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Financial Stability and Economic Development: Setting Priorities

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ABSTRACT

The subject of the study is the influence of monetary policy on the dynamics of the country's economic development. **The purpose** of the paper is to establish causal relationships between the key interest rate set by the regulator and the reaction of non-financial companies and banks to it. **The methodological basis** of the study was the theory of economic growth and economic policy, empirical-statistical and qualitative analysis. The study found that, while the regulator successfully solves the problem of ensuring the banking sector's stability, its actions to support the growth of the Russian economy are not always effective. It is **concluded** that it is expedient to set the key rate at such a level that it would be aimed at those who are able to solve the problem of inflation, and would not have an indiscriminate impact on all economic actors, including those that ensure the production capacity increase and the labor productivity growth in order to balance product supply with demand.

Keywords: inflation management; key interest rate; economic growth; sources of enterprises' financing; supply and demand

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INTRODUCTION

By financial stability, the regulator understands the resilience of the financial, primarily banking, system to various shocks.[1] The main goal of the monetary policy (MP) of the Bank of Russia is "to ensure price stability, that is, low and stable inflation. By ensuring price stability, the Bank of Russia creates conditions for the successful restructuring of the economy, which began in 2022, and its balanced growth in the future".[2]

The regulator is successfully maintaining the reliability of the banking system, but there are problems with achieving a low level of inflation. As the regulator points out, "the tightening of MP in 2023, unlike the episodes of 2014 and 2022, did not occur in a crisis situation to prevent risks to financial stability, but in a context of rapid economic recovery to curb inflation".[3]

The Russian economy needs renewal due to the cessation of the previous nature of relations with most industrially developed countries, which radically increases the role of domestic producers of a vast number of product positions in meeting internal demand. For this, most Russian enterprises need modernization and expansion of their equipment fleet to increase the production of finished goods and ensure its quality at the level of the best global standards in order to be competitive. To address this issue, it is critically important to have debt and equity financing for capital investments and to increase working capital. However, in relation to GDP, lending to Russian non-financial organizations, which is the main type of active operations for banks and the primary tool for external fundraising for the majority of enterprises, is significantly lower than such indicators in many developed countries. In the context of the termination of foreign lending (banking and trade), lack of access to the

[1] URL: https://cbr.ru/finstab/ (accessed on 30.05.2024).

[2] Main Directions of the Unified State Monetary Policy for 2024 and the Period of 2025 and 2026. Bank of Russia. November 2023. 193 p. URL: https://cbr.ru/about_br/publ/ondkp/on_2024_2026/ (accessed on 20.05.2024).

[3] Financial Stability Review. II–III quarters of 2023. Bank of Russia. November 2023. 83 p. (2). URL: https://cbr.ru/Collection/Collection/File/46610/2_3_q_2023.pdf (accessed on 25.05.2024).

international capital market, and the presence of a small domestic stock market, it is difficult for businesses to find other ways to finance the expansion and modernization of their production (besides limited own funds and investments from existing shareholders) to meet demand and ensure economic growth.

As a result, a gap arises between supply and demand, as it is difficult for businesses to quickly fill the niches created by the exit of Western companies from the Russian market, and demand, which, except for subsidized mortgages, has changed little in physical terms.

The regulator is raising the key interest rate, arguing that it is necessary to combat “overheating” in certain sectors of the economy, making loans prohibitively expensive for many enterprises across all industries. Consequently, the imbalance between supply and demand is not eliminated, and inflation in conditions of product shortages does not decrease.

The regulator’s fight against inflation is hindering the growth of goods supply by domestic companies. This slows down the economy and increases the gap with rapidly developing countries, including China. The Russian government aims to increase production and its efficiency so that the country’s GDP grows faster than the global average.[4] In this situation, it is worth reconsidering measures to reduce inflation. They should more accurately address the problem, taking its causes into account. Additional steps may be needed to restructure the economy.

It is also necessary to note that the well-being of the financial sector depends on the condition of its main borrowers — enterprises. If they lack funding, they cannot update their technologies and increase their competitiveness. This reduces their income and makes it difficult to repay loans. As a result, banks may find themselves unable to pay interest to depositors and return deposits. This threatens the financial stability of credit organisations.

In other words, the financial stability of a country’s financial system and the development of an economy where supply and demand are balanced are closely linked. Therefore, studying this interrelationship to understand the reasons that hinder the combination of a stable financial condition of banks with their contribution to the development of enterprises and the successful restructuring of the economy is of great importance from both a scientific and practical perspective.

BANK CREDIT AND ECONOMIC GROWTH

The regulator rightly notes that monetary policy creates important, but not the only necessary conditions for the successful structural realignment of the economy, and that MP measures alone cannot influence changes in the economy’s potential, “since it is determined by factors such as capital accumulation, the size of the labor force, labor and capital productivity, including as a result of the implementation of new technologies”. Actions from the government in the area of budgetary incentives and institutional reforms are also necessary. But it is implied that MP, in its counter-cyclical role, can influence the intensity of the use of these factors, ensuring a smaller cyclical downturn or overheating in the economy.[5] At the same time, it is hardly worth downplaying the impact of bank credit on the country’s economy, as the state budget has an order of magnitude fewer resources for direct support of economic restructuring (3.9 trillion rubles in 2024) compared to the credit system (62 trillion rubles — debt of non-financial organizations to banks as of 1 January 2024).

The regulator indicates that “to limit the risks of deviations of inflation from the target, and the economy from the trajectory of balanced growth, a timely and proportionate response from monetary policy is required”.[6] In other words, the Bank of

[4] Novak did not support the term “military Keynesianism” in relation to Russia. RBC June 7, 2024. URL: https://www.rbc.ru/politics/07/06/2024/6662b0509a7947a447d4c3d0?from=from_main_2 (accessed on 07.06.2024).

[5] Main directions of the unified state monetary policy for 2024 and the period of 2025 and 2026. Bank of Russia. November 2023. 193 p. URL: https://cbr.ru/about_br/publ/ondkp/on_2024_2026/ (accessed on 07.06.2024).

[6] Main directions of the unified state monetary policy for 2024 and the period of 2025 and 2026. Bank of Russia. November 2023. 193 p. URL: https://cbr.ru/about_br/publ/ondkp/on_2024_2026/ (accessed on 07.06.2024).

