Rapid loan growth in Russia: A lending boom or a permanent financial deepening?

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A lending boom or a permanent financial deepening?

by
Directorate-General for Economic and Financial Affairs

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Rapid loan growth in Russia: 

A lending boom or a permanent financial deepening? 

by 

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Directorate-General for Economic and Financial Affairs 
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Abstract

In this paper we look at a number of factors surrounding the sharp increase in lending in Russia. First of all, we discuss the sources of loan growth and factors that have triggered rapid loan growth. Second, we consider the loan portfolio quality, singling out Sberbank and other state banks which could be prone to directed lending and could be subject to lax supervision. Third, we address the potential problem associated with the high exposure of banks to large borrowers and related parties, and concentration of loans to the oil and gas industry. Our analysis shows that rapid loan growth was preceded by strong economic growth and is accompanied by increased investments in fixed assets. In 2003, loan growth was further boosted by the rise in cross-border lending and international bond issuances. The short-term nature of this foreign debt is one of the sources of vulnerability for the Russian banks. The quality and the structure of the loan portfolio has improved significantly in the last years, but the real risk may be hidden because of the negative real interest rates, high growth of loans and lack of transparency. Future loan growth will mainly depend on the success of the current banking reform.

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1. Introduction

In the last few years we have witnessed a remarkable loan growth in the Russian banking industry. As a result, 19 of the 30 fastest growing banks in Europe in 2003 were located in Russia (The Banker, January 2004). Bank claims on the private sector increased by 82% in real terms between 2000 and 2003, admittedly starting from a low level. The highest growth was exhibited by loans to individuals, with the proportion of household lending to the total amount of loans growing from a very low level of 4.7% in 1999 to 10.7% at the end of 2003. Such high credit growth begs a number of questions about what causes it and whether it will continue. This is particularly interesting at present, with the Russian banking market currently experiencing a phase of instability pending the introduction of the Deposit Insurance Scheme.

This high loan growth may be a sign of either a permanent deepening of the Russian banking market or a temporary lending boom, with very different consequences. A deeper financial system would have the benefit of contributing to sustainable economic development through the efficient allocation of savings into long-term investments. Additionally, highly developed financial systems can mitigate economic shocks caused by a worsening of the terms of trade, which is of considerable interest for Russia since it is heavily dependent on exports of raw materials. If it turns out to be a temporary lending boom, however, this could have a very severe impact on economic development. The rapid growth of loans can make it difficult to screen and monitor contracts, leading to a deterioration in portfolio quality.

The literature identifies a lending boom as a deviation from the trend, which can therefore be documented only after the event. It is even more difficult to distinguish between a lending boom and a permanent financial deepening in a transition economy, where the loan growth starts from a very low base and represents a catch-up effect. In this paper we look at a number of factors surrounding the sharp increase in lending. First of all, we look at the sources of loan growth and factors that have triggered its rapid increase, namely economic expansion and demand for new investments or speculative capital inflows and rising asset prices. Second, we look at the loan portfolio quality, singling out Sberbank and other state banks which can be prone to directed lending and could be subject to lax supervision. Third, we address the potential problem associated with the high exposure of banks to large borrowers and related parties, and loan concentration to the oil and gas industry.

Our analysis shows that the rapid loan growth was preceded by strong economic growth and is accompanied by increased investments in fixed assets. In 2003, loan growth was additionally boosted by the rise in cross-border lending and international bond issuances. The short-term nature of this foreign debt is one of the sources of Russian banks’ vulnerability. The quality and the structure of the loan portfolio has improved significantly in the last few years, but the real risk may be hidden because of negative real interest rates, high growth of loans and a lack of transparency. The future loan growth will mainly depend on the success of the current banking reform.

The remainder of the paper is structured as follows. Section 2 briefly describes the weaknesses in the Russian banking industry that led to the 1998 crisis and documents the existing situation on the Russian banking market. In Section 3 we discuss the literature on “finance and growth” and lending booms and then attempt to analyze trends in the Russian banking industry in light of this literature. Finally, in Section 4 we analyse the potential for further loan growth, and in Section 5 we draw some conclusions and provide policy suggestions.
2. The development of the Russian banking market after the 1998 crisis

2.1 The 1998 banking crisis

The Russian banking crisis in 1998 was triggered by the government’s default on its rouble-denominated domestic public debt on August 17, 1998. In the aftermath of the crisis, the Central Bank of Russia (CBR) was no longer able to support the currency and the rouble lost two thirds of its value against the dollar. The default and devaluation forced many Russian banks into insolvency. However, their failures were the result of imbalances that had appeared before the crisis:

i. the real value of banks’ holdings of government securities increased twenty-three-fold between 1993 and August 1998. This reflected the large fiscal deficit and the resulting high supply of government bonds, which pushed the interest rates upward. Government bonds became a very attractive investment opportunity, crowding out credit to the private sector. Consequently, the government’s default dealt a blow to banks with high shares of GKOs (short-term state obligations).

ii. the quality of the banks’ loan portfolio was poor for a number of reasons. First of all, many loans in foreign currency were extended to enterprises without any foreign currency earnings. Second, banks extended loans to associated parties without prior screening and evaluation of risk. The problems were further masked by the roll-over of existing loans. The devaluation of the rouble made the repayment of many loans impossible.

iii. banks had a large unhedged exposure to foreign liabilities. Large short-term capital inflows surged in 1997, making Russian banks vulnerable to loss of confidence among investors. They also sold forward foreign exchange contracts to foreigners who wanted to hedge their currency risk arising from investing in domestic government bonds. After the sharp depreciation of the rouble, a reversal of the capital inflow ensued.

iv. the excessive risk-taking was further exacerbated by inadequate risk and liquidity management, poor monitoring by the Central Bank of Russia, and bad accounting standards.

The banking market was paralysed after the crisis. The government’s first response was to announce a 90-day moratorium on all foreign debts and foreign exchange contracts and to transfer household deposits from insolvent banks to Sberbank in order to prevent massive bank runs. Additionally, the CBR injected liquidity by freeing up required reserves, extending long-term stabilization credits to banks and purchasing treasury bills from banks. However, no far-reaching reforms were undertaken in the immediate wake of the crisis.

The Russian government set up the Agency for the Restructuring of Credit Organizations (ARKO) in the first quarter of 1999. However, it turned out to be very ineffective, partly because of its small capital base and partly because it lacked the right to close down inefficient institutions against the will of their managers and owners. The bankruptcy regulation was passed in February 1999, but it protected shareholders at the expense of less influential creditors and did not prevent asset-stripping. The fact that ARKO extended a loan to the relatively unscathed Alfa Bank only further undermined its original mission.

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1 An excellent review of the 1998 banking crisis and its resolution is presented by Ippolito (2002).
2.2 The structure of the Russian banking market

The Russian banking market is peculiar because, notwithstanding the large number of banks in operation, it is very concentrated in the deposit market. Table 1 presents basic statistics about the number of banking institutions, market concentration, and the role of Sberbank.

The Russian banking market is dominated by Sberbank, the largest bank in Russia, whose majority shareholder (60.6%) is still the Central Bank of Russia. The rest of the shares are dispersed among portfolio, private and other investors with an estimated 15% or more owned by foreigners. Sberbank enjoys a near-monopoly position on the deposit market due to its inherited large branch network, implicit deposit insurance granted to it by the government in the wake of the crisis, and its quasi-monopoly in paying pensions. However, other banks are making inroads into the retail market, and at the end of 2003 Sberbank accounted for only 63% of all retail deposits in Russia – 12% less than in 1999. It is very important for Russian banks to attract deposits from individuals, because they comprise 89% of the total deposits in the system. Meanwhile, Sberbank considerably strengthened its position on the loan market (from 12% in 1998 to 29% in 2003).

Table 1. The basic statistics on the structure of the Russian banking market

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of banks</td>
<td>1447</td>
<td>1315</td>
<td>1274</td>
<td>1276</td>
<td>1282</td>
<td>1277</td>
</tr>
<tr>
<td>of which foreign</td>
<td>142</td>
<td>133</td>
<td>130</td>
<td>126</td>
<td>126</td>
<td>128</td>
</tr>
<tr>
<td>Capital controlled by foreign banks</td>
<td>n.a.</td>
<td>10.7</td>
<td>9.4</td>
<td>7.7</td>
<td>5.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Assets concentration C5 (in %)</td>
<td>41</td>
<td>42</td>
<td>41.2</td>
<td>42.8</td>
<td>44.2</td>
<td>42.9</td>
</tr>
<tr>
<td>Share of Sberbank in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>22.73</td>
<td>26.1</td>
<td>25.4</td>
<td>26.4</td>
<td>28.4</td>
<td>27.6</td>
</tr>
<tr>
<td>Loans</td>
<td>11.50</td>
<td>26.5</td>
<td>31.6</td>
<td>30.7</td>
<td>29.8</td>
<td>29.3</td>
</tr>
<tr>
<td>retail deposits</td>
<td>73.84</td>
<td>75.42</td>
<td>76.5</td>
<td>72.1</td>
<td>67.3</td>
<td>63.3</td>
</tr>
<tr>
<td>Capital</td>
<td>n.a.</td>
<td>17.6</td>
<td>14.9</td>
<td>21.2</td>
<td>20.4</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Source: CBR, authors' calculations.

