Banking and Financial Stability in Russia and the Euro Area amid International Financial Market Turbulences

Stephan Barisitz,
Gernot Ebner,
Mathias Lahnsteiner,
Johannes Pann[1]

This study was drafted during the preparation of the Fifth Joint High-Level Eurosystem – Bank of Russia Seminar hosted by the OeNB in Vienna on March 11–12, 2009. The first part of the study illustrates developments in the euro area, where the financial sector suffered to some extent from spillover effects from the first waves of the subprime crisis and later more substantially from the demise of Lehman Brothers. While rescue actions taken by national authorities and the ECB mitigated crisis effects, current challenges arise from a cyclical deterioration of credit quality and further adverse developments in global financial markets. The study highlights the considerable exposure of euro area banks to emerging Europe in general and their more modest exposure to Russia in particular. It then discusses developments in Russia: Embarking from a quite favorable macroeconomic environment, Russia was caught up in the global financial turbulences only in recent months, but the impact was heavy and exacerbated by structural weaknesses of the Russian economy. The Russian authorities' crisis response measures have been substantial and contributed to staving off a systemic banking crisis, but the sector remains fragile. The paper concludes with comments on lessons learnt: Confidence – which is the foundation of the financial system – needs to be restored. Structural and institutional problems have to be addressed adequately. Interbank markets should be made more resilient to shocks.

JEL classification: E52, G18, G21, G28
Keywords: Banking system, contagion, crisis response measures, euro area, financial crisis, financial rescue package, financial stability, Russia

1 Introduction

This study was drafted in preparation for the Fifth Joint High-Level Eurosystem – Bank of Russia Seminar hosted by the Oesterreichische Nationalbank (OeNB) in Vienna on March 11–12, 2009.[2] The aim of the seminar series was to strengthen dialog and deepen relations between the Bank of Russia (CBR) and the Eurosystem, which have intensified in recent years. The Vienna seminar was attended by high-level representatives, including presidents and governors, of Eurosystem central banks and the CBR, as well as by representatives of the European Commission and of the Government and the Federal Assembly of the Russian Federation. The program was divided into three sessions, the first of which was prepared by the CBR, the second by the ECB and the third by the OeNB.

OeNB Governor Ewald Nowotny welcomed participants and also addressed the seminar with a keynote speech on banking and financial stability in Russia and the euro area. Governor Nowotny stressed that it is a common challenge to restore confidence in financial institutions by credible recapitalization and loan loss recognition as well as to revive interbank markets and

[1] *Foreign Research Division and Financial Markets Analysis and Surveillance Division, stephan.barisitz@oenb.at, gernot.ebner@oenb.at, mathias.lahnsteiner@oenb.at, johannes.pann@oenb.at. The authors are thankful for valuable comments received from Peter Backé, Thomas Reininger and Markus Schwaiger (all OeNB). This study reflects the state of knowledge as at the time of the seminar and has since not been updated. Editorial close: March 10, 2009.*

[2] *The previous four high-level seminars were hosted by Suomen Pankki – Finlands Bank in Helsinki in 2004, the Bank of Russia in St. Petersburg in 2005, the Deutsche Bundesbank in Dresden in 2006 and the Bank of Russia in Moscow in 2007.*

strengthen their resilience in times of stress. In his opening remarks, ECB President Jean-Claude Trichet emphasized that the financial crisis has hit both the euro area and Russia. In light of the common challenges, the most important task of policymakers in the euro area and Russia is to help resolve the crisis quickly and thoroughly, President Trichet underlined.

Session I was chaired by ECB Board Member Lorenzo Bini Smaghi and entitled "Current state of the Russian economy – challenges for monetary policy." Sergey M. Ignatiev, Chairman of the Bank of Russia, held a keynote speech on this topic. He pointed out that the significant deterioration of the economic situation toward the end of 2008 had prompted the CBR to actively apply instruments of monetary policy and to take additional measures to strengthen liquidity in the banking sector. Notwithstanding the financial market turbulences, the CBR intends to persevere with efforts to bring about a gradual reduction of inflation. Seminar participants noted that both the euro area and Russia have been hit by the severe global economic slowdown as foreign demand for exports has declined and domestic demand has been negatively affected by worsening economic prospects and a tightening of financing conditions. They agreed that the outlook for the euro area and the Russian economy is surrounded by considerable downside risks. However, crisis response measures taken by the authorities in recent months should provide support to economic activity.

Session II, chaired by ECB President Trichet, dealt with "The impact of commodity price developments on domestic and global inflation." In his keynote speech, ECB Deputy Director General Gilles Noblet pointed out that the sharp increases in commodity prices until mid-2008, followed by substantial price declines, have exerted a considerable influence on consumer prices. Participants agreed that a good understanding of the nature and duration of these commodity price fluctuations, and of their impact on the medium- to long-term outlook for price stability, was essential for the conduct of monetary policy.

The focus of session III, chaired by the President of the Deutsche Bundesbank, Axel Weber, was "Banking and financial stability in Russia and the euro area in the context of international financial market turbulences." Participants reviewed developments in the banking sector, focusing on the impact of the global financial crisis. They noted that, though developments in the euro area and Russia have been different in various respects, financial stability conditions have worsened significantly since the onset of the global financial turmoil. They also discussed the crisis response measures taken and planned by the respective governments to contain stability risks and restore confidence in the banking sector.

This study served as a background paper for Governor Nowotny's abovementioned keynote speech. Section 2 briefly outlines developments in the global economy, while section 3 focuses on the euro area, whose financial sector suffered to some extent from spillover effects from the first waves of the subprime crisis and later more substantially from the bankruptcy of Lehman Brothers. After reviewing rescue packages taken by national authorities, the study highlights the exposure of euro area banks to emerging Europe in general and to Russia in particular. Section 4 discusses banking sector developments in Russia. Amid a rather favorable macroeconomic environment, the global financial turbulences reached

Russia only in recent months, but the impact was heavy and exacerbated by structural weaknesses of the Russian economy. The paper continues by discussing Russian crisis response measures, their scope and effectiveness. Putting the latest figures into context, section 5 analyzes risks to financial stability in a scenario of continued stress with regard to both the euro area and to Russia. Finally, section 6 concludes with comments on lessons learnt.

2 Developments in the External Environment

The financial crisis has pushed the world economy into an abrupt downturn. All forecasts – whether from international organizations or national institutions – paint the same basic picture: a strong decrease of growth in 2009. Many countries will experience, or are already going through, a recession. At the same time, inflation – under the impact of the massive drop of energy and raw material prices and of worsening demand conditions – is expected to recede markedly. World economic recovery is not expected before 2010. However, major uncertainties relate to the depth of further repercussions of the financial crisis on the real economy, to the size of the impact of real economic developments on the financial sector and to the time of the turning point. In the euro area, annual GDP growth declined from 2.2% in the first quarter to –1.3% in the fourth quarter of 2008. According to the IMF's projections of January 2009, euro area GDP is expected to contract by about 2% in 2009. While robust Russian economic expansion in the first half of 2008 (+8.0% year on year) had benefited from record-level oil prices, the change in the external environment, in particular the plunge of the oil price, contributed to a marked deceleration of growth in the third (–6.2%) and fourth (–1%) quarters. The IMF expects Russian GDP to contract by 0.7% in 2009.