Russia is trying to correct, through the key rate, some imperfections that it believes exist in the development of the country's economy. In practice, it turns out that the regulator is restraining the financing of the economy by increasing the cost of money for borrowers and motivating consumers to save rather than spend money on acquiring new goods and services, appealing to the lack of their supply. Moreover, the cost of capital is increasing, which requires much higher returns on investments than the increased yield on bank deposits, which in turn restrains equity financing of projects, as investors believe that the returns previously achievable only through investments in risky projects are now quite attainable with a risk-free bank deposit.

As a result, a conflict arises between the desire of enterprises to increase supply through the expansion of their production capacities and their ability to do so (which the regulator itself acknowledges[7]), including through the attraction of credit, which turns out to be very expensive and inaccessible for many. This preserves the current situation of demand and supply imbalance, and consequently, economic growth.

In this context, the conclusion of K.-S. Lee and R.A. Werner [1, p. 27–28] from their empirical study is enlightening, as it states that in conditions of demand and supply imbalance, interest rates are much less useful as an economic management variable, since the dynamics of economic activity are determined by the quantity of goods and services produced. The fact is that in the case of demand and supply imbalance, the principle of the "short" side is applied, which, when demand exceeds supply, often abuses this market power by raising prices. Examining the relevant data over the past 50 years in the UK, the USA, Gemany and Japan, they also found no empirical evidence of any consistent support for a statistical causal relationship running from interest rates to economic growth. The author's calculations confirm the absence of a stable relationship between these two indicators: the correlation between the dynamics of interest rates and GDP growth over the past 20 years is 0.06 in the USA, minus 0.83 in China, and minus 0.42 in Russia. Accordingly, to ensure sustainable economic growth, it seems advisable to pay attention to the volume of lending, the increase of which contributes to the growth of goods and services production and whose changes are more relevant in explaining GDP dynamics. According to the author's calculations, the correlation between GDP and the volume of bank lending to the non-financial sector and households for the period 2008–2023 was 0.98 in the USA, 0.99 in China, and 0.99 in Russia (*Tables 1–3 of the Appendix*).

However, the relationship between the volume of credit support to the economy and its growth is not always linear. The study by J.-L. Arcand, E. Berkes, and U. Panizza [2, p. 1, 24] finds that bank debt financing has a positive impact on production growth as long as loans to the private sector do not exceed 100% of GDP. At the same time, the relationship between financial depth and economic growth depends on whether the lending is used to finance investments in productive assets or to inflate speculative bubbles.

The decomposition of the indicator of total bank lending to the private sector across 45 developed and developing countries [3, p. 23–24] shows that:

1) lending to enterprises accelerates economic growth, whereas lending to households has no effect.

2) credit to enterprises reduces income inequality, whereas credit to households does not affect this indicator;

3) household credit is negatively associated with sensitivity to excessive consumption, whereas there is no connection between enterprise credit and sensitivity to excessive consumption.

In the Russian Federation, the ratio between bank loans provided to individuals and non-financial organizations and GDP has gradually increased since 2010, reaching 55.6% in 2023. The volume of loans to individuals increased by 8.3 times, to corporate clients by 4.5 times, while the ratio of bank loans to non-financial organizations

[7] What trends are talking about: macroeconomics and markets. Bulletin of the Department of Research and Forecasting. Bank of Russia, April 2024. 27 p.

Table 1

Bank Loans and Country's GDP

Bank loans (as of January 1 of each year) and Russian GDP (for the previous year)	2011	2014	2017	2020	2022	2023	2024	Growth 2023 to 2010
Loans provided by Russian banks to non-financial organizations, trln rubles	13.7	21.8	29.7	33.3	43.5	50.4	62.0	4.5
Loans provided by Russian banks to households, trln rubles	4.1	10.0	10.8	17.7	25.1	27.4	33.8	8.3
TOTAL: loans to the economy, trln rubles	17.8	31.8	40.5	50.9	68.5	77.8	95.7	5.4
Russian Federation's GDP at current prices, trln rubles	46.3	73.0	85.6	109.6	135.8	155.2	172.1	3.7
Ratio of bank loans to the economy to GDP, %	38.5	43.5	47.3	46.4	50.5	50.1	55.6	1.4
Ratio of bank loans to non-financial organizations to GDP, %	29.7	29.9	34.7	30.3	32.0	32.5	36.0	1.2

Source: Compiled by the author using data from the following sources: Information on loans — according to the Central Bank of Russia "Statistical indicators of the banking sector of the Russian Federation"; Information on the GDP of the Russian Federation — according to the Federal State Statistics Service.

to GDP increased by only 1.2 times (*Table 1*). At the same time, the forced refinancing of loans by Russian banks, previously provided to large Russian companies by foreign credit organizations, constitutes a replacement of creditors rather than additional financing for borrowers, although in domestic statistics this appears as additional credit support for the economy. It can be assumed that such loans reduce banks' appetite for lending to smaller borrowers.

Thus, taking into account the conclusions of the aforementioned empirical studies and the provided data on the Russian Federation, it can be assumed that the country's banking system has a huge potential for increasing credit support for the economy, as well as a need to change its current structure, primarily in favor of the demanded debt financing of industrial companies, the development of which accelerates its growth and balances the supply and demand. This assumption is confirmed by the assessment of the rating agency ACRA regarding the excess of the capital adequacy ratio by Russian banks (from 2020 to 2023, it increased from 4 to 5 trillion rubles), which "under otherwise equal conditions allows for an increase in the loan portfolio by almost 60 trillion rubles".[8] This could bring the ratio of bank lending to Russia's GDP closer to the level of many developed economies (*Table 2*).

Considering the financial stability of the non-financial sector of the economy, the regulator focusses primarily on the largest companies, noting that despite the tightening of lending conditions, these companies have reduced their sensitivity to interest rate risk and the quality of loans has not deteriorated.[9] At the same time, the regulator claims that "the near-record level of corporate profits in most sectors gives companies the opportunity to rely more on their own funds than on borrowed financing when investing".[10] In 2023, more than half of all surveyed enterprises in the manufacturing and mining industries planned to expand and modernize their production capacities due to growing domestic demand and operating at the limit of existing production

[8] Double blow. Russian banking sector: forecast for 2024. ACRA. 27 December 2023. 15 p. URL: https://www.acra-ratings.ru/upload/iblock/886/7ehk2k9l9ndsg67tytdyamgiev8302vj/20231227_RFIVP.pdf (accessed on 11.06.2024).

