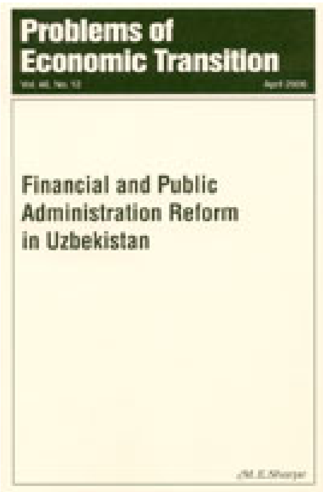

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Economic Results for 2008

The End of the “Fat” Years

The article analyzes current economic conditions in Russia and the mechanism by which the world financial and economic crisis was transmitted to the Russian economy. It discusses changes in the banking system and the stock and housing markets. Production, consumption, and investment at the end of 2008 and beginning of 2009 are described. The conclusion discusses basic changes in the conditions of national economic development.

Not long ago, it seemed that nothing threatened Russia’s economic prosperity. But overnight the global financial crisis, which rapidly grew into an economic one, stifled the country’s hopes of maintaining a high growth rate and continuing to raise the standard of living on the basis of raw material exports. Expanding global production and accessibility of credit resources were a thing of the past or shrank like shagreen leather. The Russian economy felt the consequences of this in full measure. The torrent of growing earnings from oil and petroleum product exports turned into a trickling stream, and the pump that sent money from international markets to the Russian economy went into reverse. Reeling from this blow, Russia’s

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Translated by James E. Walker.

national economy sank drastically, and its leaders had to urgently set a new course different from the one they had followed in the fat years.

Portent of global crisis

Throughout the 2000s, the mood of Russia's national economy and financial system was determined primarily by the condition of international markets: the expansion of production and consumption, rising prices for energy resources, especially oil, and easy access to foreign financial resources. These combined factors were responsible for the sources, scale, and directions of currency and financial resource flows between the Russian economy and the rest of the world, as well as national currency exchange rate trends. The turning point was August 2007, when problems in the U.S. subprime mortgage market became acute, which proved to be a precursor of the American financial crisis that broke out first, and then the global financial and economic crisis.

In the 2000s, Russia's economic development was largely financed by a large-scale inflow of money from abroad, which stimulated the growth of investments and consumption. At the same time, the financial markets took for themselves the greater part of the investment resources that were raised. For instance, while about 40 percent of total investments went into nonfinancial assets at the beginning of the 2000s, by 2008 their share was less than half that. Investments in financial assets increased to 80 percent of all investment resources going into the country's economy. The comparative rate of return determined this structural shift. The return on total production assets,[1] which did not exceed 10–12 percent on average for the economy as a whole, was much lower than return rates on investments of comparable term in financial instruments, which reached 50–80 percent in individual years, as the data in Table 1 show.

The reproduction model based on large-scale foreign financing undoubtedly makes it possible to obtain additional resources for economic growth. But it is very unstable, since the direction of financial flows between the outside world and the domestic economy is highly variable. The structural discrepancy in the distribution of resources potentially meant a risk of outflow if the Russian stock market's rate of return fell, since more than 80 percent of financial investments were short-term.

Starting in the mid-2000s, the Russian stock market was one of the fastest-growing among developing economies. Exceptionally favorable international price and demand conditions for the main Russian export

Table 1

Investments in the Economy and Comparative Return Rates on Investments

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					Breakdown of investments[a] (% of total)						
Total investments	100	100	100	100	100	100	100	100	100	100	100
Investments in nonfinancial assets	67.4	47.2	49.1	35.7	41.3	34.8	31.4	24.0	21.1	20.9	18.8[c]
Including investments in fixed assets	56.3	39.7	41.4	35.4	40.7	34.4	31.1	23.5	20.9	20.7	18.6[c]
Investments in financial assets	32.6	52.8	50.9	64.3	58.7	65.2	68.6	76.0	78.9	79.1	81.2[c]
					Rate of return on investments (%)						
In nonfinancial assets											
Return on total assets[b]	n/d	n/d	n/d	n/d	n/d	5.9	8.5	8.8	12.2	10.5	6.8[c]
In financial assets											
RTS index, annualized	–85.1	197.4	–18.2	81.5	38.1	58.0	8.3	83.3	70.7	19.2	–72.4

Source: Federal State Statistical Service, *Rossiia v tsifrakh 2008* (Moscow, 2008).
[a]Not counting small businesses and informal activity.
[b]On average for the economy as a whole.
[c]January–September.

commodities, primarily energy resources, predetermined a steady growth in Russian companies' revenues and profit and, accordingly, portfolio investors' interest in them. At the same time, the flow of export earnings contributed to ruble appreciation, which raised the country premium for foreign investors.

Russian stock market vulnerability to external shocks was due to its heavy dependence on foreign investors and the high concentration of securities because of the dominance of a few giant oil and gas companies in the market, with a comparatively limited number of issuers represented in it. Therefore, changes in Russian stock market returns and volume followed the oil price trends, and a bubble began to form in it in mid-2006 (see Figures 1 and 2).

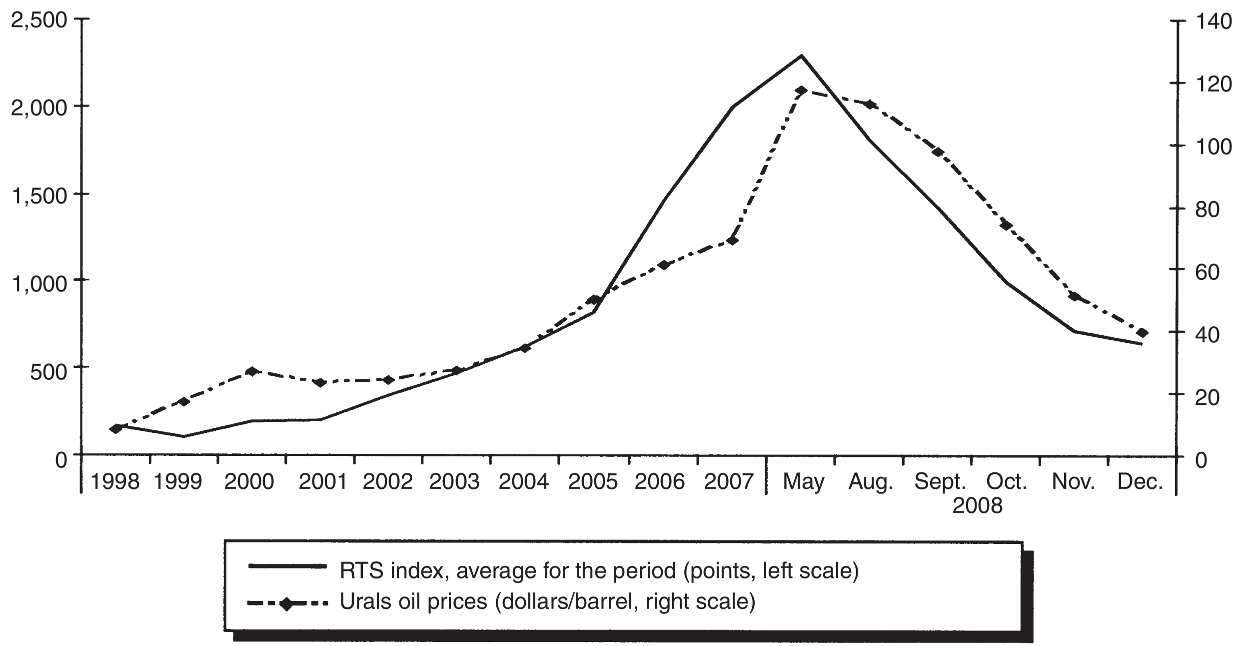
Following the stock market bubble, a bubble also developed in the real estate market. The rise of security quotes enabled asset owners to obtain large loans, which were used to finance increasingly costly projects, including investments in residential real estate. The result of the large-scale, largely speculative expansion of investments in so-called investment apartments was a rapid price rise in the primary housing market: 40–50 percent year on year in 2006–7 (see Figure 3).

Rapid price growth in the primary housing market caused a wave of speculative interest in investments in this sector. The real estate market became a kind of exchange, where as much as 100 percent profit could be made. Thus, the stock market bubble supported another bubble in the housing market. Sooner or later, they had to burst, since both the stock market and the housing market were overvalued. This is what happened after the Russian economy experienced external shocks, first in 2007 and then in 2008.

In August 2007, Russia's banking system reacted to the deepening crisis in the U.S. real estate market and to the stream of negative information from international financial markets with a sharp increase in actual interest rates on the interbank market for overnight loans. In September–October, their average actual values were 6.2 percent and 5.7 percent APR, while in the first half of the year the range of their average monthly values did not exceed 3–5 percent APR. By the end of October, lending institutions' liquid assets had fallen to their lowest value in 2007: 632 billion rubles. Russian stock market growth rates also slowed sharply.