3 Banking and Financial Stability in the Euro Area[3]

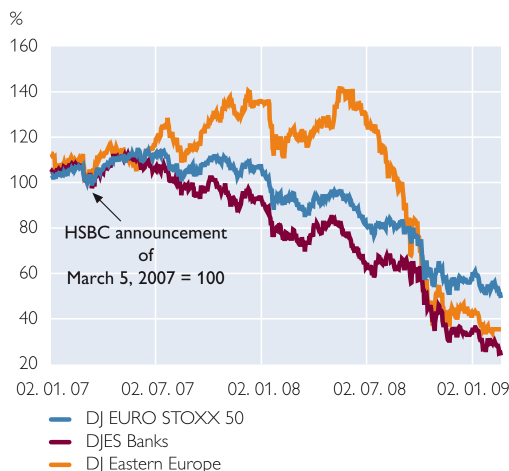
From the last High-Level Seminar until July 2007, macrofinancial conditions were very favorable. The financial sector's profitability was high, asset quality and asset prices were rising, volatilities in equity, bond, credit and foreign exchange markets were low by historical standards, and risk premiums were extraordinarily small ("pricing for perfection"). This trend may also have promoted high credit growth in some emerging economies. However, below the surface significant imbalances had been building up at various levels in the global economy and the global financial system.

Before the financial market turmoil began in July 2007, the financial conditions of large and complex banking groups (LCBGs) in the euro area had been generally strong. Banks had enjoyed improvements in fee, commission and trading income. Capital buffers were comfortable relative to regulatory requirements, but were slightly diluted due to higher risk-taking. Turning to structural banking developments, a continuation of the consolidation process and hence of market concentration, driven by the dynamic growth of certain banking groups with intense mergers and acquisitions (M&A) activi-

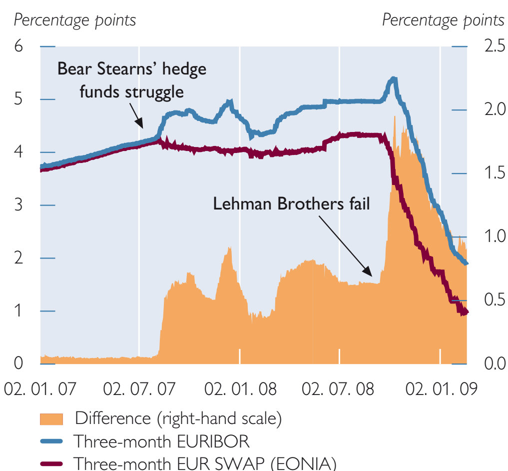
[3] *Our analysis is based on ECB publications including the ECB Financial Stability Reviews of June and December 2008 and the 2005, 2006 and 2007 reports on EU Banking Sector Stability and on EU Banking Structure.*

Chart 1

Stock Index Developments



Three-Month Risk-Free and Interbank Rates



Source: Bloomberg.

Note: Data as of February 20, 2009.

ties, was observed. A further noteworthy trend was the significant increase in the number of acquisitions by EU credit institutions of banks located in third countries.

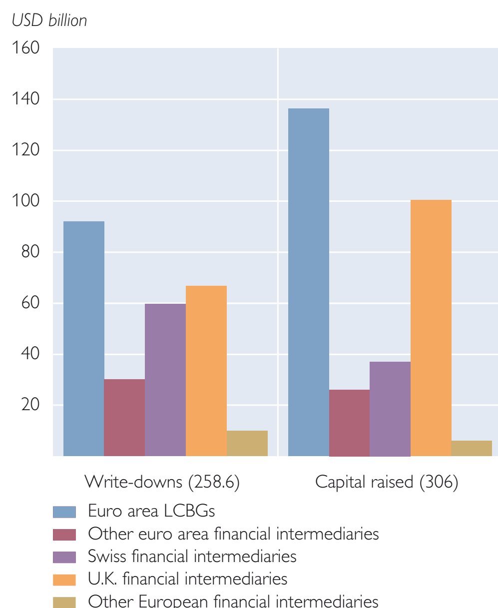
3.1 Lehman Brothers' Default Raised Uncertainty and Counterparty Risk to Unmatched Levels

When the U.S. subprime crisis erupted in July 2007, its impact was initially limited to financial markets in industrialized economies and a few emerging markets. However, in September 2008, the failure of Lehman Brothers – the largest bankruptcy in U.S. history – marked the transition from financial turmoil to crisis (see chart 1). Increased concerns about counterparty risk and uncertainty about their own liquidity needs prompted banks to either hoard liquidity or lend funds only for a very short term at relatively high rates and/or against collateral. The default of Lehman Brothers also challenged the widely held view that any large bank that was thought to be too large or too interconnected to fail would be supported by the public authorities. This triggered a sharp increase in EURIBOR-EONIA spreads across all maturities. In this environment, euro area banks were forced to make more frequent use of the ECB marginal lending facility. At the same time, amounts placed on the deposit facility rose significantly, implying significant impairment of the redistribution of interbank liquidity.

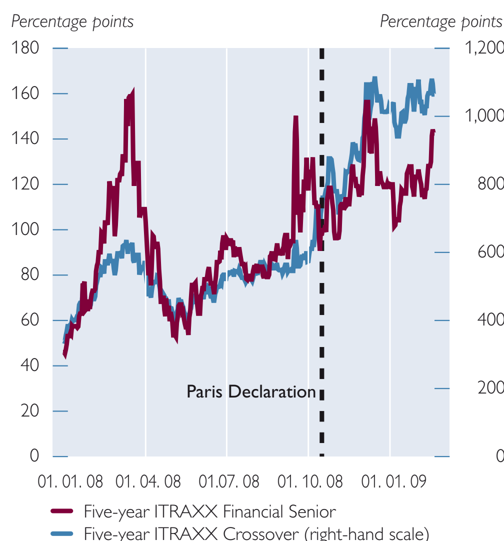
Major wholesale funding markets have been under increased pressure; even covered bonds have been adversely affected. Until the beginning of 2009, no major covered bond issuance took place. In the first three quarters of 2008, the volume of new European securitization issuance fell by 9.4% (year on year) to EUR 343.5 billion, while at the same time deal sizes increased and the share of issuances with the highest ratings went up to 84% from 68% in September 2007. In the fourth quarter, however, issuances went up by EUR 367.6 billion to reach a total of EUR 711.1 billion in 2008.

Chart 2

Write-Downs and Capital Raised



Credit Default Swap Spreads



Source: Bloomberg.

Note: Data as of February 20, 2009.

According to market observers, the majority of securitizations are being retained, presumably for repo purposes in central bank liquidity schemes. Thus, the public securitization market remained frozen.