[9] Overview of Financial Stability. Q4 2023 — Q1 2024 Bank of Russia. May 2024. 68 p.

[10] Summary of the key rate discussion. Bank of Russia. 13 May 2024. 12 p.

Table 2

Loans to Private Non-Financial Organizations in % of GDP as of 31 December 2023

Loans	Germany	UK	China	US	Japan	France	Russia
Loans total	122	144	200	150	181	213	99
Loans only from domestic banks	78	79	195	49	123	106	60

Source: Compiled by the author using data from the following source*:* URL: https://data.bis.org/topics/TOTAL_CREDIT/tables-and-dashboards (accessed on 23.06.2024).

capabilities, as 70% of companies had a share of modern machinery and equipment that did not exceed 50%. Companies report that they financed their investments predominantly through internal sources: in 2023, 81% of companies did this. At the same time, a significant portion of them (61%) relied on their own funds as the dominant source of financing, covering more than 90% of investment expenses.[11]

Orientation towards internal resources for financing one's activities is, on the one hand, a completely normal phenomenon for the corporate sector of the economy. At the same time, the opinion that many enterprises can self-finance their development by 80–90% seems, at best, to be a statistical average of the situation. Large companies possess immense financial power (both due to internally generated resources and greater access to debt financing in terms of volume and cost on one hand, and attracting funds from both banks and the capital market on the other). But their financial situation is incomparable to the meagre financial capabilities of most other non-financial companies, for which credit support and the interest rate are exponentially more important than for large companies. Moreover, many large companies produce little that is directly consumed by the population or participate in the creation of means of production that are in high demand under current conditions. They are focused on product exports and benefit from high export prices and a low ruble exchange rate, which allows them to feel financially at ease.

For medium and small companies primarily operating in the domestic market, as well as for a number of large companies that have received a historic opportunity to fill the niches left by financially and technologically powerful foreign corporations that have exited the domestic market and thus balance supply and demand (in manufacturing industries, for example, in 2023, the share of actually exited companies accounted for 35% of revenue in this sector of the Russian economy [4, p. 3]), such opportunities are generally lacking. Therefore, bank credit for their development is critically important not only for supporting investments but also for replenishing working capital, the need for which sharply increases with sales growth.

Examining the relationship between investment sensitivity and cash flow, E. Almeida and M. Campello [5, p. 23] conclude that for companies with financial constraints, such sensitivity increases, while for companies without constraints, no such effects are observed. In other words, for SMEs, difficulties with credit support for their activities mean postponing investments until their own funds become available.

Moreover, they heavily depend on the import of equipment, raw materials, and components that they use to produce their finished products in order to meet domestic demand. Besides, enterprises need to independently and at their own expense develop new technological solutions, because as noted by the Government of the Russian Federation, "few can share the technological capabilities at the level that Russia needs".[12]

The regulator's reference to the impossibility of successful structural realignment of the

[11] Investment activity in industry in 2023: results of the enterprise survey. Bank of Russia. January 2024. 26 p.

[12] Manturov answered a question about the risks for European companies in Russia. RBC, June 7, 2024. URL: https://www.rbc.ru/business/06/06/2024/666204979a79475e2cb33f05 (accessed on 07.06.2024).

economy solely through monetary policy without influencing such transformation as "capital accumulation, labor resource numbers, labor and capital productivity, including as a result of the introduction of new technologies", which is correct for developed market economies, does not, however, take into account certain features of the development of the Russian national economy.

The level of productivity depends on the availability of modern equipment, which is currently difficult for Russian enterprises to produce due to a lack of funds caused by the high cost of credit, even if they have the appropriate technologies. Additionally, seeking equity financing is hindered by the lack of additional resources among current owners, the modest size of the capital market, and the difficulty of accessing it for smaller companies. As a result, the low productivity of outdated equipment requires an increasing number of employees with the growth in production volumes, as well as the replenishment of working capital, which is funded by earned own funds. In addition, there is another problem related to the fact that the previous focus of retail and industrial demand on imported goods has shifted the demand for specialists from technical professions, the need for which decreased due to the reduction or closure of the corresponding industries, to socio-economic professions. That is, we do not have a total shortage of workers, but structural imbalances in their training and demand, which have existed for the past quarter of a century. By addressing these shortcomings and re-equipping Russian enterprises with new equipment, the situation will improve both in terms of productivity and employment.

Capital does not appear out of thin air; it either emerges as a result of successful entrepreneurial activity (for many people, primarily in SMEs), or through the accumulation of excess wages of middle and senior management in large companies, as well as income from investments in the stock market. These avenues for capital creation exist in the country, but they have not yet gained the same significance as in economies that have developed within market relations for centuries. In all cases, accumulating capital, as well as addressing issues of technological re-equipment and changes in employment, takes time, and therefore it is unlikely that one can expect its rapid emergence in volumes comparable to bank credit.

In the planned economy of the Soviet period, which was based on large-scale production, many of which, possibly in modified form, constitute the foundation of the modern Russian economy, there was no place for SMEs. Meanwhile, in a market economy, small and medium-sized enterprises precisely provide the flexibility to respond to changes in demand and are an important part of the "invisible hand of the market". The contribution of such enterprises to the GDP of the most economically developed countries is at the level of 55–65%, while in the lowest-income countries it is 23%.[13] That is, the widespread activity of SMEs is a clear sign of a more mature economy, which our country strives to achieve as quickly as possible. Meanwhile, in the Russian Federation, according to Rosstat data, the share of SMEs in the country's GDP decreased from 22% in 2017 to 21% in 2022.[14]

In this regard, credit support for SMEs, which in the overwhelming majority are aimed at meeting the needs of the domestic market and have virtually no chance of obtaining equity financing (and the high interest rate further reduces investors' motivation to enter risky projects), as well as limited access to the debt capital market, can provide significant assistance in increasing the country's GDP. As of 1 January 2024, the bank debt of SMEs amounted to 6.9 trillion rubles (excluding SMEs affiliated with large businesses), which is only 11.1% of the total amount of loans to non-financial organizations and 4.9 times less than the debt of individuals.[15] At the same time, the share of SME debt in the section of the OKVED «manufacturing industry» did not exceed 9%. Such volumes of lending are not only modest; they do

[13] International Labour Organization. URL: https://webapps.ilo.org/infostories/en-GB/Stories/Employment/SMEs#engines/gdp (accessed on 11.06.2024).

