



Finance, Money, and Credit

Original article

UDC 336.74; 336.711; 338.27; 338.5

DOI: <https://doi.org/10.17308/econ.2023.2/11154>

JEL: E37; E 44; E 51; E 52; E 58

Does the monetary policy of the United States affect the consumer price inflation in Russia?

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Subject. The economic environment in Russia, similar to other countries, is represented by the consumer price index. It is regulated by the monetary policy of the Central Bank of the Russian Federation. Since Russia participates in international economic relations, its economic environment is affected by the monetary policy of the USA, because this country plays the greatest role in the global economy and the global economic system as a whole. At the moment, the monetary policy of the Federal Reserve System of the USA has a stronger impact on consumer price inflation in Russia than the monetary policy of the Central Bank, because the US economy is significantly larger than the Russian economy. Specifically, an increase in money supply in the USA, required to stimulate economic activity in the country, can accelerate the growth of the consumer price index in our country. It is therefore important to build economic and mathematical models in order to predict the consumer price index in Russia based on the indicators of the CB and the FRS.

Purpose. The purpose of our study was to determine the effect of the monetary policy of the CB and the FRS on the consumer price index in Russia and derive multiple autoregression equations in order to predict the consumer inflation rate in our country based on the indicators of the CB and the FRS.

Methodology. In our study, we used general and specific scientific methods: analysis, synthesis, and statistical methods (correlation and regression analysis). The study was based on the analysis of relevant scientific literature and economic journals.

Conclusions. The study determined that the monetary policy of the FRS directly affects the consumer price index in Russia. It also stresses the need to develop measures aimed at eliminating the side effects of the monetary policy of the FRS in Russia. The article demonstrates a strong negative effect of increased US money supply on the economic situation in Russia and a strong correlation between the M2 money supply in the USA, the US dollar index, and the consumer price index in Russia, as compared to a less significant impact of the key rate of the CB and the M2 money supply in Russia.

Keywords: Federal Reserve System of the USA, Central Bank of the Russian Federation, monetary policy, interest rates, money supply, US Dollar Index, consumer price index.

For citation: Tenkovskaya, L. I. (2023) Does the monetary policy of the United States affect the consumer price inflation in Russia? *Proceedings of Voronezh State University. Series: Economics and Management. (2)*, 43–55. DOI: <https://doi.org/10.17308/econ.2023.2/11154>

Introduction

At the moment, it is important to determine the impact of the monetary policy of the Federal Reserve System of the USA (FRS) on the economic situation in Russia, because it can help to come to conclusions regarding the measures required to eliminate negative consequences of the expansion of the financial system of the United States of America (USA).

The USA is the world's largest economy, which grows through increasing its money supply. The US dollar is the world's primary reserve currency and is widely used in international transactions. Prices of goods and services are set in US dollars. Therefore, we can assume that the monetary policy of the FRS affects the economic situation in other countries.

There is a study demonstrating that an unconventional monetary policy of the FRS, namely quantitative easing, has side effects visible in other countries. This generally means that economic entities in other regions take additional risks due to extended loans and lower interest rates stimulating credit growth. (Yildirim & Ivrendi, 2021) As a result, the profits of most commercial banks are generated by loans (Gržeta et al., 2023). The study also determined that risks are transferred between countries by means of global stock markets. General risk aversion in various countries is characteristic for times of economic crises. Investment in risky assets was observed in many countries after the FRS introduced fiscal stimuli to the economy (Dai et al., 2021; Lai & Ng, 2020; Shahzad et al., 2021). American stock market indices (S&P 500 and DJIA) are considered to be the most important indicators of the ups and downs of global stock markets (Hong et al., 2021). The USD exchange rate is considered to be the key indicator of the monetary policy of the FRS. A strong US dollar usually has a positive impact on importers and a negative impact on exporters in the USA. A weak US dollar results in the growth of export from the USA, but negatively affects the amount of imported goods (Habibi, 2019; Khan et al., 2019).

Therefore, side effects of the changes in the monetary policy of the FRS aimed at regulating the USD exchange rate and increasing the efficiency of the largest economy in the world, are transferred to other countries via trade channels. We can therefore say that there are established channels for transferring the side effects of the monetary policy of the FRS that affect the global economy.