3.2 Loss of Confidence not only among Financial Market Participants

After the failure of Lehman Brothers, many euro area banks became subject to the risk of being hit by a loss of confidence in, and speculation about, their liquidity or solvency positions, especially those that relied on wholesale funding and on big structured credit portfolios. In late September 2008, two large euro area banks with large-scale cross-border activities came under intense market pressure. In Germany, too, a major commercial property lender faced severe funding problems. As a result, heightened uncertainty among the general public drove up cash demand. Mutually reinforcing dynamics became important drivers of market developments as leveraged investors including hedge funds were forced to unwind loss-making positions.

3.3 Financial Crisis Impairs Profitability

As a result of the intensified financial turmoil, the profitability of euro area banks fell significantly in the second half of 2008. Net profits decreased strongly year on year, and some banks even posted outright losses. In a remarkable development, the decline in quarterly earnings accelerated over the last quarters of 2008. This drop can be traced back mainly to write-downs of exposures to securities affected by the financial market turmoil and losses by proprietary trading units (chart 2) as well as to rising loan loss provisions. The development of CDS spreads shows that the intensification of the financial turmoil and the deteriorating macrofi-

nancial environment have driven up risk premiums for the financial sector and for nonfinancial issuers with weak credit ratings.

3.4 Comprehensive Rescue Actions to Mitigate Crisis Effects

In the course of the crisis, both monetary and fiscal policymakers intervened on the basis of their statutory roles in the Eurosystem. Faced with money market disruption, the ECB increased the frontloading of liquidity in its main refinancing operations (MROs) in the second half of September 2008 by allotting even larger amounts in excess of the benchmark amount. On October 8, 2008, it announced that MROs would henceforth be carried out through fixed-rate tender procedures with full allotment and that the width of the corridor formed by the marginal lending facility and the deposit facility would be narrowed symmetrically from 200 to 100 basis points.[4] Moreover, on October 15, 2008, the Governing Council of the ECB decided to carry out all longer-term refinancing operations (LTROs) through fixed-rate tender procedures with full allotment and to extend the list of eligible collateral. In addition, the ECB decreased its interest rates on main refinancing operations from 4.25% to 1.5% between October 8, 2008 and March 11, 2009. The ECB has also taken coordinated action with other national central banks in order to improve the smooth functioning of the money and swap markets, as foreign currency funding had dried up. The ECB entered into swap agreements with the Federal Reserve, the Swiss National Bank and Danmarks Nationalbank and into repo agreements with Magyar Nemzeti Bank and Narodowy Bank Polski.

At the euro area level, the heads of government agreed on a framework and an action plan to support banks on October 12, 2008. This plan involved measures that included a strengthening of deposit guarantee schemes, offering government guarantees for bank debt issuance and providing capital injections to systemically important banks. This framework was fully endorsed by the European Council at its meeting on October 15 and 16, 2008. In line with the framework, more than EUR 2.0 trillion have thus far been pledged by euro area governments to guarantee banks' new debt issuance, support their recapitalization or purchase their assets.

3.5 Rescue Packages Foster Gradual Improvement in Money Markets

The announcement, adoption and incipient implementation of the rescue packages has contributed to safeguarding banking sector stability; there has been no bankruptcy of a major financial institution. The rescue measures, in combination with other measures taken by central banks, have fostered a gradual improvement in the money market and reduced systemic risk. However, it is too early to draw conclusions on the effectiveness of the rescue packages because of the lagged effect of measures and the unavailability of timely data. It has to be borne in mind that even with the rescue measures in place, the supply of bank lending to the real economy cannot realistically mean a return to the situation before the crisis, when credit was plentiful and risk was underestimated.

[4] *With effect from January 21, 2009, this corridor was widened again to 200 basis points to restore the interbank market.*

The financial turmoil has triggered a debate on the future regulatory framework at the global level, which is based on many elements including (1) the extension of the coverage of regulation to all components of the financial system that are relevant for its stability, (2) the strengthening of prudential requirements for credit institutions and (3) the reduction of the potential procyclicality of capital requirements and accounting standards as well as an increasing transparency of structured credit products and ratings. Several public and private sector initiatives, among them the G-20, the Financial Stability Forum and the Institute of International Finance, have actively contributed to the debate.

3.6 Markets' Higher Capital Requirements Are Met with Government Capital Injections

Not least because of the high uncertainty regarding the value of banks' assets, markets require that banks have capital ratios that are significantly above the regulatory minimum also because of the high uncertainty regarding the value of banks' assets. The deleveraging activities of banks and their support through capital injections by national governments led to a small rise in solvency ratios. In the case of euro area LCBGs, both the capital adequacy and the tier-1 ratio were on average at their pre-crisis levels at the end of 2008, but their ranges widened. Furthermore, recapitalizations raised discussions about possible market distortions and the quality of injected capital. This led to clarifying communications by, and approval procedures with, the European Commission to ensure the harmonization of national rescue operations, causing some delay in their implementation. Some banks are hesitant to accept government support, which may be related e.g. to the fear of a negative stigma for banks that are in relatively good financial condition or to the attractiveness of financial rescue packages.

3.7 Rescue Packages Contributed to Increased Sovereign Risk Premiums

The implications of the rescue packages (and broader fiscal stimulus measures) for the supply of sovereign debt have been reflected in widening yield spreads and disappointing auction results. These developments highlight the need for governments to take the long-term sustainability of public finances into account when devising and implementing rescue and stimulus measures (see table 1).

3.8 Some of the Identified Risks Materialized

In their background paper for the last High-Level Seminar, Korhonen and Winkler (2005) pointed out several risks to the euro area banking system which have since materialized to some extent. Their paper highlighted, for instance, the vulnerability of euro area banks to liquidity and credit risks. Furthermore global imbalances came to the fore as predicted (i.e. heightened exchange rate risks, a reduction of banks' profits and a repricing of risks). However, it remains to be seen whether banks have adequately provided for lower credit quality in home markets.