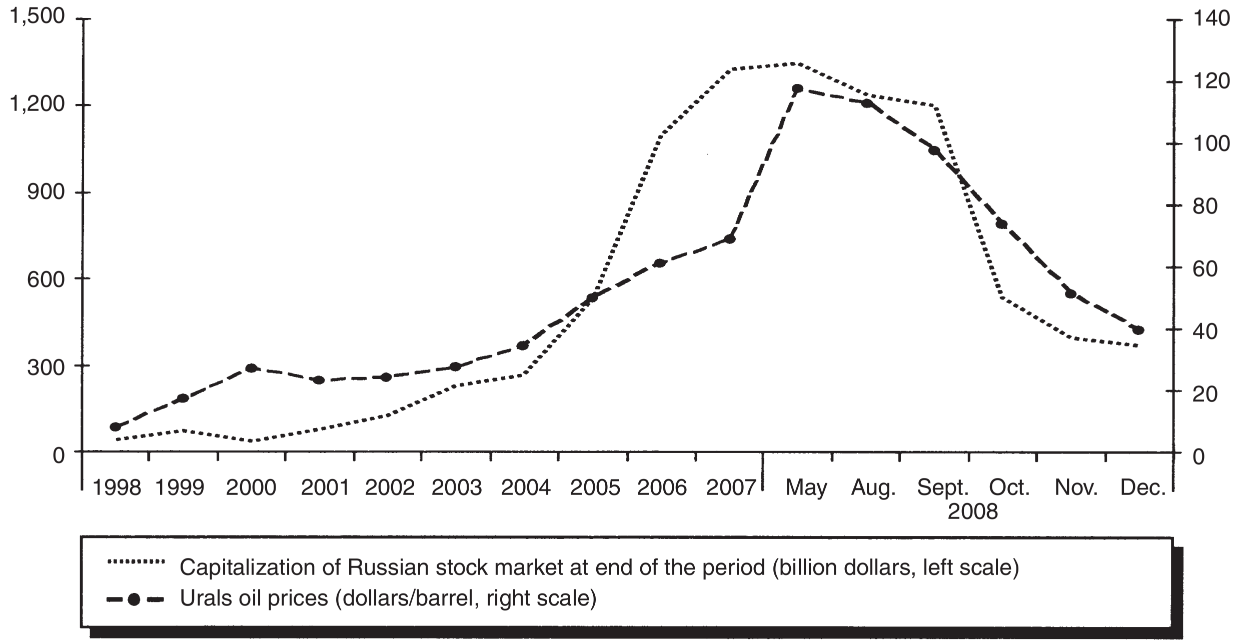
Under such conditions, the Bank of Russia and the RF government took measures intended to provide lending institutions with the amount of liquidity they needed. For this purpose, the Bank of Russia significantly lowered the mandatory reserve standards for all funds raised by banks in

Figure 1. **Stock Market Rate of Return and Oil Prices**



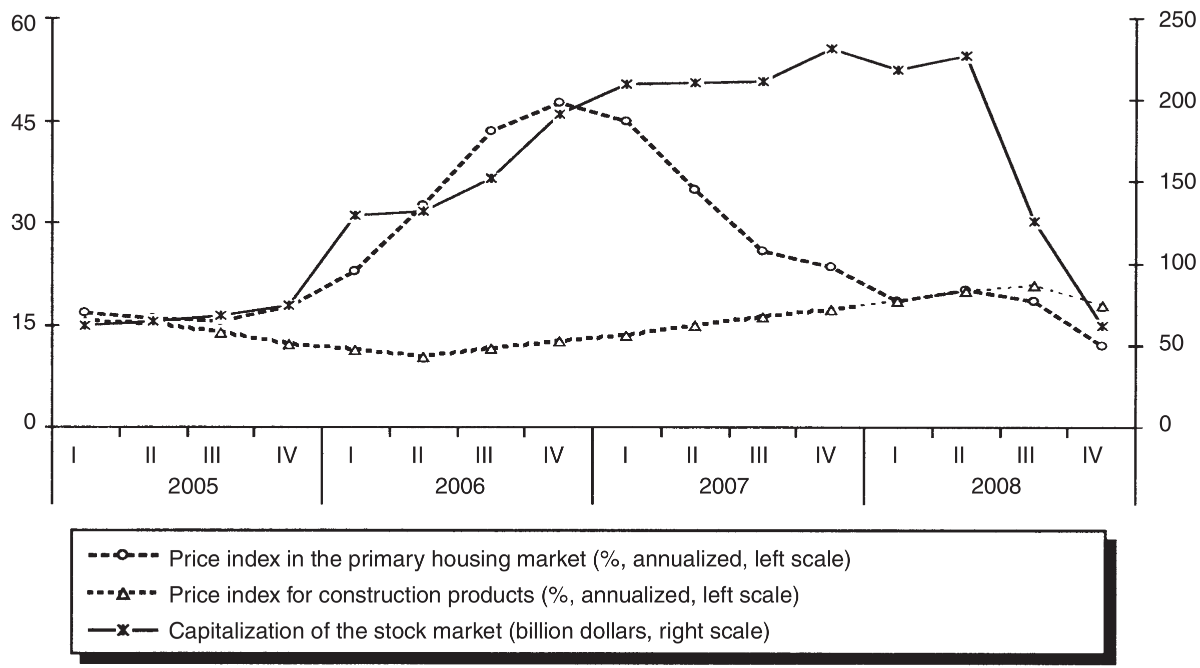
Sources: Authors' calculations based on data from RTS and Rosstat.

Figure 2. **Stock Market Volume and Oil Prices**



Sources: Authors' calculations based on data from RTS and Rosstat.

Figure 3. **Stock Market, Construction Prices, and Prices in the Real Estate Market**



Sources: Authors' calculations based on data from RTS and Rosstat.

rubles, as well as in foreign currency from individuals and corporations and nonresident banks. Increased federal budget spending (investments in the authorized capital of state corporations) also had a positive effect.

As a result of the measures that were taken, banks received the necessary financial resources at acceptable prices. By the end of 2007, the lending institutions' liquidity had increased from 10.8 percent (the minimum value at the end of October) to 16.6 percent. But this stabilization provided only temporary respite and was a prelude to the shocks that followed a year later, which almost paralyzed the country's financial system.

Beginning of the global financial crisis

The Russian stock market was the victim of a strong external shock: a drop in oil prices, a credit crisis in international financial markets, and a recession that began in the U.S. and European economies, which reduced foreign demand. The contraction of global finances led to the collapse of the Russian market and a large-scale outflow of money from the domestic financial system. The main reasons for this were overcapitalization of the market and heavy dependence on unpredictable international market prices.

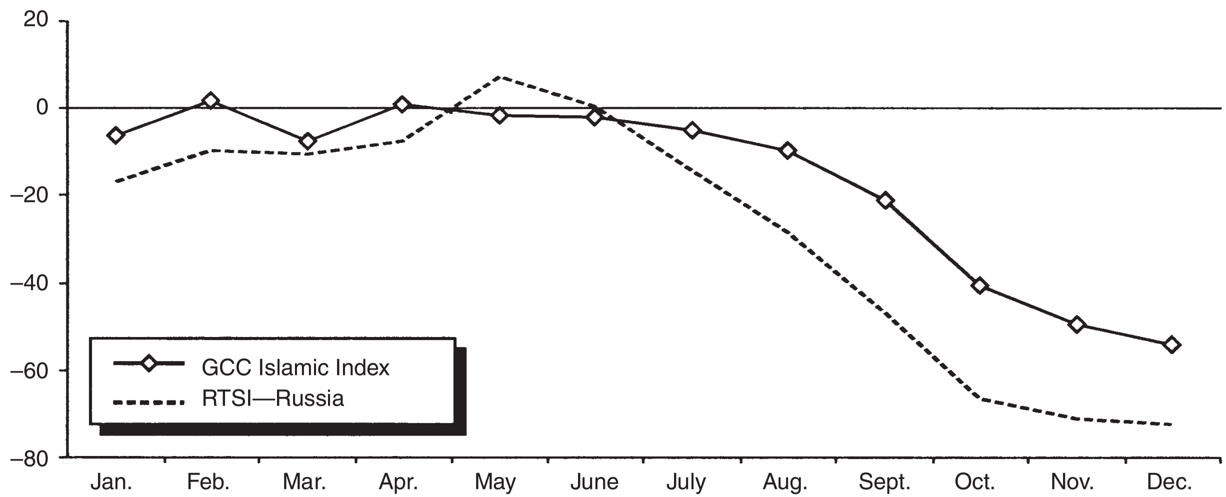
In the opinion of the prominent American investor Warren Buffet, overheating of the market is very well reflected by the ratio of its capitalization to GDP. If it exceeds 100 percent, then the market is overheated, and investing in it is playing with fire. On the other hand, if it is below 100 percent, the market is undervalued.[2]

The rapid rise of the Russian stock market began in 2005. At the end of the year, its capitalization was 69.5 percent of GDP, but by the end of 2006, under the influence of rising international oil prices and foreign investment inflows to the Russian economy, it reached 111.1 percent of GDP. When international oil prices fell below $100/barrel in mid-2008, the Russian stock market began its downward slide.

Nevertheless, the external shock only triggered the collapse: its fundamental basis was internal factors.[3] This is indirectly confirmed by comparing the behavior of stock market indexes in the largest oil exporting countries. For instance, in 2008 the GCC Islamic Index (a composite index of stock markets in member countries of the Gulf Cooperation Council: Kuwait, Qatar, Bahrain) fell 54 percent, while the RTS index* fell 72 percent (see Figure 4).