Note: The numbers on banking institutions include only operating institutions and exclude registered banks that do not have a licence to conduct banking operations.

According to the estimates of the World Bank (2004), 17% of Russian banks belong to financial and industrial groups (FIGs). A number of these banks became insolvent during the crisis due to high exposure to the industrial companies that belonged to the same group. However, the core businesses of these banks were taken over by the so called “bridge banks”, which acquired the assets but not the liabilities of the failed institutions, so that the new banks were controlled by the same shareholders and run by the same managers. The Oneximbank and Menatep banks were thus reborn as Rosbank and Menatep – St. Petersburg (Ippolito, 2002). At the same time, some of the banks belonging to FIGs, such as Alpha and MDM, withstood the crisis thanks to their prudent policies.

The majority of Russian banks are very small. At the end of 2003, the number of banks with capital of below 150 million roubles (approximately 5 million euro) stood at 72% of the total, and the share might be even higher under International Accounting Standards.2 Such a high number of small banks means that there is scope for consolidation of the industry. On the other hand, nobody knows what percentage of these banks serve as treasury departments for their mother companies.

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2 In 2001 the CBR published the *Strategy of development of the banking sector*, in which it set the minimum capital requirement of five million euro for all banks starting from 2007. However, this strategy was abandoned on June 2, 2004, when this requirement was applied only to newly established banking institutions. This is not the first time the CBR has changed its decisions and reforms have been postponed. This kind of behavior does not inspire confidence in the CBR’s determination to reform the banking industry.
and therefore would not be interested in consolidation. Another peculiarity of the Russian banking market is the existence of “phantom” institutions, i.e. registered banks that do not possess a banking licence. Their share declined from 38% of all registered banks in 2000 to 21% in 2003.

Russian banks are highly concentrated in the Moscow area, which has 84.5% of total banking assets. Despite the large number of banks, in a third of Russian regions there is no other bank except Sberbank. It can therefore be argued that Sberbank performs a social function, in that it provides access to banking services in remote areas.

Even though there are no longer any major obstacles to foreign bank ownership in Russia, foreign penetration of the Russian banking market is very limited\(^3\). At the end of 2003 the share of capital controlled by foreigners amounted to 5.2% of the total registered capital of the Russian banking industry, which is a striking decline from 1999 when foreign investors controlled 10.7% of capital. This situation is different from that observed in Central and Eastern Europe, where foreign banks account for the majority of banking assets.

### 2.3 The degree of bank intermediation

Despite the large number of banking institutions in Russia, the degree of bank intermediation remains very low. Table 2 reports the development of a number of financial depth and depositors’ confidence indicators between 1998 and 2003. It should be mentioned that the sudden rise in banking assets and credit to the private sector in 1998 reflects the depreciation of the rouble. Consequently, a decrease in foreign currency assets shows up as an increase because they are denominated in roubles.

<table>
<thead>
<tr>
<th>Year</th>
<th>Indicators of financial depth (in % to GDP)</th>
<th>Indicators of depositor confidence (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Banking assets</td>
<td>Claims on the private sector</td>
</tr>
<tr>
<td></td>
<td>24.73</td>
<td>36.22</td>
</tr>
<tr>
<td></td>
<td>10.68</td>
<td>15.62</td>
</tr>
<tr>
<td></td>
<td>13.71</td>
<td>16.48</td>
</tr>
<tr>
<td></td>
<td>19.52</td>
<td>23.90</td>
</tr>
<tr>
<td></td>
<td>65.23</td>
<td>54.52</td>
</tr>
<tr>
<td>Source: Institute for Fiscal Studies (IFS).</td>
<td></td>
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</tr>
</tbody>
</table>

When we look at the ratio of banking assets to GDP, we see that the current level is still below its 1998 value. However, the latter figure reflects the high level of bank claims on the general government around the crisis period. These claims decreased substantially between 1998 and 2003, whereas bank claims on the private sector increased from 16% to 21% of GDP over the same period. The increase would have been even larger if we controlled for the quality of the loan portfolio, as 30.9% of loans in 1998 were non-performing.

\(^3\) The ceiling of 12% to foreign ownership of the Russian banking industry was abolished in 2002. Minor restrictions, however, remain, such as the requirement to obtain the CBR’s for sales of shares to foreigners.
The level of bank intermediation in Russia lags behind not only developed countries, but also behind other transition countries in Central and Eastern Europe. The claims on the private sector amounted on average to 50% of GDP in the ten new EU member states and to 109% in the old EU member states at the end of 2002, while in Russia this ratio was only 17.7%. However, it should be noted that a number of new EU member states also possess underdeveloped banking markets, with the lowest ratio in Lithuania (14%), and a ratio of around 30% in Poland, the Czech Republic and Latvia.

The volume of deposits and the broad money measure M2 in Russia also exhibited positive trends and amounted to 21% and 30% respectively of GDP in 2003. This reflects the increasing monetization of the economy with barter declining in popularity. At the same time, the major component of M2 is cash and demand deposits, which indicates the low level of trust in the banking industry. On the other hand, the share of foreign deposits in total time and saving deposits decreased from 67% in 1998 to 42% in 2003, more than 10% of this decrease occurring in 2003 alone, reflecting the appreciation of and greater confidence in the rouble.

2.4 Loan growth

As can be seen from Table 3, the volume of lending in real terms picked up in 2000, and loan growth has continued to be strong. Loans in roubles have increased by more than 300% in real terms, whereas the amount of loans in foreign currency only slightly exceed the 1998 level. This is a striking difference with the pre-crisis period, when Russian banks predominantly extended foreign currency loans, which then became uncollectable after the devaluation of the currency.

Looking at the maturity composition of loans, we observe that in 2000 short-term loans (loans up to one year) exhibited rapid growth whereas, between 2000-2003, loans with maturity of over one year grew more rapidly. Despite positive developments in loan maturity, short-term loans still amounted to 61% of total corporate loans in 2003. This situation reflects uncertainty about the future and the constraint on long-term lending posed by the short-term nature of banks’ liabilities.

The most dramatic increase has been in consumer lending. Consumer loans in roubles increased by a factor of 5 between 1998 and 2003. Due to this impressive growth, the share of consumer lending in total loans grew from a very low level of 4.8% in 1999 to 10.3% at the end of 2003. The causes of this rapid loan growth to individuals include the rise in real income, which allows more people to have access to credit. In addition, after the introduction of the 13% flat-rate tax on personal income, reported wages and salaries rose to their actual level, which gave banks proof of revenue and made it easier to grant loans. Retail banking is currently seen as the most exciting growth area in the Russian banking industry, and many large banks are turning their attention to this business, which promises higher interest margins than either loans to corporations or government bonds. Sberbank is still the dominant player on the Russian retail market due to its inherited large branch network. However, other banks are opening new branches and small outlets and pursuing an aggressive marketing policy in order to attract clients. As a result, the share of Sberbank’s branches in the total number of operating branches declined from 42% in 1998 to 32% five years later.

