

HOW MUCH RUSSIAN BANKS EXCEEDED IN FINANCIAL INTERMEDIARY?

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The purpose of the article is to analyze the process of the increasing role of banks in the Russian economy during the period of growth that took place after the 1998 financial crisis and preceded the current financial cataclysms. We use several indicators to assess the role of banks in financial intermediation in Russia. The traditional approach (from a macro-level perspective) is complemented by an analysis of sectoral financial flows, as well as the results obtained in micro-level studies. All of these approaches confirm that banks play a consistently more important role in financial intermediation. We found that the scale and effectiveness of Russian banks' intermediation have increased over time, but their involvement in financial intermediation still lags behind those in other countries with similar income levels.

Key words: Russia, banks, financial intermediation, financial system.

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Like most other emerging market economies, Russia has a banking-based financial system. However, banking is a relatively new industry for Russia. Most of the banks were established only in the 1990s. Until 1999, the participation of the banking sector in financial intermediation for the needs of the real sector of the economy was at a very modest level. Banks did not direct financial resources to profitable investments and in many cases preferred to speculate in the financial markets or simply act as “treasures” for those who owned them. The ratio of bank lending to total bank assets gradually decreased until 1999. The reasons are soft legal restrictions, asymmetry of information between lenders and borrowers,

After the boom following the 1998 crisis, the Russian banking system began to develop rapidly and began to carry out other standard types of banking activities. In response to the demands of a more stable macroeconomic environment and important institutional reforms, the banking sector began to expand rapidly. The ratio of total banking sector assets to GDP has doubled since 2000, “frozen” at 65% at the end of 2008. The Banking Reform Index used by the EBRD increased from 2 (in 1998) to 2.7 (in 2006) ... If we consider that the values of this index range from 1 to 4, then a value of 3 indicates a significant im-

provement in the legislation on bank solvency, great progress in creating conditions for responsible control and regulation, as well as an impressive number of private banks.¹... Both the expansion of the scale of institutional reforms and their progress in Russia indicate the growing role of banks in the economy.

Despite these advances, it is unclear to what extent Russian banks can meet the needs of the economy. The data presented in the table with a number of commonly used indicators indicate that the development of the banking sector in Russia still lags behind many other countries with economies in transition. This circumstance can have serious consequences for further economic growth in the country. A significant number of scientific studies (for example, (Levine, Zervos, 1998; Beck, Levine, 2004)) data are based on IMF's International Financial Statistics Database, EBRD (Germany is not included in the EBRD index, level 4 corresponds to the standards of developed industrial economies). Confirms the point of view that the development of the banking sector has a positive effect on economic growth.

In this article, we explore how the role of the banking sector in financial intermediation in Russia has evolved during the period of economic growth that followed the 1998 crisis and preceded the current crisis. We are not going to analyze the current global crisis and its impact on the Russian financial markets. Our goal is to investigate the processes before the crisis. We believe that it is important to study the dynamics that preceded the crisis in order to better understand the prospects for growth over a long period of time. There is a collection of excellent articles on the analysis of the current crisis in the Russian banking sector and published in the Journal of the New Economic Association²...

Our approach to this topic is to combine and contrast the results obtained in studies of financial intermediation, carried out from several different points of view. Since there is no single universally accepted definition of financial intermediation, we tend to believe that it is useful to take into account different positions from both a macro-level and a micro-level perspective. This article is naturally limited by the fact that we rely on publicly available data and mainly on publications in Western economic publications. However, we are aware that there are many Russian-language works devoted to this topic. We will do our best to provide relevant links. First, we examine most of the widespread aggregate indicators of financial intermediation, namely: the ratio of aggregate indicators of the banking sector to indicators of the entire economy. We then analyze sectoral financial flows, finding out which sectors in the Russian economy are creditors and which are debtors. After that, we will supplement our research

with micro-level data analysis, which will allow us to explore some aspects of the effectiveness of financial intermediation in the Russian banking industry.

Measuring financial intermediation at the aggregate level

Usually, the level of financial intermediation in a country is measured by ratios reflecting the ratio of bank assets and bank credit to GDP. In Russia, the ratio of bank assets to GDP doubled from 2000 to 2008, exceeding 65% at the end of 2008 (Fig. 1). Similar changes took place with the indicator of bank loans to the private sector, which actually exceeds 40% of GDP.