*RTS Index is an index of fifty Russian stocks that trade on the RTS Stock Exchange in Moscow.—Ed.

Figure 4. **Depth of Downturn in Stock Markets of Largest Oil Exporting Countries in 2008** (behavior of stock market indexes in relation to December 2007, %)



Sources: Authors' calculations based on data from RTS and Global Investment House.

The collapse of the Russian stock market is explained by the pyramid of repo (repurchase agreement) transactions that was built up in it (analogous to the pyramid of treasury bills and federal loan bonds that drew off about 80 percent of the market's assets and provoked its crash in 1998). A repo transaction could be leveraged (when one transaction is "nested" in another) dozens of times, and the due dates on these leverage transactions came just one day apart.

From 2005 to mid-2008, the portion of repo transactions in the stock market more than tripled. While it is estimated that the portion of repo transactions was 18.3 percent of total exchange transactions in 2005, by mid-2008 it was already 62.4 percent. The proportion of repo transactions was even higher in the corporate bond market: by mid-2008 their share had increased by a factor of 2.8 in comparison with 2005 (from 28 percent to 77.9 percent). In transactions with bonds issued by regions of the Russian Federation and municipalities, the portion of repo transactions rose by factors of 3.1 and 2.4, respectively, during the same period (see Table 2).

In recent years, the Russian stock market has functioned primarily as a credit market, where corporations raised funds against securities, and repo transactions were a tool for additional financing. In a steadily growing stock market, a superprofit could be made by using a multiple repo scheme: after selling securities at a fairly low discount, the money was put into circulation, and this was repeated many times over. Assets were purchased and then used as collateral, and the money was used to buy new assets that were once again used as collateral (the number of leveragings rose). As a result, a so-called matryoshka pyramid was constructed. When the term of the last transaction that time would allow expired, the securities were redeemed, and the chain began to operate in the opposite direction. One repo was nested in another, with a minimum difference in time of one day. Such a scheme works well if the market quotes for the securities are rising steadily and the growth rate exceeds the interest rate for a loan. The RTS index rose by double digits in 2005–7, which enabled investment speculators to make a profit incomparably greater than the return on bank deposits or bonds, not to mention government securities.

Most multilayered repo transactions were purely speculative and, hence, high risk. With each new leveraging, the risk was multiplied. When the stock market began to fall drastically, the risk that the money would not be repaid rose many times over. With falling market values of the securities against which money was raised, sellers were compelled

Table 2

Portion of REPO Transactions in Total Volume of Transactions on MICEX (% of total)

			2007					2008		
	2005	2006	Q1	Q2	Q3	Q4	Year	Q1	Q2	First six months
Stocks	18.3	25.6	32.6	47.6	58.1	56.5	50.5	58.0	62.4	60.3
Corporate bonds	28.0	50.9	64.3	69.7	74.6	72.5	71.2	77.9	77.9	77.9
Bonds of regions of the federation	28.0	60.0	73.7	77.7	84.5	82.2	79.9	83.8	86.1	85.1
Municipal bonds	31.5	42.1	58.5	67.8	73.9	63.3	66.5	72.2	74.6	73.3

Sources: MICEX data, *Vestnik NAUFOR,* 2007; 2008, nos. 1–6.

to put up additional collateral to restore the discount level set when the repo transaction was executed (the margin call mechanism).

The freefall of the Russian stock market occurred after the September 15, 2008, announcement of the bankruptcy of Lehman Brothers, one of the largest American investment banks. The mass panic sale of assets that followed on stock markets worldwide was the starting point of the global financial crisis. Foreign investors began to pull their assets out of developing countries, including Russia.

In the trading on September 15, the Russian stock market indexes fell to two-year lows, losing 4–6 percent for the day. The RTS index dropped 4.8 percent; and the MICEX [Moscow Interbank Currency Exchange], 6.2 percent. The problem of insufficient liquidity aggravated rumors of a possible bankruptcy of the Russian investment bank KIT Finans and its default on a repo transaction. This information led to a crisis of confidence in the interbank market and mutual closing of limits by its participants. The next day, September 16, it was confirmed that KIT Finans did default on a repo transaction. According to MICEX data, the amount of defaulted repo transactions from September 8 through 15 exceeded 7.2 billion rubles, of which KIT Finans accounted for 7.1 billion rubles, failing to fulfill its obligations to fifteen counterparties.[4] As a result, the chain of mutual closing of obligations was disrupted, and the repo market began to collapse.

Stock market indexes plunged. For the first time in the history of Russian exchanges, the Federal Financial Markets Service (FFMS) was forced to suspend trading. While trading was suspended for just a few securities on the MICEX exchange on September 15, as a result of the steep drop of indexes, on September 16, more than ten liquid securities, including blue chips, were not traded.[5] The volume of repo transactions with stocks on the MICEX on September 16 fell to 48.2 billion rubles, which was half the average for the previous two weeks.[6] In two days (September 15–16), the MICEX index dropped 23 percent; the RTS index, 21.1 percent; and the stock market lost about 16 percent of its capitalization. On September 18, 2008, obligations to be fulfilled totaled 176 billion rubles, of which market participants' overdue (outstanding) obligations to each other were approximately 60 billion rubles (34 percent of the total amount).

A record stock market collapse occurred on October 6, 2008. In one day, the RTS index lost 19.1 percent, and on October 24 it reached the low for the year, having fallen to 549.4 points, which was comparable to its level in 1997. In October–November 2008, repo market turnover fell 60 percent with respect to the number of securities traded, in comparison to the corresponding figures for 2007, and 75 percent in terms of value. During this period, the RTS market fell 53.2 percent, from 1,211.8 points to 658.1 points.

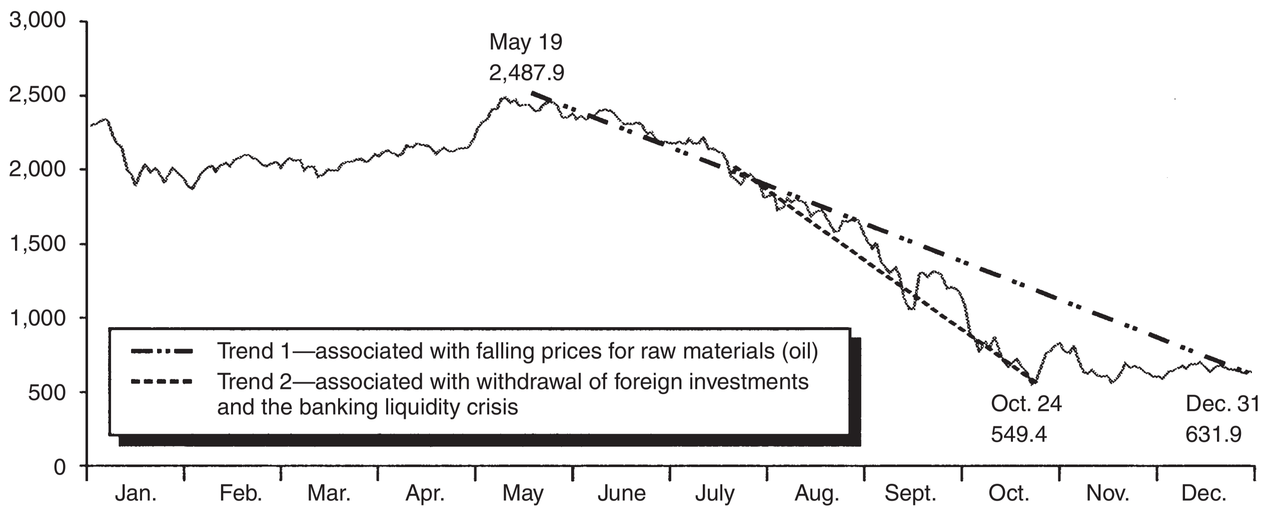
As a regulating measure, the FFMS prohibited margin trading and short sales and then limited their leveraging to 1 : 1. In addition, to eliminate defaults on transactions, the government allocated 175 billion rubles from the National Welfare Fund for supporting the stock market, investing substantial amounts in the stocks of Russian companies. Despite these measures, the absolute value of the RTS index fell from a maximum of 2,478.9 points (on May 19) to 631.9 points at the end of the year, and the total capitalization of all Russian companies decreased from $1,328.8 billion at the beginning of 2008 to $370.3 billion at the end of the year.

In addition to the panic withdrawal of money by foreign investors, the collapse of the Russian stock market was due to the specific nature of its participants and their operations. There were many speculators and Russian players involved in ownership in the market. They used their shareholdings as collateral for purchasing other assets. When the market fell, this had a strong domino effect: the lower the prices dropped, the more margin calls, and the more people forced to sell. Moreover, the immature Russian financial system was supplied with liquidity by a few large banks. When they fled from the stock market in the situation of growing risks and curtailed interbank lending, all refinancing operations came to a halt. Thus the market crash was due to a whole set of factors operating simultaneously.