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4 One should not be misled by the longer maturity of existing liabilities. The fact is that a Civil Code Article 837.2 allows a retail depositor to withdraw its funds from a bank on demand, even if the contract was concluded for a fixed term. This makes all deposits de facto demand deposits and only the amendment of this provision will create much needed long-term funds for banks.
Table 3. Loan volume and growth between 1999-2003

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>In % to previous year</td>
<td>Amount</td>
<td>In % to previous year</td>
<td>Amount</td>
<td>In % to previous year</td>
<td>Amount</td>
<td>In % to previous year</td>
<td>Amount</td>
<td>In % to previous year</td>
<td>% change between 1998-2003</td>
</tr>
<tr>
<td>Total loans in roubles</td>
<td>121074.0</td>
<td>-1.7%</td>
<td>262263.0</td>
<td>116.6%</td>
<td>356972.7</td>
<td>36.1%</td>
<td>406977.4</td>
<td>14.0%</td>
<td>545440.9</td>
<td>34.0%</td>
<td>342.8%</td>
</tr>
<tr>
<td>Of which:</td>
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<td></td>
</tr>
<tr>
<td>personal loans</td>
<td>7757.0</td>
<td>-26.8%</td>
<td>15403.5</td>
<td>98.6%</td>
<td>28790.8</td>
<td>86.9%</td>
<td>36737.1</td>
<td>27.6%</td>
<td>69671.4</td>
<td>89.6%</td>
<td>557.8%</td>
</tr>
<tr>
<td>corporate loans</td>
<td>99445.6</td>
<td>-0.1%</td>
<td>226175.0</td>
<td>127.4%</td>
<td>301729.7</td>
<td>33.4%</td>
<td>335000.4</td>
<td>11.0%</td>
<td>436418.5</td>
<td>30.3%</td>
<td>338.2%</td>
</tr>
<tr>
<td>Of which by maturity:</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>less than 1 year</td>
<td>64560.6</td>
<td>26.6%</td>
<td>169610.2</td>
<td>162.7%</td>
<td>240484.2</td>
<td>41.8%</td>
<td>256024.1</td>
<td>6.5%</td>
<td>305787.1</td>
<td>19.4%</td>
<td>499.7%</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>17609.4</td>
<td>-26.1%</td>
<td>29987.2</td>
<td>70.3%</td>
<td>43260.3</td>
<td>44.3%</td>
<td>56902.1</td>
<td>31.5%</td>
<td>100090.8</td>
<td>75.9%</td>
<td>319.8%</td>
</tr>
<tr>
<td>More than 3 years</td>
<td>8987.2</td>
<td>-14.5%</td>
<td>13975.3</td>
<td>55.5%</td>
<td>13281.5</td>
<td>-5.0%</td>
<td>16380.6</td>
<td>23.3%</td>
<td>23245.9</td>
<td>41.9%</td>
<td>121.2%</td>
</tr>
<tr>
<td>loans to banks</td>
<td>13477.3</td>
<td>5.0%</td>
<td>19951.2</td>
<td>48.0%</td>
<td>25014.2</td>
<td>25.4%</td>
<td>34152.8</td>
<td>36.5%</td>
<td>31891.9</td>
<td>-6.6%</td>
<td>148.5%</td>
</tr>
<tr>
<td>Total loans in foreign currency</td>
<td>11339.3</td>
<td>-63.1%</td>
<td>13080.8</td>
<td>15.4%</td>
<td>16965.2</td>
<td>29.7%</td>
<td>23764.2</td>
<td>40.1%</td>
<td>32026.0</td>
<td>34.8%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Of which:</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>personal loans</td>
<td>474.3</td>
<td>-51.5%</td>
<td>362.4</td>
<td>-23.6%</td>
<td>555.6</td>
<td>53.3%</td>
<td>837.6</td>
<td>50.8%</td>
<td>1743.2</td>
<td>108.1%</td>
<td>78.3%</td>
</tr>
<tr>
<td>corporate loans</td>
<td>6897.6</td>
<td>-66.6%</td>
<td>9099.5</td>
<td>31.9%</td>
<td>12662.0</td>
<td>39.1%</td>
<td>17730.3</td>
<td>40.0%</td>
<td>24693.8</td>
<td>39.3%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Of which by maturity:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 1 year</td>
<td>2698.2</td>
<td>-96.7%</td>
<td>4070.3</td>
<td>50.9%</td>
<td>6523.4</td>
<td>60.3%</td>
<td>8379.5</td>
<td>28.5%</td>
<td>10077.6</td>
<td>20.3%</td>
<td>-87.7%</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>24192.7</td>
<td>-56.4%</td>
<td>31106.1</td>
<td>28.6%</td>
<td>41515.5</td>
<td>33.5%</td>
<td>65761.8</td>
<td>58.4%</td>
<td>85089.1</td>
<td>29.4%</td>
<td>53.4%</td>
</tr>
<tr>
<td>more than 3 years</td>
<td>21035.1</td>
<td>-42.6%</td>
<td>25893.8</td>
<td>23.1%</td>
<td>18782.3</td>
<td>-27.5%</td>
<td>23762.7</td>
<td>26.5%</td>
<td>38875.0</td>
<td>63.6%</td>
<td>6.1%</td>
</tr>
<tr>
<td>loans to banks</td>
<td>2376.9</td>
<td>-49.1%</td>
<td>2131.5</td>
<td>-10.3%</td>
<td>2117.8</td>
<td>-0.6%</td>
<td>3337.1</td>
<td>57.6%</td>
<td>2710.4</td>
<td>-18.8%</td>
<td>-42.0%</td>
</tr>
</tbody>
</table>

Source: CBR, author’s calculations.
Note: The original data was in million roubles. In order to facilitate comparison, we have adjusted the data for loans in roubles for inflation and it is presented in millions of 1998 roubles. The data for the loans in foreign currency was converted into dollars using the annual average exchange rate and is presented in million dollars.
3. A lending boom or a permanent financial deepening?

A considerable amount of research has shown that the level of financial development is directly linked to economic growth, capital accumulation and productivity growth (e.g. Levine and Zervos, 1998; Levine et al., 2000). However, the causality of this relationship remains contested. Some theories emphasize the importance of banks in identifying and funding productive investments and consequently encourage financial liberalization which would promote long-term economic growth. On the other hand, growth can spur the demand for investments which can be financed through credit, contributing to the development of financial markets. It is beyond the scope of this paper to solve this puzzle, but it should be noted that the two forces can reinforce each other, and that financial development that is spurred by growth can in turn encourage economic growth through efficient allocation of resources.

Another strand of literature focuses on lending booms and their impact on economic development. During a rapid growth of credit, monitoring becomes impossible because of the large number of contracts, so that financing is extended to projects with low or even negative present value. The situation may be exacerbated in transition countries where banks lack credit risk assessment skills and/or are poorly supervised. Alternatively, banks might increase lending during a boom when asset prices are rising, which in turn would increase asset demand and fuel additional lending (financial accelerator). During a bust, the opposite scenario would develop: banks would face a higher ratio of non-performing loans and sell assets held as collateral, which would drive the asset price down, decrease the net worth of companies and trigger more insolvencies. Not surprisingly, the empirical literature shows that high real growth in loans is a significant determinant of banking crises (Demirguc-Kunt and Detragiache (1997)).

In light of the above discussion the natural question is: what do we observe in Russia? The empirical studies identify lending booms as deviations from the natural trend. However, this is not helpful for a policy-maker who has to decide whether a rapid increase in loans represents a permanent financial deepening or a lending boom. For instance, in Australia the ratio of private-sector credit to GDP rose from 30% to 60% between 1985 and 1993. This is a 100% increase in credit in a short period of time, but it apparently represented a healthy deepening of the financial market in Australia. By contrast, an increase in credit of the same magnitude in Argentina between 1979 and 1982 resulted in a banking crisis and credit reversal.

There are many theories explaining the reasons for a rapid growth in lending (e.g. Gourinchas et al., 2001). The real business cycle theory predicts that favorable macroeconomic conditions and economic expansion cause credits to grow. The investment boom is an outcome of this type of lending growth and the empirical evidence shows that such booms lead to a permanent deepening of the financial market rather than banking crises.

Alternatively, lending booms may be a consequence of financial liberalization, for example in a country where lending is centrally allocated or the banking system overregulated. When liberalization also involves opening the capital account, we can observe a large inflow of foreign capital. The inflow of speculative capital may also be induced by push factors, such as low interest rates in developed countries, making transition markets particularly attractive. Lending booms following these scenarios can be very troublesome, particularly if the requisite banking regulations are not in place.
Because of the difficulty in determining whether rapid loan growth is indeed a sign of a lending boom, we have to look at deeper factors such as the causes of loan growth, the macroeconomic environment, the quality of lending, and concentration of bank loan portfolios.

3.1 Sources of lending growth

To analyse the sources of lending growth in Russia we first compute banks’ balance sheet indicators, and, second, we look at the macroeconomic environment between 1997 and 2003. Table 4 reports annual changes in ratios of balance sheet items to GDP.

The ratios presented in Table 4 show how the growth of claims on the private sector was financed. When lending picked up in 2000, its growth was financed not by increased deposit mobilization, but by declining investment in government bonds (“crowding-in” effect), and the raising of funds through money market instruments. Both factors have remained important determinants of loan growth, but since 2001 deposits have become the main source of banking expansion. In 2003 the ratio of net foreign liabilities to GDP increased by 2.37%, contributing significantly to loan growth. Interestingly, loan growth could have increased at an even faster rate than in 2003, but banks chose to maintain high reserves at the CBR.