[14] Rosstat. National accounts. Small and medium-sized enterprises in GDP and GRP. URL: https://rosstat.gov.ru/statistics/accounts (accessed on 11.06.2024).

[15] Annual report 2023. Bank of Russia. March 2024. 331 p.

not even correspond to the share of SMEs in the country's GDP, which indicates a weak motivation for credit organizations to provide debt financing to this segment of the economy. However, the share of overdue debts of SMEs as of 1 January 2024 (5.0%)[16] is on par with problematic corporate loans (5.1% in April 2024 of the total debt of companies) and only slightly higher than this indicator for retail lending (4.2%).[17]

Thus, it appears that the regulator's conclusions about the insignificant impact of high interest rates conceal the differences in perception among various segments of the corporate sector of the country's economy. It is also unlikely that the aforementioned level of self-financing reflects the requirements and capabilities of a significant portion of Russian enterprises. If this level is acceptable for large enterprises, for others it can only indicate the inaccessibility of bank credit, which does not contribute to the progressive growth of the economy. Moreover, the aforementioned circumstances indicate that the demand for bank credit in the Russian Federation is much higher than in developed markets, where capital accumulation has occurred over centuries, production capacities consistently and significantly exceed demand, and their renewal is not hindered by external and internal factors.

INFLATION, INTEREST RATE, AND ECONOMIC "OVERHEATING"

The basic principles of the regulator's monetary policy were established 10 years ago and have not changed since then. K.V. Yudaeva then pointed out [6, p. 13–14] that under conditions of low unemployment and high labour force utilization, as well as an insufficiently favorable business climate, a reduction in rates is unlikely to have a significant stimulating effect on investments in the real economy. Since the slowdown in economic growth in the Russian Federation is structural in nature, it can only be addressed through structural reforms. Therefore, the choice of scenarios based on the use of monetary policy in Russia is limited: it is either low growth and low inflation, or stagflation, that is, low growth and high rising inflation. And the scenario with high growth and limited inflation through monetary policy methods is not feasible. Therefore, "only consistently low inflation can provide opportunities for the further development of the financial system, and thus, for business as a whole".

It seems that the position on the limited ability of the monetary policy to influence economic growth was based on the understanding of the inability of many domestic enterprises to compete at that time with transnational corporations (TNCs), which had advantages in technology, cheap and long-term financial resources, a high reputation, and skilled marketing. The state did not impose any conditions (other than tax payments) on the activities of these TNCs in the Russian Federation, and purchasers of consumer and industrial goods preferred products from foreign companies, that significantly limited the demand for similar goods from a substantial part of Russian companies. In these conditions, the creditworthiness of domestic enterprises raised doubts among banks, and the enterprises themselves had little incentive to attract expensive bank loans, that justifies the regulator's skepticism regarding the ability of the monetary policy to significantly impact economic growth. In this situation, D.V. Tulin concludes [7, p. 6], "the monetary authorities are forced to choose the lesser of two evils".

At the same time, S. Yu. Glazyev, O.S. Sukharev, and O.N. Afanasyeva draw attention [8, p. 23] to the fact that such an approach to monetary policy during the period from 2000 to 2020 created a negative cumulative effect and the tools of monetary policy did not have a significant impact on achieving the goals of the country's macroeconomic policy.

Meanwhile, the practice of developed countries during the specified period, which did not have restrictions like those in the Russian economy, just having moved away from the principles of a planned closed economy with enterprises unprepared for open competition with global

[16] Lending to small and medium-sized enterprises. Bank of Russia. March 2024. 22 p.

[17] On the development of the banking sector of the Russian Federation in April 2024. Bank of Russia. May 2024. 22 p.

leaders in their respective industries, showed, as A. Carstens [9, p. 5], the General Manager of the Bank for International Settlements, testified, that prolonged demand growth at low credit costs does not lead to overheating of economies largely due to the effect of globalization, which, through international cooperation and technological progress, reduces supply costs, allowing for a weakening of the link between GDP growth rates and inflation.

In 2022, the situation changed dramatically. The demand in the Russian Federation, which was previously met by the production of goods by foreign companies in the Russian Federation or by imports, remains, but the Russian enterprises that were previously oppressed by unfair competition cannot immediately restructure to meet this demand under the conditions of import restrictions and the departure of many foreign manufacturers from the country, who took with them the technologies used in their production. In the new circumstances, when Russian enterprises see the emerging opportunities, they are highly motivated to expand and modernize their production capacities, the financing of which through bank loans is one of the best alternatives.

In the new conditions of economic functioning, the previous concerns that "an increase in bank lending (at any interest rates, even the lowest) does not necessarily lead to an increase in the physical volumes of industrial production, the growth of production investments" [7, p. 6], followed by an improvement in financial results due to increased sales, are hardly relevant.

Nevertheless, even under current conditions, the regulator considers it necessary to tighten monetary policy, as the growth rates and levels of aggregate money demand are outpacing the productive capacity of the economy. In this regard, it thinks that the economy has overheated,[18] as evidenced by the regulator's data showing that at the end of 2023, the historical maximum of production capacity utilization was reached — 81%. Meanwhile, the sectoral decomposition of this indicator shows that capacity utilization exceeds 80% only in the mining and agriculture sectors (a significant portion of whose products are exported), the situation in electricity supply and the production of intermediate goods approaches this mark, while the level of capacity utilization in the production of consumer and investment goods does not exceed 75%. At the same time, the last three industries have the greatest need for equipment upgrades to increase labour productivity and expand their product lines, along with enterprises that provide electricity delivery[19]. Domestic companies are still unable to switch to the production of corresponding goods in terms of quality and quantity, which results in the highest dependence on imports for the category "machines and equipment" (86%) among all categories of imported goods [10, p. 10].

Rosstat does not provide data on the use of production capacities for the economy as a whole, but its calculations of the average annual value of this indicator by the output of individual types of products show,[20] that in 2022, capacities of only 12 out of 74 types of products were loaded at 80% or higher, with the most utilized (over 85%) being capacities in the production of sugar, paper and cardboard, sulfuric acid, ceramic tiles, and cast iron. It is hard to imagine that these productions significantly affected the level of capacity utilization across the entire Russian economy. Moreover, foreign statistics on this indicator, using the same methodology applied to the economies of the USA, China, and Russia, indicate,[21] that in 2023, the overall capacity utilization in the Russian economy was 61% (in the USA — 78.6%, in China — 75.9%), which is significantly lower than the data from the Russian regulator and more in

[18] Main directions of the unified state monetary policy for 2024 and the period of 2025 and 2026. Bank of Russia. November 2023. 193 p. URL: https://cbr.ru/about_br/publ/ondkp/on_2024_2026/ (accessed on 11.06.2024).