The COVID-19 pandemic is known to have had a detrimental effect on the global economy and the international economic system. With the number of infected people growing rapidly, great financial aid was required to support the nation. Food supply was of utmost importance. It was at that moment that the USA and other countries resorted to softer monetary policies, which resulted in a cash excess all over the world (Das & Gangopadhyay, 2023). It is thus obvious that starting with the COVID-10 pandemic and until the present moment, the monetary policy of the FRS has formed certain economic conditions characterised by increased consumer inflation rates. This raises an important question: "Has the monetary policy of the FRS USA affected the economic situation in Russia?"

Most economists quite reasonably believe that the Central Bank of the Russian Federation (CB) plays the main role in creating the conditions for economic activity in our country by regulating the interest rates, money supply, the strength of the Russian rouble, and the rate of unemployment (Tkackev et al., 2019; Zaitsev, 2020; Koloskova & Egorov, 2022; Konyagina & Krut, 2022; Savchina & Apresyan, 2020). At the same time, the CB operates in a specific environment, which has a strong enough effect on the regulatory bodies and can counter the economic policy (Sokolova, 2019; Mitin, et al., 2019; Afanasieva, 2021; Baryshnikova et al., 2019; Sazonov & Sazonova, 2019). This is why the monetary policy of the CB is not always effective (Gospodarchuk & Zeleneva, 2021; Khotulev, 2021; Aliev et al., 2021; Kapkanschikov, 2021). The international economic environment

changed especially greatly during the COVID-19 pandemic and the special military operation in Ukraine (Tenkovskaya, 2022a, 2022b). Can the CB now use conventional methods to control the external factors affecting the economy of our country?

The purpose of our study was to determine the impact of the monetary policy of the FRS on the consumer price index in Russia. The purpose determined the following tasks: to review the theoretical basis for the monetary policies in the USA and in Russia; to analyse the indicators of the FRS and CB; to derive multiple autoregression equations in order to predict the consumer price index in Russia depending on the monetary policy of the CB and the FRS. The hypothesis of our study is that the monetary policy of the FRS has a significant impact on the economic situation in Russia, particularly on the consumer price index.

The article is divided into several parts. The “Materials and methods” section presents statistical data, the data sources, and methods used in the study. The “Results” section presents the results of the correlation and regression analysis aimed at determining the dependence between the consumer inflation rate in the Russian Federation and other indicators of the monetary policy. The “Discussion” section focuses on the value of the study for the economic science. The “Conclusions” section presents the main conclusions of the study.

Materials and methods

The article presents an analysis of indicators of the monetary policy of the FRS: the effective federal funds rate and the M2 money supply in the United States (the statistics is published on the official website of the FRS); the US dollar index, i.e. a weighted average of the foreign exchange value of the U.S. dollar against the euro, the Japanese yen, the British pound, the Canadian dollar, the Swedish krona, and the Swiss franc (in our study, we used the values published on ru.investing.com); the United States Core Personal Consumption Expenditure

(PCE) Price Index (the data is collected by the US Bureau of Economic Analysis); and the rate of unemployment in the USA (calculated by the U.S. Bureau of Labor Statistics). In our study we also analysed the following indicators of the monetary policy of the CB: the key rate of the CB and the M2 money supply in Russia (published on the official website of the CB); the USD/RUB exchange rate; the consumer price index; and the rate of unemployment in Russia (in the study, we used the values published on ru.investing.com) (Fig.1). The study focused on the time period starting in December 2019 and ending in February 2023 (from the beginning of the COVID-19 pandemic up to the present moment).

In our study we used a series of specific scientific methods. First, we confirmed the stationarity of the time series which included the above listed statistical data using autocorrelation plots. Next, we formed a correlation matrix in order to evaluate the quality of the data. Then we derived multiple autoregression equations in order to predict the consumer price index in Russia based on the following independent variables: 1. indicators of the CB; 2. indicators of the FRS; 3. CB and FRS factors. The obtained multiple autoregression equations were then evaluated with regard to their statistical significance and reliability. Finally, we used the results of the correlation and regression analysis to predict the consumer price index in Russia.

Results

During the first stage of our study, we assessed the stationarity of the analysed time series using the Dickey – Fuller test and the KPSS test. The results are presented in Tables 1 and 2 respectively. They indicate the stationarity of almost all the time series of the indicators of monetary policies of the FRS and the CB.