When we compare sources of loan growth in pre-crisis and post-crisis periods, there are two differences. First, in the pre-crisis period, the ratio of claims on the government was increasing, reflecting the high real interest rate on government bonds. Second, in 1997 loan growth was not accompanied by capital growth.

Table 4. Financing the growth of the Bank Claims on Private Sector Ratio. Annual changes in ratios between balance sheet items and GDP (in percent of GDP)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Claims on Private Sector</td>
<td>2.38</td>
<td>4.94</td>
<td>-2.53</td>
<td>0.18</td>
<td>3.20</td>
<td>1.21</td>
<td>3.16</td>
</tr>
<tr>
<td>Reserves</td>
<td>0.80</td>
<td>-0.47</td>
<td>0.67</td>
<td>0.76</td>
<td>-0.31</td>
<td>0.48</td>
<td>1.45</td>
</tr>
<tr>
<td>Claims on General Government</td>
<td>0.80</td>
<td>1.71</td>
<td>-0.80</td>
<td>-1.94</td>
<td>-0.71</td>
<td>-0.16</td>
<td>-0.84</td>
</tr>
<tr>
<td>Claims on Non-Financial Public Enterprises</td>
<td>-1.79</td>
<td>-0.76</td>
<td>-0.37</td>
<td>0.00</td>
<td>-0.15</td>
<td>0.20</td>
<td>-0.06</td>
</tr>
<tr>
<td>Claims on Other Financial Institutions</td>
<td>0.33</td>
<td>-0.06</td>
<td>0.00</td>
<td>-0.07</td>
<td>0.05</td>
<td>0.04</td>
<td>0.11</td>
</tr>
<tr>
<td>Deposits</td>
<td>1.54</td>
<td>4.58</td>
<td>-2.30</td>
<td>-0.16</td>
<td>1.20</td>
<td>1.54</td>
<td>1.69</td>
</tr>
<tr>
<td>Money Market Instruments</td>
<td>0.02</td>
<td>0.26</td>
<td>0.75</td>
<td>0.38</td>
<td>0.23</td>
<td>0.74</td>
<td>0.41</td>
</tr>
<tr>
<td>Credit from Monetary Authorities</td>
<td>0.02</td>
<td>2.38</td>
<td>1.25</td>
<td>-1.44</td>
<td>-0.04</td>
<td>-0.72</td>
<td>-0.58</td>
</tr>
<tr>
<td>Capital Accounts</td>
<td>0.04</td>
<td>-0.22</td>
<td>-0.39</td>
<td>-0.42</td>
<td>0.47</td>
<td>0.50</td>
<td>0.66</td>
</tr>
<tr>
<td>Net foreign liabilities</td>
<td>2.10</td>
<td>-1.82</td>
<td>-2.40</td>
<td>-0.10</td>
<td>0.49</td>
<td>0.60</td>
<td>2.37</td>
</tr>
</tbody>
</table>

Source: IFS.

When we compare the sources of loan growth in Russia with the experience of other transition countries in Central and Eastern Europe that experienced high loan growth, we see that the development is very similar in terms of direction but differs in magnitude. The crowding-in effect was present in almost all countries, but not to the extent that we observe in Russia. This is natural as real interest rates on GKO’s were negative after the crisis and domestic government securities were held only for liquidity reasons. On the other hand, deposits were an important source of loan growth, as they increased even faster than loans in Bulgaria, Croatia, and Poland. Even in countries where deposit growth lagged behind loan growth (Estonia and Latvia), deposits still increased on average by 2% of GDP per year.

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5 See the study by Cottarelli et al., 2003. Countries with high loan growth include Bulgaria, Croatia, Estonia, Hungary, Latvia, Poland, and Slovenia.
Net foreign liabilities in the CEECs increased at a lower pace than in Russia. It should be noted, however, that many of these countries saw a decline in cross-border lending as more foreign banks chose to enter the market via subsidiaries. It has been generally agreed that this form of foreign bank penetration is much more stable and brings benefits not only in terms of additional lending funds, but also in terms of improved management and know-how (Haas and Lelyveld, 2002).

3.2 Macroeconomic environment

When we look at the situation in Russia, we can see that, as predicted by the real business cycle theory, credit growth in Russia was preceded by high GDP growth (Table 5). Moreover, after 1999, investments in fixed capital generally grew faster than GDP. This reflects the fact that, as growth recovered, the demand for new investments increased. Despite this investment boost, investments still remain at 18.2% of GDP, which is considered low for a developing country.

Recently, the growth in loans has been caused by large foreign capital inflows into the banking sector. Foreign liabilities of Russian commercial banks soared by 72% in 2003 to reach $27.5bn, of which $16.5bn, or 60%, represent short-term loans. This increase reflected the inflow of cross-border loans from foreign banks, as well as money raised through the issuance of international bonds. Sberbank alone raised $1bn in October, 2003 with a three-year floating rate.

Table 5. Summary of macroeconomic indicators 1997-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth of loans to the private sector</td>
<td>30.89</td>
<td>28.60</td>
<td>-17.26</td>
<td>27.18</td>
<td>25.11</td>
<td>12.28</td>
<td>29.26</td>
</tr>
<tr>
<td>Real GDP growth</td>
<td>0.9</td>
<td>-4.9</td>
<td>5.4</td>
<td>9.0</td>
<td>5.0</td>
<td>4.7</td>
<td>7.3</td>
</tr>
<tr>
<td>CPI</td>
<td>14.8</td>
<td>27.7</td>
<td>85.7</td>
<td>20.8</td>
<td>21.5</td>
<td>16.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Change in gross capital formation</td>
<td>-7.9</td>
<td>-12.4</td>
<td>6.4</td>
<td>18.1</td>
<td>10.2</td>
<td>3</td>
<td>12.9</td>
</tr>
<tr>
<td>Current account in % to GDP</td>
<td>-0.02</td>
<td>0.08</td>
<td>12.56</td>
<td>18.03</td>
<td>11.02</td>
<td>8.54</td>
<td>9.00</td>
</tr>
<tr>
<td>Government balance in % of GDP</td>
<td>-8.5</td>
<td>-8.2</td>
<td>-3.1</td>
<td>2.7</td>
<td>2.9</td>
<td>1.4</td>
<td>1.0</td>
</tr>
<tr>
<td>Real deposit rate</td>
<td>1.74</td>
<td>-8.32</td>
<td>-38.79</td>
<td>-11.81</td>
<td>-13.7</td>
<td>-9.35</td>
<td>-6.79</td>
</tr>
<tr>
<td>Real lending rate</td>
<td>15.05</td>
<td>11.06</td>
<td>-24.78</td>
<td>3.03</td>
<td>-2.92</td>
<td>-0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>Exchange rate (year average)</td>
<td>5.78</td>
<td>9.71</td>
<td>24.62</td>
<td>28.13</td>
<td>29.17</td>
<td>31.35</td>
<td>30.69</td>
</tr>
<tr>
<td>International reserves (in bill US $)</td>
<td>17.8</td>
<td>12.2</td>
<td>24.66</td>
<td>24.64</td>
<td>24.66</td>
<td>24.66</td>
<td>24.66</td>
</tr>
<tr>
<td>Foreign liabilities of banks (in bill US $)</td>
<td>16.6</td>
<td>14.6</td>
<td>11.9</td>
<td>9.8</td>
<td>12.3</td>
<td>16.0</td>
<td>27.5</td>
</tr>
<tr>
<td>Of which short term (in bill US $)</td>
<td>16.3</td>
<td>6.6</td>
<td>4.5</td>
<td>6.3</td>
<td>8.2</td>
<td>9.4</td>
<td>16.5</td>
</tr>
<tr>
<td>International bonds issued by financial institutions</td>
<td>2.9</td>
<td>2.5</td>
<td>2.1</td>
<td>1.2</td>
<td>1.7</td>
<td>2.6</td>
<td>7.7</td>
</tr>
<tr>
<td>FDI inflows (in bill US $)</td>
<td>4.86</td>
<td>2.76</td>
<td>3.31</td>
<td>2.71</td>
<td>2.75</td>
<td>3.44</td>
<td>6.8</td>
</tr>
<tr>
<td>FDI net (in mil US $)</td>
<td>1681</td>
<td>1492</td>
<td>1102</td>
<td>-463</td>
<td>216</td>
<td>-48</td>
<td>-200</td>
</tr>
<tr>
<td>RTS Index</td>
<td>396.86</td>
<td>58.93</td>
<td>175.26</td>
<td>143.29</td>
<td>260.05</td>
<td>359.1</td>
<td>567.25</td>
</tr>
</tbody>
</table>

Source: IFS, EBRD Transition Report, CBR, BIS.

