



**THE CENTRAL BANK  
OF THE RUSSIAN FEDERATION  
(BANK OF RUSSIA)**

# **Quarterly Inflation Review**

---

**2008 Q2**

---

**Research and Information Department**

*Quarterly Inflation Review* currently issued by the Bank of Russia's Research and Information Department is a document primarily aimed at analysing the latest consumer price trends. Inflation surveys published in countries implementing inflation targeting (inflation forecasts) offer projected inflation estimates to study potential inflation deviation from the target, analyse the reasons for such deviation and outline the central bank's measures to steer inflation towards the target. Since the end of 2006 the Bank of Russia, assisted by the IMF, carries out work to develop an analysis and forecast system similar to those used by central banks implementing inflation targeting. As the methods of analysis and forecast improve, quarterly inflation reviews will be expanded and complemented with respective sections.

# Contents

Introduction.....	3
Inflation Dynamics.....	4
<i>Consumer prices</i> .....	4
<i>Housing prices</i> .....	6
<i>Producer prices</i> .....	7
<i>Foreign trade</i> .....	9
<i>Demand</i> .....	11
<i>Supply</i> .....	14
<i>Labour market</i> .....	14
Monetary Conditions.....	16
<i>Exchange rate</i> .....	16
<i>Interest rates</i> .....	18
<i>Asset prices</i> .....	21
<i>Monetary aggregates</i> .....	22
<i>Credit aggregates</i> .....	25
Statistical Addendum.....	27



## Introduction

Rapid growth in consumer prices that began in the Russian economy in the second half of 2007 continued in the first half of this year. Inflation in January-June 2008 quickened to 8.7% as against 5.7% in the same period last year. The acceleration of inflation in the country is largely due to the increase in food prices, which account for a large share of household consumer expenditures. Growth in food prices on world commodity markets has been another contributing factor. Faster price growth has been registered virtually in all major groups of goods and services included in the consumer price index calculation showing that there are fundamental factors behind the acceleration of inflation, mostly related to the expansion of domestic demand. This process is the result of the easing of monetary and budget policies in the past two years.

The Bank of Russia has been taking measures to tighten monetary conditions for the economy. It continued to raise interest rates to contain inflation and make money supply grow slower. In April and June 2008, the refinance rate and the Bank of Russia interest rates were raised by a total of 0.5 percentage points. Another rise in interest rates took place in July. As a result, in the first seven months of this year, interest rates rose by one percentage point. The raising of the required reserve ratios for credit institutions' obligations

on July 1 and September 1 may also contribute to the slowing of growth in money supply.

On May 14, 2008, the Bank of Russia changed the procedure for conducting interventions on the domestic foreign exchange market, which is expected to result in higher volatility of ruble rate with its fluctuations less predictable, and help reduce the inflow of short-term speculative capital and slow growth in the money supply. In addition, this move may gradually enhance the effect of the interest rate policy on economic development.

The average quarterly MIACR on overnight ruble loans was slightly higher in the second quarter 2008 than in the previous quarter. Bank deposit and lending rates also increased a little in that period. On the one hand, their rise was due to the increased uncertainty on the financial markets and growth in risks and inflationary expectations; on the other hand, it was a reaction to the monetary policy tightening.

The second quarter of the year saw the beginning of a tendency towards the shrinking of the money gap. The annualised money supply growth approached the current estimates of the money demand dynamics. However, the positive money gaps impact on inflation, first registered in the middle of last year, will persist in the medium term.

# Inflation Dynamics

## Consumer prices

The accelerated growth in the prices of consumer goods and services, which began in the second half of 2007, continued in the first half of this year. According to the Federal State Statistics Service (Rosstat), inflation stood at 8.7% in January-June 2008 as against 5.7% in the same period of 2007. Prices went up 15.1% in June 2008 and 13.9% in the first half of 2008, year on year.

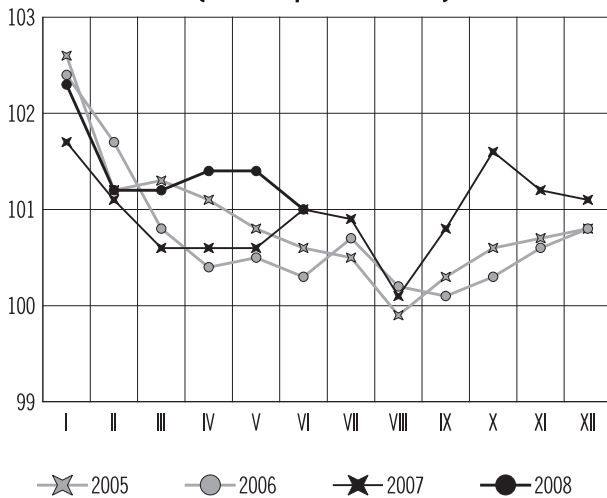
**Core inflation** stood at 6.7% in the first half of this year as against 3.0% in the first half of 2007 and an estimated 15.1% in June 2008 as compared with June 2007.

Growth in the prices of goods and services included in the core consumer price index

calculation accounted for an estimated 5.3 percentage points, or 60.5%, of overall consumer price growth in the first half of 2008 as against 2.3 percentage points, or 40.4%, in the same period of 2007. The acceleration of core inflation was largely due to the increased growth in food prices, excluding vegetable and fruit prices, which began in the second half of 2007.

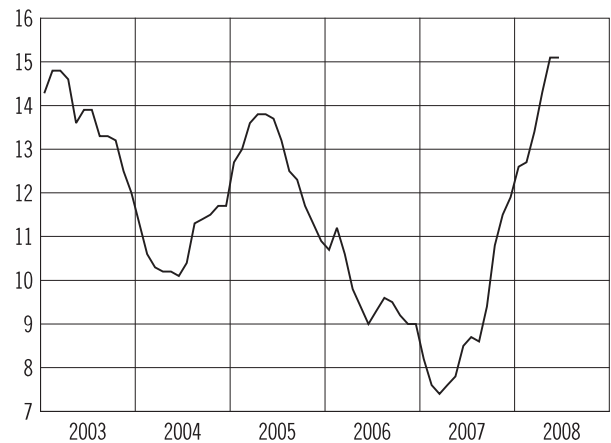
**Food prices, excluding vegetable and fruit prices**, gained 8.7% in the first half of this year as against 2.7% in January-June 2007. Increase in the prices of these products accounted for an estimated 3.1 percentage points, or 35.2%, of overall consumer price growth in the first half of the year as against 1.0 percentage point, or 17.6%, in the first half 2007.

**Consumer prices**  
(as % of previous month)



Source: Rosstat.

**Consumer prices**  
(as % of corresponding month of previous year)



Source: Rosstat.

## Consumer price inflation (%)

	Growth (June 2008 on December 2007)	Growth (June 2007 on December 2006)	
Prices of goods and services, total:	8.7	5.7	Acceleration of growth by 3.0 percentage points
of which:			
– food prices	11.4	6.1	Acceleration of growth by 5.3 percentage points
– food prices, excluding vegetable and fruit prices	8.7	2.7	Acceleration of growth by 6.0 percentage points
– non-food prices	4.4	2.2	Acceleration of growth by 2.2 percentage points
– prices of paid services provided to households	10.8	9.8	Acceleration of growth by 1.0 percentage points
Prices of goods and services included in core inflation calculation	6.7	3.0	Acceleration of growth by 3.7 percentage points

Source: Rosstat.