We also assessed the stationarity of the time series using autocorrelation plots: most autocorrelation plots of the above listed factors approach zero for larger lags, which indicates the stationarity of the time series. Therefore, the

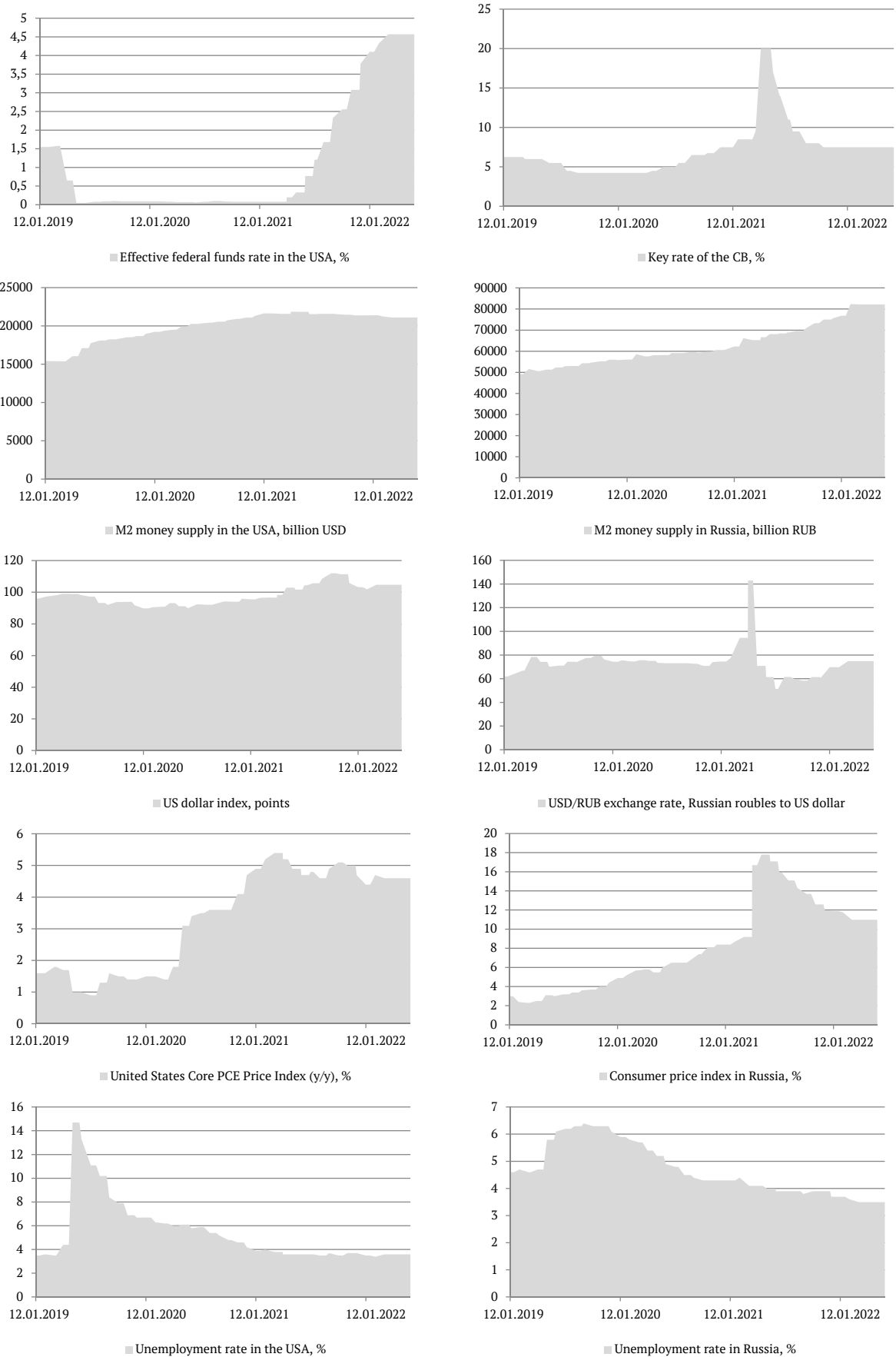


Fig 1. Indicators of the FRS and the CB

Table 1

Results of the Dickey – Fuller test

Indicator	Test with a constant term		Test with a constant term and a trend term	
	Test statistics	<i>p</i> -value	Test statistics	<i>p</i> -value
Effective federal funds rate in the USA, %	0,239936	0,97510	0,0325563	0,99670
M2 money supply in the USA, billion USD	-3,294400	0,01516	-1,4022700	0,86070
US dollar index, points	-0,724804	0,83880	-2,0113900	0,59450
United States Core PCE Price Index (y/y), %	-1,025790	0,74630	-2,6284800	0,26740
Unemployment rate in the USA, %	-2,713050	0,07174	-0,6478710	0,97580
Key rate of the CB, %	-2,069320	0,25740	-2,3962900	0,38140
M2 money supply in Russia, billion RUB	3,235870	1,00000	1,4273300	1,00000
USD/RUB exchange rate, Russian roubles for a US dollar	-3,964300	0,00161	-3,9439600	0,01046
Consumer price index in Russia, %	-1,403640	0,58220	-2,0630600	0,56590
Unemployment rate in Russia, %	-0,128585	0,94460	-6,3119200	0,00000

Table 2

Results of the KPSS test

Indicator	Test statistics	<i>p</i> -value
Effective federal funds rate in the USA, %	0,2446920	<0,010
M2 money supply in the USA, billion USD	0,2565510	<0,010
US dollar index, points	0,2205640	<0,010
United States Core PCE Price Index (y/y), %	0,1377950	0,07
Unemployment rate in the USA, %	0,0695860	>0,100
Key rate of the CB, %	0,1012050	>0,100
M2 money supply in Russia, billion RUB	0,2437570	<0,010
USD/RUB exchange rate, Russian roubles for a US dollar	0,0891908	>0,100
Consumer price index in Russia, %	0,0907116	>0,100
Unemployment rate in Russia, %	0,1263860	0,092

statistical data can be used in the correlation and regression analysis.

Table 3 presents the correlation coefficients calculated for the analysed factors. Based on the results presented in the table, we can say that there is a strong dependence between the analysed factors of the monetary policies of the FRS and the CB. This makes it possible to derive multiple autoregression equations. The unemployment rate was analysed because it affects the decisions of the FRS concerning the interest rates.