Some experts, including officials from the Bank of Russia, believe that further accumulation of short-term foreign indebtedness by commercial banks poses a real threat of a repetition of Russia’s 1998 financial crisis. In order to decrease foreign borrowing by Russian banks, the CBR passed a new regulation that stipulated a reserve requirement of 2% on foreign bank borrowing.

However, there are distinct differences between the pre-crisis situation and that prevailing today. First of all, the official international reserves of the Bank of Russia have been rising continuously and currently amount to $76.9bn. Therefore, net foreign bank liabilities amount to only 7.8% of foreign exchange reserves, whereas before the crisis they stood at more than 22%. The Guidotti

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6 The measure is heavily criticized by Russian bank managers, not only because it makes new foreign borrowing more expensive, but because it also applies to existing foreign liabilities which were made without the expectation of any such requirement.
ratio of 31.9% in March of 2004 also indicates that foreign exchange reserves provide a sufficient guarantee in case of a sudden capital outflow\(^7\). Second, the Bank of Russia is paying more attention to currency risk now, and the ratio of currency risk to capital consequently declined from 42.9% at the beginning of 2001 to 8.4% in 2004. And finally, the macroeconomic situation is much more stable than in 1997-98 with a budget surplus, strong economic growth and a current account surplus. Interestingly, Russian banks’ foreign liabilities come not only from foreign banks, as was the case in 1998, but were also raised through the issuance of international bonds. Finally, according to BIS (Bank for International Settlements) international statistics, in 2003 Russia was the largest net creditor among emerging economies (see Box 1).

In addition to foreign capital inflows, another reason for the high loan growth could be the low (and very often negative) real interest rates (see Box 2) which have persisted since 1999 as a result of two forces. First of all, monetary policy has pursued the twin targets of inflation and the exchange rate. Due to external factors such as low interest rates in international markets and high oil prices, the CBR tried to keep the rouble from rapid appreciation by accumulating huge international reserves, which has created excess liquidity in the banking system. Raising interest rates in this situation would conflict with the target of exchange rate stability.

The second force shaping interest rates on the Russian banking market is the monopolistic position of Sberbank on the retail deposit market, which allows it to set low deposit and lending rates. In order to attract depositors, the remaining banks set interest rates higher than Sberbank’s in order to earn an interest margin, though keeping them low lest they lose their clients to Sberbank. The existing situation can only be resolved when deposit insurance becomes functional and Sberbank’s share of the deposit market falls, allowing more competition.

Low real interest rates have a number of implications for the economy. They inflate the demand for loans because they make repayment very easy. Even projects with negative present value can be financed with such loans (which could lead to inefficient allocation of resources). As long as interest rates remain low, there is no problem for the stability of the banking industry. However, when real interest rates rise, borrowing enterprises might find themselves unable to meet their repayment obligations. This could happen due to a number of internal or external factors, such as tighter monetary policy, lower inflation, a rise in world interest rates, or worsening terms of trade leading to the depreciation of the rouble.

To summarize, the main source of loan growth in Russia has been the demand for new investments spurred by economic growth. However, growth may have been too fast owing to factors such as real negative interest rates and high capital inflows. If this proves to be the case, the quality of the underlying loan portfolios will be a key factor in mitigating the impact on the economy.

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\(^7\) The Guidotti Rule suggests that a prudently managed economy will have a short-term external debt no greater than its stock of foreign exchange reserves. After the Asian crisis the Guidotti ratio of 50% is considered to be sufficient (Lubin, 2002).
Box 1. Cross-border position of Russian banks

BIS international statistics report cross-border liabilities and claims of BIS reporting banks vis-à-vis banks (including the CBR and the Russian Finance ministry) and non-banks in Russia. These statistics allow us to see the drastic difference between the present situation and the time before the 1998 crisis.

In 2003 claims of BIS reporting banks on Russian banks increased from 13.7 billion USD to 21.4 billion USD. At the same time, the CBR and Russian commercial banks hold large deposits in BIS reporting banks, which makes Russia the fourth largest gross creditor to the international banking market (behind China, Taiwan and Mexico). In 2001, Russian banks’ assets abroad exceeded their foreign liabilities for the first time and currently Russia is the largest net creditor among emerging markets, providing a net 28 billion USD to BIS reporting banks (compared with China’s 24 billion USD). In contrast, in 1998 Russian banks were net debtors to the BIS reporting banks, which made them more vulnerable to the reversal of sentiment toward the Russian economy.

It should be emphasized, however, that these statistics reflect the position of the Russian banking sector including the CBR, whereas Russian commercial banks became net debtors in 2003. Therefore, a withdrawal of foreign liabilities would still negatively affect Russian banks.

At the same time, credit of BIS reporting banks to the Russian non-bank industry has been increasing continuously since 2001. Foreign banks often extend cross-border loans to leading Russian corporations without being physically present in Russia. A typical loan extended by a foreign bank carried an interest rate of 4-8% at the end of 2003, whereas for a similar long-term loan at a domestic bank corporations were charged 9-12%. This leads to foreign banks cherry-picking the best borrowers on the Russian market, leaving bad credit risk clients for domestic banks. It should be noted that Russian banks are also losing their best clients to foreign investors as international bond issues by Russian companies are growing fast.
The average real lending rate has been either negative or zero since 2001, which presumably has a significant impact on the demand for loans. However, the average rate includes rates for loans of different maturities and for different clients.

Real interest rates on loans to corporations adjusted with CPI were volatile between 2000 and 2001 and have been nearly zero since than. This clearly indicates that banks might have had incentives to lend for bad investment projects, since negative real interest rates made repayment much easier. The situation with the interest rates adjusted with PPI is more complicated. Negative real interest rates might have been beneficial for companies that sell intermediate goods, but at the same time if PPI grows faster than CPI, companies producing consumer goods might have more difficulty in repaying loans. This was the case in 2000 and 2003.

Household loans have exhibited the highest level of loan growth and hence it would be interesting to know whether there are signs of overborrowing due to low borrowing costs. When we adjust individual loan interest rates with the CPI, we see that real interest rates have grown from very negative values in 2000 to highly positive values in 2003. However, when we use a non-traditional approach and discount individual interest rates with the wage index, interest rates are negative. This indicates that borrowers use consumer loans for consumption smoothing purposes; however, we cannot exclude overborrowing since, as long as wages rise faster than CPI, it will be easy for borrowers to repay loans.
3.3 The quality of the loan portfolio

When loans grow too fast, it becomes difficult to screen new contracts and monitor existing ones, and the quality of the loan portfolio may therefore deteriorate. However, there is currently no evidence of this happening in Russia. Figure 1 shows that the amount of overdue loans decreased steadily after the crisis and amounted to 1.62% of total loans in 2003, which is much lower than the level of overdue loans in other CEECs. However, the current loan portfolio has not been put to the test by harsh macroeconomic conditions. According to Standard & Poor’s, the gross volume of problem loans that would emerge in the event of an economic recession might reach 50-75% of the total credit portfolio.

Interbank loans are an exception as the share of overdue loans is more than twice as high as the equivalent ratios for loans to enterprises and individuals. The interbank market in Russia is characterized by a low level of liquidity; the share of interbank loans actually decreased from 16% of the total amount of loans in 1998 to 7% in 2003. The reason for this is the lack of trust between banks which stems from a lack of transparency in ownership and supervision.

In order to gain further insight into the subject, we decided to look at the loan quality indicators for different bank groups. Table 6 shows statistics for the largest 40 banks in Russia, which are divided into five subsets: Sberbank, other state banks (6 banks), large private banks (10 banks), medium private banks (18 banks), and foreign banks (five banks). We look not only at the loan loss reserves, but also at growth rates for different subsets, because this can also serve as an indicator of vulnerability.

![Figure 1. Loans overdue in percent of respective loan portfolios](image)

Source: CBR.

We are particularly interested in the performance of Sberbank and other state banks, because international experience shows that state banks are more likely to be inefficient in providing financial services. La Porta et al. (2002) find that countries with high state ownership of banks experience a lower level of financial development, economic growth and productivity. State banks tend to have more concentrated portfolios and give loans to large and inefficient state enterprises, failing to allocate capital to its highest use. Barth et al. (2004) argue that state bank ownership does not lead directly to financial instability, but that government ownership is positively correlated with tighter restrictions on bank activities, restrictions on bank entry and prohibitions on foreign loans, and is negatively associated with private monitoring. In Russia, the situation is even more
delicate, because the Bank of Russia is not only the regulator of the largest state bank, Sberbank, but also its majority owner, creating a conflict of interest which might lead to regulatory forbearance.

