Five Years of Inflation Targeting Without Economic Growth: What Should Be Changed The Case of Russia

Gasanov, Oscar

Don State Technical University

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Abstract. The article provides a review of approaches to assessing and analyzing the effectiveness of the interest rate and exchange rate policy of the Bank of Russia in the period 2015-2019. Despite the decrease in the rate of price growth, inflationary expectations of economic agents remain at a high level. Monetary policy continues to be tight. The stability of the exchange rate to external shocks, expected from the introduction of inflation targeting and a free floating rate, did not happen. The complex of conditions that have developed due to geopolitical factors, low growth rates and the global economic crisis caused by the coronavirus pandemic require the search for new targets, such as economic growth and exchange rate stability. To maintain the stability of the ruble exchange rate, it is recommended to sell foreign exchange reserves accumulated according to the "Budget rule" in an equivalent amount; to support the liquidity of banks during periods of an attack on the ruble, it should through foreign exchange REPO, and develop a derivatives market.

Keywords: inflation targeting, consumer price index, exchange rate, monetary policy, Russian ruble, Bank of Russia.

JEL classification: E 520, E 580

1. Inflation and inflation expectations in Russia

The transition to inflation targeting and refusal of direct participation in the formation of the exchange rate, which was implemented by the Bank of Russia at the end of 2014, has had mixed results. Their influence sparks discussions among experts regarding the achievement of the expected results. Achievement of CPI levels, which turned out to be even lower than the target of 4% adopted by the regulator, opens up new questions in the urgent problem of inflation targeting. As noted (Kartaev, 2016), a long period of price stability can become a factor in the growth of economic agents' confidence in the national currency, which, in turn, will have a positive effect on the stability of the exchange rate in the event of external shocks by reducing capital outflow and stabilizing investments. That is, price stability should lead to a decrease in inflation expectations, which will become a trigger that price and exchange rate stability to shocks.

However, despite the low rate of price growth over the past three years, inflationary expectations remain at a fairly high level. The Bank of Russia in its February report on monetary policy reports that in January 2020, the median inflation rate expected by the population over the next 12 months was at 8.3%. The price expectations of Russian enterprises were at about 8%. Thus, economic agents, who are the main participants in the pricing process, are confident that inflation will be more than twice the Bank of Russia target. And only professional analysts are confident that the CPI will be at a level close to the target of the regulator.[1]

It should be noted that the scientific literature often indicates the possibility of reducing inflation expectations due to the real independence of the Central Bank. In (Goryunov, 2015) come to the conclusion that the stability of monetary policy is a reliable tool for fixing inflation expectations due to the increase of business confidence in the actions of the regulator. The monetary policy of the Bank of Russia since 2015 can hardly be blamed for instability or softness, however, it must be admitted that inflation expectations of the population and business remain at a very high level.

The dynamics of the observed and expected inflation, as well as the real consumer price index, demonstrate a significant correlation between these variables. However, assessing what is the cause and what is the effect is uneasy here. We assume that it is the inflation expectations of the population and enterprises that have an impact on the actual indicators of price dynamics. There are two reasons for this. First, the higher the inflation expectations of the households, the higher the tier propensity to consume, which increases the demand for goods and services; second, it is reasonable to assume that enterprises will strive to increase prices no lower than the level that they expect for the economy as a whole. What prevents them from implementing this scenario? Of course, the demand for products, which after the crisis of 2014-2015 not restored. The demand is induced, first of all, at the expense of a part of the household incomes, which is directed to consumption. However, in recent years, the real average monthly salary has been increased at a low rate, for example, in 2019, it grew by 2.9%. After the crisis of 2014-2015, the propensity of the household to save significantly increased (Gasanov, 2018), which also leads to a decrease in consumer demand. Consumer lending is growing, but its effect on increasing

[1] Bank of Russia. Monetary Policy Report. URL: http://www.cbr.ru/Collection/Collection/File/27317/2020_01_ddcp.pdf

demand is not so high, since high-interest rates reduce the solvency in the future when the loan has to be repaid. In addition, the impact of consumer credit is overwhelmingly limited to the imported industrial goods sector.

Ultimately, the contraction in demand due to low household incomes due to tight budget policy and negative expectations of employers, and not the tight monetary policy of the Bank of Russia, have become the main factors of low inflation over the past three years. Based on the postulate that only if economic agents have low inflationary expectations, the regulator can successfully counter it by monetary methods (Goryunov, 2015), it should be assumed that monetary policy measures in the period 2017-2019 were excessively tough. The main instrument of monetary policy in the context of inflation targeting, in the role of which is the Central Bank Key Rate, cannot exert a significant influence on the CPI under these conditions.

In the situation of high inflation expectations and insufficient efficiency of the transmission mechanism, accompanied by a weak level of development of the financial sector (Goryunov et al., 2015), the efficiency of the interest rate channel is low, and increase in interest rates may cause the opposite effect: due to the features of the business culture of Russia, an increase of Key Rate is estimated by economic agents as a signal for future price increases. Most often, the rise in interest rates is associated with a worsening situation in the foreign exchange market. In the absence of the possibility of credit financing, industrial enterprises, taking advantage of the rise in import prices, prefer to raise prices rather than grow production volumes, which further enhances inflation trends (Glazyev, 2015).