3.9 Exposures to the U.S.A. and the U.K. Prevail and Entail Further Contagion Risks

An early lesson to be learned from the U.S. subprime crisis was certainly that contagion from other banking sectors and global financial markets is an important source of risk for euro area financial stability. According to the

Table 1

A Comparison of Crisis Response Measures, Banking Sector Assets, Government Debt Ratios and Outstanding Amounts of Short-Term Debt

	Euro area	AT	BE	CY	DE	ES	FI	FR	EL
Rescue packages in EUR billion									
Capital injection	239.1	15	18.4	–	80	–	4	43	5
Asset purchases/swaps	98	–	–	–	–	50	–	–	8
Guarantuees/loans/credit lines	1922.5	75	90.8	–	499.8	100	50	374.8	15
Rescue packages in % of GDP									
Capital injection	2.6	5.3	5.3	–	3.2	–	2.1	2.2	2.0
Asset purchases/swaps	–	–	–	–	–	4.6	–	–	3.3
Guarantuees/loans/credit lines	20.8	26.4	26.0	–	20.1	9.1	26.3	19.1	6.1
Banking sector assets as of December 2008									
Total assets in EUR billion	31,807	1,068	1,279	119	7,893	3,374	396	7,698	465
% of GDP	343	376	366	705	317	307	208	393	190
Government debt in % of GDP									
GDP in 2008	9,261	284	349	17	2,489	1,098	190	1,958	244
Budget deficit in 2008	–1.3	–0.6	–0.5	1	0	–1.6	5.1	–3	–2.5
Government debt 2008	66.6	57.4	86.5	48.2	64.3	37.5	31.6	65.4	93.4
Short-term debt securities, outstanding amount as of December 2008 in % of GDP									
Government	6.1	0.9	13.8	2.8	1.9	4.9	3.9	8.2	2.7
Financial institutions	8.1	6.5	3.7	3.4	6.1	6.7	12.4	20.4	0.9
Nonfinancial institutions	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Source: ECB, Eurostat, government announcements and OeNB calculations.

Table 1 cont.

A Comparison of Crisis Response Measures, Banking Sector Assets, Government Debt Ratios and Outstanding Amounts of Short-Term Debt

	IE	IT	LU	MT	NL	PT	SI	SK
Rescue packages in EUR billion								
Capital injection	10	20	2.9	–	36.8	4	–	–
Asset purchases/swaps	–	40	–	–	–	–	–	–
Guarantuees/loans/credit lines	485	–	0.1	–	200	20	12	–
Rescue packages in % of GDP								
Capital injection	5.4	1.3	7.8	–	6.3	2.4	–	–
Asset purchases/swaps	–	2.5	–	–	–	–	–	–
Guarantuees/loans/credit lines	260.0	–	0.3	–	34.0	11.9	32.0	–
Banking sector assets as of December 2008								
Total assets in EUR billion	1,744	3,700	1,274	42	2,225	483	49	50[1]
% of GDP	935	233	3,408	740	378	288	131	77
Government debt in % of GDP								
GDP in 2008	187	1,585	37	6	589	167	38	66
Budget deficit in 2008	–5.5	–2.5	2.7	–3.8	1.2	–2.2	–0.2	–2.3
Government debt 2008	31.6	104.1	14.1	63.1	48.2	64.3	21.8	28.8
Short-term debt securities, outstanding amount as of December 2008 in % of GDP								
Government	0.0	9.3	–	6.4	12.2	8.7	0.2	–
Financial institutions	14.2	0.1	–	0.0	3.9	1.5	0.0	–
Nonfinancial institutions	–	0.1	–	0.0	0.0	0.1	–	–

Source: ECB, Eurostat, government announcements and OeNB calculations.

[1] *Figure taken from the 2007 BSC Structural Report.*

BIS, the United Kingdom and the United States together accounted for more than half of euro area banks' consolidated foreign claims at end-2008, and offshore centers for another 7.5%. These exposures refer not only to traditional lending activities but also to investment banking, proprietary trading and asset management. A lot of bad news have already been priced into these markets, but the following risks still prevail:

- *Persistent economic weakness and a further deterioration of housing markets.* Adverse developments could not only increase delinquency ratios further and weaken credit demand, but might also continue to depress real estate prices and hence collateral values.
- *Prolonged risk aversion of investors and issuers.* This could continue to depress noninterest income, decrease efficiency and necessitate further downsizing. The resulting high volatility may pose a potential burden for banks' profits.
- *Counterparty risks vis-à-vis hedge funds and insurance companies.* Both the hedge fund and the insurance industry act, inter alia, as important counterparties in derivatives trades, but as they have recently experienced substantial pressures (e.g. hedge funds received redemption calls and faced tighter bank lending conditions; insurance companies may have suffered a marked decline in the value of investments), their outlook is highly uncertain.

3.10 Euro Area Banks Exposed to Emerging Europe Face Severe Challenges

Aside from banking activities in the economically developed countries, traditional banking activities in emerging markets in general, and in Central, Eastern and Southeastern European (CESEE) countries (mainly non-euro area EU Member States) in particular, have become increasingly important. At end-September 2008, euro area banks' consolidated claims vis-à-vis CESEE (including Turkey) amounted to about 13.6% of total foreign claims or 9.6% of euro area GDP according to BIS data. However, exposures to CESEE economies vary significantly across euro area banking sectors. In most cases, risks are contained because of the small size of the exposures (compared to claims on the U.S.A. and the U.K.), but a prolonged crisis in this region would constitute a serious additional burden for euro banks that are already stressed.

Sharply increased risk aversion and deleveraging activities and, in particular, the malfunctioning of international foreign exchange swap markets dried up liquidity not only in banks' funding markets but also in government bond markets. Together with rising expectations of recession in the CESEE region's main export markets, this put several currencies under depreciation pressure. Local policymakers and supervisors intervened with regulatory, monetary and fiscal measures. In certain cases, the International Monetary Fund (IMF), the World Bank, the EU and the ECB stepped in and provided assistance.

There are several challenges for euro banks with respect to their CESEE business:

- *Adverse funding conditions.* Excessive lending growth rates, especially in foreign currencies, have increased the ratio of nonbank loans to nonbank deposits in several countries and aggravated currency as well as maturity mismatches. However, even if the lending boom was partly financed by the external borrowing

(from their parent banks) of euro area banks' subsidiaries, the latter continue to be predominantly locally funded.

- *Relatively low levels of loan loss provisions.* The recent credit boom in CESEE took place in a very benign economic environment. Banks may therefore have underestimated credit risks (especially under fixed exchange rate regimes in some smaller countries).
- *Relatively low tier-1 capital ratios.* Banks' focusing on shareholder interests has led to high lending growth rates and high returns on equity, but also to weaker capital buffers.
- *Relatively high goodwill.* Tightening competition pushed up prices of acquisitions and hence led to material goodwill in banks' balance sheets.

On the one hand, both direct and indirect lending by foreign banks to CESEE countries has been beneficial to borrowers and lenders (and their respective countries of residence) alike and has entailed positive externalities for third parties. On the other hand, the involvement of foreign banks means that CESEE economies are vulnerable to problems that a foreign bank may suffer from its exposure in other countries inside or outside this region. Factors that could magnify contagion effects on other CESEE countries and on the home country itself are basically the centralized (capital and liquidity) management of subsidiaries by parent banks, the large asymmetry in foreign exposures between home and host countries, the concentration of funding sources and the often very short maturity of foreign claims. These strong linkages make coordinated responses of home and host countries vital.