[19] Regional Economy: Commentary Main Department of the Bank of Russia, No. 26, March 13, 2024 P. 31, 35, 37

[20] The level of utilisation of the average annual production capacity of organisations for the production of certain types of products. 2017–2022. Rosstat. Section Industrial Production. URL: https://rosstat.gov.ru/enterprise_industrial (accessed on 11.06.2024).

[21] URL: https://tradingeconomics.com/united-states/capacity-utilization и URL: https://tradingeconomics.com/russia/capacity-utilization (accessed on 12.06.2024).

line with Rosstat statistics. At the same time, the annual volatility of this indicator rarely exceeds 5 percentage points.

Thus, it becomes evident that many sectors of the Russian economy, especially those important for meeting domestic demand for non-food goods, have not yet achieved high levels of production capacity utilization. This situation indicates the need for equipment modernization, which will allow for increased labour productivity without increasing the number of workers. This, in turn, will help increase production volume and produce high-quality goods that will meet the best global standards. They should not be inferior to the products of foreign companies that have recently left the Russian market.

Experts from the U.S. Federal Reserve System, M. Dotsey and T. Stark [11, p. 11, 16], after studying this topic for over 40 years, concluded that the relationship between capacity utilization and core inflation is unreliable. In their analysis, where core inflation was considered to be the personal consumption expenditure price index, the ability of capacity utilization to predict inflation behavior varied significantly across different periods. Sometimes capacity utilization indicators are quite useful, and sometimes they turn out to be useless.[22] Experts advise cautiously forecasting core inflation without relying solely on a simple model of the relationship between production capacity and price levels. This opinion is supported by the conclusion of E. Siklar and I. Siklar [12, p. 160] that in Turkey, 53% of inflation changes are related to supply factors, and only 13% to demand factors. Thus, the fight against inflation often depends not on limiting demand, but on increasing supply. This, in turn, often happens when companies update their production facilities. For this, debt financing is often required.

In the Russian Federation, the share of investments in fixed capital in the country's GDP, according to Rosstat, has consistently remained at the level of 19–22% from 2011 to 2023. Meanwhile, according to a study by the consulting firm McKinsey,[23] in rapidly developing economies (China, India, some countries in Central and Eastern Europe, and developing countries in Asia), it reaches 40% of GDP. This helps them significantly improve the standard of living for the population. The data from the study also indicate that the growth of investments is additionally associated with lower inflation and accounts for 4/5 of the growth in productivity per worker. In China, the best in the world in this latest indicator, it amounts to 8.3% according to the author's calculations for the period from 1997 to 2022, which is several times higher than the average annual growth rate of this indicator in the Russian Federation (2.5%). Although in the most developed economies, the dynamics of this indicator are even lower (for example, in the USA — 1.5% over the specified period). The absolute level of GDP per worker, according to the World Bank, varies significantly: $ 146.7 thousand in 2022 in 2021 prices in the USA, and $ 78.9 thousand and $ 40.0 thousand in purchasing power parity terms in the Russian Federation and China, respectively.[24] With such a gap in the absolute level of productivity, the difference in growth rates will allow China to reach the level of the USA, if they continue to develop at the indicated rates, according to the author's calculations, in 19 years. And for Russia, according to the author's calculations, it will take 50 years to achieve this, assuming the current productivity growth rates are maintained.

In mature economies, where there is sufficient production capacity and buyers (not only retail but also corporate) predominantly use bank credit to purchase goods and services, an economic overheating occurs when demand, fueled by low interest rates on loans, exceeds the supply offered by existing production capacities. It is meant that companies, in the context of competitive struggle,

[22] The author also did not find a stable relationship between these indicators: over the past 20 years, the correlation between inflation and production capacity utilization, according to the author's calculations, was 0.43 in the USA, 0.09 in China, and 0.80 in Russia.

[23] Investing in productivity growth. McKinsey global institute. March 2024. 58 p. URL: https://www.mckinsey.com/mgi/our-research/investing-in-productivity-growth (accessed on 11.06.2024).

[24] World Bank Group URL: https://data.worldbank.org/indicator/SL.GDP.PCAP.EM.KD?locations (accessed on 23.06.2024).

create production capacities that exceed normal demand, aiming for their utilization at the level of 80–85% to respond to demand surges and to manage technological disruptions in production.

Economists qualify the reduction of the specified capacity reserves as "overheating" of the economy (unlike business owners, who are pleased with the more complete use of equipment, which provides them with a better return on invested capital), which in developed markets is regulated by increasing prices for goods with limited supply and further increasing production capacity (to balance it with demand), on the one hand, and increasing the cost of credit to reduce demand, on the other.

In economies that are underdeveloped, not orientated towards meeting demand across all positions, and/or subjected to exogenous shocks that reduce import capacities or make them very expensive, the inability of supply to meet demand as a result of such circumstances can hardly be classified as "overheating". The cause of the emerging imbalance is not only the lack of production capacity but also, in most cases, the absence of proper quality of these capacities among local companies due to, as in the case of the Russian Federation, the following circumstances.

Firstly, industries that meet domestic demand lack capacity and product quality. This is due to the fact that transnational corporations have dominated the market for a long time. They possessed technological and financial resources that allowed them to meet most of their needs. Local producers could not compete with them and develop their industries due to suppressed demand.

Secondly, a significant portion of the production capacities of small and medium-sized enterprises has long been outdated precisely due to the shift in domestic demand towards the products of transnational corporations, which operated freely in the Russian Federation and were not required, as in China, to transfer technologies to local partners, since the state did not demand that they enter into corresponding agreements with local companies.[25]

Thirdly, there was no large-scale support for local producers in non-commodity sectors in the country. This put them at a disadvantage compared to foreign competitors. The latter had internal reserves for financing, access to cheap and long-term credit, as well as experience in production management and marketing in market conditions, which Russia had only recently lacked. Moreover, foreign companies often used scientific developments created with the participation of Russian scientists for practical purposes.