The percentage channel is not ideal, even in developed economies. From 2007 to the present, the central banks of developed countries, especially the US Federal Reserve and the ECB, have emitted incredibly large amounts of money. Today practically any bank in Europe and the US can get unlimited liquidity support from regulators. At the same time, the ECB cannot achieve inflation. The reason is the same negative economic expectations of end consumers - households that are not ready to spend.

The insignificant influence of interest rates on the CPI (Lomivorotov, 2014) is explained by the presence of non-monetary inflation factors. The main one is external shocks, which are realized through the exchange rate and the dynamics of prices of international exchange commodities. The negative impact of changes in world prices on Russian export goods is observed both in the case of an increase in prices for them, and a fall. In the event of an increase in prices for exported goods, the disparity between domestic and world prices increases, this, over a certain period of time, is compensated by their increase in the national economy. In the event of a fall in prices for Russian exports, a depreciation of the ruble is observed, which is also reflected with a certain lag in domestic prices: first the pass-through effect on imports, and then, on goods produced domestically, since due to a decrease in the dollar cost, they become more competitive in the global market. The dual character of the channel of influence of exchange rate fluctuations on inflation is noted in (Mogilat, 2017).

(Mironov, 2015) rightly points out that targeting the CPI, which contains a high level of imports, can increase the pro-cyclical nature of inflation. In a situation where the Key Rate is the main instrument of price stability, in the event of devaluation, the regulator is forced to resort to tightening it in those periods when world prices for energy resources and other raw materials will decline, and economic agents will especially need support.

Given the high propensity of households to save, easing monetary policy will not have a significant negative effect on consumer prices. A certain tightening of the non-price rules for consumer lending is enough to ensure that credit resources do not put pressure on the consumer goods market. Loans that are given by banks to business (credit channel loans) is “resource money”, not “consumers money” and will not automatically lead to an increase in effective demand, as it is claimed of orthodox macroeconomic theories.

Nevertheless, the importance of interest rate policy after the imposition of the international sanctions and restriction of the access of Russian corporations and banks to the world financial market should increase. The reason for the low efficiency of interest rate policy in the period before the crisis of 2014-2015 could be the assumption made by (Woodford, 2010), (Hofmann and Bogdanova, 2012), (Andryushin, 2015), that in conditions when national financial intermediaries prefer to attract funding from the foreign markets, interest rates of the Central Bank don't have a significant impact either on the interbank lending market, or on loans to the real sector of the economy, or the macroeconomic situation in the country.

Proponents of tight monetary policy often refer to the high level of employment and capacity utilization, which are an obstacle to investment growth due to lower interest rates (Yudaeva, 2014), (Badasen et al., 2015). Based on theoretical assumptions, this seems to be a correct conclusion, but it should be remembered that employment in Western economies, the modeling results of which underlie these postulates, and in Russia, are completely different phenomena. With relatively low unemployment according to the ILO method in 2017, 26.4% of the working population are classified as employed with low wages (they receive less than 2/3 of the median earnings), 7.2% are working poor, 10.2% of young people from 15 to 24 years old, neither studies nor works. In Russia, there is not a shortage of labor, but highly qualified jobs. Their creation, structural reforms, and

modernization of the economy, which were set by the goals of the Government (Medvedev, 2015), are unrealizable under the tight monetary policy.

The monetary policy of the Bank of Russia continues to be tight (Balatsky, 2019). This can be seen from the level of the Monetization ratio defined as the ratio of the broad money supply to GDP. Let us compare its level in the BRICS countries and the individual commodity countries with Russia (Table 1).

Table 1. Monetization ratio (M2 / GDP), in %

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	$\bar{\chi}$
Brazil	68	70	76	74	77	79	79	82	88	94	94	96	81
Russia	43	40	49	51	47	47	51	54	62	59	59	59	52
India	72	77	79	78	79	77	78	78	78	75	74	74	77
China	149	149	175	176	175	181	187	192	203	209	204	199	183
S. Africa	79	81	78	76	75	73	71	71	73	72	72	73	74
Mexico	26	26	30	31	31	31	33	34	36	38	39	38	33
Australia	91	98	94	101	100	101	106	109	113	118	116	113	105
Canada	113	124	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	119

World Bank data

The experience of China is noteworthy here, which skillfully combines a high level of monetization of the economy, a controlled exchange rate, and the dynamics of economic growth that is incredible for Russia over the long period. In Mexico, which is historically characterized by a low level of monetization of the economy, the shortage of the national money supply is compensated by the active circulation of the US dollar in the country.