3.11 Euro Area Banks Have Boosted Lending to Russia, in Particular Cross-Border and Often at Short Maturities

While foreign banks' total involvement is relatively smaller in Russia than in other countries of the region, it consists mainly of more unstable direct cross-border lending by nonparent banks (to banks and nonbanks in Russia). During the period of benign global credit and liquidity conditions before the outbreak of the crisis, Russian banks and nonbanks increased their foreign liabilities – both market instruments and syndicated loans – swiftly and substantially (see also below). These relatively cheap funds have been provided to a considerable degree by large euro area banks. At the end of 2008, foreign banks (from 24 BIS reporting countries) held consolidated claims on Russia of EUR 163 billion or 14% of Russian annual GDP. Approximately three-quarters of this amount consisted of direct cross-border loans. Consolidated claims of euro area banks amounted to roughly 10% of Russian annual GDP, or 1.3% of the annual euro area GDP. At the same time, Russian banks and enterprises have also found rising investment opportunities in the euro area.

Particularly in the context of the current international economic crisis, however, one should not forget the real economic links between the euro area and Russia and their potential repercussions. An aggravated downturn in the euro area economy may have negative spillover effects on its trading partners' real economies and, consequently, also on their financial stability.

4 Banking and Financial Stability in Russia[5]

After the 1998 crisis, Russian banking recovered only hesitantly. Toward the middle of the current decade, however, some important and long-awaited advances were achieved as regards the upgrading of prudential supervision, steps toward introducing the International Financial Reporting Standards (IFRS) and the creation of a general mandatory deposit insurance scheme.[6] Moreover, in mid-2006, the CBR removed all remaining capital controls and the Russian ruble became fully convertible. In the second half of the decade, swift expansion of banking activities resumed in a favorable environment characterized by high economic growth (by almost 7% p.a. on average; see table A1 in the annex), continuously rising oil prices and prudent macroeconomic policies.

The speed of the expansion of banking activity reached a climax just before the impact of the U.S. subprime crisis made itself felt in Russia in the late summer of 2007 (see chart 3). Lending to enterprises and particularly to households has been the driving force of this expansion. The share of foreign exchange deposits in total deposits followed a downward path (dedollarization) and arrived at 20% in mid-2007 (see table A2 in the annex). With credit demand steadily outstripping deposit growth, banks increasingly resorted to – relatively cheap – foreign borrowing to finance their lending activities. Taking up funds abroad had become cheaper thanks to the country's improved credit ratings, an abundance of liquidity on the world markets and persistent nominal appreciation pressures on the Russian ruble. Thus, banks' external debt as a percentage of their total liabilities grew from about 15% at end-2004 to 23% at end-2007 (and 25% in mid-2008, of which about one-third was short term).

Attracted by the buoyant economy, the credit boom and high profitability, inward banking FDI started to get off the ground. The share of majority foreign-owned credit institutions in total banking sector assets almost doubled from 8% at end-2004 to around 15% in mid-2007 (coming to 19% by end-September 2008). Yet various institutional/structural difficulties have remained. One shortcoming has been the uneven distribution of liquidity and insufficient functioning of the interbank market, as pointed out by Korhonen and Winkler (2005).[7]

4.1 Spillover Effects from International Financial Turbulences since August 2007

Private sector capital inflows into Russia have become more volatile since the summer of 2007 (see chart 3), reflecting the impact of the U.S. subprime crisis and the ensuing global financial turmoil. Interest rate levels on the domestic interbank loan market, which took some of the strain from the contraction of inflows, were pushed up (see chart 4). However, overnight lending rate levels remained negative in real

[5] *Our analysis is principally based on CBR data and publications.*

[6] *However, further advances from compliance-oriented to risk-oriented accounting, valuation and supervision practices are still needed.*

[7] *In the Russian interbank market, only a few banks have tended to act as liquidity providers and many second-tier credit institutions typically lack adequate collateral and therefore face difficulties in refinancing themselves through the market or the monetary authority. In stress situations like the one that affected several banks in 2004 – and again in 2007 and 2008 – liquidity can quickly dry up, forcing some market players to sell their assets.*

Chart 3

Deposits and Credit as a Percentage of GDP

Net Capital Flows to the Private Sector

Source: Bank of Russia (CBR).

[1] *Excluding interbank deposits or credit, respectively.*

terms. The CBR contributed to calming down the situation by quickly and repeatedly supplying liquidity. An end-2007 surge in government spending also helped ease liquidity strains. However, the sharp rise of inflation since the fall of 2007 has complicated the CBR's banking stabilization policy. Pushed by significantly increasing food and energy prices, consumer price inflation rose to 11.9% at end-2007 and to above 15% in mid-2008 (year on year). From the fall of 2007 to the summer of 2008, the monetary authority had to steer a middle course between the opposing goals of monetary policy and bank soundness.

4.2 Strong Impact of Aggravation of Global Crisis since September 2008

The drastic worsening of the U.S. and global financial crises in September 2008 gave rise to expectations of a worldwide downturn and sent the oil price plummeting.[8] Together with the immediate global deleveraging process of financial institutions (in particular hedge funds), this led to a plunge of the Moscow stock exchange (RTS) index by almost 75% from its heights reached earlier in the year until mid-October. The outflow of previously accumulated foreign capital inflows and the stock market downturn had a destabilizing impact on the Russian economy in general and the financial sector in particular, given their specific vulnerability as characterized by

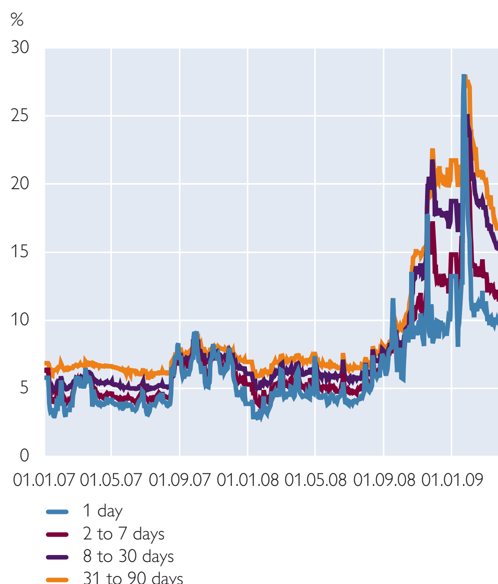
– the sizeable accumulated external debt (to nonparent sources) of Russia's banking sector and private nonbanks (shares of total private sector debt and banking sector debt in Russia's total external debt at end-September 2008: 92% and 37%, respectively) heightened depen-

[8] *Crude oil prices (Urals grade) declined from an average monthly price of USD 129 per barrel in July 2008 to USD 69 in October and USD 38 in December.*

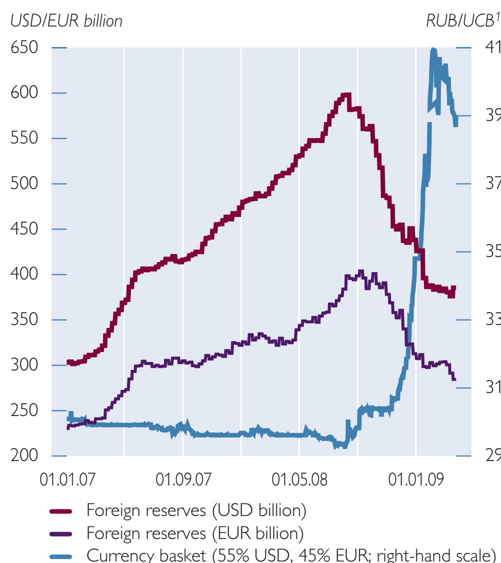
[9] *Total deposits started to contract in real terms in October 2008.*

Chart 4

Interbank Interest Rates



Foreign Reserves and Russia's Currency Basket



Source: Thomson Reuters, Bank of Russia (CBR).