In other words, under the specified circumstances of endogenous and exogenous nature, physical demand predominantly does not increase, i.e., it is not excessive, provoked by cheap credit (although in certain segments of the economy this is possible if the cost of credit is subsidized). It remains roughly at the same level, but the vanished imports, along with limited or absent domestic production capacities of the required quality, create a false impression of "overheating", although in reality, this situation is more accurately characterized as a structural imbalance in the economy. The imbalance is due to the fact that there is demand for goods that the local industry cannot produce, or can produce but only in limited quantities.

Therefore, it is advisable to address this problem not only by temporarily cooling demand in those sectors where it is artificially inflated, but also through targeted measures to increase production capacity to fully meet demand in the future. From this perspective, the simultaneous increase in the cost of credit for both demand and supply appear to be an indiscriminate weapon of mass destruction, which, in addition to limiting demand — something that is temporarily beneficial only for certain sectors — prevents the increase of supply in all other sectors, which is largely possible only through debt financing, and this is detrimental in the long-term.

[25] In this regard, it is noteworthy that A.S. Kovrigin, the Deputy General Director of the analytical and consulting company "ASM-holding", remarked that "a big mistake was made when we called SPIKs import substitution… In fact, we simply funded the development of foreign technologies with our money, and when the foreign partner left, we were left without rights to the design, licenses, and technologies. Moreover, with such an approach, the Russian automotive industry found itself on the brink of losing its competencies in the design of cars and their components". [13, p. 21].

Moreover, when using an increased interest rate, which in developed economies is applied as a means to suppress price growth, in the Russian context it is necessary to take into account the following circumstances that affect domestic prices:

- export netback, when producers of exported goods, which are more than sufficient to meet domestic demand, try to align the profitability of their external supplies with domestic ones, which, at higher prices in the global market, exerts upward pressure on domestic prices;
- meet the demand through imports, when the low exchange rate of the national currency forces domestic prices to be set at a high level;
- budgetary stimulation of demand, as well as supply in certain segments, which in turn increases demand along the value chain.

The mentioned factors, along with exogenous causes, are generally beyond the control of the regulator. At the same time, budgetary infusions into the economy cannot be considered a determining factor of inflation, since, as it notes, in 2024 "the budget's contribution remains small compared to 2022–2023, and the main source of monetary mass growth remains lending".[26] If we take into account these circumstances, as well as the previously mentioned conclusions of empirical studies about the different contributions to achieving a balance between demand and supply in retail and corporate lending, the effectiveness of managing inflation in the current situation in the Russian Federation through an increase in the interest rate becomes somewhat unclear. Moreover, the high cost of credit not only negatively affects the financial results of borrowers but, in conditions of commodity shortages, increases the cost of raw materials, materials, and components, which is reflected in the higher price of finished products and contributes to inflation. It is obvious that an increased interest rate can work effectively only in a developed economy with an abundance of goods and excess production capacity.

[26] What trends are talking about: Macroeconomics and markets. Bulletin of the Department of Research and Forecasting. Bank of Russia, April 2024. 27 p.

STABILITY OF THE BANKING SECTOR OF THE ECONOMY AND THE EFFICIENCY OF THE TRANSMISSION MECHANISM

The main source of income for banks is traditionally considered to be the net interest margin (NIM), i.e., the difference between the cost of funding credit operations and the amount of interest received on the loans provided. For example, in 2023, it accounted for 63.2% of the 9.3 trillion rubles of all bank revenues in Russia, while net commission income accounted for only 20.5%.[27] The share of retail loans in the total loan portfolio in 2023 was 36%, and of the total amount of such loans, 46% was accounted for by consumer loans and auto loans (their total cost ranges from 21.5% to 59.8% per annum).[28] Considering that most of the latter is directed towards financing the purchase of imported goods, approximately 17% of the NIM is generated from providing loans amounting to around 16 trillion rubles for the payment of imported consumer goods, rather than developing their production in the country.[29]

Over the past 15 years, NIM has consistently remained in the range of 4–5 percentage points (pp)[30], despite periodically arising difficulties in the economy and strong volatility in the key rate. ACRA qualifies this situation as the ability of the banking sector to "demonstrate a very high level of resilience and adaptability to rapidly occurring changes".[31] It seems that this result is largely a consequence of the regulator's efforts to ensure the reliability of the banking sector, whose

[27] Statistical indicators of the banking sector 2022–2023. (Table 5). The structure of income and expenses of operating credit institutions. Bank of Russia.

[28] Average market values of the total cost of consumer loans (credits) in annual percentage rates for the period from 1 January 2024, to 31 March 2024. Bank of Russia. 16 May 2024.

[29] Calculated by the author using data from the following sources: "Statistical Indicators of the Banking Sector of the Russian Federation". Bank of Russia and the Banking Sector: Analytical Review. Q1 2024 Bank of Russia, June 2024.

[30] Results of the Decade 2008–2017 in the Russian Banking Sector: Trends and Factors. Series of Economic Research Reports. Bank of Russia, June 2018; (31–81):37.

[31] Double blow. Russian banking sector: forecast for 2024. ACRA. 27 December 2023. 15 p. URL: https://www.acra-ratings.ru/upload/iblock/886/7ehk2k9l9ndsg67tytdyamgiev8302vj/20231227_RFIVP.pdf (accessed on 11.06.2024).

participants are required to consistently increase their capital, loan reserves, and liquidity.

At the same time, the high interest rate, aimed at suppressing inflation and motivating the placement of money in bank deposits for passive income, simultaneously reduces the motivation of enterprises to create sources of active income by expanding their production. Increased interest payments suppress the financial results of borrowers and redistribute them in favor of creditors. This negatively affects the creditworthiness of borrowers, which, in turn, inevitably reflects in the deterioration of the credit risk assessment, which is accordingly compensated by the increase in loan reserves (in 2022–2023 alone, they grew by 4.5 trillion rubles). At the same time, there is a stable trend (from 2017 to 2023) of increasing net profit in the banking sector,[32] a significant portion of which (generated by almost half of consumer loans) does not depend on the development of the country's industrial potential.

Thus, the policy of increased interest rates, considered by the regulator as a tool to combat inflation, worsens the financial health of banks not through a reduction in their interest margin (which, in fact, reacts weakly to changes in the interest rate: according to the author's calculations, the correlation between the dynamics of this rate and NIM from 2018 to 2023 was 0.35), but through the deterioration of the borrowers' situation, whose ability to pay interest on loans and repay the principal debt is determined by their financial condition. The logic behind the measures aimed at complicating the activities of manufacturing companies, which are intended to increase the supply of goods and, in turn, create the basis for reducing price growth, is not entirely clear.