These aggregates support the view that financial intermediation has grown rapidly in Russia in recent years.

Despite impressive growth, Russia is still lagging behind not only developed economies in terms of financial intermediation, but also behind its counterparts in Central and Eastern Europe (Chart 2).

The role of bank loans as a source of financing investments in fixed assets of companies increased from less than 5% at the beginning of 2000 to 11% at the beginning of 2008 (Rosstat, 2008). The role of other financial intermediaries in Russia is even less significant than that of the banking sector. The only major source of funding for Russian companies is their own funds. In 2008, these resources financed about 40% of such investments, which is less than in 2002, when this figure was 48% (Rosstat, 2008). Another important source is budgetary resources, which are used to finance approximately one fifth of fixed capital investments. Despite a significant increase in the volume of issue of shares by Russian companies, especially in 2006 and 2007,

The bond market is also not developed: only a few large Russian companies have issued bonds. The share of corporate bonds in financing investments in fixed assets is less than 1%. The ratio of bonds of non-financial corporations to GDP in 2008 was 2.4%, which is significantly less than the same indicator in developed countries (Ulyukaev, Danilova, 2009). The situation is similar in the Eurobond market: in 2008, the total volume was 3.1% of GDP. The performance of the indices used by the EBRD confirms that this figure is in line with those of other transition economies.

Insurance companies also do not make a significant contribution to financial intermediation in Russia. The sector is very small and underdeveloped, with premiums reaching only 2.3% of GDP, which corresponds to about one fifth of that in developed countries (Swiss Re, 2009). Most of the insurance business is involved in non-life insurance business that could generate financial resources for long-term investments. The long-term nature of insurance only adds to the

growing distrust of Russian financial institutions. Analysis of sectoral financial flows

We will consider in more detail the role of banks in financial intermediation, applying the analysis of financial flows between the commercial banking sector and other sectors of the economy. It is assumed that banks - as financial intermediaries - move resources from investors to the productive sectors of the economy. This analysis reveals their true role. Moreover, this approach allows us to investigate whether there are any structural breaks in the period under consideration.

Following (Kocenda et al., 2007), we treat the economy as a set of sectors exchanging financial assets. The following sectors are considered as the main economic players: state, non-financial companies, individuals, the Central Bank, as well as other banks. The flow of resources between the banking sector and other sectors is traced through the intermediation ratios, which reflect the shares of the total assets of the banking sector that originate in the other five sectors. This creates a more complete picture of the role of banks as debtors in the economy. Likewise, we analyze the other side of the banking sector balance sheet, noting which sectors receive bank loans. Thus, we can assess the contribution of each sector to the development of the banking system, and the volume of resources transferred by the banking sector to other sectors. The data used in our study was obtained from the Bank of Russia. This is a quarterly time series from the first half of 2000 to the end of 2008. Due to differences in data specifications, direct comparisons between countries should be made with some caution, and such comparisons are beyond the scope of this article. However, we are able to make at least some (very rough) comparisons with the results obtained in (Kocenda et al., 2007) based on data from CEE countries. Due to differences in data specifications, direct comparisons between countries should be made with some caution, and such comparisons are beyond the scope of this article. However, we are able to make at least some (very rough) comparisons with the results obtained in (Kocenda et al., 2007) based on data from CEE countries. Due to differences in data specifications, direct comparisons between countries should be made with some caution, and such comparisons are beyond the scope of this article. However, we are able to make at least some (very rough) comparisons with the results obtained in (Kocenda et al., 2007) based on data from CEE countries.

The share of retail deposits in the total assets of the banking sector gradually increased - from less than 20% in 2000 to almost 30% in 2004. Our research revealed that individuals were the largest lenders of banks between February

2002 and February 2006. (Fig. 3). The very low share of retail deposits in the first years after the August 1998 crisis was caused by a lack of trust among depositors in the banking industry, as well as by a drop in real incomes. In 2006, the share of retail deposits in the total assets of the banking sector began to decline after the growth in corporate deposits apparently outstripped the growth in retail deposits. This trend continued during the current financial crisis. Thus, at present the largest creditors of Russian banks are non-financial companies. Their share in the total assets of the banking sector exceeded 30% by the end of 2008. In contrast to Russia, individuals are the largest lenders of banks in Central European countries with economies in transition. Individual deposits are viewed as the most important source of resources for banks, as these deposits tend to have maturities longer than those of non-financial companies.