Growth in the prices of most basic food products in January-June 2008 far surpassed the corresponding price increase in the same period a year earlier. In particular, prices of bread and bakery products jumped 20.7% in the first six months of this year as against 4.7% in the same period last year, pasta 26.0% as against 2.9%, meat and poultry 7.8% as against 2.3% and sunflower oil 25.9% as against 0.8%. The accelerated rise in food prices on the consumer market was partly due to faster growth in agricultural producer prices. In particular, grain producer prices went up 20.2% in the first half of this year as against 8.0% in the same period last year, sunflower producer prices rose 16.7% as against 8.1% in January-June 2007, and livestock and poultry producer prices gained 3.9%, whereas in the first half of 2007 they fell 1.1%.

In January-June 2008 the Russian government continued grain interventions on the domestic market, first launched in October 2007 to contain growth in the prices of grain products. In addition, it kept high until July 1, 2008, the export duties on some cereals. The agreements between major trading networks to freeze the prices of some socially important food products remained in effect until May. As a result, growth in food prices, excluding vegetable and fruit prices, slowed by 3.1 percentage points in January-June 2008 as compared to the second half of 2007.

The world grain market demonstrated different price dynamics in January-June 2008. Compared to December 2007, the price of Thai rice

grew 110%, US maize 59.2% and Canadian barley 21.2%, while US and Canadian wheat prices were down 5.4% and 8.2%, respectively.

World meat and vegetable fat prices also continued to rise. Beef prices went up 35.5% in January-June, while the price of sunflower oil on the European market increased 39.2%.

**Vegetable and fruit prices** rose 36.0% in the first half of this year, a slowdown by 2.6 percentage points on the same period last year. Growth in vegetable and fruit prices in the first half of 2008 accounted for an estimated 1.4 percentage points of headline inflation, or 15.7% of overall consumer price growth (compare with an estimated 1.5 percentage points and 26.0%, respectively in the same period a year earlier). In January-June 2008 growth in vegetable and fruit prices was smaller than their average annual growth in the previous three years.

**Food prices** gained 11.4% in the first half of this year as against 6.1% in the same period last year.

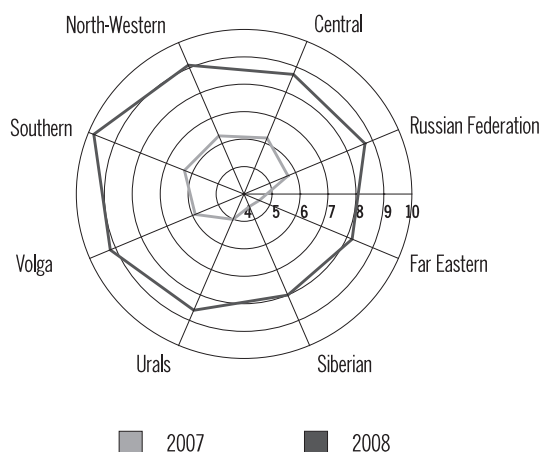
Growth in **non-food prices** accelerated to reach 4.4% in the first half of this year as against 2.2% in January-June 2007. The biggest increases were registered in the price of car petrol (16.1% as against 0.5% in the first half of 2007), washing liquids and detergents (7.8% as against 3.2% in the same period of 2007) and building materials (6.8% as against 6.5% in January-June 2007). According to estimates, the increase in non-food prices accounted for 1.6 percentage points, or 18.2%, of overall consumer price growth in the

#### Food price inflation (%)

	Growth (June 2008 on December 2007)	Growth (June 2007 on December 2006)	
Food products	11.4	6.1	Acceleration of growth by 5.3 percentage points
Bread and bakery products	20.7	4.7	Acceleration of growth by 16.0 percentage points
Cereals and legumes	20.4	7.2	Acceleration of growth by 13.2 percentage points
Pasta	26.0	2.9	Acceleration of growth by 23.1 percentage points
Meat and poultry	7.8	2.3	Acceleration of growth by 5.5 percentage points
Fish and seafood	3.9	4.3	Slowing of growth by 0.4 percentage points
Milk and dairy products	6.1	2.2	Acceleration of growth by 3.9 percentage points
Butter	5.6	2.7	Acceleration of growth by 2.9 percentage points
Sunflower oil	25.9	0.8	Acceleration of growth by 25.1 percentage points
Granulated sugar	17.5	-4.5	
Vegetables and fruit	20.6	11.2	Acceleration of growth by 9.4 percentage points
Alcoholic beverages	6.0	3.4	Slowing of growth by 2.6 percentage points

Source: Rosstat.

**Consumer price growth by federal district  
(June as % of December of previous year)**



Source: Rosstat

first half of 2008 as compared with an estimated 0.8 percentage points, or 13.7%, in January-June 2007.

The acceleration of price growth on the non-food market, which is characterised by highly diversified consumer demand and high competition, including competition with importers, is a sign of rapid growth in demand. In the first half of the year the Bank of Russia repeatedly raised its interest rates to contain the expansion of aggregate demand.

Prices of **paid services provided to households** increased 10.8% in January-June 2008 as against 9.8% in the same period last year and accounted for an estimated 2.7 percentage points, or 30.8%, of overall consumer price growth (2.4 percentage points, or 42.7% of headline inflation in the first half of 2007). Regulated prices of paid services grew by an estimated 12.0% in January-June 2008 or 0.2 percentage points faster than in the same period last year.

Rent and communal service charges increased 14.6% as against 12.7% in the first half of last year, and passenger transport fares grew 17.0% as against 11.9% in January-June 2007.

Growth in service prices in the first half of 2008 exceeded overall growth in the prices of goods by 2.8 percentage points as against 5.5 percentage points in January-June 2007.

According to Rosstat, consumer price growth in all **federal districts** in the first half of 2008 was higher than in the same period last year.

Estimates show that the differences between various Russian regions and territories in terms of the cost of a fixed set of goods and services used by Rosstat for the interregional comparisons of the purchasing power of the population became less pronounced in the first half of 2008. The regional difference ratio<sup>1</sup> in that period decreased to 38.2% from 41.1% in the same period last year.

In the first half of 2008, the rates of growth in food prices, excluding vegetable and fruit prices, differed slightly by federal district (from 7.5% to 10.7%). Growth in non-food prices in that period was almost twice as slow and differed by federal district from 4.4% to 5.1%. As for the vegetable and fruit prices, their growth rates differed more significantly by federal district. In the Central Federal District, for example, vegetable and fruit prices rose 40.3% in January-June, whereas in the Far Eastern Federal District they increased 27.8%.

Growth in service prices accelerated in all federal districts in the first half of 2008 as compared with the same period last year.

### Housing prices

Housing prices increased 7.7% on the primary market and 11.9% on the secondary market in June 2008 as compared with December 2007. Compared with the first half of 2007, growth in housing prices on the primary market slowed by 3.0 percentage points, whereas on the secondary market price growth accelerated by 1.2 percentage points.

There was a marked slowing of growth in housing construction in the first half of this year. While in the first half of last year housing construction increased 34.3%, in the same period of 2008 there was a growth of 2.9%. Together with the slowing of housing price growth on the primary market, that may testify to the saturation of demand in this segment of the real estate market. It should be noted that this demand is

<sup>1</sup> The regional difference ratio is calculated by the Bank of Russia as the difference between the cost of a fixed set of goods and services in the most and least expensive regions relative to the national average cost of the set.



partly created by investors and therefore the slowing of price growth may be the result of the world financial crisis.