Studying the dependence of the consumer price index in Russia on the monetary policy of

the Central Bank of Russia (Model 1, Table 4), we determined that both the volume of the M2 money supply and the key rate have a statistically significant positive impact on the studied parameter. The sensitivity indices were 0.0003 ($t = 7.82$) and 0.7709 ($t = 9.47$). The dynamics of the USD/RUB exchange rate has a significant negative impact. The unemployment rate does not have any statistically significant effect.

To analyse the effect of the monetary policy of the FRS on the consumer price index in Russia, we assessed the parameters in Model 2 (Table 4). The effective federal funds rate in the USA, the US M2 money supply, the US dollar index, and the rate

Correlation matrix

Parameters	Effective federal funds rate in the USA, %	M2 money supply in the USA, billion USD USA	US dollar index, points	United States Core PCE Price Index (y/y), %	Unemployment rate in the USA, %	Key rate of the CB, %	M2 money supply in Russia, billion RUB	USD/RUB exchange rate, Russian roubles for a US dollar	Consumer price index in Russia, %	Unemployment rate in Russia, %
Effective federal funds rate in the USA, %	1,000	0,198	0,734	0,411	-0,453	0,052	0,748	-0,332	0,430	-0,618
M2 money supply in the USA, billion USD USA	0,198	1,000	0,325	0,846	-0,436	0,504	0,777	0,096	0,803	-0,579
US dollar index, points	0,734	0,325	1,000	0,563	-0,359	0,364	0,694	-0,325	0,677	-0,651
United States Core PCE Price Index (y/y), %	0,411	0,846	0,563	1,000	-0,696	0,681	0,811	0,036	0,853	-0,877
Unemployment rate in the USA, %	-0,453	-0,436	-0,359	-0,696	1,000	-0,447	-0,544	0,057	-0,576	0,794
Key rate of the CB, %	0,052	0,504	0,364	0,681	-0,447	1,000	0,428	0,433	0,710	-0,578
M2 money supply in Russia, billion RUB	0,748	0,777	0,694	0,811	-0,544	0,428	1,000	-0,097	0,824	-0,751
USD/RUB exchange rate, Russian roubles for a US dollar	-0,332	0,096	-0,325	0,036	0,057	0,433	-0,097	1,000	0,004	0,127
Consumer price index in Russia, %	0,430	0,803	0,677	0,853	-0,576	0,710	0,824	0,004	1,000	-0,754
Unemployment rate in Russia, %	-0,618	-0,579	-0,651	-0,877	0,794	-0,578	-0,751	0,127	-0,754	1,000

Note. Highlighted in bold are coefficients indicating moderate and strong correlation between the factors.

of unemployment in the USA have a statistically significant effect (about 1 %).