Another important source of inflows to the banking sector is loans from other financial institutions, which during the entire period under review accounted for approximately 10% of the banking sector's assets. Based on micro-level data, Karasetal (2008) shows that although large banks reduced their dependence on interbank financing from 25% in 1999 to 10% in 2004, they are still more dependent on interbank financial markets. instruments than smaller jars. Moreover, they show that large banks continue to rely mainly on transactions with foreign partner banks (Figure 4). This led to the fact that in 1999-2004, the volume of transactions with foreign assets all the time exceeded the volume of domestic interbank transactions. We have good reason to believe

The role of the government as a lender to the banking sector was not significant and in fact diminished. It currently accounts for less than 0.5% of the banking sector's assets. Finally, the role of the Central Bank in providing financial resources to the banking sector has become more significant only recently, including as a result of the current financial crisis and attempts by the authorities to stabilize the situation. In general, during the analyzed period, financial flows from the Central Bank to the banking sector were close to zero. However, it is important to remember that the state plays a very significant role in the banking sector, since it currently owns approximately half of the sector's total assets.3... On the other hand, foreign participation in banking is still rather modest. The number of foreign-owned banks at the end of 2008 increased to 2214 (from 130 in 2000), while the total number of registered banks was 1108. Examination of the other side of the coin shows that the most significant flows from the banking sector to other sectors are those directed to non-financial companies. This conclusion is well supported by data for Central European countries, where non-financial companies are also the largest borrowers. New positive trends in the

field of financial intermediation are that the share of funds that banks lend to these companies increased until 2008, and some subsequent slowdown occurred only due to the global financial crisis at the end of 2008. Another positive trend in this area is associated with the fact that the volume of loans to individuals also increased to 15% in 2008. (from about 2% of total banking assets in 2000). Traditionally, individuals have not been important banking clients in Russia. However, in recent years, their importance has increased significantly. However, the indebtedness of individuals remains small in comparison with developed countries, as well as with other countries with economies in transition. This circumstance can be seen as an advantage during the ongoing financial cataclysms. Flows from the banking sector to the Central Bank have remained relatively stable over the period under review, although the data are obviously seasonally significant. as well as with other countries with economies in transition. This circumstance can be seen as an advantage during the ongoing financial cataclysms. Flows from the banking sector to the Central Bank have remained relatively stable over the period under review, although the data are obviously seasonally significant. as well as with other countries with economies in transition. This circumstance can be seen as an advantage during the ongoing financial cataclysms. Flows from the banking sector to the Central Bank have remained relatively stable over the period under review, although the data are obviously seasonally significant.

There are no significant gaps in financial flows to and from the banking sector between 2000 and 2008. During this period, the system gradually expanded, and, obviously, there were no major changes that would significantly affect this trend. Unlike the Central European countries, the Russian banking sector has not undergone large-scale privatization. In general, our analysis of financial flows between sectors indicates that banks increasingly moved funds to the real sector of the economy and gradually began to play their role as financial intermediaries.

How effective has mediation been?

The growing involvement of banks in the allocation of financial resources raises the question of how costly and efficient their intermediary services are. To answer this question, it is necessary to move our attention from the aggregate level to the micro level, i.e. refer to the review of data on specific banks. The role of banks in the economy is not only to transform savings into investment, but also to ensure the quality of borrowers and increase the likelihood that their innovations will be successful. Therefore, a banking performance analysis that measures the relative ability of banks to efficiently use their resources to gener-

ate “output” can lead to valuable findings. Since there is a strong tradition of research,

In the literature on how costly and efficient bank intermediation is, the generally accepted approach is to examine the bank's interest margin and its determinants.⁵... In general, the analysis of the size of the interest margin and the rationale for these sizes presupposes the existence of a tradeoff. On the one hand, high margins create obstacles to deepening financial intermediation in the country, as lower interest rates on deposits reduce incentives to create savings in the form of bank deposits, and high interest rates on loans narrow the investment opportunities of banks. Moreover, large margins can create problems in the banking regulatory environment and information asymmetries (Claeys, VanderVennet, 2008). On the other hand, larger margins can increase the profitability of the banking sector and bank capitalization, as well as strengthen the financial position of the sector, creating additional reserves in the event of negative shocks. But overall, the empirical evidence indicates that margins are smaller in more advanced banking systems. In Russia, the net interest margin, as shown below, is still quite high compared to the same indicator in other countries (Fig. 5)⁶...