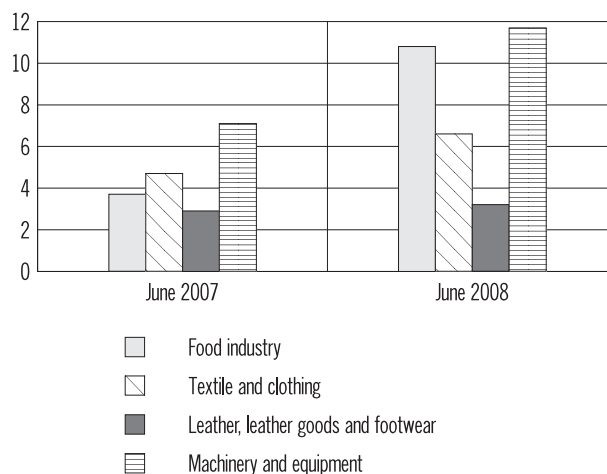
### Producer prices

**Industrial producer prices** increased 17.0% in the first half of this year as against 14.6% in the same period of 2007. The acceleration of producer price growth was mostly due to the price rise in the manufacturing sector and in the production and distribution of electricity, gas and water. Producer prices also rose significantly in the mining sector, especially in the production of fuel and energy.

Producer price growth in the manufacturing sector stood at 16.2% in the first half of this year as against 8.3% in the first half of 2007. The most significant price growth was registered in the metallurgy sector (28.8% as against 14.1% in the first half of 2007), chemical industry (26.1% as against 3.7%) and output of petroleum products (19.1% as against 11.5%).

Price growth acceleration was registered in all manufacturing industries turning out products for the consumer goods market in the first half of 2008, as compared with the same period of 2007. For instance, producer prices in the production of food, including beverages, and tobacco gained 10.8% as against 3.7% in January-June 2007, and there was a similar movement in producer prices in the textile and clothing industry (6.6% as against

**Producer prices in some manufacturing industries (growth as % of December of previous year)**



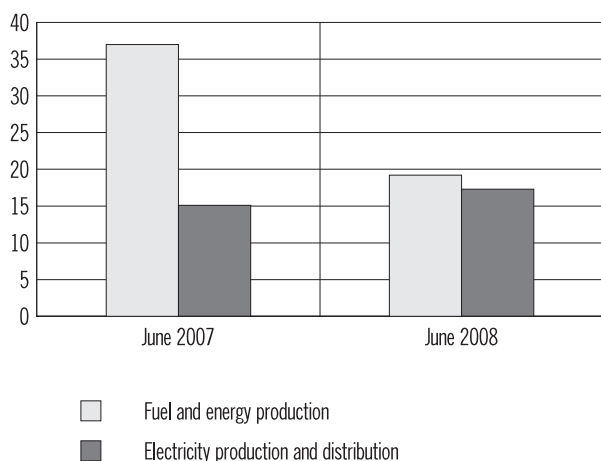
Source: Rosstat.

4.7%) and in the production of leather, leather goods and footwear (3.2% as against 2.9%).

Price growth in the production, transmission and distribution of electricity accelerated to 17.3% in the first half of this year as against 15.1% in the same period last year.

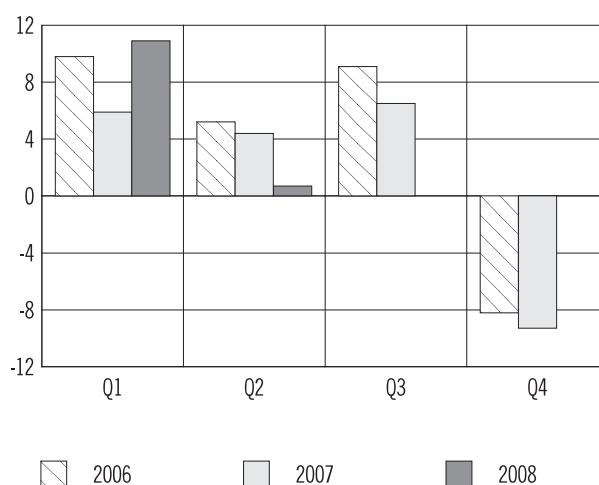
Producer price growth in the mining sector slowed to 18.3% in January-June 2008 as against 32.9% in the same period last year. Producer price growth was slightly higher in the fuel and energy sector (19.2% as against 37.0% in the first half of 2007). Price growth in the mining sector, except the fuel and energy sector, accelerated to 9.1% in

**Producer prices by type of activity (growth as % of December of previous year)**

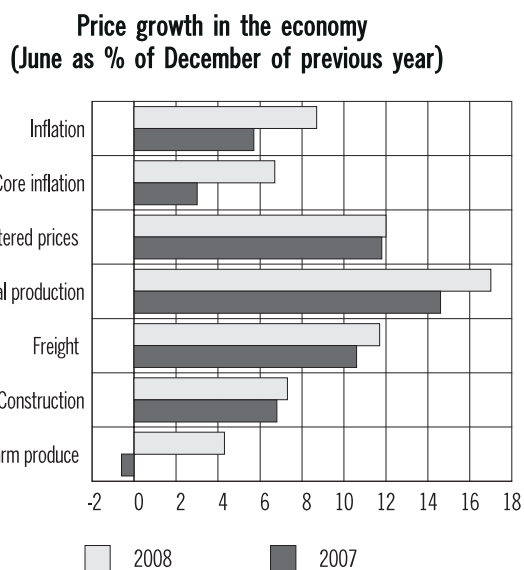


Source: Rosstat.

**Freight charges (quarterly, %)**



Source: Rosstat.



Source: Rosstat.

January-June 2008 as against 3.6% in the same period last year.

The contribution from producer prices in the mining sector to overall industrial producer price growth equalled an estimated 4.9 percentage points, or 28.8%, in the first half of 2008, as compared with an estimated 7.4 percentage points, or 50.5%, in January-June 2007.

**Freight charges** increased 11.7% in the first half of this year as against 10.6% in the same period last year. Railway transport fares rose 12.7% as against 7.7% in January-June 2007.

**Communication fees for corporate entities** gained 10.2% in the first six months of this year as against 3.8% in the same period of 2007.

Producer prices of **building materials** increased 7.3% in January-June 2008 as against 6.8% in the corresponding period a year earlier.

**Agricultural producer prices** grew 4.3% in January-June 2008, whereas in the same period last year they went down by 0.6%. Crop grower prices made the biggest contribution to agricultural producer price growth. In the first six months of this year crop grower prices rose 17.2% as against 3.9% in the same period last year. Especially high growth was registered in potato producer prices (38.0% as against 19.8% a year earlier).

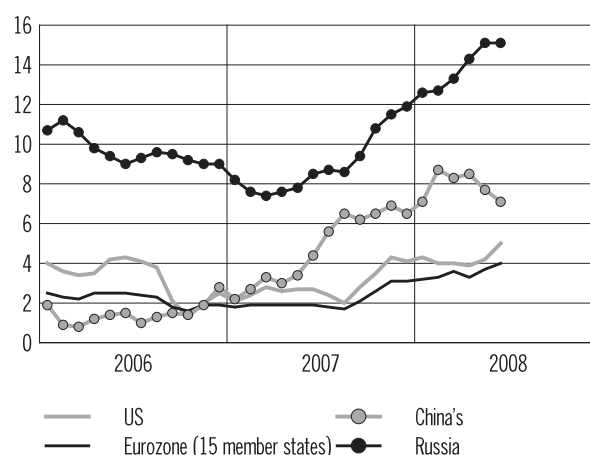
Livestock breeder prices were down 4.7% in January-June 2008, whereas in the same period last year they dropped 3.6%.

### **Inflation in some countries of the world<sup>2</sup>**

*Inflation in the countries that are the major exporters of goods to Russia accelerated to 4.2% in the first half of 2008 (June on December of the previous year) from 2.1% in the same period last year. Price growth quickened in most of the countries that account for a large portion of Russian imports. The biggest contribution to aggregate inflation was made by the acceleration of price growth in Ukraine (to 15.5% from 4.2% in the first half of 2007), with growth in energy and food prices remaining the key factor of accelerated inflation.*

*In the United States, consumer prices increased by 4.2% in the first half of the year (June 2008 on December of the previous year) as against 3.2% in June 2007 due to significant rise in energy prices, while the contribution from core inflation and food price growth to overall price growth remained unchanged from the first half of 2007. In the euro area, inflation accelerated*

**Consumer prices by country (%)\***



\* Consumer price growth on corresponding month of previous year.