We can thus say that consumer inflation in Russia is affected by the indicators of the CB and the FRS. Therefore, in order to predict the inflation rate in Russia, it is reasonable to evaluate the equation including the indicators of the CB and the FRS (Model 3, Table 4). As a result, we determined that the VIF for the M2 money supply in Russia is 48. Therefore, it was excluded from the model due to its excessiveness. To assess

the effect of independent factors, we built a regression model of a standard scale (Model 4, Table 4). The evaluation of standard regression parameters demonstrated that the impact of the US money supply is greater than the impact of the key rate of the CB. Therefore, the inflation rate in Russia is significantly affected by the indicators of the monetary policy of the FRS.

The multiple autoregression equations were used to calculate predicted values of consumer inflation in our country (Fig. 2).

Evaluation of the regression models

Parameters	Models			
	(1)	(2)	(3)	(4)
(Intercept)	-11,4885*** [-2,8210]	-66,7644*** [-8,5041]	-38,9535*** [-6,6194]	
M2 money supply in Russia	0,0003*** [7,8293]			
Key rate of the CB	0,7709*** [9,4770]		0,5472*** [7,9775]	0,4456*** [7,9775]
USD/RUB exchange rate	-0,0705*** [-3,8002]		-0,0449*** [-2,8472]	-0,1340*** [-2,8472]
Unemployment rate in Russia	0,2132 [0,4974]			
Effective federal funds rate in the USA		-0,8600*** [-3,6278]	0,0852 [0,4537]	0,0253 [0,4537]
M2 money supply in the USA		0,0015 *** [6,1797]	0,0012 *** [12,1083]	0,5015*** [12,1083]
US dollar index		0,4978*** [7,5208]	0,2209 *** [3,9787]	0,2703*** [3,9787]
United States Core PCE Price Index		-0,3458 [-0,7983]		
Unemployment rate in the USA		-0,4664 *** [-3,4196]		
Number of observations	70	70	70	70
R^2	0,8649	0,8684	0,9205	0,9205
Adj R^2	0,8566	0,8581	0,9143	0,9143
F -statistics	104,0482***	84,4510***	148,2892***	148,2892***

Note. Estimates of regression parameters that are significant at levels of 5%, 1%, and 0.1% are marked with *, ** and ***, respectively.



Fig 2. Predicted consumer price index in Russia

The obtained results therefore demonstrated the following: 1) The soft monetary policy of the CB of Russia as opposed to the tight monetary policy of the FRS of the USA, required to slow down inflation in the USA, is more effective, because the growth of the M2 money supply in Russia together with low interest rates slows down the inflation rate. 2) The soft monetary policy of the FRS aimed at the devaluation of the American currency in order to constrain the global export market, creates favourable conditions for the expansion of the money supply in Russia, because it slows down consumer inflation in our country. 3) A significant growth in US money supply, which often stimulates economic activity in the country, affects consumer inflation in Russia and results in higher key rates set by the CB of Russia.

Discussion

The scientific novelty of the study is due to the use of multiple autoregression equations in order to predict the consumer price index in Russia based on the indicators of the CB and the FRS. The correlation and regression analysis demonstrated that consumer inflation in Russia can be affected by the monetary policy of the FRS. It is therefore important for the CB to consider new tools of monetary policy aimed at mitigating the impact of the USA on the economic situation in Russia. The results of our study can be used by Russian regulatory bodies to combat increased inflation in Russia, because they determine another cause of the growth of the consumer price index in our country, besides the high prices, the controlled raising of tariff on monopoly services, the lack of money supply resulting from capitals being transferred abroad, high interest rates on loans, and dependence of the fiscal system on the production costs.

There is scientific literature regarding the impact of the monetary policy of the FRS on the economic situation in the USA, Europe, and China (Das & Gangopadhyay, 2023; Gržeta

et al., 2023; Habibi, 2019; Hong et al., 2021; Khan et al., 2019). However, the effect of the indicators of the monetary policy of the FRS on the economic situation in Russia has not been studied yet (Aliev et al., 2021; Afanasieva, 2021; Baryshnikova et al., 2019), even though the US financial system is known to be very large (Dai et al., 2021; Lai & Ng, 2020; Yildirim & Ivrendi, 2021). Therefore, the article provides valuable information regarding economic policy and reveals another hidden threat of the growth of the US financial system to the global economy. In particular, using a series of specific scientific methods, we determined that the greatest threat resulting in the growth of the inflation rate in Russia is a large money supply in the USA, which demonstrated a long term tendency to grow rapidly. As we have already mentioned, the determined correlation causes concerns and makes other countries search for new tools of monetary policy that could protect them from the side effects of the monetary policy of the FRS. Therefore, the study is also of practical value for international economics.