In work (Fungáčová, Poghosyan, 2009), quarterly data for all Russian banks for the period from 1999 to 2007 are used to calculate the values of net interest margin, defined as the difference between interest income and interest expense divided by total assets. In general, during the period under review, margin values decreased. This indicates the fact that the process of financial intermediation has become less costly for society.

Further in the specified work, the importance of factors influencing the value of the margin and identified in the theoretical model of Ho and Saunders (Ho, Saunders, 1981) is analyzed. These factors include: market concentration, operating costs, risk aversion, credit risk, liquidity ratio and bank size. Using economic terminology, one can formulate...

Note... Net interest margin - the book value of the bank's net interest income, expressed as a share of (total) interest-earning assets.

We define pearl interest margin as the proportion of net interest income that can be generated by interest bearing assets and compare Russian figures with similar figures for other countries.

to formulate the following conclusion: the most significant influence on the size of the interest margin of banks in Russia is exerted by operating expenses. Operating costs incurred by banks are passed on to customers through higher margins charged for financial services. In this regard, Russian banks still “have

room to develop” in terms of improving their operational efficiency, because the ratio of non-interest expenses to total assets is, on average, much higher than in developed or Central European countries (Moody's, 2008).

Risk aversion on the part of the bank is positively related to the size of the margin. Banks with greater risk aversion charge higher margins. All other significant factors are negatively related to the size of the margin. First, the negative relationship between the size of banking operations and the value of margin confirms the existence of economies of scale, as larger banks tend to charge lower margins. A more significant liquidity ratio allows the bank to reduce its margin. Finally, the negative relationship between credit risk and margin value can be explained by the application of market discipline in Russia (Karas, Pyle, Schoors, 2009). Depositors demand higher premiums for putting their savings in banks with a higher level of credit risk.

In Russia, however, interest margins are not affected by changes in the market structure as measured by the regional Herfindahl index. This contradicts the results obtained in earlier studies of trends in developed countries, as well as the prediction of the theoretical model, according to which the coefficient will be positive. This conclusion is consistent with the results obtained from the analysis of economies with newly emerging market economies. These results are mixed and not always significant. The insignificant value of the market structure ratio may indicate the fact that regional concentration in the Russian banking sector has not changed significantly over time. It is clear that there are several dominant players in this market, and the changes in the rest of the banking system are not large enough.

Financial intermediation abroad

Our research indicates that in recent years Russian banks have become increasingly involved in financial intermediation. Moreover, a slight decrease in the level of the bank interest margin reflects a positive trend in the efficiency of financial intermediation, although here, we repeat, there is still "room for development." All these changes were caused by the rapid economic growth and the growing integration of the Russian banking sector into global financial markets.

Despite impressive growth rates in the 2000s, the Russian banking sector remains extremely small relative to the size of the entire economy. Individuals, as well as small businesses in Russia, usually have little or no contact with the financial system. Just over 10% of fixed capital investments are financed through bank loans, and despite the marked demonetization after the 1998 crisis, only about one third of the population has bank accounts. Due to the banking crisis of the 1990s, the population still distrusts the banking system⁷... At the

same time, large Russian oil, gas and metallurgical companies have financial needs that significantly exceed the capabilities of domestic financial markets. Large Russian companies involved in the development of natural resources are “big” even by world standards. In fact, they are an integrated part of the world economy. The financial needs of companies such as Gazprom, Rosneft and Lukoil are mainly met by the global financial markets. These companies have significant export earnings and their revenue streams are largely dependent on changes in the global economy. In fact, large global financial groups also have more knowledge and skills to analyze the actions of these companies than local Russian banks.