Sources: Bureau of Labour Statistics at the US Department of Labour, Statistical Office of the European Communities EUROSTAT, China's National Bureau of Statistics, and Rosstat.

<sup>2</sup> Based on data provided by the Bureau of Labor Statistics at the US Department of Labor, the Statistical Office of the European Communities (EUROSTAT) and national statistical offices of other countries. Contribution from individual factors to US and eurozone inflation has been evaluated by the Bank of Russia.

to 2.3% (June on December of the previous year) as against 1.4% in the same period of 2007, as the contribution from energy and food prices increased and that from core inflation waned.

### Foreign trade

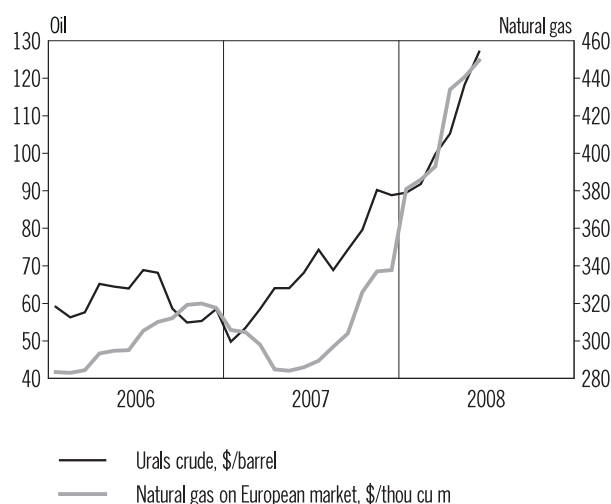
The price situation for major Russian export commodities<sup>3</sup> on world markets in January-June 2008 was favourable. World market prices of Russian exports were higher than in the same period last year, especially energy prices that grew 66.8%, while non-energy prices climbed 16.1% on average.

Global oil prices grew faster this year, especially in the second quarter, hitting all-time record high. On June 27, the price of Urals crude jumped to a six-month high of \$134.1 per barrel. There have been a marked rise in Russian oil prices since December 2007 (by 43.1% in June 2008 as against 16.6% in June 2007), reflecting the impact of such factors as the state of oil and petroleum products stocks in the United States and other OECD countries, US dollar dynamics as against other major world currencies, significant investments in raw materials markets, the exacerbation of the geopolitical situation in the world in connection with Iran's nuclear programme, instability of oil deliveries from Nigeria and weather conditions. As a result, the average price of Urals crude increased 78.5% in 2008 Q2 year on year to nearly \$117 per barrel, according to Bank of Russia estimates.

The world market price of Russian oil increased 76.3% in the first half of 2008 year on year to \$105.3 per barrel. Prices of petroleum products gained 76.1% on average. Of these, the price of diesel fuel soared 81.1% and fuel oil 74.6%, while premium and straight-run petrol prices went up 44.7% and 49.6%, respectively. The price of natural gas in Europe rose 40.9%.

<sup>3</sup> Average prices have been calculated on the basis of data provided daily by the following news agencies and exchanges: Reuters for oil, Petroleum Argus for petroleum products (petrol, diesel fuel and fuel oil) and the London Metal Exchange for non-ferrous metals (aluminium, copper and nickel). Data on average monthly prices of natural gas and ferrous metal price indices were provided by the World Bank, and on other goods, by the International Monetary Fund.

### World oil and natural gas prices

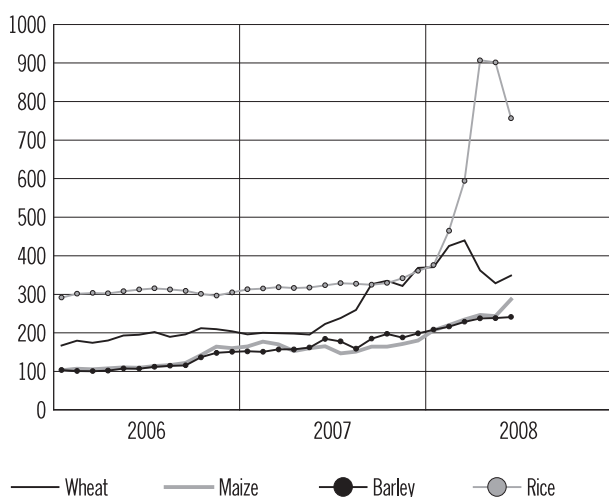


Sources: Reuters, World Bank.

A key factor behind the rise in ferrous metals prices has been the impact of higher raw materials prices on ferrous metals producers' costs (for instance, prices of iron ore soared almost 70% in the first six months of 2008 year on year). Growth in ferrous metal prices accelerated in the second quarter of this year: compared with the same period last year, they rose 56% on average (first-quarter growth stood at 30%). Ferrous metal prices increased 67.9% in June 2008 on December 2007, as against 36.8% in June 2007. In the first half of this year, ferrous metal prices were 43% higher than in the first half of 2007.

On the non-ferrous metals market, copper and aluminium prices kept on rising in the second quarter of the year, while the price of nickel continued to fall (nickel prices had been falling for four consecutive quarters). Growth in copper and aluminium prices of in January-June 2008 reflected mainly high demand in industry, especially in China, the major consumer, as it prepared to host the Olympic Games. The fall in nickel prices was largely due to an unprecedentedly high level of nickel stockpiles. Aluminium and copper prices went up 25% in June 2008 on December 2007, whereas nickel prices dropped 13.5%. Aluminium and copper prices grew 2.3% and 19.5%, respectively, while the price of nickel fell 38.7% in January-June 2008 year on year. And there was a substantial rise in prices of other Russian raw material exports, except wood and

**World grain prices (\$/tonne)**



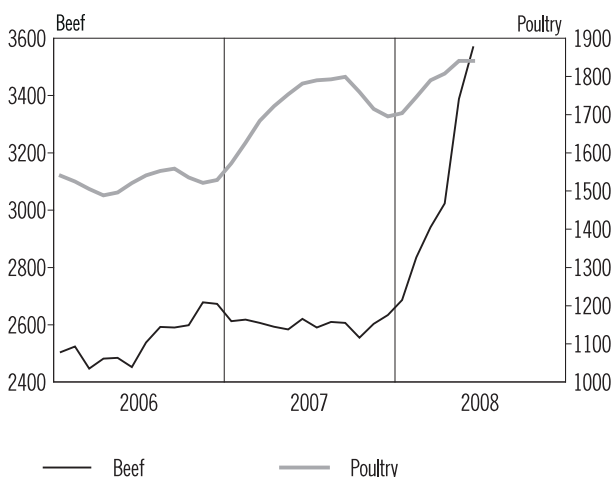
Source: World Bank.

saw timber, as compared with January-June 2007.

World prices of major Russian food imports<sup>4</sup> had different dynamics in the second quarter of the year. Wheat and sugar prices declined, growth in prices of barley, maize, sunflower oil and butter slowed down while growth in meat and rice prices accelerated.