In the situation of the crisis associated with the coronavirus pandemic and a new wave of devaluation, Russia will face a decline in production and an increase in prices. Therefore, we welcome the downward trend in the Key Rate of the Bank of Russia. Consumer prices in the current environment will not depend on the dynamics of the Key Rate. In a press release dated March 20, it is noted that "short-term pro-inflationary risks have intensified due to a possible more significant exchange rate pass-through effect of the weakening of the ruble into prices ... At the same time, a significant weakening of external demand, a possible decrease in consumer activity and lag effects from the tightening of monetary policy conditions can be sources of significant disinflationary risks in the medium term."[2] Is it possible to count on a positive effect on the Russian CPI due to weakening external demand? I imply a weakening of external demand for Russian goods and services, then it is worth noting: firstly, Russia produces has too few final consumption goods that are exported, therefore, the effect should be expected to be insignificant, if not zero; secondly, due to the devaluation of the ruble, producers of these goods will redirect them for export at a discount in dollar prices and earn additional profits. If the Bank of Russia implies a weakening of consumer demand in the markets of partner countries, then one should not expect that this will lead to a significant decrease in prices for goods and services in these markets.

The inconsistency of numerous approaches and models that assess the effectiveness of inflation targeting necessitates changes. In contrast to the basic concepts of economic policy, the choice of goals in the current management of the economy is a tactical element and is subject to change over time and the emergence of new challenges. Perhaps the time has come to re-evaluate inflation targeting as the sole goal of the monetary authorities. After the crisis of 2008-2009, many authors advocate changing the goals of monetary regulators (Frankel, 2012), (Fackler, McMillin, 2020).

Interest in targeting nominal GDP arose against the backdrop of the crisis in advanced economies. However, in (Bhandari, Frankel, 2017) it is argued that developing countries are better suited to such a model in the light of large external trade shocks. In inflation targeting, the full impact of adverse shocks is reflected in the loss of real GDP. In (Chen, 2020), it is noted that targeting GDP reduces inflation volatility by 25%, fluctuations in production by 27%, and, in almost the same way as inflation targeting, stabilizes inflation.

Summarizing up, it should be noted that it should not be allowed that high-interest rates in the struggle to maintain low rates of increase in prices, as one of the factors in the successful development of the economy, don't lead to the opposite effect.

[2] Bank of Russia. Press release. March, 2020. URL: http://cbr.ru/press/PR/?file=20032020_133000Key.htm

2. Exchange rate and exchange rate policy

Over the past five years, the dynamics of the Russian ruble (RUB) exchange rate has been showing relative stability; inflation has dropped to record lows. First of all, I would like to express my agreement that the time for the transition to the floating rate was not chosen the best. In the autumn of 2014, the monetary conditions were as follows: there was a closure of global financial markets for Russia, capital outflows, and the associated pressure on the RUB exchange rate. In such conditions, the transition to a free-floating regime is not recommended by supporters of regulating the national currency exchange rate (Andryushin, 2015) and as the Bank for International Settlements (BIS, 2012). Nevertheless, the Bank of Russia decided not to abandon the previously adopted plan to switch from January 1, 2015, to a floating regime, in which the geopolitical events of 2014 were not taken into account. The work (Andryushin, 2014) indicated the likelihood of a sharp devaluation of the ruble due to the neglect of the risks of speculative attacks and the lack of clear methods in the regulator's plans to neutralize the negative impact of fluctuations in the ruble exchange rate on the national economy.

In 2015, the RUB exchange rate was not stable. Both the maximum and minimum value of exchange rate fluctuations during 2015-2019 is observed precisely from January 2015 to January 2016. The exchange rate volatility (defined as a standard deviation) for 2015 is 6.1437 rubles (10.0% of the average annual rate) and for during the 2016-2019 – 3.5051 rubles (5.6% of the average annual rate).

The dynamics of the exchange rate remains a significant factor not only in inflation but also in economic growth. Econometric models by most authors indicate the impact of the exchange rate on inflation (pass-through effect) and output. In the (Loschenkova, Zaitsev, 2019), the exchange rate is defined as one of the most significant factors in the investment attractiveness of the Russian economy. In the (Lomivorotov, 2014) notes that in the period 1999-2013, the ruble devaluation by 10% led to an increase in the CPI by 1.5% with a lag of 4-6 months; the output increases by 0.5% with a lag of 2-3 months. After the 2014-2015 financial crisis, the pass-through effect due to reduced demand factors increased significantly. In the period 2014-2017, the RUB devaluation by 1% led to an increase in the CPI by 0.18% in the next month and by 0.39% over the next two months (Gasanov, Petrosyan, 2018). In the (Sinyakov et al., 2019), the pass-through effect is assessed by sectors of the Russian economy. A high pass-through effect is observed in those industries in which pricing is most significant for most Russian citizens: agriculture (0.26), food production (0.26), and textile and clothing manufacturing (0.52).