This is confirmed by the growing number of syndicated loans issued by foreign lenders to Russian borrowers in recent years. The syndicated loan business began to expand in Russia as early as 1997, as such loans were the only sources of financing for companies that did not have credit ratings. The 1998 financial crisis prevented the issuance of such loans, but the growing demand for long-term financial instruments, associated with rapid economic growth in the 2000s, again contributed to a significant increase in the scale of syndicated lending. In both 2005 and 2006, the volume of syndicated loans issued in Russia exceeded \$ 50 billion, which is about one-fifth of the domestic loans provided to the non-financial private sector, according to BIS reports. Further, in 2007,

Despite this boom, Russian lenders did not play a significant role in the syndicated loan business (Russian banks were visible only as recipients of such loans). The expansion of the volume of issued syndicated loans was mainly associated with the activities of non-Russian banks. Russian banks provided only about 2% of the funds issued in the form of syndicated loans for the period from 1997 to 2006.eight Moreover, the banking literature argues that the presence of a local bank in a loan syndicate creates significant informational advantages in monitoring. These benefits usually translate into a smaller credit spread for the borrower. However, in the work (Fungáčová et al., 2011) shows that things are different in Russia. The presence of the Russian bank in the loan syndicate did not reduce these spreads. This circumstance obviously indicates that Russian banks have no informational advantages over international lenders when granting loans to large Russian firms. This may be a consequence of the relatively small size of Russian banks, their short experience in dealing with participation in international syndicates, or a general phenomenon of mistrust in Russian banks. In most other developing countries, such shortcomings of domestic banks are more than offset by the positive value of better knowledge of local conditions.

All this means that Russia not only has a dualistic economy, characterized by the presence of strategic sectors controlled by the state, and a non-strategic sector open to all. Apparently, the country also has a dual financial system: a domestic sector serving local clients and an international sector characterized by minimal participation of Russian banks. Until the onset of the global financial crisis, large corporations could rely on international markets to finance their investments, and usually only needed an internal banking system to process their payments. It is possible that this aspect is an additional explanation for the relatively small size of the domestic banking system (Sutela, 2009).

Since the structure of the Russian economy is likely to continue to evolve in the future towards the dominance of very large corporations engaged in the development of natural resources, there are no simple or quick ways to expand the domestic banking system at the expense of a foreign one. But, of course, strengthening the insurance industry and domestic pension funds would be beneficial as a factor in creating a more stable base for domestic funding.

The existence of a dual system is not necessarily “good news” for local, non-export-oriented clients with no access to international financial markets. If a company generating, for example, 8% of GDP⁹, needs an internal system only to carry out their payments, the growth prospects of the internal banking system are far from bright. Over a longer period of time, this may mean more limited access to finance for the rest of the economy, which nevertheless creates a dominant mass of jobs in Russia. The current financial cataclysms are severely curtailing foreign funding, prompting even large, export-oriented corporate clients to turn to domestic banks. It remains to be seen to what extent these companies can return to international financial markets in the long run.

Concluding remarks and future perspectives

The expansion of the banking sector during the economic boom from 2001 to 2008 was impressive. During this period, the size of the banking sector in relation to the economy doubled. Moreover, lending to the real sector (ie, businesses and households) increased rapidly, and a growing, albeit still small, share of investment in fixed assets was financed through bank loans. It is clear that the banking sector has begun to play a more important role in transforming savings into investment and consumption. In addition, there appears to have been some improvement in the effectiveness of mediation as well, but this increase was relative to a very low baseline. A McKinsey report argues that the efficiency level of Russian “retail” banks is only 23% of the US level (McKinsey, 2009).

Predicting the future is always a thankless task. Perhaps the current global financial crisis will at best prove to be some kind of milestone on the road to a

more efficient banking system. Wherever a crisis occurs, it has wiped out the least performing firms, and it is possible that many of the very small and unreliable Russian banks will be closed as a result of the current economic collapse. If management were prudent, the restructuring of the banking industry could ultimately give larger and better managed, as well as more efficient, banks a dominant position in the sector. Many of them could well participate in banking activities at the international level, especially since borrowing from abroad, even from the largest Russian corporations, stopped during the crisis.

However, there is always the possibility that the future will turn out to be different from what we hope for. If international financial markets remain closed for a long time, large corporations involved in the development of natural resources will have to rely only on domestic markets. In all likelihood, they will crowd out a host of other borrowers and put clients inside the country in an even worse position. Moreover, the domestic banking sector may emerge from the crisis weakened, and its credibility will actually be undermined for several more years.

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