The sharp rise in the world wheat prices from May 2007 to March 2008 gave way to a price downturn in April, as the area sown to wheat

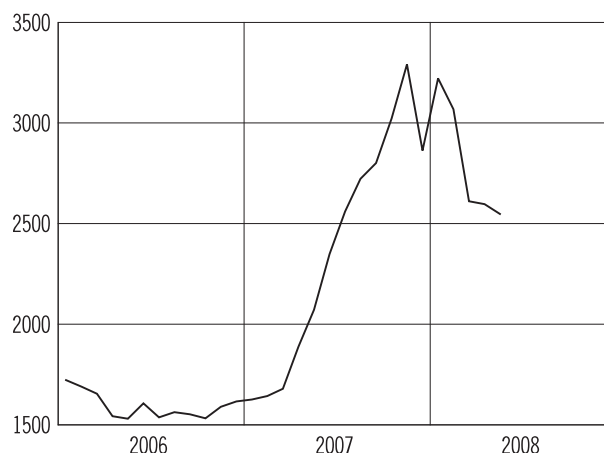
**World meat prices (\$/tonne)**



Source: World Bank.

<sup>4</sup> Average sugar prices have been calculated on the basis of data provided daily by the London Commodity Exchange, other prices are the monthly averages published by the World Bank and IMF.

**Contract import milk prices (\$/tonne)**

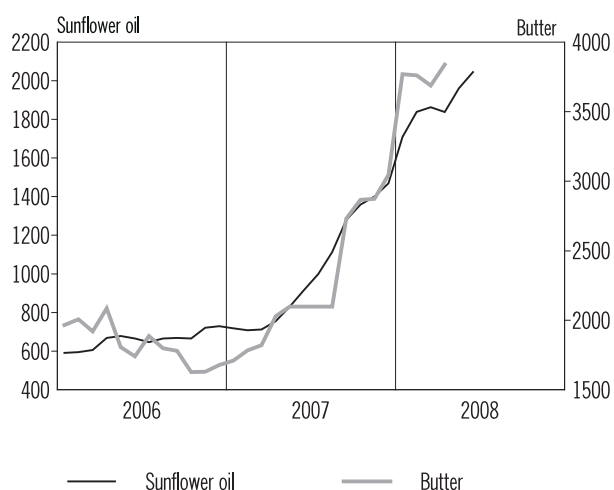


Source: Rosstat.

expanded and a bumper harvest was expected. Even though US wheat prices fell 16% in 2008 Q2 quarter on quarter, they remained at the highest level in 40 years and were 70% higher than a year earlier. Pushed up by demand, maize and barley prices continued to rise: in the first quarter of the year, the price of maize went up 17.5% and barley 10% year on year, and in the first half of the year, maize and barley prices increased by 1.4-1.5 times year on year. The second quarter of the year saw the sharp acceleration of growth in rice prices, which increased almost 80% quarter on quarter (Q1 growth stood at 40%). The price upturn was due to high demand and the ban imposed on rice imports by some producing countries, such as India and Thailand, to protect the domestic market. As a result, the price of rice rose 110% in the first half of this year as compared with the same period last year (in the previous two years the price of rice rose by an average of 7% a year).

The increased energy and fodder prices and the rise in world demand led to growth in the prices of meat, milk, butter, cheese and other dairy products. The acceleration of growth in beef prices was also due to the rise in demand on the dairy products market, the reduction of beef production in the EU, the drop in beef imports from Brazil caused by health safety problems and the restrictions placed on beef exports by Argentina. In the second quarter of the year, the price of beef rose 17.9% quarter on quarter and poultry was up 5.8% (as compared with price

## World animal and vegetable fat prices (\$/tonne)



Sources: World Bank, VNIKI (All-Russia Market Research Institute).

increases of 8.6% and 1.4%, respectively, in the first quarter). In the first half of the year, beef prices rose 18.0% as compared with the same period last year and poultry gained 6.4%.

The shortage in milk and dairy products on the world market in 2007 led to significant increase in prices. In early 2008, all countries that supplied these products to the world market restored output to previous volumes, while South East Asia, especially China, increased milk production, causing prices to fall. Contract import prices of milk declined 11% in May 2008 on December 2007. However, milk prices remain high on the world market this year: in January-May 2008, the average contract price of milk imported to Russia rose 55% as against the same period last year. Growth in the price of butter slowed to 3% in the second quarter of this year, whereas in the two preceding quarters it stood at 27-28%. Growth in sunflower oil prices was due to the fall in production in the two previous agricultural years and the sharp drop in exports from Ukraine and Argentina. In the second quarter of 2008, growth in sunflower oil prices slowed down (compared with the previous period, the price of sunflower oil rose 8%, whereas in the previous four quarters it increased by an average of 26% a quarter). As a result, vegetable oil and butter prices remained high: in the first half of this year, the world market price of butter doubled and the price of sunflower oil increased by 2.4 times, as compared with the same period last year.

On the world sugar market, first-quarter growth in prices gave way to a price decrease in the second quarter. As a result, in the first half of this year the price of raw sugar rose 11.3% and refined sugar 4.6%, as compared with the same period last year.

The price situation on world commodity markets remained favourable for Russia's trade with other countries in the first half of the year (and in 2008 Q2, in particular). The rise in the terms of trade index<sup>5</sup> accelerated as export prices grew faster than import prices.

Accelerated growth in exports accounted for Russia's foreign trade surplus increase by 75.1% to \$104.8 billion<sup>6</sup> in the first half of 2008, year on year. In the first half of 2007, Russia's foreign trade surplus contracted by 19.3% to \$59.9 billion.

### Foreign trade in some countries<sup>7</sup>

As was expected, the terms of trade changed for the better for the energy exporting countries in the first half of 2008 due to continued growth in the world prices of their major raw material exports. In the first half of the year, the International Energy Agency repeatedly scaled down its forecast for growth in world oil consumption in 2008 but raised it significantly in July as the forecast for demand in Asia and the Middle East was scaled up. The OECD predicts that the average annual price of Brent crude will increase more than 50% this year and exceed \$110 per barrel.

Russia's trading partners increased their expenditures on the consumption of oil and petroleum products. Russia supplies more than a quarter of the EU's aggregate demand for imported mineral fuel.

### Demand

#### Domestic demand

Russia's GDP expanded by an estimated 7.8-8% in the first half of 2008 year on year (in January-June 2007, it grew 7.8%). Domestic

<sup>5</sup> The ratio between export and import price indices.

<sup>6</sup> According to a balance of payments estimate as of July 4, 2008.

<sup>7</sup> According to data provided by the International Energy Agency, Organisation for Economic Cooperation and Development, Statistical Office of the European Communities EU-ROSTAT and OECD Economic Outlook No. 83, June 2008.

demand demonstrated continued growth. The positive influence of consumer demand on the expansion of the output of goods and services was limited by competitive imports. Imports continued to make up a large portion of the retail trade commodity resources, but in the first quarter of this year, it was by 2 percentage points smaller than in January-March 2007 and stood at 46%. The share of food imports contracted from 38% to 37%, while the share of non-food imports decreased by 2.8 percentage points to 53.5%. Estimates show that domestic demand for imports grew faster than demand for domestic products.

Both investment and consumer goods imports increased at rapid rates. According to the Bank of Russia estimate, imports of investment goods necessary for economic development grew a little faster than consumer goods imports, which increased largely due to rapid growth in the import of cars, household appliances and other non-food products.

Imports from non-CIS countries, especially from China and other Asia-Pacific Economic Cooperation (APEC) member countries, increased more rapidly than overall imports in January-June 2008. Imports from European Union (EU) member countries also grew a little faster than imports from other countries. Imports from CIS countries grew slowly, whereas imports from Georgia and Uzbekistan decreased.

In the first half of the year, imports of goods increased mostly due to the expansion of import volumes. However, growth in import volumes slowed down in 2008 Q2 while import price growth accelerated. The rise in import prices,

especially the prices of imported foodstuffs and edible raw materials, creates conditions for price growth on the domestic market. As before, growth in the cost of imports mainly results from the acceleration of growth in engineering imports.