The dynamics of the international reserves of the Bank of Russia testifies to the fact that a flexible formation of the ruble exchange rate has de facto not taken place. Over the past five years, the volume of reserves increased by 168.9 billion USD, or 42.8%. Over the last year, 2019 - by 85.9 billion USD or 18.3%. That is, there are regular ruble interventions, which should not exist given a freely floating exchange rate (Yudaeva, 2014). How to disagree with the opinion (Andryushin, 2015): “this practice has nothing to do with a floating, all the more flexible floating, exchange rate” [p. 59]. The ruble exchange rate cannot be called “free-floating” even in the context of the Budget Rule. Undoubtedly, the Budget Rule is an effective tool for absorbing high oil and gas budget revenues, but from the point of view of currency policy, its implementation is the same foreign exchange interventions that stabilize the RUB exchange rate. But these interventions are of a regular unilateral nature - they keep the RUB exchange rate low against world reserve currencies. In 2019, the Russian Ministry of Finance acquired foreign currency worth 2.977 trillion RUB[3], which with an average annual exchange rate of 64.62 RUB / USD is equivalent to 46 billion USD. The Bank of Russia should publicly declare the exchange rate policy as the de facto one - a floating exchange rate adjusted for unwanted fluctuations, and not at all a free-floating exchange rate.

Moreover, the negative nature of the role of exchange rate volatility on economic growth is regularly confirmed by researchers. Exploring the results of empirical studies on the effect of devaluation on GDP dynamics (Mironov V., 2015) notes the negative impact of devaluation on economic growth, the likelihood of a financial crisis and a decrease in credit ratings, increased uncertainty, and a reduction in investment activity. In (Aghion et al, 2009) it is noted that, in contrast to developed economies, where macroeconomic shocks are compensated by exchange rate flexibility, in developing economies, on the contrary, financial shocks become the main source of macroeconomic instability. Hadj Fraj et al. (2018) found that full exchange rate flexibility significantly destabilizes emerging markets and accelerates economic growth in developed countries. They also concluded that there is a relationship between the nature of the exchange rate regime and the quality of decision-making in monetary management. The paper (Balaban et al, 2019) notes the negative impact of exchange rate volatility on overall economic development and foreign direct investment in Central and Eastern European countries.

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[3] Federal Treasury of the Russian Federation. URL: https://roskazna.ru/o-kaznachejstve/plany-i-otchety/o-rezultatakh-raboty-fk

The findings (Cao et al., 2020) suggest that the choice of exchange rate regime is not a universal solution for all countries and cultures. The authors conclud that when establishing optimal exchange rate regimes, one should take into account not only economic but also cultural characteristics of countries. If a country's exchange rate regime is consistent with its national business culture, economic agents can better accept and adapt to it, leading to increased social welfare.

The high value of the ruble exchange rate for the Russian economy is reported by (Goryunov, 2015), (Amosov, 2015), etc. Despite the policy of de-dollarization, as of January 1, 2020, 19.1% of Russian banks' liabilities are denominated in foreign currency and the 20 largest banks have 20.6%. International liabilities of corporations exceed USD 227.6 billion.[4] In the event of an attack on the ruble, to avoid a sharp devaluation, the regulator can and should promptly support the ruble exchange rate, since the preemptive actions will have a stabilizing effect and signal the market about the danger of speculative play. Note that we are don't call for keeping the ruble exchange rate at a constant, but recommend achieving a reduction in volatility during periods of external shocks. By the stability of the exchange rate dynamics, we mean the absence of sharp devaluation (or revaluation, which is unlikely) in the ruble exchange rate against the world reserve currencies, which threaten to destabilize the financial system and the economy of the country.

To support the RUB exchange rate during the crises of 2008-2009 and 2014-2015, the Bank of Russia, as the main, used two instruments: the foreign exchange interventions and the interest rates. Which tool was most effective? Let's turn to the statistics: let's compare the ratio of the loss of foreign exchange reserves and the RUB exchange rate against the USD during the crises of 2008-2009 and 2014-2015 (Tables 2a, 2b). The idea of an indicator of the ratio of maximum and minimum international reserves is borrowed from (Aizenman, Sun, 2012).

Table 2a. Dynamics of the international reserves (IR) and the ruble exchange rate (ER) during the 2008-2009crisis

Max IR (01.08.08)	Min IR (01.03.09)	Max IR / Min IR	Max ER (02.09)	Min ER (07.08)	Max ER / Min ER
595 902	384 074	1,55	35,76	23,35	1,53

Table 2b. Dynamics of the international reserves (IR) and the ruble exchange rate (ER) during the 2014-2015 crisis

Max IR (01.10.14)	Min IR (01.05.15)	Max IR / Min IR	Max ER (02.15)	Min ER (06.14)	Max ER / Min ER
454 240	356 005	1,28	64,63	34,41	1,88

Data: Statistical Bulletin of the Bank of Russia.

Reserves are quoted in billions of USD.

RUB to USD rate - average monthly official rate of the Bank of Russia.

During the crisis of 2008-2009, the difference between the indicators of loss of reserves and the exchange rate was 0.02 (1.5515 - 1.5315), and during the crisis of 2014-2015 minus 0.60 (1.28 - 1.88). The comparison allows us to conclude that foreign exchange interventions are important for supporting the RUB. The more reserves are spent, the less the RUB losses in the exchange rate. In addition to the calculations also note that the interest rates as a tool for managing the stability of the RUB exchange rate don't show so high efficiency: during 2008-2009 they increased from 11 to 13% (change rate 1.18) and during the 2014-2015 from 7.5 to 17% (change rate 2.27).