The collapse of the stock market very nearly paralyzed the banking system. Some banks, receiving short-term money from stock transactions, placed this money in long-term loans for various long-term projects. When the banks lost confidence in borrowers' ability to repay the money, they halted their lending operations, closing limits and lines of credit. As the result of an instantaneous chain reaction, the interbank lending market was paralyzed. The financial markets could be revived only by aggressive actions on the part of regulators and representatives of major market players to manually sort out defaults and settle reciprocal claims in chains of repo transactions and in the lending operations of banks and other financial institutions, which made it possible to avoid a collapse in settlements.

Figure 5 schematically shows the sequence and time limits of various factors' effect on stock market behavior. The turnaround in the movement

Figure 5. **RTS Index and Trends Associated with Its Collapse in 2008**



Sources: Authors' calculations based on data from RTS and the Bank of Russia.

of the RTS index began under the influence of the price factor (the fall of international oil prices from their maximum in June 2008), which even now has an effect (trend 1). In September–October 2008, the fall accelerated, amounting to 26.4 percent and 36.2 percent, respectively (trend 2). This was caused by the mass withdrawal of funds from the Russian stock market by foreign investors under the influence of both the global financial crisis that had broken and the domestic liquidity crisis.

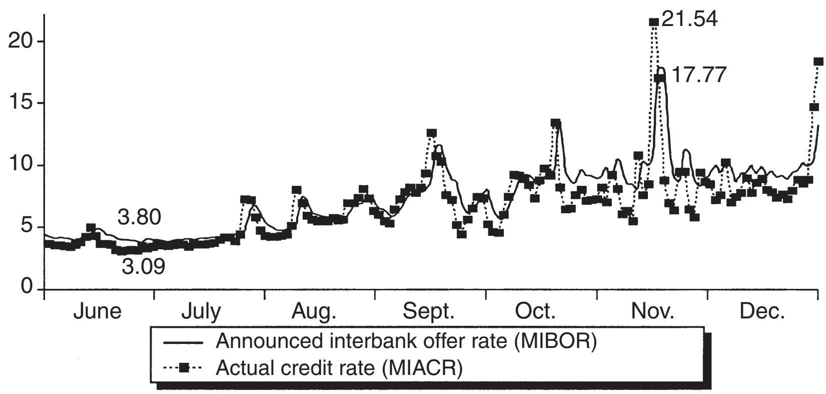
Having broken the old trends and created new ones, the global financial crisis led to a change in the volumes and direction of financial flows between the domestic economy and the outside world. On the one hand, investments raised from foreign investors were curtailed (due to the risk of undervaluation of the securities offered). Russian companies were able to raise just $1.7 billion through IPOs [initial public offerings] in 2008, as opposed to $34.3 billion in 2007 (i.e., twentyfold more). On the other hand, foreign investors withdrew funds early from high-risk Russian assets to take their profit. According to Rosstat data, their financial investments in January–September 2008 declined by 13.8 percent in relation to the corresponding period of the previous year, in comparison with a 120 percent increase for all of 2007.

Until 2008, foreign investors' growing interest in Russian assets provided for net capital inflows ($41.8 billion in 2006 and $83.1 billion in 2007). In 2008, the stock market collapse and investors' flight into foreign assets, due to ruble depreciation, led to an unprecedented net capital outflow of $129.9 billion (in the second half of the year outflow was $147.9 billion, vs. an inflow of $18 billion in the first half). The net withdrawal of private capital exceeded its inflow in 2005–7. As a result, even against the background of a record positive current account, Russia's international reserves decreased for the first time since 1998.

The banking system

The entry of the global crisis into its acute phase at the end of 2008 and the subsequent collapse of the Russian stock market significantly worsened conditions in the Russian banking system. Demand for liquid assets rose sharply, resulting in increased interest rates in the money market. The interbank lending crisis peaked in mid-November, when the interbank offer rate exceeded 17.8 percent APR, and the actual credit rate was 21.5 percent, as opposed to their minimum level in mid-June: 2.8 percent and 3.1 percent APR, respectively (see Figure 6).

Figure 6. **Money Market Rates in 2008** (overnight, APR)



Source: Bank of Russia, "Ob″iavlennye stavki po privlecheniiu kreditov (MIBID), ob″iavlennye stavki po predostavleniiu kreditov (MIBOR) i fakticheskie stavki po predostavleniiu kreditov (MIACR)," *Biulleten´ bankovskoi statistiki*.

Having paralyzed the credit system, the liquidity shortage and lending problems led to increased defaults and bankruptcies of banks. Because of drastic deterioration in the condition of the banking system and the expansion of ongoing operational measures in the currency market, currency swaps, repo transactions, and a manyfold increase in deposits of surplus federal budget funds in banks, the RF government and the Bank of Russia developed and adopted a set of anticrisis measures.

Some of the measures were intended to overcome the lack of confidence; others, to solve the key problem of Russian banks: the lack of internal resources for cheap and long-term funding. The first group of measures includes providing loans in foreign currency to service part of the foreign debt owed by Russian banks and nonfinancial companies that came due in the fourth quarter of 2008; compensating banks for part of their losses in the interbank lending market; increasing the insured amount of deposits in lending institutions; instituting a mechanism for lending without collateral (unsecured lending); and increasing the period during which the Bank of Russia will provide resources to half a year. Among the measures in the second group, we single out the provision of long-term subsidized loans to a number of banks, which replaced foreign financing. For instance, the Bank of Russia provided a subordinated loan to Sberbank of Russia for a term until December 31, 2019, inclusive, at a rate of 8 percent APR, by acquiring securities issued by the bank.

Implementation of the anticrisis measures began on October 20, 2008. In the first week of holding auctions for unsecured lending, the bank of Russia provided more than 420 billion rubles, which is comparable with the total indebtedness of lending institutions at the beginning of October (407.3 billion rubles).

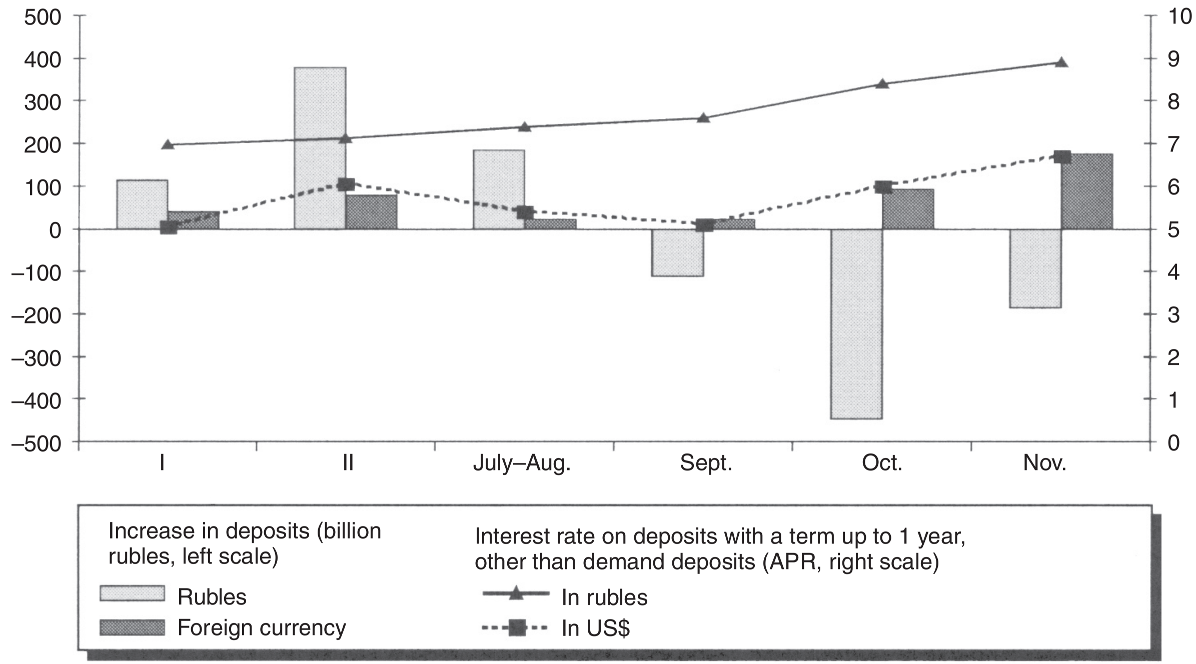
The significantly expanded refinancing of lending institutions by the Bank of Russia through lending operations without collateral made it possible to provide banks with funds totaling more than 2,800 billion rubles. As a result, in the fourth quarter of 2008, claims on lending institutions increased by more than 700 percent and cumulative indebtedness on lending without collateral reached 1.769 trillion rubles by the end of the year.

The negative news from international markets in the grip of the crisis, together with the growing outflow of currency and financial resources from the country, predetermined strong pressure for devaluation of the national monetary unit. The public panicked. Along with the liquidity crisis, a crisis of confidence began to take shape. Instability in the banking system caused depositors to flee.

In September, total individual deposits in banks decreased 1.5 percent—the first outflow in several years. While foreign currency deposits increased by 22 billion rubles, the public withdrew more than 110 billion rubles from ruble deposits in September (a 2.1 percent decrease). A similar situation had been seen only during the local liquidity crisis in 2004, when ruble deposits fell by 16.7 billion rubles (1.3 percent). In October, the public's ruble deposits fell more than four times faster. Withdrawals reached a record value of 440 billion rubles, while individual foreign currency deposits brought in by lending institutions increased by 92 billion rubles. In November, withdrawals of ruble deposits slowed to 186.9 billion rubles, while the process of conversion of deposits to foreign currency accelerated. As a result, the proportion of foreign currency deposits grew (Figure 7).