State banks in Russia grew after the crisis because of their preferential treatment by the government. They were recapitalized, received privileges during government debt restructuring, and were even subject to lower reserve requirements in the wake of the crisis (till December 1998). Not surprisingly, their loan portfolios grew faster than those of other banks. In 2000, loans extended by Sberbank increased by 45% in real terms, whereas loans by other state banks grew by almost 80%. Sberbank’s and other state banks’ share of loans in total assets also increased from 32% and 15% in 1999 to 48% and 33% respectively in 2002.

The rapid loan expansion of Sberbank and other state banks in the wake of the crisis raises many questions. If lending had become so profitable, why did other banks not also expand their loan portfolio? Conversely, if lending was not profitable, why did Sberbank and other state banks lend so much? In fact, in 2002 lending by large private banks picked up while loan growth of state banks moderated. Nevertheless, as we mentioned before, Sberbank succeeded in gaining a large share of the loan market in the aftermath of the crisis.

Table 6. Statistics on loan growth and loan loss reserves for bank subsets

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth in loans (in % to previous period)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sberbank</td>
<td>45.28</td>
<td>17.31</td>
<td>6.43</td>
<td>81.38</td>
</tr>
<tr>
<td>Other state banks (6)</td>
<td>79.28</td>
<td>53.93</td>
<td>17.84</td>
<td>225.21</td>
</tr>
<tr>
<td>Large private banks (10)</td>
<td>20.43</td>
<td>19.12</td>
<td>33.35</td>
<td>91.30</td>
</tr>
<tr>
<td>Medium private banks (18)</td>
<td>20.94</td>
<td>7.58</td>
<td>7.50</td>
<td>39.87</td>
</tr>
<tr>
<td>Foreign banks (5)</td>
<td>-1.19</td>
<td>35.26</td>
<td>17.03</td>
<td>56.40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loans (in % of total assets)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sberbank</td>
<td>44.00</td>
<td>49.57</td>
<td>47.53</td>
<td>32.37</td>
</tr>
<tr>
<td>Other state banks (6)</td>
<td>24.57</td>
<td>31.35</td>
<td>32.62</td>
<td>15.46</td>
</tr>
<tr>
<td>Large private banks (10)</td>
<td>36.29</td>
<td>38.41</td>
<td>45.55</td>
<td>34.75</td>
</tr>
<tr>
<td>Medium private banks (18)</td>
<td>52.47</td>
<td>49.23</td>
<td>49.81</td>
<td>49.41</td>
</tr>
<tr>
<td>Foreign banks (5)</td>
<td>25.74</td>
<td>35.15</td>
<td>39.26</td>
<td>31.72</td>
</tr>
</tbody>
</table>

|                    |          |          |          |           |
| Loan loss reserves (in percent of loan portfolio) |          |          |          |           |
| Sberbank           | 11.96    | 9.22     | 9.12     | 18.41     |
| Other state banks (6)| 13.30    | 12.76    | 9.85     | 35.30     |
| Large private banks (10)| 7.24  | 7.26     | 6.63     | 10.29     |
| Medium private banks (18)| 12.99 | 10.23    | 7.55     | 21.08     |
| Foreign banks (5)  | 4.27     | 2.85     | 2.56     | 10.17     |

Source: BankScope, author’s calculations.

Table 6 also reports loan loss provisions to total loans ratios under International Accounting Standards (IAS) for subsets of banks. It should be mentioned that this item differs significantly

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8 State banks include inter alia Vneshtorgbank (Bank for Foreign Trade) and Vnesheconombank (Bank for Foreign Economic Affairs). Following the World Bank Study (2002), Gazprom Bank, currently the third largest Russian bank, is excluded from this group. Even though it is controlled by the state owned Gazpromgroup, its business profile is similar to FIG banks and, therefore, it is included in the subset of large private banks.
under the Russian Accounting Standards (RAS) and IAS\(^9\). For example, Sberbank’s loan loss provisions (LLP) amounted to 9.1% of total loans in 2002 under IAS (in 1999 it was 18.4%), but to only 5.1% under the RAS (8.1% in 1999). Since calculations in Table 1 are based mostly on IAS, these numbers are higher than the official statistics of the Bank of Russia, which still relies on the RAS.

Sberbank and other state banks have much higher LLPs than either private Russian banks or foreign banks. This supports the assumption that state banks are more prone to directed lending. In the past, regional governments have influenced the allocation of credit, with the result that in Dagestan, for example, 90% of credits extended by the regional Sberbank were said to be overdue in 2000 (Oxford Analytica Brief 2000). The problem may have been alleviated when the system of territorial bank offices was consolidated from 71 to 17 in 2000, because there are currently no significant differences in the net interest margin earned by Sberbank in the different regions of Russia.

The improving quality of banks’ loan portfolios may not reflect the true risk undertaken by banks, which can be hidden by high loan growth and negative real interest rates. Moreover, it is likely that Russian banks roll over existing loans in order to mask their portfolios’ true risk. Another risk faced by Russian banks comes from their high exposure to large borrowers and their loan concentration in oil and gas companies, which we explore in the next subsection.

3.4 Concentration of the loan portfolio

The concentrated exposure to large borrowers and related parties has very often been blamed for the Russian banking crisis; yet in spite of this recognition it still remains one of the sources of vulnerability for the Russian banking system. Banks are exposed to two types of concentration risk: high exposure to large borrowers (defined as loans larger than 5% of capital) and high exposure to certain industries, such as oil and gas.

High exposure to large borrowers is related to the nature of the Russian economy, which is characterized by a high level of concentration at national level. A survey conducted by the World Bank shows that the 23 largest private owners control 36% of all industry sales with a particularly high concentration in oil and raw materials, automobiles and chemicals. Given the small size of most banks in Russia and the large number of potential borrowers, it is not surprising that the loan exposure is highly concentrated. Another reason for lending only to a few large, often connected, borrowers lies in the lack of transparency of Russian firms and the weak rule of law, which discourages banks from lending to clients whom they do not know.

Table 7 reports statistics on measures of exposure to a single borrower and to related parties. The share of large loans in the total loan portfolio did not decrease but, rather, actually increased between 1999 and 2002. The rating agency Standard & Poor’s notes that around 40% of the credit portfolio of Russian private banks rated by S&P is held by the 10 largest borrowers. However, banks have made considerable progress in complying with the CBR’s requirements. In 2002, banks controlling fully 42% of the total banking assets were in breach of the maximum limit for

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\(^9\) Russian banks have created a number of schemes that are allowed by RAS and which help them to keep loan loss provisions low. For example, a bank transfers an amount of money to an enterprise on condition that the latter will repay it with interest. This transaction can be treated either as a loan or as a purchase of a promissory note under the RAS. Of course, the loan loss provisions and disclosure requirements are different in both cases. Under IAS the substance of the transaction would become more important and, despite differences of form, the transaction would be considered as a loan.
exposure to a single borrower, whereas this figure was down to 7% by the end of 2003. The current ratio of banks’ large loans to capital is 241% and is well within the CBR’s limit of 800%. However, the experience of the previous crisis shows that it can go up very rapidly: between 1998 and 1999 the ratio jumped from 170 to 700 percent (IMF, 2003).

The concentration of exposure could be even higher than suggested by the ratio of large loans to capital. First of all, banks employ a number of techniques to circumvent CBR concentration limits. One common scheme involves placing funds on the correspondent account of a “friendly” bank, which in turn gives a loan to a designated borrower, disguising the concentration position of the first bank (World Bank, 2002). Second, the official data covers the concentration of formal ownership only, and avoids the question of effective control, which may be exercised through many different channels, such as holding companies, off-shore arrangements and business alliances. Finally, concentration is measured as a share of capital which, according to the CBR, has been inflated in many large banks.

Table 7. Measures of exposure to a single borrower and to related parties (percent)

<table>
<thead>
<tr>
<th></th>
<th>1.07.98</th>
<th>1.01.99</th>
<th>1.01.00</th>
<th>1.01.01</th>
<th>1.01.02</th>
<th>1.01.03</th>
<th>1.01.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ratio of large loans to capital</td>
<td>167.7</td>
<td>450.2</td>
<td>275.7</td>
<td>249.4</td>
<td>216.1</td>
<td>228.6</td>
<td>241.0</td>
</tr>
<tr>
<td>The ratio of large loans to total loans</td>
<td>n.a.</td>
<td>n.a.</td>
<td>29.2</td>
<td>30.2</td>
<td>31.1</td>
<td>32.1</td>
<td>35.1</td>
</tr>
<tr>
<td>Assets controlled by banks that violate H7</td>
<td>n.a.</td>
<td>n.a.</td>
<td>12.4</td>
<td>3.2</td>
<td>1.6</td>
<td>0.17</td>
<td>0.00</td>
</tr>
<tr>
<td>Assets controlled by banks that violate H6</td>
<td>n.a.</td>
<td>n.a.</td>
<td>30.1</td>
<td>45.3</td>
<td>45.6</td>
<td>42.3</td>
<td>7</td>
</tr>
<tr>
<td>Assets controlled by banks that violate H9</td>
<td>n.a.</td>
<td>n.a.</td>
<td>6.0</td>
<td>3.2</td>
<td>1.8</td>
<td>0.04</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Capitalization</td>
<td>23.1</td>
<td>11.5</td>
<td>18.1</td>
<td>19</td>
<td>20.3</td>
<td>19.1</td>
<td>16.7</td>
</tr>
</tbody>
</table>

Source: CBR.