The article (Aizenman, Sun, 2012) concludes that the openness of trade and the financial market plays an important role in the accumulation of international reserves as insurance and the need to spend them in large volumes during a crisis to compensate for external shocks [p. 255]. With the protracted nature of the crisis after several months and the presence of large losses, the regulators fear the loss of reserves, interventions are reduced, and the increase of reserves begins. In countries with high export potential, where there is a positive trade balance, the post-devaluation accumulation of reserves occurs rather quickly due to a reduction in imports of goods and services. With a low level of export-import elasticity (Gurvich, 2013) typical for the Russian

[4] Bank of Russia. Review of the banking sector of the Russian Federation. No. 208. February, 2020. URL: https://cbr.ru/eng/statistics/bank_sector/review

economy, the positive effect of devaluation is limited to the raw materials sector, which advantages over the non-resource economy, which is shocked by rising import prices and reduced investment.

The experience of the 2014-2015 devaluation shows that for the Russian financial system, interest rates on ruble loans haven't still become an effective tool to support the RUB exchange rate during periods of capital outflow and an attack on the RUB. With a speculative attack on the ruble, when the yield of foreign exchange transactions within a month can reach 50-70%, an increase in money market rates even by 2-3 times will not bring the expected effect. And lending to economic agents will stop, including due to the outflow of their liquid assets to the foreign exchange market (Glazyev S., 2015). The non-financial business cannot provide profitability with interest rates, that exceed its own profitability. Should also take into account the presence of global trends in capital outflow and devaluation of currencies of developing countries, when the actions of the regulator should go in the same direction with the actions of other regulators or the situation that develops when only the RUB is attacked for one reason or another. The regulator must have sufficiently accurate forecasts of the development of the situation in the global financial market to assess the situation on time and make the right decisions.

One of the reasons for the permanent pressure on the ruble exchange rate is the structural imbalances in the Russian economy. Nevertheless, in our opinion, the motive for the sharp devaluation in 2014-2015 was, first of all, geopolitical problems and sanctions, structural problems of the economy, and the decline in oil prices became a triggering mechanism, the effect of which would be moderate. This is evidenced by a comparative analysis of the devaluation of the currencies of countries exporting oil and other raw materials. In the period from July 2014 to August 2015, the nominal exchange rate of the RUB devalued by 39.4%, and the real effective exchange rate - by 29.4%; in the same period, the currencies of Australia, Norway, and Mexico were devalued by, respectively: 13.7%, 16.5%, and 16.0%; 11.7%, 11.8 and 14.1% (Mironov, 2015).

When comparing the dynamics of inflation and the exchange rate of RUB, it turns out that the stability of the exchange rate is more important for activating the investment process and domestic consumption. The strengthening of the RUB exchange rate has a particularly positive effect on these processes (Ershov, 2015).

The stabilization of the exchange rate requires the regulator to determine the fundamental exchange rate of the ruble to world reserve currencies since the results of studies on the effectiveness of foreign exchange interventions indicate that uncertainty about the fundamental value of the exchange rate leads to the fact that foreign exchange interventions become less effective. It is also noted that the actions of speculators, under some circumstances, can reduce the volatility of the exchange rate, but always support the upward trend in the mismatch of the exchange rate with the fundamental, and the intervention of the regulator reduces the volatility of the exchange rate and also reduces the risks of speculation. Several authors (Andryushin, 2015), (Glazyev, 2015) believe that achieving financial and price stability in the Russian economy is possible only by targeting the exchange rate. The presence of a target level of the ruble exchange rate can form for economic agents the expectations of the dynamics of this exchange rate desired for the regulator. It is known that in emerging markets, the expectations of foreign exchange market participants that correlate with the policy of the regulator allow it to set the desired vector of exchange rate dynamics with the help of minor interventions (Miyajima, 2013).

Anyway, all regulators strive to create favorable conditions for their residents at the expense of the undervaluation of the exchange rate, resorting to the so-called “modern mercantilism”. In this desire, it is necessary to find an acceptable level of the RUB exchange rate for all participants in economic relations, and don't blame other countries, so spoke (Medvedev, 2015), as prime minister. In order not to be unfounded, let us turn to a comparative analysis of the ratio of purchasing power parity (PPP) and the nominal exchange rate calculated in the national currencies of several countries with which Russia is most often compared or has a similar export structure (Table 3).