Economic growth, financial stability of enterprises and the increase in the government social security benefits in the first half of the year led to 8.1% growth in household real disposable money income. The share of wages and salaries in household money income contracted from 69.1% to 68.6% in January-June 2008, while the share of social transfers and income from entrepreneurial activities expanded. The structure of household expenditures also changed slightly in 2008: the share of consumer expenditures expanded from 71.5% to 73.3%, compulsory payments and duties from 12.6% to 12.9% and foreign exchange purchases from 5.2% to 5.7%. The share of organised savings contracted by 0.8 percentage points to 8.3%. These figures show that as inflation accelerated and deposit interest rates remained low, people preferred to spend more on consumption rather than increase organised savings. Expenditures on household final consumption grew 14.1% in the first quarter of 2008 as against 12.4% in January-March 2007.

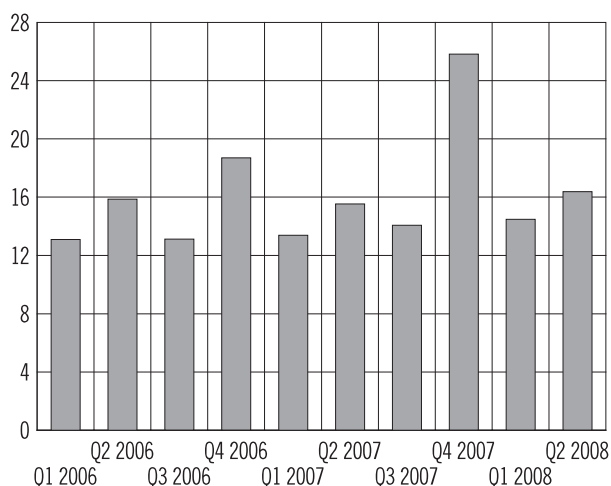
Rapid growth in consumer expenditures stimulated retail sales. Retail trade turnover expanded 15.2% in January-June 2008, while the value of paid services provided to the public increased 6.0%. Transport, municipal and communications services accounted for

**GDP consumption**  
(growth as % of corresponding period of previous year)

	2007					2008
	Q1	Q2	Q3	Q4	Full year	Q1
GDP	7.4	8.1	7.3	9.5	8.1	8.5
Final consumption	10.4	10.6	10.5	11.0	10.6	10.6
Of which:						
– households	12.4	12.7	12.8	13.1	12.8	14.1
Gross capital formation	24.9	25.9	18.1	23.6	22.6	10.4
Net exports	-23.9	-29.2	-41	-20.4	-28.1	-7.3
– exports	3.8	5.3	4.4	11.3	6.4	14.4
– imports	28.4	28.9	26.4	26.1	27.3	27.3

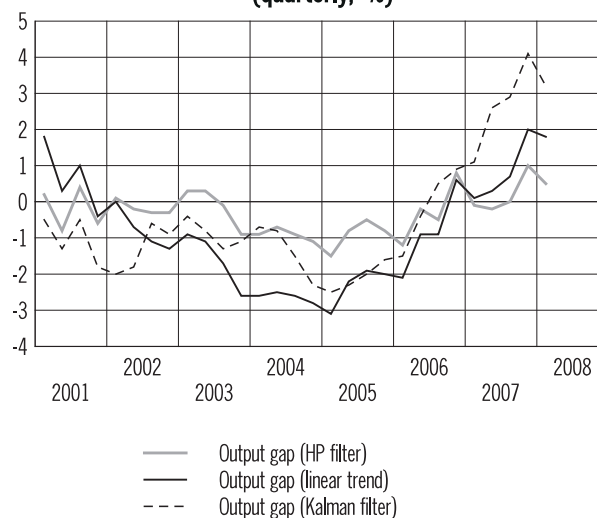
Source: Rosstat.

**Federal budget non-interest expenditures  
(quarterly, as % of GDP)**



Source: Federal Treasury.

**Production gap  
(quarterly, %)**



Source: Bank of Russia.

the largest part of the paid services in terms of value.

Government expenditures on final consumption increased 2.3% in the first quarter of this year as against 5.6% in the same period of last year. According to the Federal Treasury's preliminary data, federal budget expenditures rose to 15.9% of GDP in the first half of 2008 as against 15.0% in January-June 2007. Non-interest expenditures hit a four-year record high of 15.5% of GDP (as against 14.5% in January-June 2007). This growth in non-interest expenditures was chiefly due to the increase in social expenditures and partial transfer of obligations from 2007 to 2008. Larger expenditures in the first half of the year were also attributable measures taken by the Finance Ministry to level out cash expenditures more evenly during the year. The federal budget execution in terms of non-interest expenditures in January-June 2008 was 40.4% of the level written down in the 2008 federal budget law as amended, which represents a considerable improvement on the previous year's 33.0%.

The funds on the government's accounts with the Bank of Russia continued to grow significantly in the first half of the year, absorbing surplus liquidity in the economy. At the same time, the federal budget surplus contracted by 0.1 percentage points in January-June 2008 as compared with the same period last year and stood at 7.3% of GDP.

Gross capital formation increased 10.4% in January-March 2008 as against 24.9% in the same period last year. Growth in investment activity slowed down. Fixed capital investment increased 16.9% as against 23.7% in January-June 2007. The largest sums were invested in the mining sector, transport and communications.

Investments in machinery, equipment and transport vehicles accounted for more than a third of total investments. About one-fifth thereof were used to acquire imported equipment. Imports of machinery, equipment and transport vehicles increased 63.5% in the first quarter of this year as against 69.2% in the same period last year. Imports of machinery and equipment help modernise production and introduce technological innovations and, consequently, raise labour productivity, control price growth in the economy, and create conditions for sustainable economic growth.

Fixed capital investment was largely financed (by 53.8%) by raising funds in January-March 2008. The share of bank loans in investment financing stood at 10.4% (as against 9.2% in January-March 2007).

As imports grew considerably faster than exports, net exports of goods and services decreased 7.3% in January-March 2008.

Thus, investment activity and the expansion of consumer demand stimulated rapid economic growth. As a result, production exceeded its natural

(potential) level, accelerating price growth on the consumer goods market.

### **Foreign demand<sup>8</sup>**

*According to preliminary data, US GDP increased 2.2% and China's GDP expanded 10.4% in the first half of 2008 as against 1.5%, respectively, in the first half of 2007. In the euro area, GDP grew by an estimated 1.8% as against 2.9% in the same period last year. GDP growth in the countries that account for a substantial part of Russian exports slowed to an estimated 3.9% in the first six months as against 5% in January-June 2007, a decline that corresponds to the predicted level. By the end of the year, it is expected to decline to 3.5% as against 4.7% in 2007. Forecasts for annual GDP dynamics in the United States and China have improved. According to the IMF forecast, growth in the world production of goods and services will slow to 4.1% in 2008 as against 4.9% in 2007.*

Russian exports<sup>9</sup> of goods increased 54.4% to \$240.0 billion in January-June 2008 year on year. Exports of goods to EU countries, especially Italy, Germany and France, and CIS member countries, particularly Belorussia and Ukraine, increased faster than overall commodity exports.<sup>10</sup>

The value of Russian exports of goods increased in January-June 2008 year on year, largely due to higher energy export prices accompanied by the expansion of natural gas export volumes. Oil export volumes contracted in the first half of the year. Export volumes grew more slowly than export prices. According to data on GDP consumption, exports of goods and services increased 14.4% in 2008 Q1 as against 3.8% in January-March 2007.