Thus, the public responded to the external shock by changing its deposit mix. While real and nominal ruble appreciation since 2003 had made ruble deposits more attractive, and individual foreign currency deposits decreased, the situation changed in the fall of 2008. During the first eleven months of 2008 individual foreign currency deposits increased 64.9 percent, while ruble deposits decreased 1.5 percent. By the end of the year, the proportion of foreign currency deposits had risen to 19.9 percent, in comparison with 12.9 percent at the beginning of the year (it had been 13–13.5 percent until September).

Figure 7. **Individual Deposits in 2008**



Source: Bank of Russia, *Biulleten′ bankovskoi statistiki.*

Trying to attract more money from individuals and corporations, banks raised their interest rates on deposits. Another reason for increased interest on ruble deposits was the outflow of money from ruble deposits into foreign currency deposits. Average interest rates on ruble deposits with a term up to one year (other than demand deposits) rose by 1.5 percentage points in September–November 2008, to 8.9 percent APR. (The last time interest had been this high [9.2–8.7 percent] was in March–June 2005.)

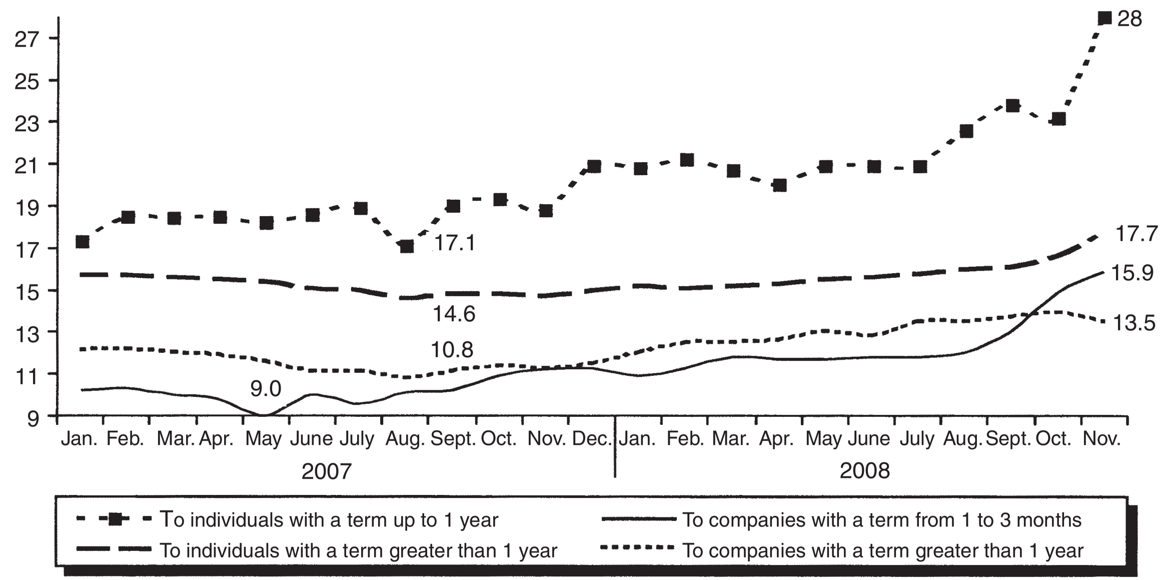
In the second half of 2007, rapid expansion of the banking sector's resource base enabled it to meet growing domestic demand for credit and even to lower the cost of borrowed funds. The nascent credit crisis, having made foreign borrowing less accessible as the main source of funding of the lending institutions' resource base, set off an upward trend of interest rates on deposits. The cost of loans to corporate clients and individuals also increased, due to higher interest rates on the deposits of individuals and nonfinancial companies. Interest rates on ruble loans to the public with a term up to one year rose appreciably. For instance, while they averaged 17.1 percent APR in August 2007, in November 2008 the average was 28.0 percent (see Figure 8).

Weighted average interest rates on banks' ruble loans to nonfinancial companies with a term greater than one year rose from 10.8 percent APR in September 2007 to a maximum of 13.9 percent in October 2008. (The last time such rates had been in effect was in January–February 2004.) Interest increased most rapidly on short-term ruble loans to companies with a term from one to three months. These rates rose by 6.9 percentage points, from 9.0 percent APR in May 2007 to 15.9 percent APR in November 2008 (see Figure 8).

The reduced accessibility of borrowed funds for individuals and companies slowed the trend of lending to them. For instance, the November increase in the indebtedness of nonfinancial companies to banks (0.8 percent) was the lowest since March 2006 (0.6 percent), while the average monthly increase in loans in September–November (1.3 percent) was less than half that in the first eight months of 2008 (3.1 percent) (see Figure 9).

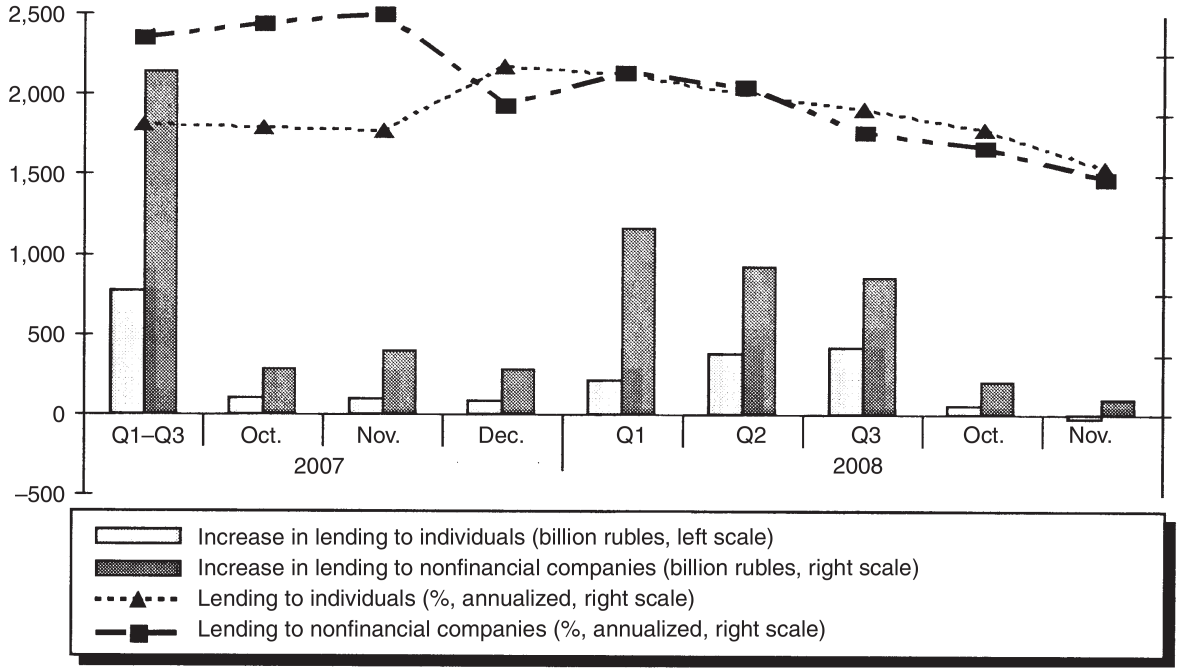
For the first time since the beginning of the crisis, a decline in lending to companies was recorded in November, when total indebtedness decreased by 28 billion rubles. Experiencing a liquidity shortage, Russian banks limited lending for construction, and lines of credit for building new facilities were almost closed. Difficulties with consumer lending

Figure 8. **Interest Rates on Ruble Loans** (APR)



Sources: Authors' calculations based on Bank of Russia, *Biulleten´ bankovskoi statistiki.*

Figure 9. **Lending to Individuals and Nonfinancial Companies**



Sources: Authors' calculations based on Bank of Russia, *Biulleten′ bankovskoi statistiki*.

affected retail sales of automobiles, household appliances, and electronics, and lending terms were tightened in every way.

For the first time in recent years, in November, bank loans to individuals decreased 0.7 percent, to 4.1 trillion rubles, partly because of decreased lending for housing purchases. For instance, while individual indebtedness in the first quarter of 2007 grew to 189.6 percent, annualized, in the third quarter of 2008 it fell to 84.6 percent. In the mix of lending to individuals for housing, the share of the riskiest mortgage loans rose steadily. In January–September, it increased by four percentage points, to 84.7 percent. At the same time, mortgage debt in arrears doubled in the third quarter of 2008 alone.

By the end of 2008, the acute, speculative financial phase of the crisis had been overcome. In December, after a three-month decline, the inflow of individuals' money into the banking system resumed (the total outflow of individual deposits in September–November was 454.2 billion rubles). According to preliminary data, deposits rose by more than 800 billion rubles,[7] thanks to the seasonal increase in incomes before the new year, as well as the overvaluation of foreign currency deposits in Russian accounting in rubles. It should be emphasized that the December increase in deposits was due less to exchange rate fluctuations than to the return of individuals' money to the banking system.

