy. It creates a situation where a reasonable

loosening of the monetary policy may immediately turn into an excessive one. Taking into account that the dormant inflation expectations can resurge, monetary policy decisions resembles walking on the edge.

Conclusions

Today's policy discussion in Belarus is extensively concentrated around the search for the best monetary policy to fight the recession. However, this formulation of the problem is a mistake in itself. Today's contradictions in monetary policy are simply a reflection of the bulk of accumulated structural weaknesses in the economy. Today, monetary policy can hardly do anything to stabilize output. The solutions for ending the recession, and enhancing growth should be found in structural policies, not in the sphere of monetary policy. As for monetary policy, it can, at this moment, hardly contribute to output stabilization (without challenging price stability). To do so, it has to ensure an anchoring of the inflation expectations first.

References

- Kruk, D. (2017). Monetary Policy and Financial Stability in Belarus: Current Stance, Challenges, and Perspectives (in Russian), BEROC Policy Paper Series, PP No.43.
- Kruk, D. (2016a). SVAR Approach for Extracting Inflation Expectations Given Severe Monetary Shocks: Evidence from Belarus, BEROC Working Paper Series, WP No. 39
- Kruk, D. (2016b). The Reasons and Characteristics of Recession in Belarus: the Role of Structural Factors (in Russian), BEROC Policy Paper Series, PP No. 42.
- Kruk, D., Bornukova, K. (2014). Belarusian Economic Growth Decomposition, BEROC Working Paper Series, WP no. 24





Dzmitry Kruk

Belarusian Economic Research and Outreach
Center (BEROC)

kruk@beroc.by

www.eng.beroc.by

Dzmitry Kruk is a Researcher at the Belarusian Economic Research and Outreach Center (BEROC). He obtained BA in economics (2002) and MA in banking and finance (2004) from the Belarusian State University. In 2008, he finished the postgraduate program in economic theory at the Belarusian State University. In 2003, Kruk worked as a research assistant for the Scientific and Research Economic Institute of the Ministry of Economy of the Republic of Belarus. From 2003 till 2010, he was a researcher at the IPM Research Center. Since 2004, Kruk teaches economic courses at the BSU.

freepolicybriefs.com

The Forum for Research on Eastern Europe and Emerging Economies is a network of academic experts on economic issues in Eastern Europe and the former Soviet Union at BEROC (Minsk), BICEPS (Riga), CEFIR (Moscow), CenEA (Szczecin), KEI (Kiev) and SITE (Stockholm). The weekly FREE Network Policy Brief Series provides research-based analyses of economic policy issues relevant to Eastern Europe and emerging markets.