The reliability of the banking system's functioning is undoubtedly a priority for the regulator and the entire economy. At the same time, considering that the banking sector is highly dependent on the creditworthiness of its clients, and the regulator's goal is to promote the growth of the country's economy, it would be expedient to use more selective monetary policy and prudential supervision measures that, while maintaining the stability of credit institutions, would allow for a more targeted impact on inflation, as well as on the shortage of goods and services, which is its main source. The elimination of product shortages, which Russian enterprises are working on by increasing their production capacities, would create a situation more natural for a market economy of exceed of required by quality supply over the demand and would lead to a slowdown in the rate of price growth.

The concepts of counter-cyclical management of mature economies, which develop with the active use of debt financing from banks and the capital market, are based on the premise that such markets actively respond to changes in the interest rate set by the regulator. An increase in the rate in the case of an overheated economy restrains demand and increases the cost of goods production, which translates into higher prices, thereby limiting their sales opportunities. In the case of an overproduction crisis, companies themselves reduce the use of their production capacities, while a decrease in the interest rate by the regulator increases demand for goods. In both cases, market equilibrium is achieved.

Such interconnections work with a high share of debt financing in the economy (taking into account borrowings from banks and the capital market). But in the Russian Federation, it is still significantly lower than in mature markets, as indicated in *Table 2*. Therefore, it is logical to assume that the reaction of the economy, the structure of which does not correspond to the parameters of mature markets, to a change in the interest rate will be different.

The Bank of Russia assures that the transmission mechanism for conveying the signal of interest rate changes to economic agents is sufficiently effective (otherwise, there would be no point in relying on it), although it is multi-stage and involves many commercial organizations across various sectors of the economy. But it

[32] Statistical indicators of the banking sector 2022–2023. Table 5. Structure of income and expenses of operating credit institutions. Bank of Russia.

is precisely the complexity of this mechanism in terms of the distance over which the signal is transmitted and the number of various participants with their own interests that leads one to assume that the strength of the signal on its way to the final recipients will weaken. In the Russian Federation, the relationship between the interest rate and inflation, according to the author's calculations, is the highest among the three countries considered: 0.81 in the Russian Federation, 0.67 in China, and 0.44 in the United States over the past 20 years (*Table 1 of the Appendix*). It seems that the difference in this indicator reflects the varying levels of response of these economies to the cost of credit due to their greater ability to adapt to changing conditions, stemming from the different levels of development of market relations in which supply is created, and the higher competition among producers. Thus, the Russian regulator has to "overpressure" the interest rate compared to inflation: in the other two countries, the difference between them, even during crisis periods, is usually in the range of 1–3 pp., whereas in the Russian Federation, it has been 5–8 pp. in most cases over the past 10 years, and the gap of 1–3 pp. persists even in calm times.

But, on the other hand, small and medium-sized enterprises, whose development opportunities are closely linked to the availability of debt financing, which is becoming almost prohibitive for them, are located at a short distance from the source of the signal. At the same time, large companies are indifferent to the increase in the cost of credit, as they primarily have internal resources for development or export revenues multiplied by the low exchange rate of the ruble, which allow them to offset such costs when external borrowing is necessary.

The regulator itself notes that "among the factors limiting investment activity in 2023, 46% of enterprises indicated costs for machinery and equipment", the acquisition of which is generally not financed from current cash flow unless there is a payment installment plan from their supplier for several years, which is unrealistic under current conditions. Therefore, bank credit support is required. The subsequent conclusion that "the limited use of borrowed financing is due not so much to the low availability of bank credit (since only 32% of enterprises indicated it), but rather to other non-financial conditions",[33] does not take into account that for many companies, the high cost of credit means not only its low availability but also the impracticality of attracting it. Therefore, the opportunities for expanding industrial capacities and increasing productivity (to operate without increasing, and perhaps even with reducing, the servicing personnel) are postponed to an indefinite future and remain unrealized.

Thus, the issue is not that expensive credit is bad, but rather how much a high interest rate achieves its ultimate goal of more balanced and sustainable economic growth. In this regard, O.S. Sukharev's remark [14, p. 6] is fair, stating that regulators "should not strive for price stability by any means (through exchange rates and interest rates), but rather bring the economy to financial stability and steadiness, which will contribute to the growth of current production volume".

In the Russian Federation, a taxonomy of projects for technological sovereignty and structural adaptation of the economy,[34] has been developed, which is mainly focused on large projects. The Bank of Russia, accordingly, has allowed credit organizations to apply adjustments[35] to credit risk for loans provided for the implementation of such projects (only those included in the VEB.RF registry), which lead to a significant reduction in the amounts of reserves for potential losses on such loans. However, the actions of the regulator may not be very interesting to borrowers, as the reduction in costs

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[33] Investment activity in industry in 2023: results of the enterprise survey. Bank of Russia. January 2024, 26 p. (24–25).

[34] On the approval of priority areas for projects of technological sovereignty and projects of structural adaptation of the economy of the Russian Federation. Government of the Russian Federation, Resolution from 15 April 2023, No. 603. 67 p. URL: http://government.ru/docs/48272/ (accessed on 20.05.2025).

[35] On amendments to the Regulation of the Bank of Russia from 6 August 2015, No. 483-P. Instruction of the Central Bank of the Russian Federation dated June 7, 2023, No. 6443-U. URL: https://cbr.ru/queries/unidbquery/file/90134/2802 (accessed on 20.05.2025).

through the implementation of these measures is unlikely to lead creditors to significantly reduce their margins, and such a reduction in costs will fundamentally not affect the cost of credit, which is largely determined by the key rate. Accordingly, the volume of lending that the regulator is counting on will not increase either. This conclusion is also confirmed by the practice of implementing the mentioned projects: the head of the Bank of Russia reports that "we estimated the potential at several trillion, but we have financed about 300 billion rubles for taxonomy projects", and the first deputy chairman of VEB.RF states that "the 'savings' on capital requirements that lenders can achieve by providing financing within the framework of the taxonomy are offset by the increased cost of money in the market".[36]

In the EU, there was an attempt in the past decade to encourage banks to provide loans to SMEs by lowering reserve requirements. However, it turned out to be unsuccessful both in terms of conditions and the volume of lending.[37] The study by B. Chamberlin and J. Evain [15, p. 31] on the effectiveness of this regulatory tool in the banking sector, aimed at supporting "green" projects, shows that it "has only a very limited impact on the financing conditions of energy transition projects and, at best, will reduce the overall project cost by only a few tenths of a percentage point". IMF experts D.G. Demekas and P. Grippa [16, p. 5] also believe that significant capital redistribution is unlikely to occur and that "the net benefits of such regulatory intervention are questionable".