Positive trends were also noted in the field of lending to corporate clients: in December 2008, their indebtedness rose 1.6 percent vs. 0.8 percent in November. At the same time, lending to individuals fell 1.5 percent. A further increase in overdue debt on loans to individuals as well as nonfinancial companies is worrisome. At the same time, reserves created by lending institutions were more than twice as large as arrears, which indicates that the banking system is still in a negative mood and expects the quality of loan portfolios to continue to deteriorate and that bank accounts will be closed.

Cessation of economic growth

In fall 2008, the economic authorities, in hands-on management mode, saved the country's financial system from system-wide collapse, which cannot be said of production. The main channel of crisis transmission from the financial sphere to production was a credit crunch. The external shock from the decline in global demand and the drop in international market prices of raw materials, metals, and other key commodities that

Russia exports was exacerbated first by a lending slowdown and then by curtailment of lending.

The 1998 crisis did not affect deliveries of energy resources, metals and other key commodities, and transport carrying these cargoes thus remained busy. On the contrary, in 2008 transportation workers were the first to encounter a deterioration in business conditions. The growth of freight traffic (seasonally adjusted) peaked in March 2008 and has trended downward since April. Following transportation, capital investments also peaked in May 2008, after which (allowing for seasonal and calendar components) they began to decline, entailing a slowdown in construction and related sectors. Finally, a full-scale industrial recession began being recorded in mid-2008. Industrial production volumes[8] (based on seasonally adjusted data) fell from July to the end of 2008, that is, for six months, or two consecutive quarters.

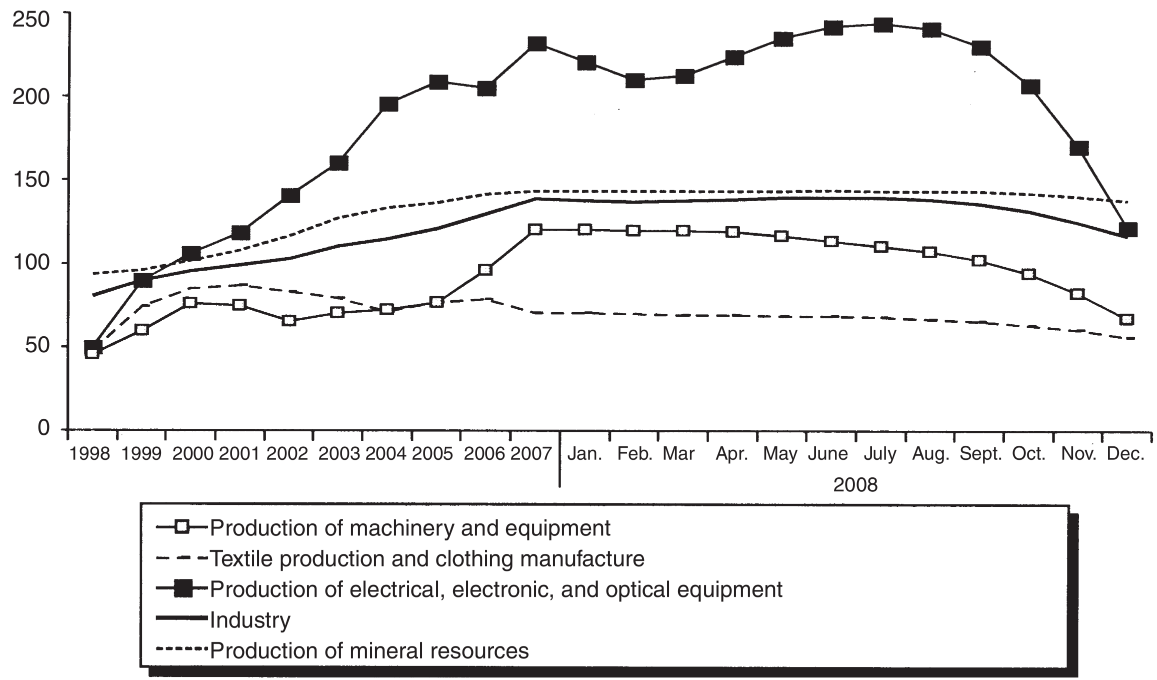
In the final months of 2008, the production decline accelerated. For instance, while 0.6 percent (annualized) growth over the corresponding period of 2007 was still recorded in industry in October, in November and December the slump deepened considerably: industrial output fell 8.7 percent and 10.3 percent, respectively, across all types of economic activity. As a result, while the increase in industrial output was 6.3 percent in 2007, it was only 2.1 percent in 2008, that is, two-thirds less.

Manufacturing (seasonally adjusted) peaked in June 2008. At the end of the year it slowed drastically: in October output increased by only 0.3 percent (annualized), while November and December saw 10.3 percent and 13.2 percent reductions, respectively. The main reason for the manufacturing downturn was a production decline in sectors that produce capital assets. The production decline in machinery and equipment as a result of the abrupt slowdown in capital asset investments was 12 percent, while vehicle production declined 8.7 percent. The sectors that fell most sharply were chemical production (by 21.5 percent in the fourth quarter of 2008), woodworking and manufacture of wood products (16.4 percent), and textile production and clothing manufacture (16.2 percent).

Although stagnation was already seen in the second quarter of 2008 in most sectors, in some manufacturing sectors, such as textile production and clothing manufacture, the decline began back in 2007. In November and December 2008, growth was not recorded in any type of economic activity (see Figure 10).

Investment activity also fell sharply, primarily in housing construction. The main factor limiting investment demand and construction growth

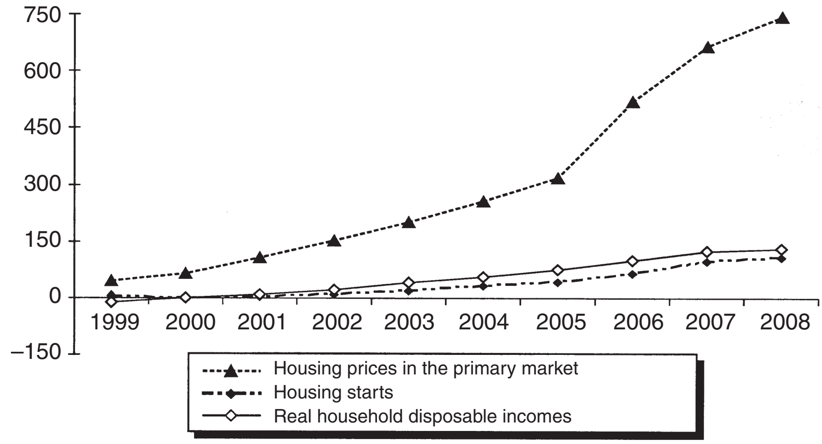
Figure 10. **Smoothed Production Indexes, with Seasonal and Calendar Adjustment**



Source: Analytic Center affiliated with the RF Government, the Institute of Economics of the Russian Academy of Sciences, and the Institute of Information Development of the State University–Higher School of Economics, http://stat.hse.ru/hse/index/html.

Note: January 1995 = 100%.

Figure 11. **Real Household Disposable Incomes, Housing Prices, and Housing Starts**



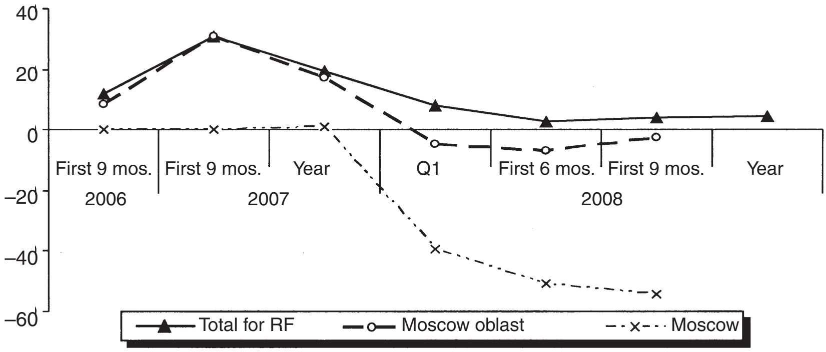
Sources: Authors' calculations based on Rosstat data.
Note: 1998 = 100%.

was exceptionally high housing prices. Prices in the real estate market had peaked by mid-2007, since for a number of preceding years they had risen faster than household disposable income (see Figure 11). As a consequence, the existing price level was unacceptable, and growth in effective demand for housing and then for housing construction began to slow drastically. In 2008, housing starts increased just 4.5 percent (vs. 20.6 percent in 2007) and amounted to 63.8 million square meters (61 million square meters in 2007).

The nonuniformity of the Russian economic space was clearly manifested in the housing construction slowdown. The most prominent feature of Russia's construction market after a bubble formed in it was its extremely high regional unevenness. Moscow and Moscow oblast accounted for more than half of the construction in 2007 (15.5 percent in 2006). So the abrupt slowdown in housing starts in the country as a whole in 2008 was the result mainly of the drop in investment demand in Moscow and the surrounding region (see Figure 12).