Table 3. PPP / Nominal exchange rate Ratio (to the USD, in %)

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Brazil	58	66	65	79	88	80	76	74	56	57	63	55	53
Russia	55	58	44	52	59	60	61	55	39	36	42	41	40
India	28	27	27	31	32	29	28	28	26	26	28	26	26
China	39	46	46	49	54	56	57	57	56	52	52	54	51
S. Africa	54	49	51	62	66	60	53	49	43	40	46	47	44
Mexico	67	67	55	61	62	60	62	61	53	47	48	49	48
Australia	112	132	106	132	149	159	148	133	123	106	109	111	102

Canada	113	116	105	119	125	125	119	111	98	94	96	96	90

Data: World Bank Group

All developing countries take advantage of the undervalued national currencies. Only highly developed economies, despite the raw material nature of their exports, can afford to have a currency whose nominal exchange rate is as close as possible to PPP or sometimes higher it is. At the end of 2019, the average annual exchange rate of the Russian ruble in comparison with PPP is undervalued by 2.54 times! The smallest (best) result is observed at the end of 2013 - 1.64 times). Of the BRICS countries, only the national currency of India is undervalued more than the Russian ruble. But India traditionally had a negative current payment account. The data on the dynamics of the PPP of the Russian ruble does not allow us to agree with the conclusion that the weakening of the regulatory influence of the Central Bank is a prerequisite for the reduction of the disparity between the PPP and the nominal market rate (Kiyutsevskaya, 2014). During the entire period after the introduction of the "floating rate" regime, there has been an increase in the gap between the nominal market rate and PPP. Until 2014, the opposite process is observed (except 2009). The presented data also allow us to conclude that there is no positive effect of high disparity on the likelihood of subsequent devaluations: before the devaluation of 2008-2009, the disparity was 1.73 times, the devaluation of the RUB was 53% of the values of July 2008, before the devaluation of 2014-2015 the disparity was 1.83 times, the devaluation of the RUB reached 88% of the values of June 2014.

Monetary mercantilism, which means the practice of accumulating foreign exchange reserves to maintain a low level of the national currency rate to stimulate export-oriented industries (Narkevich, 2015), (Loshchenkova, Zaitsev, 2019) is suitable for those economies that produce industrial goods for sale in highly competitive markets. Russian exports consist mainly of commodities, prices for which are forming on the international exchange markets, and over-the-counter markets for these goods are not always regulated on the principles of open competition (example, the OPEC +). The country is facing the implementation of the tasks of structural changes in the economy. In the context of the need to increase the share of non-resource exports for the Russian economy, financial mercantilism based on selective economic policy is more suitable. In the conditions of financial mercantilism, it is practiced to finance target industries and create favorable conditions for them to attract capital both in the domestic and foreign markets. It should be noted here that the scientific literature often asserts the impossibility of effective selective policy in countries with a high level of corruption (Mironov, 2015). But this topic is outside the scope of our research.

One cannot unequivocally agree with the statements about the impossibility of monetary stimulation of the economy in the presence of structural problems (Yudaeva, 2014), (Badasen et al., 2015). The availability of credit and the stability of the exchange rate can have a stimulating effect on investment by both domestic and foreign economic agents. The stable and predictable in the long term the exchange rate of the national currency reduces the risks of an investment in new projects in two directions: (1) the availability of procurement of imported equipment and technologies, as well as confidence in the repayment of foreign currency loans received for their purchase; (2) the absence of significant risks of the exchange rate dynamics, which contributes to the free repatriation of profits for foreign investors.

And finally, a study (Chen, Lee, 2018) confirms the hypothesis that in the long term for commodity economies only the presence of market power in world commodity trade can reduce the reaction of the exchange rate of the national currency, and in the short term, the inflation targeting regime can strengthen the reactions of the exchange rate for fluctuations in commodity prices. The authors also point to the need for foreign exchange interventions to counter excessive fluctuations in commodity currencies.

3. Discussion

The need for targeting the exchange rate follows from a completely fair postulate: "economic policy is not neutral about economic interests" (Glazyev, 2014). The RUB will always need support due to the unequal financial potentials of interested stakeholders: importers, whose financial and business resources are incommensurately small, are playing against the foreign exchange interests of hydrocarbon and metallurgical giants with their colossal influence don't only on the financial market, but also on all levels of the Russian government, which are always "for" devaluation. Therefore, direct support through foreign exchange interventions should remain, albeit the last tool that should be resorted to without fear of losing international reserves, since their existence is justified by such a necessity.

When setting money market rates, the deceptiveness of negative real rates due to inflationary surges caused by devaluation should be avoided; it is obvious that the rise in prices caused by a sharp rise in the price of imports

(pass-through effect) has nothing to do with interest rates in the domestic market and can't be controlled with their help.

The effectiveness of the transmission mechanism is a factor determining the effectiveness of the monetary policy. The main problem of the transmission of actions (signals) of the Bank of Russia is the underdevelopment of the financial sector. Is the requirement for the development of the financial market should go beyond the requirements for the banking system, which over the past five years has significantly improved the time structure of assets and liabilities, increase the capital and the regulator has increased the level of monitoring of the banking system. Activity are needed to stimulate economic agents to hedge the financial risks, primarily the currency risks. Corporate structures can be indirectly influenced through public procurement. It is enough to introduce a requirement for the obligatory hedging of foreign exchange risks when participating in the supply of products, the prices of which are related to exchange rate fluctuations. The increase of the RUB derivatives market, the lower the volatility of the RUB will become.