[1] *UBC=unit of currency basket (55% USD, 45% EUR).*

dence on debt-creating capital inflows, given the low net FDI inflows into the Russian economy and its banking sector (the latter totaling 1.4% of GDP in the first half of 2008),

– the exposure of the Russian banking sector to the stock market through extensive leveraging and the widespread but risky practice of pledging corporate shares to raise cash *(repo stock loans),* which led to sizeable margin calls (often triggering fire sales) as the value of credit collateral declined.

The sudden stop of capital inflows hit an already fragile interbank market, whose overnight lending rates reached double digits in mid-September 2008 and repeatedly spiked in the following months, indicating a liquidity squeeze. The liquidity situation of credit institutions deteriorated markedly and exerted pressure on their capitalization. This is true particularly of medium- and smaller-sized institutions, which often have limited deposit bases and insufficient liquid assets for use as collateral. Some of them grew illiquid and had to close down.

The oil price dive, massive capital outflows and the stock market plunge unleashed downward pressures on the Russian ruble, which increased the currency risk in banking activities. This added to concerns about the illiquidity of some banks. Deposit withdrawals gathered momentum, further aggravating the liquidity squeeze.[9] Redollarization tendencies re-emerged and accelerated.

4.3 Crisis Response Measures: Scope and Effectiveness

The CBR immediately and massively responded to accelerating capital outflows by intervening in the foreign exchange market in defense of the Russian

[9] *Total deposits started to contract in real terms in October 2008.*

ruble. Consequently, Russian foreign reserves (including gold), which had almost reached USD 600 billion in early August 2008, fell back to USD 485 billion by end-October. Expressed in euro, however, foreign reserves moved much less and remained more or less stable at around EUR 380 billion to EUR 385 billion, owing to exchange rate movements during these weeks (see chart 4). In the second half of September and the first half of October 2008, the Russian authorities issued a number of strong measures to inject liquidity, shore up financial markets and support the economy. Major elements of these measures included:

– a temporary placement of public-sector deposits (from the federal budget) in selected banks,
– a cut of reserve requirements to provide liquidity,
– a pledge of official foreign reserves (RUB 1,300 billion, equaling USD 51 billion or EUR 36 billion) to extend foreign currency loans to help repay and service enterprises' and banks' external liabilities,
– the provision, by the government and the CBR, of long-term financing of RUB 950 billion (EUR 27 billion) in subordinated loans to the largest (mostly state-owned) banks, and
– the provision of government support for companies traded on the stock market.

Moreover, in the first three weeks of October 2008, three mid-sized credit institutions were bailed out by the state. The authorities certainly aimed at ruling out any popular impression that a crisis of the dimension of the 1998 crisis (including multiple bank runs etc.) could again take place. The total amount of money pledged, provided or disbursed by the authorities in their crisis response measures is estimated to amount to about EUR 150 billion (or around 13% of Russian GDP). Additional measures, including loans and capital injections to state-owned banks totaling about EUR 20 billion to EUR 30 billion, are currently being discussed.

4.3.1 Problems of Implementation of Crisis Response Measures

While the Russian financial sector appeared to have at least temporarily stabilized by late October 2008, the implementation of the above-mentioned measures and policies faced some serious problems.

– *Sluggish implementation:* Some of the liquidity-boosting measures announced in mid-September and thereafter, particularly government assistance to industrial corporations, do not appear to have been implemented as swiftly and comprehensively as planned.
– *Insufficient "trickle-down effect:"* While the large, mostly state-owned banks targeted to receive financial support were also expected, or even required, to on-lend money to smaller illiquid banks, the on-lending mechanism has not worked well, given that most of the smaller institutions do not possess adequate collateral. The CBR reacted by providing short-term loans via auctions without requiring collateral.
– *Financial leakages:* Official financial assistance in some cases was reported not to have been lent on, but to have been converted into foreign currency (thus adding to pressure on the Russian ruble's exchange rate) and shipped abroad. The monetary authorities have attempted to counter financial leakages through administrative control measures.

4.3.2 Further Deterioration of External Environment, CBR Opts for Controlled Devaluation

The continued global slowdown and pessimism depressed oil and staples prices. This price slide, in turn, fueled expectations that the country's long-standing current account surplus could soon turn into a potentially sizeable deficit, which intensified pressure on the Russian currency. While the CBR has continued to run down its reserve assets in defense of the national currency, in mid-November it opted for a controlled devaluation policy, while somewhat tightening foreign exchange controls (e.g. by putting limits on foreign exchange swap market volumes).

By January 2009, this strategy had already led to more than 20 incremental widening steps of the Russian ruble's currency corridor vis-à-vis its U.S. dollar/euro basket (55% U.S. dollar and 45% euro). Over time, the widening steps became larger and more frequent. However, each time the corridor was widened, the spot rate quickly fell to the new, weaker limit of the corridor. The policy approach of gradual devaluation seems to have maintained devaluation expectations and, hence, fueled the flight into the U.S. dollar, which, in turn, led to further interventions. As a result, net capital outflows of the private sector (of which a sizeable part probably stemmed from the build-up of external assets by resident entities) are estimated to have reached around EUR 99 billion in the fourth quarter of 2008 (see chart 3). Thus, despite the substantial depreciation of the Russian ruble, official reserve assets continued to decline swiftly (see chart 4).[10] On January 23, 2009, after another substantial corridor widening, the CBR declared its corridor widening exercise completed, at least for the next months. For the time being, the Russian ruble has been fluctuating above the new lower limit, but has touched it at least once.[11] Overall, the Russian currency depreciated by about 50% against the U.S. dollar (or by around 25% against the euro) from early August 2008 to early March 2009.[12] In the same period, official reserve assets, expressed in U.S. dollars, shrank by more than one-third from their height of early August 2008 to reach USD 381 billion. (Expressed in euro, they declined by about one-quarter to EUR 302 billion in the corresponding period.)

4.4 Banking Sector on the Brink

The impact of the international financial crisis on the Russian banking sector has not yet been fully reflected in the available monthly banking indicators. Following the swift expansion of the banking sector in recent years, aggregate balance sheet growth declined in the second half of 2008. The slowdown of banking expansion appears to have been largely triggered by the further slowdown, then stagnation, then decrease of household deposits; this movement, in turn, is probably attributable to two factors which are described in the following.