For Russia's national economy, the end of 2008 was the most difficult period since the 1998 crisis. Although GDP rose 5.6 percent, this was achieved only because a high level of economic growth was maintained for the first ten months of 2008 (7.3 percent vs. 7.6 percent in January–September 2007). In the last quarter of 2008, GDP increased by only 1.2

Figure 12. **Trend of Housing Construction** (increase/decrease, % of the corresponding period in the previous year)



Sources: Authors' calculations based on Rosstat data, quarterly reports "O zhilishchnom stroitel′stve."

percent (annualized), while in the fourth quarter of 2007 it increased 9.5 percent. Capital investment growth rates almost halved: in 2008, gross fixed capital formation increased by just 10.3 percent vs. 21.1 percent in 2007 (see Table 3).

Consumption remained a little island of prosperity: so far, it has not significantly felt the impact of crisis processes. Retail sales and paid services to the public continued to grow, even in the acute phase of the crisis at the end of 2008. As a result, final consumption increased 9.0 percent, which is close to the figure for 2007, when it rose 10.8 percent (see Table 3).

Although Russian economic indicators for 2008 look quite favorable against the background of the worldwide recession, they nevertheless conceal the genesis of negative processes. The macroeconomic condition of the domestic economy at the end of the year was characterized by a steep decline in industrial production and slowing of investments, an increase in interest rates and a credit crunch, a significant reduction in federal budget revenues and international reserves, a turnaround of financial flows, and national currency depreciation.

Foreign financing of the Russian economy

The slowdown in production, capital formation, and consumption was accompanied by a significant change in the macroeconomic parameters

Table 3

Physical Volume of GDP Elements Produced and Used (growth rate, %)

	Codes	2007	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2008
		In relation to the corresponding period of the previous year					
GDP	B.1*g	8.1	8.5	7.5	6.2	1.2	5.6
Spending on final consumption	P.3	10.8	10.6	9.4	9.8	6.6	9.0
Gross fixed capital formation	P.51 + P.53	21.1	19.4	12.9	10.4	4.6	10.3
Exports	P.6	6.4	14.4	5.4	4.0	–18.5	0.2
Imports	P.7	26.6	27.3	22.6	24.9	1.2	17.7
		In relation to the previous period (seasonally adjusted)					
GDP	B.1*g		–1.0	2.8	–0.9	0.2	
Spending on final consumption	P.3		1.0	2.4	2.9	0.2	
Gross fixed capital formation	P.51 + P.53		0.5	3.6	–2.1	2.6	
Exports	P.6		0.4	–5.5	–1.6	–12.7	
Imports	P.7		7.2	0.8	4.0	–9.9	

Sources: Rosstat data. GDP 2007—second estimate; Q1–Q3 and 2008 as a whole—first estimate; Q4 2008 and seasonal adjustment—authors' estimate and calculations.

of financing the national economy. Constraints on foreign borrowing and outflows of capital from the country led to increased foreign assets and an end to the buildup of Russian banks' liabilities to foreign partners. As a result, the growth of banks' foreign liabilities, which peaked in the second quarter of 2007 (plus 16.8 percent), was replaced by a 3 percent reduction in October–November 2008 (see Figure 13).

Thus, the global financial and economic crisis fostered a turnaround of financial flows between the Russian banking system and nonresidents. Against the background of a decrease in banks' foreign indebtedness by more than 120 billion rubles in the fourth quarter of 2008, their foreign assets increased by more than 1,300 billion rubles (i.e., by 40 percent). By the end of 2008, the negative position with respect to net foreign assets of Russian companies was reduced to 300 billion rubles versus 2.065 trillion rubles at the end of the first six months of the year.

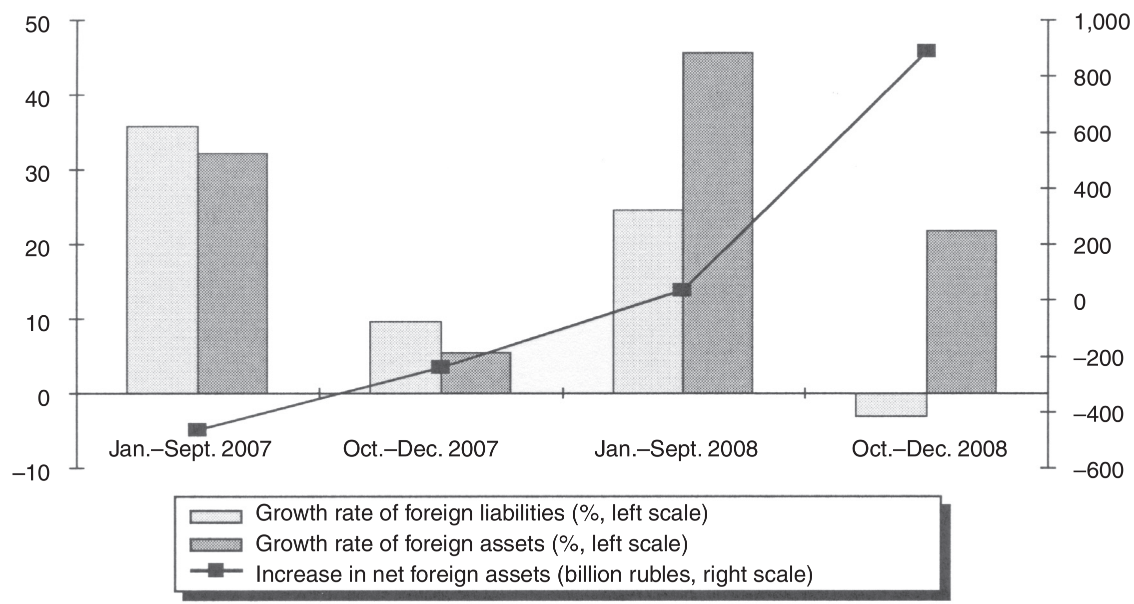
In the second half of 2008, the distribution of federal budget funds among parts of the banking system also changed significantly. For instance, last year the funds of government administrative agencies deposited in lending institutions more than quadrupled, more than doubling in August–November alone.

As a result, while prior to September 2008 government administrative agencies were net creditors only of the Bank of Russia, the government then also became a net creditor of lending institutions, that is, the funds deposited in them by the consolidated government exceeded the amount of its borrowing (see Figure 14). The significance of the federal budget in saturating the banking system with liquidity is manifested in the 40 percent December decrease in budget funds on deposit, from 1.205 trillion rubles to 690.1 billion rubles at the end of November and December 2008. Previous deposits of federal budget funds in lending institutions made it possible to replace foreign financing flows, which had dried up, with domestic financing, while the Bank of Russia drew up regulations for and organized additional refinancing measures and tools.

Net state financing of the banking system as a whole increased by more than 50 percent during the year and exceeded 7.2 trillion rubles at the end of December 2008. Thus, the foreign financing of the banking system that was curtailed was partially replaced in the fourth quarter of 2008 by centralized domestic financing from the bank of Russia and the federal budget.

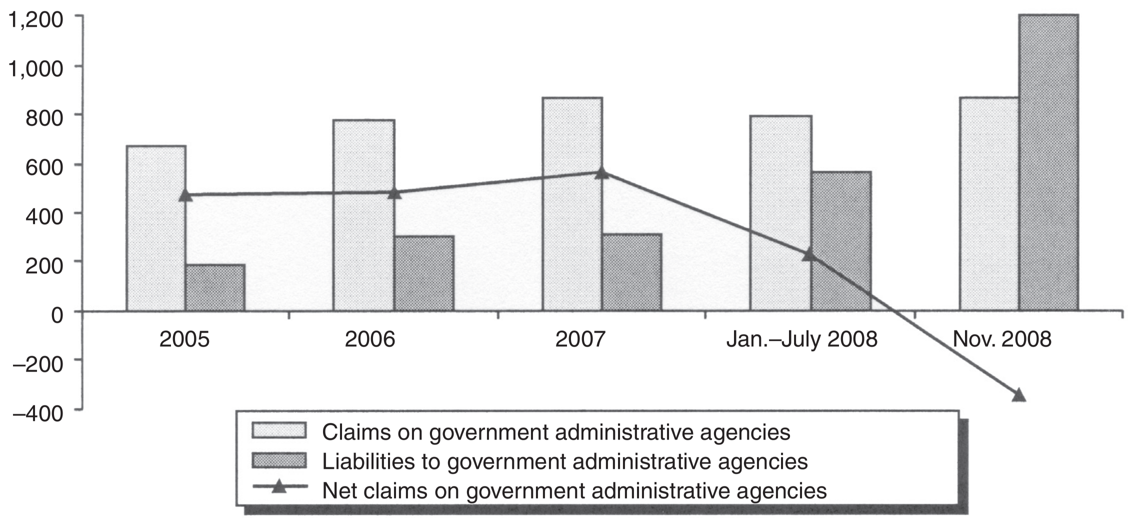
Under the influence of the global financial crisis, the direction of financial flows in the Russian economy was fundamentally changed.