### **Supply**

Production grew in most of the economic activity categories in the first half of this year. The manufacturing sector, construction, trade, education and healthcare increased their

contribution to value added growth in 2008 Q1 as compared with the same period last year, whereas the mining sector's contribution decreased. This process may indicate that the Russian economy has become slightly less dependent on the foreign trade situation and that the role of the services sector has increased.

Output in the key economic activity categories increased 8.2% in the first half of this year as against 8.1% in the same period last year. The most rapid growth was registered in construction and retail trade. In January-June 2008, retail trade turnover expanded 15.2% (15.3% in January-June 2007), growth in construction stood at 22.4% (19.9%) and freight transport turnover increased 4% (2.9%).

Industrial output grew 5.8% in January-June 2008 as against 7.1% in the same period last year. The year-on-year deceleration of production growth in January-June 2008 was largely due to the slowing of growth in output in manufacturing industries (from 11.4% in the first half of 2007 to 8.4% in the first half of this year) and also in the mining sector (from 3% to 0.5%).

Agricultural production increased 4.3% in the first half of this year as against 4% in the same period last year. There was a rise in the output of major livestock products, such as cattle and poultry, which increased 8.5%, and milk, which grew 1.3%. As a result, the output of meat and meat products increased 7.7% in January-June 2008 year on year (of which, the output of meat and premium-quality by-products grew 14.1%). However, growth in agricultural producer prices has accelerated.

### **Labour market**

The number of people employed in the economy continued to grow in January-June 2008, but the rate of growth slowed to 0.1% from 2.6% in the same period of 2007.

Labour productivity increased by an estimated 7.9% in the first quarter of the year (as against 5.1% in the same period of 2007), containing price growth in the economy. According to estimates, labour productivity in the production of goods grew faster than in the services sector in 2008 Q1. Growth in the production of services exceeded growth in the manufacturing sector. The number of people employed in the services sector

---

<sup>8</sup> According to data compiled by the Bureau of Economic Analysis at the US Department of Commerce, the Statistical Office of the European Communities (EUROSTAT), China's National Bureau of Statistics and national statistical offices of other countries.

<sup>9</sup> According to a balance of payments estimate as of July 4, 2008.

<sup>10</sup> According to data provided by the Federal Customs Service of Russia.



increased as compared with the same period last year, while jobs numbers in the manufacturing sector declined.

In the first half of this year, as in the previous years, growth in real wage (by 13%) exceeded growth in labour productivity. However, the gap between growth in real wage and growth in labour productivity narrowed as compared with the same period last year.

The share of wages and salaries in the GDP structure by source of income contracted from 49.5% in the first quarter of 2007 to 49.1% in the same period this year.

Significant differences remained in wages and salaries in different activity categories in 2008. The highest average monthly wage in January-May 2008 was registered in the financial sector (40,194 rubles) and fuel and energy production (35,629 rubles). That exceeded the

national average by 2.5 times and 2.2 times, respectively. The lowest wages were registered in agriculture, hunting and forestry (7,099 rubles), the textile and clothing industry (7,632 rubles) and the production of leather, leather goods and footwear (8,772 rubles). This accounts for 44.7%, 48.1% and 55.2% of the national average wage, respectively. Wages and salaries were lower than the national average in the activity categories financed, to a large extent, from the federal budget (education, communal, social and personal services and healthcare).

The number of unemployed (calculated according to the ILO methodology) rose 2.1% in January-June 2008. The total number of jobless accounted for an estimated 6.7% of the economically active population (as against 6.5% in the first half of 2007).

# Monetary Conditions

## Exchange rate

The current account surplus stood at \$31.7 billion in the second quarter of the year, according to the balance of payments estimate. This represents a decrease from \$37.7 billion in the first quarter of 2007. At the same time, preliminary data indicate that the private sector registered a net capital inflow of \$35.7 billion in the second quarter of the year. The Bank of Russia remained the net buyer of foreign exchange on the domestic foreign exchange market and as a result, Russia's international reserves increased by \$56.5 billion in the second quarter to \$568.3 billion as of July 1, 2008.

The composition of the bi-currency basket remained unchanged from the first quarter of 2008 (0.45 euros and 0.55 US dollars). On May 14, the Bank of Russia began to conduct regular interventions on the domestic foreign exchange market in addition to operations cushioning intraday fluctuations of the bi-currency basket's ruble value. The decisions on the nature and scale of the scheduled interventions are made taking into account fundamental factors determined by current dynamics of the key macroeconomic indicators and monetary and budget policies. Regular interventions allow for a broader range of ruble fluctuations as against the bi-currency basket within the limits of the target band and signify the Bank of Russia's transition to a more flexible exchange rate policy.

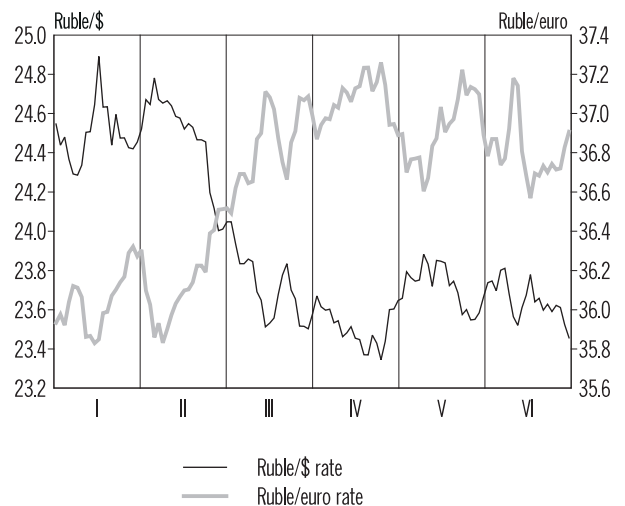
**The nominal ruble/dollar rate** gained more in the second quarter than in the first quarter of 2008 (2.7% as against 1.6%). In the second quarter, the dollar/ruble rate and dollar/euro rate had similar dynamics characterised by high volatility. Among the factors that gave a strong boost to the dollar in the quarter under review were data on growth in production and decline in first-time jobless claims in the United States, released in April, as well as ECB representatives' comment on the negative effect of sharp exchange rate fluctuations causing market participants to fix their profits whenever the dollar began to show signs of weakening. Federal Reserve Chairman Ben Bernanke's statements predicting further

slowdown in the US economy also made for the dollar's depreciation at the beginning of 2008 Q2. In this connection, the fact that the US currency lost some of its attractiveness to investors amid expectations of a new cut in the Federal Reserve key interest rate played a significant role. The weakening of the dollar in some periods was also caused by the statistics on decline in US business activity, published in April and May, and growth in oil prices at the end of June.

**The nominal effective ruble/euro rate** shed 1.7% in the second quarter as compared with the first quarter of 2008 (it was down 1.6% in the previous quarter). **The nominal rate of the ruble as against the bi-currency basket** gained 0.2% due to a more significant rally of the ruble as against the dollar (it fell 0.2% in the first quarter).

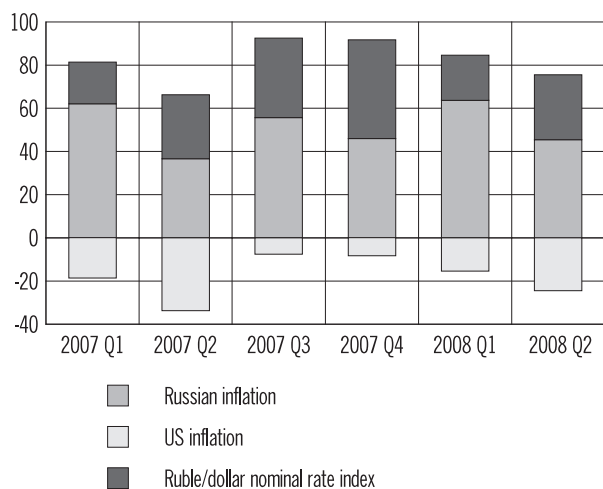
**The nominal effective exchange rate of the ruble** as against foreign currencies lost 0.4% in the quarter under review (in the first quarter of the year it was down 0.8%). **The real effective rate of the ruble** gained 1.5% as against 1.7% in the first quarter. In April-June, the real effective rate of the ruble continued to appreciate faster than the nominal effective rate without marked acceleration of inflation in Russia as compared with its leading trading partners.