The period until August 2008 was characterized by households' sensitive reaction to rising inflation and increasingly negative real interest rates. The crisis-prone period starting in the fall

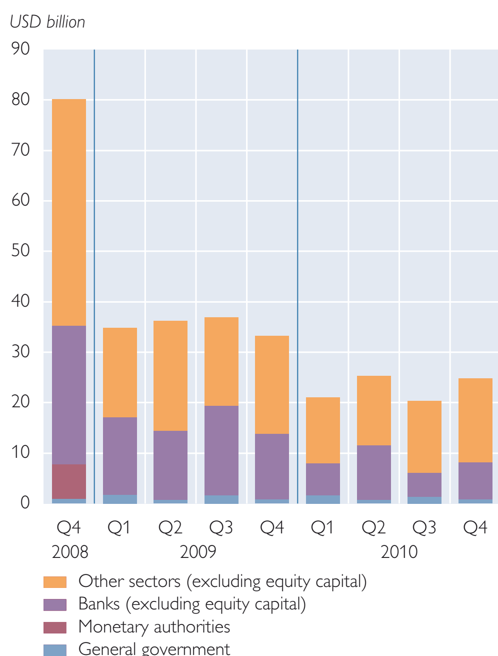
[10] *Citing the unrelenting erosion of foreign reserves, Standard&Poor's had downgraded Russia's long-term sovereign foreign currency debt rating by one notch from BBB+ to BBB (outlook negative) already in early December.*

[11] *According to CBR calculations, an exchange rate at the lower limit of the corridor (about RUB 36 per U.S. dollar or RUB 47 per euro) would approximately correspond to an oil price of USD 41 per barrel.*

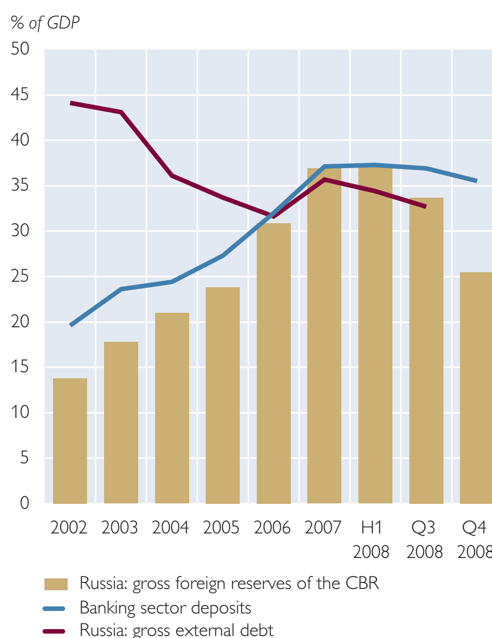
[12] *In real effective terms, the Russian ruble depreciated by 12% in the seven months to end-February 2009.*

Chart 5

Repayment Schedule of Russia's External Debt (Including Interest Payments)



Russia's Gross Foreign Reserves as a Shock Absorber



Source: Bank of Russia (CBR).

of 2008 (liquidity problems, Russian ruble depreciation pressures) saw total deposits – measured in Russian rubles – shrink by about 7% between end-September and end-November due to withdrawals. In December 2008, deposits measured in Russian rubles picked up again – a move which was partly attributable to valuation effects, however. Moreover, while Russian ruble deposits have dropped significantly since September 2008 (despite higher interest rates), foreign currency-denominated accounts have expanded. The crisis thus abruptly reversed the decline of dollarization of bank deposits, which had already been halted by rising inflation in the second half of 2007: During the second half of 2008, the share of foreign exchange deposits (mostly denominated in U.S. dollar) in total deposits climbed by 11 percentage points to almost one-third (see table A2).[13]

Moreover, in banks' balance sheets, substantial disbursements of financial assistance are reflected in a substantive rise of loans and other funds banks received from the CBR. During the second half of 2008, their share in total bank liabilities grew from near zero to 12%.

As of end-2008, the total credit volume reached a record level of 42% of GDP. Credit growth slowed down in the fourth quarter of the year (falling to +0.7% month on month in December 2008, despite valuation effects which increased the credit stock, in Russian ruble terms, during that month). At the same time, the credit-to-deposit ratio continued to rise until

[13] *The loan structure about-faced as well: While the share of foreign exchange-denominated loans in total loans had steadily declined to 21% in June 2008, it reversed to 25% in December.*

November 2008, when it reached 124%, before decreasing in December (see table A2). The real economy's downturn, which has been observed in Russia since late 2008 (contracting industrial production), has a deteriorating impact on loan quality.

In conjunction with the sizeable external debt of banks (a high share of which is short term), these developments point to considerable vulnerabilities of the Russian banking system, in particular if the adverse environment banks currently operate in persists or deteriorates further.

5 Risks to Financial Stability in a Scenario of Continued Stress

A longer and deeper than expected worldwide recession would worsen creditworthiness of borrowers further and also dampen credit demand. Banks in the euro area and in Russia would suffer from a substantial deterioration of the quality of their loan books and would possibly be confronted with a solvency crisis. In addition, adverse developments in the foreign exchange market may lead to indirect credit risk for banks through foreign currency borrowers that have no hedges in place.

In Russia, uncertainty regarding the exchange rate (another drop of the oil price implying a deteriorating current account may necessitate further depreciation) could erode domestic confidence in both the currency and the banking system. Should the population become more reluctant to switch from Russian ruble to foreign exchange deposits and prefer to increase their foreign exchange cash holdings outside banks instead, the liability side of banks' balance sheets could be severely hit. On top of this, Russia remains saddled with improperly functioning interbank markets. Therefore, liquidity risk continues to present a problem. At the same time, solvency issues could increasingly come to the fore if adverse conditions prevail for an extended period of time.

In the euro area, the need for government interventions to maintain financial stability and stimulate real economies may lead to an inhomogeneous increase of debt issuance by euro area governments, causing a divergence of sovereign credit spreads. While write-downs triggered by valuation losses of subprime mortgage-related securities can be expected to taper off, the mark-downs on other structured finance products – including U.S. consumer asset-backed securities (ABS) and European mortgage-backed securities (MBS) – could increase. In the event of a breakdown of a large euro area bank, the consequences would again depend on the reactions of the national governments. Nationalization may reduce banks' willingness to sustain their activities in noncore markets. Negative spillover effects cannot be ruled out in such a scenario.

Euro area banks that hold claims on Russian banks and nonbanks in the form of direct cross-border loans may want to limit or reduce this exposure if their own financial situation deteriorates and/or the economic situation in Russia worsens. Thus, Russian banks' access to external refinancing would remain tightly circumscribed. While Russian banks' scheduled debt service payments[14] should be manageable as such, a combination of deposit withdrawals and restricted access to external funding (in particular for debt rollover) could eventually lead to a distinct crisis situation. In such a setting, much

[14] *According to CBR information, these payments will total USD 58.5 billion in 2009 and USD 16.6 billion in the first half of 2010. Debt servicing is not front-loaded, but more or less evenly distributed over time.*

would depend on whether major Russian banks would continue being viewed as a safe haven in an environment of stressed medium-sized banks. Moreover, the Russian authorities' capabilities to continue propping up the sector with their reserve holdings could be put to the test (see chart 5).