It proves that the monetary policy of the FRS has a significant negative impact on the Russian economic system. In particular, the expansion of the US money supply aimed at stimulating economic activity significantly increases the inflation rate in our country. A drawback of the study is that it does not suggest any specific measures to eliminate the side effects of the increased US money supply on the global economy and only focuses on studying the effect of the monetary policy of the FRS on Russian economy.

Conclusions

Our study led us to the following conclusions. First, we determined that the state of the economic environment in Russia is reflected by the consumer price index, which depends on the indicators of the monetary policy of the Central Bank, including the key rate and the money supply. Since the Russian economy depends on the international economic system, which is

dominated by the US economy, there is a close correlation between the consumer price index in Russia and some indicators of the monetary policy of the FRS, namely the money supply and the US dollar index. The study determined that the monetary policy of the FRS has greater impact on the inflation rate in our country than the monetary policy of the CB. Therefore, the USA has tools enabling it to affect the economic situation in Russia, namely to cause increased inflation.

Second, fast growth of the consumer price index reduces the real earnings of the population, the purchasing power, and the consumer demand. It also leads to the growth of interest rates, reduces the amount of loans, increases the production costs, minimises production, and limits the economic growth. Therefore, it is obvious that we should combat high inflation. Since we determined the dependence between the US money supply, the US dollar index, and the consumer price index in Russia, it is important to develop a monetary policy in Russia aimed at eliminating the negative side effects of the increase in the US money supply and the strengthening of the US dollar index. The US money supply demonstrates a long term tendency to increase, which is a way to manage economic crises by stimulating economic activity. The US dollar index in turn forms a negative dynamic, because a weak dollar stimulates the export-oriented American economy. Therefore, US money supply poses the greatest threat to the Russian economy. Thus, an increase in US money supply can have a negative effect on the inflation rate in Russia.

Third, since a large money supply in the USA can cause increased consumer inflation in the global economy, the global financial system as a whole, and in the economy of our country in particular, it is reasonable to use the potential of the state to slow down the

increase in the consumer price index. In Russia, the measures aimed at the reduction of the consumer price index are as follows: low interest rates on loans; increasing the amount of loans; increasing the variety and number of available goods and services; scientific and technical progress; the GDP growth; supporting local manufacturers; modernisation of housing and utilities infrastructure; optimisation of the cost of services provided by natural monopolies; due control of the RUB exchange rate to major foreign currencies; state controlled prices for essential commodities.

Finally, it is advisable to develop new measures to eliminate the negative side effects of US money supply. In order to do this, it is necessary to determine the correlation between macroeconomic variables, the M2 money supply in the USA, and the consumer price index in Russia. It is vital to understand, though, that this is a very time consuming process that requires separate consideration and does not always lead to the desired results. This should be the focus of further research. For instance, the correlation and regression analysis determined the dependence between the US money supply and the indicators of the monetary policy of the CB. Our calculations demonstrated that the consumer price index in Russia, the key rate of the Central Bank of Russia, and the M2 money supply in Russia do not significantly affect the M2 money supply in the USA. The evaluation of the multiple autoregression equation including these factors demonstrated that the elasticity coefficients are low and the regression coefficients are not statistically relevant.

Conflict of Interest

The author declares the absence of obvious and potential conflicts of interest related to the publication of this article.