Note: H6 refers to the limit of exposure to a single borrower (<25% of own funds), H7 – limit of loans to large borrowers (<800% of capital), and H9 – limit on the credit exposure to a single shareholder or insider (<20%).

The risks of high exposure to large borrowers were shown clearly during the stress-testing of the Russian banking system conducted by the IMF. The results show that in the case of the shock similar to 1998, the current exposure concentration could magnify losses by 40% in aggregate. Related-party exposures, which are concentrated in FIG banks, were estimated to increase losses by one third (IMF, 2003).

One of the largest problems faced by the Russian banking industry is its high exposure to the oil and gas industry. The problem is difficult to deal with because of the weight of the oil and gas sector in Russia’s national accounts; according to the World Bank, they amounted to around 16% of GDP in 2000. Since there are no prudential norms set by the CBR, the extent of the problem is difficult to measure. However, a number of large banks publish this information in their annual reports and there are indicators that banks are attempting to diversify their loan portfolios away from the oil and gas sector. Sberbank, Vneshtorgbank, and Gazprombank decreased their shares of loans to the gas and oil industry from 22%, 47% and 75% in 2001 to 18%, 33%, and 54% respectively in 2002. Despite this positive trend, the economic risks remain very high, and the banking system would be heavily affected by a terms-of-trade crisis.

Currently, there are no international best practices on managing the risks to banks arising from a high concentration of the economy. However, the following policy options should be considered. In the short run, banks should be required to collect and report data on industry exposures.

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*10 For more discussion on this issue see Narain et al. (2003).*
Prudential limits on exposure to a single industry are usually not advised, though banks can be required to set their own internal limits for industries listed by the CBR. In the long run, development of credit risk transfer techniques, such as securitization and credit risk derivatives, should be encouraged.

4. The outlook for further loan growth

Russian banks continue to invest in development of branch networks and information technologies, expecting further growth of their assets. Is this behaviour supported by microeconomic and macroeconomic developments? In this section we look at a number of factors that have an impact on loan growth: capitalization, profitability, potential sources of financing, macroeconomic outlook and banking reforms.

Capitalization

Figure 2 shows that capitalization has been declining continuously since 1999 and could thus be a constraint on further loan growth. Despite high profits that have contributed to the absolute growth of capital, rapid loan growth has eroded the capitalization of many banks. The current level of capitalization of 15.78% (May, 2004) might seem sufficiently high compared to the required 10%; however, a number of considerations should be taken into account. First of all, capitalization is calculated according to the RAS and the shift to IAS will force banks to revise their capital downward. Second, many banks have developed a number of schemes to inflate their capital and its true level is therefore lower than that stated. The scale of the problem is significant. The CBR has audited 634 of the largest banks and has found a “technical capital increase” in 137 of them. The estimations of the Development Centre indicate that banking sector capital was inflated by about 15% at the end of 2002 (Tompson, 2004).

Figure 2. Capitalization and profitability of Russian banks

![Graph showing capitalization and profitability of Russian banks]

Source: CBR.
Note: Capitalization is measured as ratio of equity to risk weighted assets for the largest 30 Russian banks. Return on assets (ROA) is measured as profits before taxes divided by average annual assets.

Crowding-in

Another important factor that has contributed to Russian banks’ loan growth is the decreasing investment in government bonds. This reflects a “crowding-in” effect resulting from stronger

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12 Banks wanting to participate in the Deposit Insurance should have a capital-to-weighted-assets ratio of 11%.
fiscal discipline since 1999-2000. Most banks hold only a small amount of government securities
for liquidity purposes. The only exception is Sberbank, whose share of the government securities
market increased from 56.6% in 2000 to 71.9% in 2003, but which is likely to decline as well.

New products

In the future, loan growth seems likely to continue in new financial products, such as consumer
lending, mortgages, SME financing, and leasing. Consumer lending took off in 2000 and the share
of individual loans increased from 4.8% in 1999 to 10.3% at the end of 2003. One of the
commonest forms of consumer lending is the overdraft, but credit cards and instalment loans in
shopping centres are becoming increasingly popular. Mortgages have also grown during the last
year, albeit from a low starting level. Every month new banks offer mortgage schemes,
anticipating a significant increase in home financing after all the required legislation is in place.

There is also potential for growth in SME lending. Currently, fewer than 1% of small businesses
rely on bank loans. To improve the situation, the government announced that it was making
increased access to funds for SMEs its priority and pledged around 100 million USD for SMEs
loan guarantees for the Russian Development Bank. However, such administrative measures
without further legislative reforms will not have the desired effect. The Central Bank of Russia has
already taken a number of steps to simplify extending loans to SMEs. However other reforms, such
as writing off bad SME loans without a court decision (which has been under discussion since
2002) and establishing movable property register and credit bureaux, should be speeded up. It
should nevertheless be noted that the above new loan products bring not only benefits, but also
new risks, since banks are not familiar with the lending technology and the society has no real
credit culture.

Deposit growth

Past experience shows that growth in loans by banks in Russia and in a number of CEECs has been
financed by a rise in household savings. In this respect the current Deposit Insurance (DI) reform
should be discussed, since one of its goals is to attract household money into the banking system.
This so-called “mattress money” is estimated at 40-80 billion USD (Tompson, 2004) and would be
an important source of long-term financing for Russian banks. However, there are some doubts
about the role of DI in expanding the deposito r base (see e.g. Cull, 1998). As Tompson (2004)
notes, the Russian population choose to keep their money at home despite the explicit state
guarantee extended to state-owned banks, so it may be assumed that the general deposit insurance
is unlikely to change their behaviour. Furthermore, the Russian DI’s coverage is fairly low, which
also weakens its capacity to mobilize household deposits. However, the introduction of this safety
net should contribute to the development of a level playing field and will lead to competition for
household deposits, which will result in a redistribution of household deposits from Sberbank to
private banks.

The impact of the May-July 2004 “mini-crisis”

One of the main reasons for introducing the DI is to prevent bank runs by depositors in times of
financial distress that lead to the illiquidity of otherwise viable institutions (Diamond and Dybvig,
1983). However, recent developments in the Russian banking market show exactly the opposite:
speculation about which banks will be included in the DI scheme has led to instability on the
interbank market and to bank runs. The turmoil on the Russian bank market started when, on May
13, 2004, the CBR withdrew Sodbusinessbank’s licence, accusing it of infringing the anti-money-
laundering legislation. The fact that even banks with strong financial fundamentals can lose a license forced banks to rethink their position towards their counterparts. Another bank was liquidated and scandals and rumors surrounded other institutions. The lack of trust caused a drop in activity on the interbank market, and interest rates jumped from 1.3% in January-March to 9.4% in June. The small bank Credittrust lost its access to the external funding market owing to an alleged ownership connection to the Sodbusinessbank and, as a result, announced its bankruptcy on June 3.

Sodbusinessbank and Credittrust account for about 17 billion roubles (600 million USD) of assets or 0.33% of total banking assets. However, the fear that more banks might be liquidated or go bankrupt alarmed depositors, who rushed to withdraw their money from such stable institutions as Alfa bank. This in turn pushed more banks into illiquidity, among them Guta Bank, the 22nd largest bank in terms of assets. On July 8 the CBR reacted by introducing a number of stabilization measures, including extending the deposit guarantee even for funds held at banks that would not be covered by the deposit guarantee scheme. This calmed the market. However, future deposit growth will depend on the success of the reforms and the ability of the CBR to implement an orderly closure or restructuring of the remaining problem banks.

Foreign liabilities

The banks’ foreign liabilities increased dramatically in 2003, giving them one more source of financing. However, we anticipate that foreign liabilities will increase much more slowly in the future. This will reflect changing external factors, such as higher interest rates in developed countries, as well as internal factors, such as the introduction by the CBR of required reserves for foreign bank liabilities. The increased uncertainty surrounding the introduction of the DI will also play a role. In fact, in the first half of 2004 Russian banks experienced a slight outflow of foreign liabilities for the first time since 1999.