6 Conclusions – Lessons Learnt

The U.S. subprime crisis hit euro area banks early and directly, albeit to a moderate extent, through their exposure. After the bankruptcy of Lehman Brothers, however, the unfolding international financial and economic crisis had a substantial impact on both the euro area and Russia. Russia was affected initially through the outflow of foreign capital and subsequently through the deterioration of economic fundamentals (driven by the collapse of the oil price) and structural problems in the banking sector, despite relatively strong shock-absorbing factors. Though developments have been different in various respects, considerable risks have emerged for the euro area as well as for Russia:

Confidence, which is the foundation of the financial system, has to be restored. Investor and depositor confidence certainly constitute key requirements for sound financial deepening. Credible recapitalization programs can play a crucial role in restoring confidence in the euro area and Russia. Further careful monetary policy actions are needed in Russia, as persisting pressure on the Russian currency, even after an already substantial depreciation, could still trigger a loss of confidence and a banking crisis. More generally, confidence is also key to ensure the sustainability of cross-border funding, which over the past months has proved to be a key channel of contagion.

Structural problems have to be addressed adequately. The crisis has shown policymakers quite plainly that the supervisory architecture has not kept pace with market developments. An adequate supervisory framework has to be developed in order to further deepen financial integration. In Russia structural problems relate to connected lending, weak risk management, inadequate internal controls, insufficient risk orientation in accounting and supervision practices, modest corporate governance and an imperfect rule of law.

Interbank markets should be made more resilient to shocks. Amid the crisis, central banks started to act as general providers of liquidity, even though their toolboxes had not been equipped for this task. For this reason it is still worth exploring whether a stronger institutionalization of interbank markets by establishing clearing houses could be useful. In Russia, the current crisis may set the stage for a market shake-out in which many medium-sized or smaller credit institutions might be forced to exit or be taken over by larger competitors, thereby leaving the sector stronger than it was.

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Annex

Table A1

Macroeconomic, Monetary and Financial Indicators for Russia (2002–2008)

	2002	2003	2004	2005	2006	2007	2008[1]
GDP growth (real, %)	4.7	7.3	7.2	6.4	7.4	8.1	5.6
CPI inflation (year-end, %)	15.1	12.0	11.7	10.9	9.0	11.9	13.3
Exchange rate (annual average, RUB/USD)	31.35	30.69	28.81	28.3	27.34	25.58	24.81
Exchange rate (annual average, RUB/EUR)	29.65	34.69	35.81	35.22	34.08	35.01	36.41
Refinancing rate (year-end, %)	21	16	13	12	11	10	13
Broad money (M2, year-end, growth in %)	32.4	50.5	35.8	36.8	48.8	47.5	1.7
Broad money (M2/GDP in %, year-end)	19.7	24.3	26.0	27.9	33.8	40.2	–
Budget balance (general government, % of GDP)	0.9	1.3	4.5	8.1	8.4	6.0	4.9
Current account balance (% of GDP)	8.4	8.2	10.1	11.1	9.8	6.1	5.9
Net private capital inflows (% of GDP)[3]	–2.3	–0.4	–1.5	0.1	4.3	6.3	–7.8
– of which FDI (% of GDP)	–0.1	–0.1	0.3	0.1	0.7	1.0	0.4
– of which bank-related (% of GDP)	0.7	2.4	0.6	0.8	2.8	3.6	–3.4
Gross external debt (year-end, % of GDP)	44.1	43.1	36.1	33.7	31.6	35.7	32.7[4]
– of which: private debt (% of GDP)[5]	13.9	18.5	18.3	22.9	26.6	32.2	30.1[4]
– of which: bank debt (% of GDP)	4.1	5.8	5.5	6.6	10.3	12.7	12.0[4]
Net international investment position of the banking sector (% of GDP)	1.0	–1.4	–1.9	–2.7	–6.0	–9.0	–6.0[4]
Gross foreign reserves of the CBR (year-end, % of GDP)	13.8	17.8	21.0	23.8	30.9	36.9	25.5

Source: Bank of Russia (CBR), wiiw.

[1]) Preliminary data or estimates.
[2]) A minus sign („–") corresponds to a net outflow.
[3]) September.
[4]) Nongovernment sector (including banks).

Table A2

Banking Sector-Related Indicators for Russia (2002–2009)

	2002	2003	2004	2005	2006	2007 (first half)	2007	2008 (first half)	2008[1]	January 2009[1]
Ratio of balance sheet total to GDP (%)	38.3	42.1	41.7	44.8	51.9	59.0	61.0	61.3	67.5	–
Share of foreign-owned banks[2] in total assets (%)	8.1	7.4	7.6	8.3	12.1	14.0	17.2	18.6	18.7	–
M2 growth (annual, in real terms, %)[3]	15.0	34.4	21.6	24.9	36.5	41.4	31.8	14.0	–10.2	–18.2
Ratio of deposits[4] to GDP (%)	19.6	23.6	24.4	27.3	32.0	35.4	37.1	37.3	35.5	–
Deposit growth (annual, in real terms, %)[3]	16.7	31.3	19.7	27.7	33.7	36.9	26.9	18.2	6.3	10.3
Household deposits (annual real growth, %)[3]	32.1	31.8	16.7	25.7	26.6	28.1	21.0	15.3	1.1	5.2
Share of foreign exchange deposits in total deposits (%)	–	28.9	27.2	28.1	23.4	20.4	20.9	21.8	32.7	41.3
Ratio of credits[4] to GDP (%)	17.1	21.0	23.7	26.4	31.3	34.6	39.0	41.4	42.0	–
Credit growth (annually, in real terms, %)[3]	18.2	33.8	28.9	27.7	35.2	37.7	36.4	33.9	19.6	21.1
Share of lending to households in total credit (%)	–	9.0	13.3	18.4	22.3	–	23.1	23.1	23.0	21.9
Share of foreign currency loans in total loans (%)	34.8	32.8	27.1	28.0	24.5	22.2	22.6	21.4	24.6	26.5
Credit-to-deposit ratio (%)	87.2	89.0	97.1	96.7	97.8	97.7	105.1	111.0	118.4	120.8
Return on equity (ROE, %)	18.0	17.8	20.3	24.2	26.3	–	22.7	19.5	13.3	–
Capital adequacy (%)	19.1	19.1	17.0	16.0	14.9	16.8	15.5	14.8	16.8	16.1
Liquidity: share of highly liquid assets in total assets (%)	22.3	20.6	17.1	15.2	13.6	13.0	12.1	10.7	14.5	–

Source: Bank of Russia (CBR), Goskomstat.

[1] *Preliminary data.*
[2] *Credit institutions majority-owned by foreign banks.*
[3] *CPI-deflated.*
[4] *Excluding interbank deposits or credits, respectively.*

Note: Deposit and credit data are based on Russian ruble-denominated volumes and therefore include changes in stock that are due to valuation effects, in particular exchange rate effects.