Thus, the use of reserve requirements by the regulator as an additional tool to address specific tasks in the economy may prove ineffective in terms of achieving the goal of sustainable economic growth. At the same time, the associated failure to maintain sectoral neutrality by the regulator in its prudential policy may lead, as noted by F. Diluizo, B. Annicchiarico, M. Kalkuhl, J. Minx [17], to banks taking on increased risks that will not be balanced by sufficient loan reserves.

The aforementioned conclusions compel a return to the topic of the adequacy of the interest rate in relation to the circumstances that cause price increases. It seems that, aiming to suppress inflation and considering the true causes of its acceleration, it is expedient to correlate the level of the established interest rate with the degree of response from those economic actors whose activities will directly affect the price level from both the demand and supply sides. In particular, since finding compromises between the lender and the borrower on the cost of credit under conditions of a high key rate is quite difficult, and overheating in the economy is visible only in one or several sectors, it would be expedient to set the key rate at a level acceptable for the entire economy, while tightening the lending conditions for the "overheated" sectors as much as possible using macroprudential policy tools. At the same time, such an approach would reduce the contradictions between the actions of the regulator and the government, decreasing the need for budgetary subsidies.

It would probably also be logical if representatives of the state, which holds a controlling stake in the dominant state credit organizations in the Russian banking system, drew the management's attention to the need to increase lending for projects aimed at increasing the supply of goods in the country, which would likely have a much greater macroeconomic effect by reducing inflation and increasing tax revenues, than receiving dividends from these banks into the budget. A number of Western European countries, including Italy, acted in this way until the end of the 1980s [7, p. 14], and in China, such a practice still exists today.

CONCLUSION

The conducted research allows us to draw the following conclusions:

• under endogenous and exogenous circumstances in the Russian Federation, demand

[36] VEB assessed the impact of high rates on the financing of tech sovereignty. RBC, 17 June 2024. URL: https://www.rbc.ru/finances/17/06/2024/666c46609a7947be98fa25af (accessed on 20.05.2025).

[37] EEBA report on SMEs and SME supporting factor. European Banking Authority. EBA/OP/2016/04, March 23, 2016–139 p. (10–11) URL: https://www.eba.europa.eu/sites/default/documents/files/documents/10180/1359456/602d5c61-b501–4df9–8c89–71e32ab1bf84/EBA-Op-2016–04%20%20Report%20on%20SMEs%20and%20SME%20supporting%20factor.pdf?retry=1 (accessed on 20.05.2025).

predominantly does not increase, i.e., it is not excessive, provoked by cheap credit (although in certain segments of the economy this is possible if the cost of credit is subsidized). It remains approximately at the same level, but the vanished imports, combined with limited or absent production capacities in the domestic market, create a false impression of "overheating", although in reality, this situation is more accurately characterized as a structural imbalance in the economy;

- the regulator is doing an excellent job of ensuring the stability of the banking sector of the economy, but its actions to support the growth of the Russian economy are far from always effective;
- consumer loans, if they are used to purchase imported goods, do not contribute to the development of the Russian economy, but they make a significant contribution to the net interest margin of Russian banks, which makes the financial result of the banking system in this sense and in this part independent of the state of the Russian economy;
- if the increased cost of credit does not allow for the purchase of new equipment to increase supply (and it is rarely acquired through the company's own funds), equity financing is limited, budgetary incentives are aimed only at strategic industries, and non-monetary factors have a significant impact on prices, then one should consider how beneficial the increased cost of credit is for everyone;
- it's not that expensive credit is bad, but rather how much the high interest rate achieves its goal of more balanced and sustainable economic growth.

Answering the main question of the research, it seems appropriate to conclude that the fundamental stability of the banking sector cannot be achieved without the financial viability of its clients, primarily corporate ones, who, through their activities, address the issues of providing the economy with the required volumes and quality of goods and services, in order to balance supply and demand and thus eliminate the cause of inflation. Therefore, it makes sense to set the key rate at a level that targets those and in such a way that can solve the inflation problem, rather than being a weapon of mass destruction for all sectors of the economy. This would ensure an increase in the production capacities and productivity of Russian companies, which would positively reflect on their financial results, and in turn, would allow banks to reduce the reserves they create and increase their profitability. In that case, everyone would benefit: creditors, borrowers, and consumers.

The identification of specific tools to influence credit availability for different classes of borrowers and projects is the subject of further research.

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APPENDIX

Table 1

Correlation Matrix Based on Russia Data

Indicators	Key rate	Capacity utilization rate	Inflation	GDP	Bank loans
Key rate	1				
Capacity utilization rate	–0.72	1			
Inflation	0.81	–0.80	1		
GDP	–0.42	0.47	–0.57	1	
Bank loans	0.16	–0.03	–0.07	0.99	1

Source: Calculations by the author based on data from the Bank of Russia and Rosstat.

Table 2

Correlation Matrix Based on the US Data

Indicators	Key rate	Capacity utilization rate	Inflation	GDP	Bank loans
Key rate	1				
Capacity utilization rate	0.61	1			
Inflation	0.44	0.43	1		
GDP	0.06	0.17	0.32	1	
Bank loans	0.80	0.53	0.57	0.98	1

Source: Calculations by the author based on data from the US Federal Reserve, the Bank for International Settlements, the World Bank and the website tradingeconomics.com.

Table 3

Correlation Matrix Based on China Data

Indicators	Key rate	Capacity utilization rate	Inflation	GDP	Bank loans
Key rate	1				
Capacity utilization rate	−0.03	1			
Inflation	0.67	0.09	1		
GDP	−0.83	0.24	−0.17	1	
Bank loans	−0.85	0.27	−0.48	0.99	1

Source: Calculations by the author based on data from the US Federal Reserve, the Bank for International Settlements, the World Bank and the website tradingeconomics.com

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