4. Conclusion

The instability of the global financial market creates conditions for the penetration of external shocks into the Russian market. In contrast to previous crises, several necessary measures to help the Russian financial market maintain stability have already been implemented. In particular, the regulator carefully monitors foreign exchange risks of domestic banks, the time structure of liabilities and assets, which reduces sensitivity to sharp fluctuations in the RUB exchange rate and interest rates. However, in the event of severe shocks caused by the movement of speculative capital, the inflow and especially the outflow of international capital may be of such volumes that the stability of the ruble exchange rate will be disturbed. In such cases, must use the “Budget Rule” in the opposite direction. That is, the Ministry of Finance of Russia must sell foreign currency from reserves in the amount that compensates for the current budget revenues that fall due to the fall in oil prices below the level established by the "Budget Rule". This will allow maintaining the current stability of the budget and supporting the RUB for a sharp fall.

When the ruble exchange rate reaches a level that a fall below which threatens financial stability, the Bank of Russia should abandon the allocation of ruble liquidity, which will appear on the foreign exchange market, and give liquidity for banks once in foreign currency (in the form of foreign exchange REPO). This tactic will allow supporting the liquidity of banks (yes, with losses for them) and the exchange rate at the same time. When the market stabilizes, the use of this tool should stop to avoid the negative consequences described in (Glazyev, 2015).

The world is increasingly faced with a non-standard reaction of economic agents to the policy of the monetary authorities. The current events caused by the coronavirus pandemic may be another factor that will accelerate the official adoption by the monetary regulators of developed countries of an additional goal - economic growth. Taking into account the anomalies of monetary regulation, typical of the world economy in the last decade, there is a request to study the influence of behavioral factors of economic agents on the dynamics of inflation, currency fluctuations, and economic growth.

References

Aghion Ph., Bacchetta Ph., Rancière R., Rogoff K. (2009) Exchange rate volatility and productivity growth: The role of financial development. *Journal of Monetary Economics*, Vol. 56, Issue 4, pp. 494-513. doi: http://dx.doi.org/10.1016/j.jmoneco.2009.03.015.

Aizenman J., Sun Y. (2012) The financial crisis and sizable international reserves depletion: From ‘fear of floating’ to the ‘fear of losing international reserves’? *International Review of Economics and Finance*, Vol. 24, pp. 250-269. https://doi.org/10.1016/j.iref.2012.03.004.

Amosov A. (2015) Economic recovery on the basis of hard national currency and full-fledged family - the purpose of the social state. *Bulletin of the Institute of Economics RAS*, No 5, pp. 77-88. (in Russian). Retrieved from: https://elibrary.ru/download/elibrary_24332025_30353219.pdf.

Andryushin S. (2014) Perspectives on Inflation Targeting Regime in Russia. *Voprosy Ekonomiki*, No 11, pp. 107-121. (in Russian). https://doi.org/10.32609/0042-8736-2014-11-107-121.

Andryushin S. (2015) Arguments for the Ruble Exchange Rate Management. *Voprosy Ekonomiki*, No 12, pp. 51-58. (in Russian). https://doi.org/10.32609/0042-8736-2015-12-51-68.

Badasen P., Isakov A., Khazanov A. (2015) Modern Monetary Policy: Relevant Criticism or Misunderstanding in the Expert Community? *Voprosy Ekonomiki*, No. 6, pp. 128-142. (in Russian). https://doi.org/10.32609/0042-8736-2015-6-128-142.

Balaban S, Zivkov D, Milenkovic I. (2019) Impact of an unexplained component of real exchange rate volatility on FDI: Evidence from transition countries. *Economic Systems*. https://doi.org/10.1016/j.ecosys.2019.100719.

Balatsky E., Ekimova N. (2019) Effectiveness of monetary regulation in conditions of sanctions. *Journal of Institutional Studies.* 11 (2). pp. 094-109. https://doi.org/10.17835/2076-6297.2019.11.2.094-109.

BIS (2013) Market volatility and foreign exchange intervention in EMEs: What has changed? *BIS Papers*, No 73. Retrieved from: https://www.bis.org/publ/bppdf/bispap73.pdf.

Bhandari P., Frankel J. (2017) Nominal GDP targeting for developing countries // *Research in Economics*. Vol. 71, Issue 3, pp. 491-506. https://doi.org/10.1016/j.rie.2017.06.001.

Cao Z., El Ghoul S., Guedhami O., & Kwok C. (2019) National Culture and the Choice of Exchange Rate Regime // *Journal of International Money and Finance*, 102091. https://doi.org/10.1016/j.jimonfin.2019.102091.

Chen H. (2020) Nominal GDP targeting, real economic activity and inflation stabilization in a new Keynesian framework // *The Quarterly Review of Economics and Finance*. In press, corrected proof Available online 22 January 2020. https://doi.org/10.1016/j.qref.2020.01.002.

Chen, Y., Lee, D. (2018) Market power, inflation targeting, and commodity currencies // *Journal of International Money and Finance,* Vol. 88, Nov. 2018, pp. 122-139. https://doi.org/10.1016/j.jimonfin.2018.07.002.

Chutasripanich N, Yetman J. (2015) Foreign exchange intervention: strategies and effectiveness. *BIS Working Papers,* No 499. Retrieved from: https://www.bis.org/publ/work499.pdf.