Macroeconomic situation

As our previous analysis shows, the current high loan growth in Russia was preceded by a strong economic expansion. Therefore, expected GDP growth may be a good indicator of future loan growth. According to the IMF, real GDP will grow by 7.25% in 2004 and will slow down to 6.5% in 2005. The Russian minister of economic affairs estimates that growth will average 6% between 2005 and 2007. At the same time there is a consensus that the economic growth connected with the export of raw materials is not sustainable in the long run and that the Russian economy should become more diversified. In the last few years, the growth of non-oil industries, particularly railroads and communication, has been very strong.

Growth in asset prices

As we have already noted, changes in asset prices may act as a financial accelerator. Rising asset prices may magnify the lending boom, while declines may add to the bust phase of the lending cycle. In fact, both stock and property prices have grown very rapidly in Russia and have surpassed the pre-crisis level. However, for the financial accelerator to work, the level of company

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13 The Russian situation in 2004 resembles the situation in Indonesia in 1997, when the closure of 16 insolvent banks caused massive bank runs. Of course the two cases are different, because in Indonesia banks were closed in the middle of the Asian crisis, whereas Russia is enjoying macroeconomic stability and rapid economic growth. However, the two situations are similar, in that both of them are characterized by a lack of clear criteria for liquidating banks, which creates ambiguity about the future of the remaining banks.
indebtedness should be sufficiently high. Despite rapid loan growth, most investments are still financed by retained earnings, and therefore declines in asset prices would have only a marginal effect on the quality of loan portfolios. However, a decline in the stock market can influence banks’ profitability due to the fact that they hold large portfolios of securities. Banks benefited from the strong growth of the stock market between 1998 and 2003, but their profitability has already been negatively affected by the stock market decline in 2004.

Banking reform

The CEECs’ experience showed that lending growth was higher in countries where banking reform had advanced (Cottarelli et al., 2003). According to the EBRD index of banking sector reform, Russia still lags far behind the CEECs. As we mentioned earlier, fast loan growth in an environment characterized by the lack of a regulatory framework and weak supervision can lead to a number of problems\(^\text{14}\). At the same time it should be mentioned that the pace of reform of the Russian banking industry has accelerated recently. A wide range of new legislation on banking regulation, deposit insurance, mortgages, and credit bureaux has been adopted or is under discussion. One of the most extensively debated current reforms is the establishment of the financial “safety net” in Russia, which encompasses the following three elements: deposit insurance, reform of prudential regulation and supervision, and measures to increase the transparency of the banking industry, such as IAS\(^\text{15}\).

There still remain many areas in which reforms are needed in order to transform the Russian banking industry into an efficient, stable market. These include (1) legislation strengthening the enforcement of financial contracts, loan recovery and the realization of collateral; (2) legislation on bank liquidations; (3) streamlining of procedures for mergers and acquisitions; (4) changes in the tax and regulatory framework to facilitate syndicated lending; and (5) revision of the article of the civil code that allows borrowers to withdraw even fixed term deposits from a bank on demand. Furthermore, banking reform cannot be separated from reforms in other areas, namely bankruptcy and judicial reform, and the adoption of IAS in the real sector (Tompson (2004)).

\(^{14}\) The rapid growth in mortgages, which rose from 56 to 500 million USD between 2001 and 2003, is worrying, since the regulatory framework is still not in place.

\(^{15}\) For a detailed analysis of the introduction of the financial “safety net” see Tompson (2004).
5. Conclusions and policy suggestions

The present paper describes the development of the Russian banking industry between 1999-2003 and analyses its possible vulnerability due to rapid loan growth. The analysis reveals a number of strengths and weakness of the Russian banking sector:

i. There are many indicators that the observed loan growth is a sign of permanent financial deepening. First of all, it was preceded by strong GDP growth and followed by a rise of investments in fixed assets. The quality of the loan portfolio has improved since the crisis. Banks are also attempting to diversify their portfolios away from the oil and gas industries and starting to compete on the retail market by offering new products such as consumer loans and mortgages. However, Russian banks operate in an environment of negative real interest rates, which inflates the demand for loans because the repayment of loans is easier. This might result in a situation where projects with negative net present value are financed by loans.

ii. The bank claims on the private sector increased from 16% to 21% of GDP between 1998 and 2003. Both assets and liabilities in roubles exhibited strong growth, which suggests that confidence in the national currency is growing. The maturity of the loan portfolio has also increased. The highest growth was exhibited by loans to individuals, with the proportion of consumer lending in the total amount of loans growing from a very low level of 4.7% in 1999 to 10.7% at the end of 2003. However, while consumer lending and loans to large corporations have grown considerably, many small and medium enterprises are still excluded from bank intermediation.

iii. The growing confidence in the Russian banking market and low interest rates on the world market have spurred the high inflow of foreign capital to the banking industry. In light of strong economic growth and high foreign reserves, the rising foreign liabilities do not pose a threat to the stability of the banking system. However, 60% of them are of short maturity and may be vulnerable to a reversal when investors’ confidence falters. Furthermore, since some of the long term bonds (e.g. Sberbank) are issued at the floating rate, the eventual rise in the international interest rates will put additional pressure on banks.

iv. The monopoly position of Sberbank continues to distort the competition on the banking market. Due to its developed branch network and implicit deposit insurance Sberbank attracts a high, albeit declining, share of the retail market, controlling around 66% of deposits, while its share in the loan market increased from 11% to 28% between 1998 and 2002.

v. The current rapid loan growth will not continue in the short term for a number of microeconomic and macroeconomic reasons, such as declining capitalization, uncertainty about future growth of deposits, and expectation of lower GDP growth. Loan growth in the longer term depends mainly on the success of the ongoing banking reform.

One of the most important reforms currently undertaken by the CBR is the creation of the “safety net”, which includes the introduction of Deposit Insurance, international accounting standards, and more effective prudential regulation and supervision. The crucial issue here is the ability of the CBR to admit only viable banking institutions into the DI scheme, but the recent instability in the Russian banking market has underlined the difficulty of this task.
In addition to the “safety net” reform, more progress should be made in the following areas:

i. **The ownership of Sberbank should be transferred from the Bank of Russia to the state, and the privatization of other state banks should be accelerated.** Three of the five largest Russian banks are controlled by the state. The risks of state bank ownership are widely known and talks are ongoing about the privatization of Vneshtorgbank, but the process is very slow. Sberbank’s situation is more difficult, because its major shareholder is the Bank of Russia, which might cause regulatory forbearance due to conflict of interests.

ii. **Bank consolidation should be encouraged.** Consolidation of the banking system would have a number of positive effects. First of all, it would purge the system of small, undercapitalized banks and, would therefore alleviate the problem of high exposure to large borrowers. Second, the smaller number of banks would facilitate banking supervision by the Bank of Russia. However, the current legislation makes consolidation a very complicated and time-consuming process, and many banks are waiting for the new legislation to be passed before they initiate a merger.

iii. **A credit information sharing mechanism should be introduced.** Information sharing about borrowers’ characteristics and their indebtedness can have significant effects on credit market activity. First, it improves the banks’ knowledge of applicants for loans and permits a more accurate prediction of repayment probabilities. Second, it reduces the informational rents that banks could otherwise extract from their customers. Third, it can operate as a borrower discipline device. Finally, it eliminates the incentive for borrowers’ to become over-indebted by drawing credit simultaneously from many banks.

iv. **On-site and off-site regulation and supervision should be improved.** Currently, off-site supervision focuses on completeness of reports and compliance with the prudential standards, rather than on the analysis of the underlying risk. Data on banks’ shareholders is not always available and information on the effective control of banks is even scarcer. The survey conducted by the World Bank shows that about 17% of banking assets belong to banks which are part of financial and industrial groups. In order to assess the risks entered into by these banks, the consolidated supervision of FIGs should be made possible.

v. **Risks arising from high loan exposures to the oil and gas industries should be better managed.** In the short run, banks should be required to collect and report data on industry exposures. Prudential limits on exposure to a single industry are not advised, but banks may be required to set their own internal limits for industries listed by the CBR. In the long run, development of credit risk transfer techniques, such as securitization and credit risk derivatives, should be encouraged.

vi. **Further reforms should be undertaken to ensure the rule of law in the country.** Many experts have mentioned that the 1998 crisis had little effect on the real sector of the economy. However, the crisis itself and the events that followed (for example, creation of bridge banks that took over the assets but not the liabilities of failing banks) have further damaged the population’s confidence in banks. Therefore, for the banking reform to be successful, it should be accompanied by the enforcement of bankruptcy, contract, and private property laws, improved consumer protection and strengthened corporate governance.
References