References

- Afanasyeva, O. N. (2021) The influence of the monetary base as an instrument of monetary policy on inflation in various countries. *Business. Education. Right.* 2 (55), 177–185. (In Russian). <https://doi.org/10.25683/VOLBI.2021.55.276>
- Aliev, A. T., Baldin, K. V., Savelyev, V. N. (2021) Inflation, prices and regional incomes in the socio-economic development of Russia in the context of the spread of COVID-19. *Economic Systems*, 14 (4), 145–154. (In Russian).
- Baryshnikova, N. A., Pastushenko, E. N., Zemcova, L. N. (2019) Law-making policy of the Central Bank of the Russian Federation: current issues. *Legal Policy and Legal Life.* 3, 80–95. (In Russian).
- Dai, P. F., Xiong, X., Liu, Z., Huynh, T. L. D., Sun, J. (2021) Preventing crash in stock market: The role of economic policy uncertainty during COVID-19. *Financial Innovation*, 7 (1). <https://doi.org/10.1186/s40854-021-00248-y>
- Das, N., Gangopadhyay, P. (2023) Did weekly economic index and volatility index impact US food sales during the first year of the pandemic? *Financial Innovation.* 9 (1). <https://doi.org/10.1186/s40854-023-00460-y>
- Gospodarchuk, G. G., Zeleneva, E. S. (2021) Assessing the effectiveness of monetary policy of central banks. *Finance: Theory and Practice.* 25 (1), 6–21. <https://doi.org/10.26794/2587-5671-2021-25-1-6-21>
- Gržeta, I., Žiković, S., Tomas Žiković, I. (2023) Size matters: analyzing bank profitability and efficiency under the Basel III framework. *Financial Innovation.* 9 (1). <https://doi.org/10.1186/s40854-022-00412-y>
- Habibi, A. (2019) Non-linear impact of exchange rate changes on U.S. industrial production. *Journal of Economic Structures.* 8 (1). <https://doi.org/10.1186/s40008-019-0172-0>
- Hong, H., Bian, Z., Lee, C. C. (2021) COVID-19 and instability of stock market performance: evidence from the U.S. *Financial Innovation.* 7 (1). <https://doi.org/10.1186/s40854-021-00229-1>
- Kapkanshchikov, S. G. (2021) Once again about the negative synergy of the destructive policy of the Russian monetary authorities. *Russian Economic Journal.* 6, 4–42. (In Russian). <https://doi.org/https://doi.org/10.33983/0130-9757-2021-6-4-42>
- Khan, M. K., Teng, J. Z., Khan, M. I. (2019) Cointegration between macroeconomic factors and the exchange rate USD/CNY. *Financial Innovation.* 5 (1). <https://doi.org/10.1186/s40854-018-0117-x>
- Khotulev, I. (2021) Review of the Bank of Russia – NES Workshop ‘Main Challenges in Banking: Risks, Liquidity, Pricing, and Digital Currencies.’ *Russian Journal of Money and Finance.* 80 (4), 124–136. <https://doi.org/10.31477/rjmf.202104.124>
- Koloskova, N. V., Egorov E. A. (2022) Checking the strength of the Russian banking system during global economic crises. *Management Accounting.* 12–4, 1284–1298. (In Russian).
- Konyagina, M. N., Krut, V. V. (2022) Ensuring Russia’s Economic Growth: between the Scylla of Inflation and the charybdis of recession. *Bulletin of the Academy of Knowledge.* 52 (5), 364–373. (in Russian).
- Lai, H., Ng, E. C. Y. (2020) On business cycle forecasting. *Frontiers of Business Research in China.* 14 (1). <https://doi.org/10.1186/s11782-020-00085-3>
- Mitin, I. N., Grachev, I. D., Nevolin, I. V. (2019) Statistical investigation into relations between the monetary policy tools. *Economic Analysis: Theory and Practice.* 18 (1), 179–196. <https://doi.org/10.24891/ea.18.1.179>
- Savchina, O. V., Apresyan, I. V. (2020) Analysis of the monetary policy of the Bank of Russia in the context of macroeconomic instability. *Bulletin of the Moscow State Pedagogical University. Series: Economics.* 2 (24), 20–28. (In Russian). <https://doi.org/10.25688/2312-6647.2020.24.2.02>
- Sazonov, A. A., Sazonova, M. V. (2019) Prospects for the development of the Russian financial market. *Economics, Entrepreneurship and Law.* 9 (4), 245–256. (In Russian). <https://doi.org/10.18334/epp.9.4.41468>
- Shahzad, S. J. H., Bouri, E., Kristoufek, L., Saeed, T. (2021) Impact of the COVID-19 outbreak on the US equity sectors: Evidence from quantile return spillovers. *Financial Innovation.* 7 (1). <https://doi.org/10.1186/s40854-021-00228-2>
- Sokolova, E. Y. (2019) Global Market Risks and Their Possible Consequences for Russian Economy. *Management and Business Administration.* 4, 55–63. <https://doi.org/10.33983/2075-1826-2019-4-55-63>
- Tenkovskaya, L. I. (2022a) Opportunities to increase the money supply in Russia in the context of the economic crisis and the strengthening of the Russian ruble. *Sustainable Development Management.* 4 (41), 12–22. (In Russian). https://doi.org/10.55421/2499992X_2022_4_12
- Tenkovskaya, L. I. (2022b) Macroeconomic trends in Russia shaping the investment and business environment. *Bulletin of Omsk University. The «Economy» series.* 20 (3), 48–64. (In Russian). [https://doi.org/10.24147/1812-3988.2022.20\(3\).48-64](https://doi.org/10.24147/1812-3988.2022.20(3).48-64)
- Tkachev, V. N., Shashkina, E. O., Mazurova, M. A. (2019) The Central Bank’s role in economic growth. *Finance and Credit.* 25 (4), 821–839. <https://doi.org/10.24891/fc.25.4.821>
- Yildirim, Z., & Ivrendi, M. (2021) Spillovers of US unconventional monetary policy: quantitative easing, spreads, and international financial markets. *Financial Innovation.* 7 (1). <https://doi.org/10.1186/s40854-021-00299-1>
- Zajcev Yu. K. (2020) Monetary and fiscal policy Measures during the COVID-19 economic crisis in Russia. *Finance: Theory and Practice.* 24 (6), 6–18. (In Russian). <https://doi.org/10.26794/2587-5671-2020-24-6-6-18>