Fackler, J.S., & McMillin, W.D. (2020) Nominal GDP versus price level targeting: An empirical evaluation // *Journal of Economics and Business,* 105890. https://doi.org/10.1016/j.jeconbus.2019.105890.

Frankel J. (2012) The Death of Inflation Targeting. *voxEU*. June 19, 2012. Retrieved from: http://www.voxeu.org/article/inflation-targeting-dead-long-live-nominal-gdp-targeting.

Gasanov O.S. (2018) Deposit operations of Russian banks: condition and directions of improvement. Monograph. Rostov on Don, Don State Technical University, 97 pp. (in Russian).

Gasanov O.S., Petrosyan A.A. (2018) Transmission mechanism implementation of monetary policy in Russia. In book *Breakthrough development of the Russian economy: Conditions, Tools, and Effects*. Nalchik, Kabardino-Balkarian State University, pp. 53-59 (in Russian).

Glazyev S. (2014) Sanctions of the USA and the Policy of Bank of Russia: Double Blow to the National Economy. *Voprosy Ekonomiki*, No 9, pp. 13-29. (in Russian). Retrieved from: https://elibrary.ru/download/elibrary_21916549_48543832.pdf.

Glazyev S. (2015) On Inflation Targeting. *Voprosy Ekonomiki*, No 9, pp. 124-135. (in Russian). https://doi.org/10.32609/0042-8736-2015-9-124-135.

Goryunov E., Drobyshevsky S., Trunin P. (2015) Monetary Policy of Bank of Russia: Strategy and Tactics. *Voprosy Ekonomiki*, No 4, pp. 53-85. (in Russian). https://doi.org/10.32609/0042-8736-2015-4-53-85.

Gurvich E., Prilepskiy I. (2013) How to secure external sustainability of the Russian economy. *Voprosy Ekonomiki*, No 9, pp. 4-39. (in Russian). Retrieved from: https://elibrary.ru/download/elibrary_20206842_85185983.pdf.

Hadj Fraj S., Hamdaoui M. & Maktouf S. (2018) Governance and economic growth: The role of the exchange rate regime // *International Economics* Vol. 156, pp. 326-364. https://doi.org/10.1016/j.inteco.2018.05.003.

Hofmann B., Bogdanova B. (2012) Taylor rules and monetary policy: A global "Great Deviation"? *BIS Quarterly Review*, September, pp. 37-49. Retrieved from: https://www.bis.org/publ/qtrpdf/r_qt1209.pdf.

Kartayev Ph. (2016) Modeling the impact of inflation on economic growth in the oil-exporting countries. *Bulletin of the Institute of Economics RAS*, No 1, pp. 169-180. (in Russian). Retrieved from: https://elibrary.ru/download/elibrary_25463317_76053597.pdf.

Kiyutsevskaya A. (2014) Floating exchange rate of the Russian ruble: myth or reality? *Voprosy Ekonomiki*, No 2, pp. 50-67. (in Russian). https://doi.org/10.32609/0042-8736-2014-2-50-67.

Loshchenkova A.N., Zaytsev Yu.K. (2019) The impact of exchange rate dynamics on foreign direct investments inflow to the Russian Federation. *Journal of the New Economic Association*, No 4 (44), pp. 127-142. (in Russian). https://doi.org/10.31737/2221-2264-2019-44-4-4.

Medvedev D. (2015) A new Reality: Russia and global Challenges. *Voprosy Ekonomiki*, No 10, pp. 5-29. (in Russian). http://dx.doi.org/10.1016/j.ruje.2015.11.004

Mironov V. (2015) Russian Devaluation in 2014-2015: Falling into the Abyss or Window of Opportunities? *Voprosy Ekonomiki*, No 12, pp. 5-31. (in Russian). https://doi.org/10.32609/0042-8736-2015-12-5-31.

Miyajima K. (2013) Foreign exchange intervention and expectation in emerging economies. *BIS Working Papers*, No. 414. Retrieved from: https://www.bis.org/publ/work414.pdf.

Mogilat A. (2017) Overview of Monetary Policy Transmission Mechanism Channels and Instruments of Their Analysis in the Bank of Russia. *Russian Journal of Money and Finance*, No 9, pp. 3-9. (in Russian). Retrieved from: https://elibrary.ru/download/elibrary_29987325_61698586.pdf.

Sinyakov A.A., Chernyadyev D.N., Sapova A.K. (2019) Estimating the Exchange Rate Pass-Through Effect on Producer Prices of Final Products Based on Micro-Data of Russian Companies. *Journal of the New Economic Association*, No 1 (41), pp. 128-157. (in Russian). https://doi.org/10.31737/2221-2264-2019-41-1-5.

Woodford M. (2010) Financial intermediation and macroeconomic analysis. *Journal of Economic Perspectives*, Vol. 24, No. 4, pp. 21-44. Retrieved from: https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.24.4.21.

Yadaeva K. (2014). On the Opportunities, Targets and Mechanisms of Monetary Policy under the Current Conditions. *Voprosy Ekonomiki*, No 9, pp. 4-12. (in Russian). https://doi.org/10.32609/0042-8736-2014-9-4-12.