Figure 13. **Net Foreign Assets of Lending Institutions**



Sources: Bank of Russia, "Obzor kreditnykh organizatsii," *Biulleten′ bankovskoi statistiki.*

Figure 14. **Net Position of Lending Institutions in Relation to the Banking System, at End of Period** (billion rubles)



Sources: Bank of Russia, "Obzor kreditnykh organizatsii," *Biulleten´ bankovskoi statistiki.*

The net foreign assets of monetary-regulation agencies began to decline. Dollar appreciation in international markets led to decreased foreign liquidity coming into the country (along with continuing decreased accessibility of foreign borrowing). As a result of growing capital outflow and increasing ruble interventions in September, for the first time since the third quarter of 2003 the Bank of Russia's net foreign assets fell by 233.6 billion rubles. For the fourth quarter of 2008, this decrease totaled 1.508 trillion rubles (see Table 4). Thus, the mix of sources from which the money supply is created changed markedly under the influence of the deepening global financial crisis.

Beginning in 2000, the main tool for sterilization of the money supply was accumulation of federal budget funds in the accounts of government administrative agencies in the Bank of Russia. However, while about half of the increase in net foreign assets was absorbed by budget funds in 2007, in 2008, when net foreign assets were declining, budget funds in Central Bank accounts rose by 170 percent in comparison with its net foreign assets.

Thus, against the background of a change in the direction of financial flows between the domestic economy and the rest of the world, which caused a reduction in the net foreign assets of monetary-regulation agencies, the sterilization effect of the Reserve Fund and the National Welfare Fund was significantly strengthened. In spite of the large-scale net outflow of foreign currency from the country, the money in budget reserve funds increased by 225.1 billion rubles ($68.3 billion) in 2008 vs. 156.8 billion rubles ($67.7 billion) in 2007. As a result, the monetary-regulation agencies' money supply had the smallest growth since the beginning of the socioeconomic transformations in the 1990s.

In a deteriorating foreign economic situation and aggressive actions by the Bank of Russia to keep the national currency stable, money was supplied only by refinancing lending institutions. In this case, the key factor in ruble demand was depreciation of the Russian currency, as a result of which banks and their clients massively shifted ruble liquidity into foreign currency assets. The Bank of Russia estimates that, of the $169 billion in foreign currency it sold to banks in September–December, 17 percent was removed from Russia, and 36 percent found its way into the pockets of private individuals.[9]

The smooth devaluation of the national currency conducted through a reduction in international reserves enabled enterprises and the public

Table 4

Sources of Growth of the Bank of Russia's Money Supply (billion rubles)

	2007				2008			
	Jan.–July	Q3	Q4	year	Jan.–July	Q3	Q4	Year
Increase in monetary base from	1,017.5	–551.9	926.1	1,391.7	–90.4	–105.1	260.2	65
Net foreign assets	2,472.8	154.6	1,118.0	3,745.4	1,594.5	711.2	–1,508.2	798
Net claims on government administrative agencies	–1,362.2	–70.0	156.1	–1,876.1	–1,768.6	–731.6	290.9	–2,209
Claims on lending institutions	55.5	56.0	–20.3	91.2	2.2	270.6	3,520.7	3,793
Other	–148.6	–92.4	–327.7	2.2	81.0	–355.3	–2,043.2	–2,317

Sources: Bank of Russia, "Obzor kreditnykh organizatsii," *Biulleten´ bankovskoi statistiki.*

to adapt to exchange rate changes, and lending institutions were able to repay part of their foreign debt and restructure their assets by changing their foreign currency positions. At the same time, Russian banks opened foreign currency positions to their corporate clients, so that they could hedge exchange rate risks for paying foreign debt.

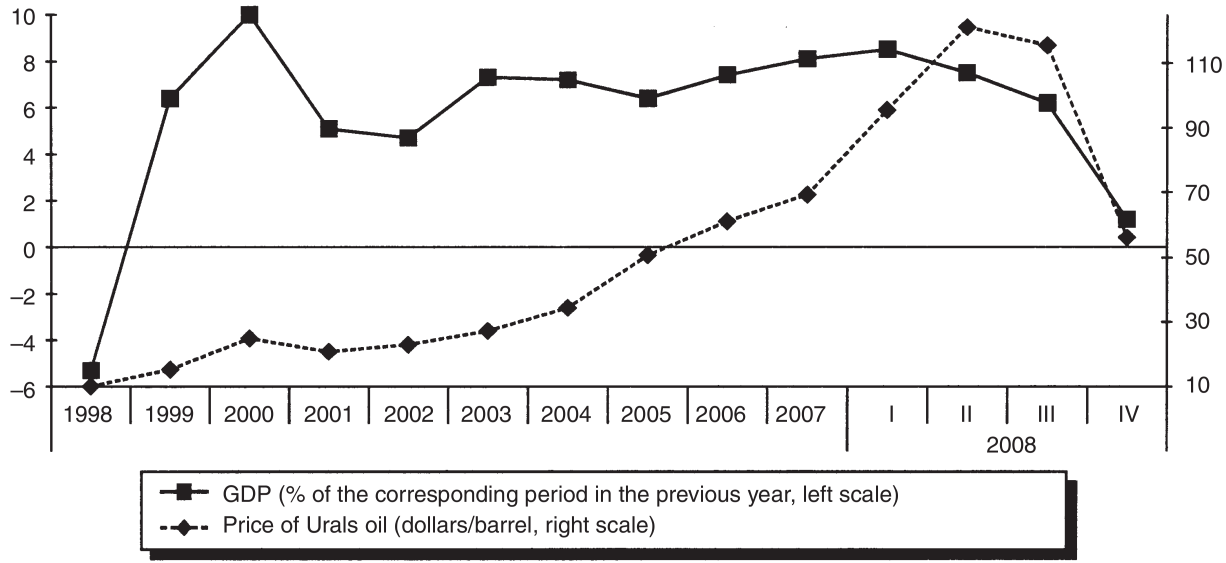
The Bank of Russia's aggressive actions to maintain liquidity expanded the money supply by 1.2 percent in 2008 versus a 33.7 percent increase in 2007. As a result, M2 money supply growth in 2008 did not exceed 1.7 percent vs. 47.5 percent in 2007. In the second half of 2008, the money supply decreased by 5.3 percent versus a 22.2 percent rise in the corresponding period of 2007 and 7.3 percent in the first six months of 2008. Contrary to the steady trend of previous years, in 2008 the cash portion of the M2 money supply grew faster, while the amount of noncash funds increased only slightly. This led to decreased financing of corporations' current operations, and in the future will limit the accessibility of long-term sources of financing for their investment programs and, accordingly, the economic growth rate.

***

The Russian economy entered 2009 coming down from almost a decade of growth since the crisis of 1998. This was predetermined primarily by the end of a period of exceptionally favorable prices in foreign markets for energy resources and other raw material commodities (see Figure 15). International price decline was followed by decreased global demand. The situation was exacerbated by contraction of Western credit markets and a decreased inflow of cheap and long-term foreign financial resources into the Russian economy,

History knew only local or continental crises. The current crisis became global. Neither its depth, nor its length, nor its long-term consequences can be predicted yet, but in any case, it appears that the fat years are over for Russia. With the stagnation of foreign demand and reduced accessibility of foreign financial resources, we can and should rely only on domestic demand. This will require the creation of a new, postcrisis model of reproduction different from the failed one of the 1990s and the one that worked in the fat years of the 2000s, even though the size and quality of banks, the stock market, and other financial institutions do not meet the needs of a national economy as large as the Russian one.

Figure 15. **International Oil Prices and Russian Economic Growth Rate**



Sources: Authors’ calculations based on Rosstat data.

Notes

1. The return on total assets equals the ratio of the net financial result to total production assets and reflects the average rate of return obtained on all sources of investments (internal and borrowed).

2. "Warren Buffet on the Stock Market," *Fortune,* December 10, 2001.

3. See, in particular, L. Grigor′ev and M. Salikhov, "Finansovyi krizis-2008: vkhozhdenie v mirovuiu retsessiiu," *Voprosy ekonomiki,* 2008, no. 12 [translated as "Financial Crisis 2008: Entering Global Recession," *Problems of Economic Transition,* vol. 51, no. 10 (February 2009), pp. 35–62]; A. Navoi, "Rossiiskie krizisy obraztsa 1998 i 2008 godov: naidi 10 otlichii," *Voprosy ekonomiki,* 2009, no. 2.

4. "Rossiiskii fondovyi rynok—lokomotiv rosta i burevestnik krizisa," Interfaks, December 29, 2008, www.interfax.ru/print.asp?sec=1447&id=54611/.

5. "Na rynke repo tonet 'KIT,'" *Point,* September 17, 2008, www.point.ru/business-news/2008/09/17/17732/.

6. "Obval rossiiskogo rynka—prichiny i pervye vyvody," *ZeFinance,* September 17, 2008, http://zefinance.ru/Archive/0010.htm.

7. "Bankovskaia sistema v dekabre: zatish′e . . . mezhdu buriami," Trast National Bank, www.iguru.ru/Files/20090204/{592FCBA2-0795-4CAD-A666-3FE4881EB2AC}/0.pdf.

8. For the types of activity "production of mineral resources," "manufacturing," and "production and distribution of electric power, gas, and water."

9. "TsB v sentiabre–dekabre prodal bankam valiuty na $169 mlrd," RBK, January 27, 2009, http://top.rbc.ru/economics/27/01/2009/276661.shtml.