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Received 15.05.2023

Accepted 31.05.2023



Финансы, денежное обращение и кредит

Научная статья

УДК 336.74; 336.711; 338.27; 338.5

DOI: <https://doi.org/10.17308/econ.2023.2/11154>

JEL: E37; E44; E51; E52; E58

Потребительская инфляция в России – под влиянием монетарной политики Соединенных Штатов?

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Предмет. В России, как и в других странах, внешние экономические условия представлены индексом потребительских цен. Данный показатель регулируется с помощью монетарной политики ЦБ РФ. Поскольку Россия участвует в международных экономических отношениях, внешняя экономическая среда в нашей стране находится под влиянием монетарной политики США, потому что это государство имеет большой вес в международной экономике и мировой хозяйственной системе в целом. В настоящее время монетарная политика ФРС США оказывает большее воздействие на потребительскую инфляцию в России, чем монетарная политика ЦБ РФ, так как экономика США значительно превосходит народное хозяйство России. В частности, увеличение денежной массы в США, необходимое для стимулирования экономической активности в этой стране, способно ускорить темпы прироста индекса потребительских цен в нашей стране. Поэтому целесообразно построить экономико-математические модели с функцией прогноза индекса потребительских цен в России на основе индикаторов ЦБ РФ и ФРС США.

Цели. Определение воздействия монетарной политики ЦБ РФ и ФРС США на индекс потребительских цен в России; построение уравнений множественной линейной регрессии для предсказания потребительской инфляции в нашей стране в зависимости от индикаторов ЦБ РФ и ФРС США.

Методология. В ходе достижения целей исследования использовались общие и специальные научные методы: анализ, синтез, статистические (корреляционно-регрессионный анализ). Исследование построено на изучении российской и иностранной периодической научной литературы.

Выводы. Установлено сильное прямое влияние монетарной политики ФРС США на индекс потребительских цен в России; подчеркнута необходимость разработки в России определенных мер устранения побочных эффектов монетарной политики ФРС США; отмечен негативный эффект разрастания денежной массы США для экономических условий в России; выявлено сильное давление денежного агрегата M2 в США и индекса доллара США на индекс потребительских цен в России по сравнению со слабым влиянием ключевой ставки ЦБ РФ и денежного агрегата M2 в России.

Ключевые слова: Федеральная резервная система США, Центральный банк РФ, монетарная политика, процентные ставки, денежная масса, индекс доллара США, индекс потребительских цен.

Для цитирования: Теньковская, Л. И. (2023) Потребительская инфляция в России – под влиянием монетарной политики Соединенных Штатов? *Вестник Воронежского государственного университета. Серия: Экономика и управление.* (2), 43–55. DOI: <https://doi.org/10.17308/econ.2023.2/11154>

Конфликт интересов

Автор декларирует отсутствие явных и потенциальных конфликтов интересов, связанных с публикацией настоящей статьи.

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Поступила в редакцию 15.05.2023

Подписана в печать 31.05.2023