**Nominal ruble/US dollar and ruble/euro rate in 2008**



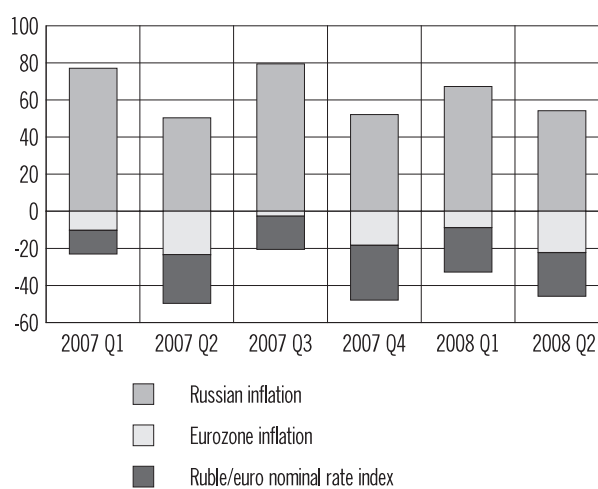
Sources: Bank of Russia, Reuters.

**Decomposition of change in real ruble/US dollar rate (quarterly, as % of real ruble rate index)**



Sources: Bank of Russia, Reuters.

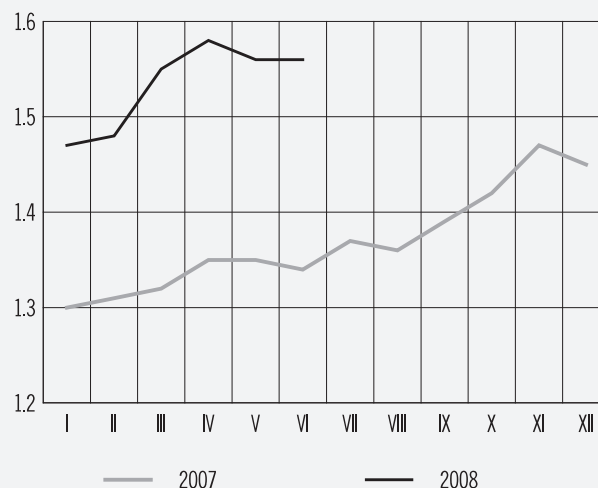
**Decomposition of change in real ruble/euro rate (quarterly, as % of real ruble rate index)**



Sources: Bank of Russia, Reuters.

**The international currency market** saw the US dollar lose some of its value as against the currencies of most of Russia's trading partners in the first half of 2008. The dollar became particularly depreciated as against the Slovak and Czech koruna, Polish zloty and Hungarian forint. Compared to December 2007, in June 2008 the dollar lost about 7% as against the euro and about 5% as against the yuan. As China broadened the range of the yuan's intraday fluctuations against the US dollar in the middle of 2007, the yuan rallied far more rapidly in the first half of 2008 than in the first half of 2007. In May 2008, the National Bank of Ukraine revalued the hryvnia as against the US dollar to 4.85 from 5.05 hryvnia to the dollar, the rate it had maintained since May 2005. The National Bank of the Republic of Belarus made stability of the exchange rate of the Belorussian ruble as against the US dollar the target of its exchange rate policy for 2008.

**Euro/US dollar rate (monthly average, \$/euro)**



Source: Reuters.

**The real ruble/dollar rate** gained 4.4% in the second quarter as against 5.1% in the first. As consumer price growth slowed down in Russia in April-June, the relative contribution made by domestic inflation to real ruble/dollar exchange rate dynamics decreased in the second quarter, while the contribution of the nominal ruble/dollar rate and US inflation increased.

**The real ruble/euro rate** gained 0.8% in the second quarter 2008 as against 2.1% in the first quarter. In the period under review, the contribution of the ruble/euro nominal

rate index and inflation in the euro area to real ruble-euro exchange rate dynamics increased significantly, while the relative contribution of domestic inflation decreased. This tendency, noted throughout the second quarter, was largely a result of non-concurrent seasonal price fluctuations in Russia and other countries.

The dollar/ruble and euro/ruble exchange rate dynamics caused inflation in Russia to slow down by an estimated 0.03-0.05 percentage points over 2008 Q2.

## Interest rates

### Money market and Bank of Russia interest rates

As inflationary pressure on the Russian economy increased, the Bank of Russia in the second quarter of the year raised twice the refinance rate and the rates on its operations (by 0.5 percentage point) (see Statistical addendum, Table 9). The overnight credit rate, which sets

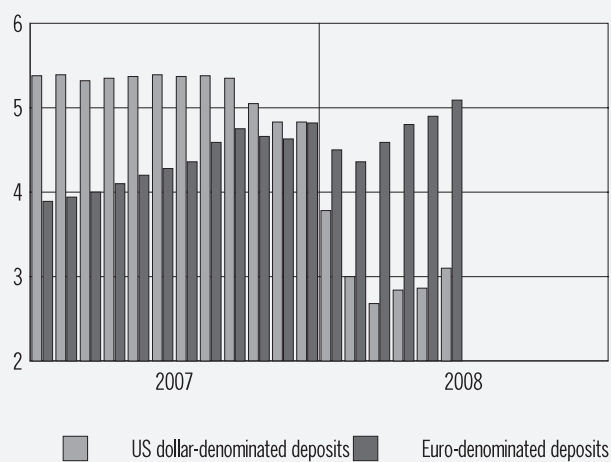
the upper limit of the Bank of Russia interest rate band, was raised to 10.5% p. a. on April 29, and on June 10 it was increased to 10.75% p. a. The interest rate on standard 'tom-next' deposit operations, which sets the lower limit of the band, was raised to 3.25% p. a. on April 29, and to 3.5% p. a. on June 10. Interest rates that set the limits of the Bank of Russia interest rate band were raised by 0.25 percentage point in the first quarter of the year.

The monetary authorities of the leading industrialised nations in the first half of this year continued to pursue a policy largely aimed at maintaining financial sector stability and controlling the risks created by the subprime mortgage crisis. The US Federal Reserve in the period from January to April cut the benchmark federal funds rate from 4.25% to 2% p. a. The Bank of England in the same period lowered the refinance rate from 5.5% to 5% p. a. The European Central Bank (ECB) in the first half of the year maintained the refinance rate at 4% p. a. as inflation risk increased in the euro area. By the middle of the year the task of containing inflation had become the most important factor of the central bank monetary policy.

From May 2008 the Federal Reserve and the Bank of England kept the key interest rates intact (the ECB raised the refinance rate to 4.25% in July). Interest rates were raised in the first half of the year in Sweden, Norway, Poland, Hungary, the Czech Republic, India and Indonesia. The central banks of Turkey and the Philippines cut interest rates at the beginning of the year, but in the second quarter they started to raise them. LIBOR on the dollar-denominated deposits with maturity periods from 1 month to 1 year fell by 1-2.5 percentage points in the first half of the year (June as against December 2007), while LIBOR on the euro-denominated deposits changed slightly. LIBOR on the dollar-denominated deposits were lower than on the euro-denominated deposits with the same terms.<sup>1</sup>

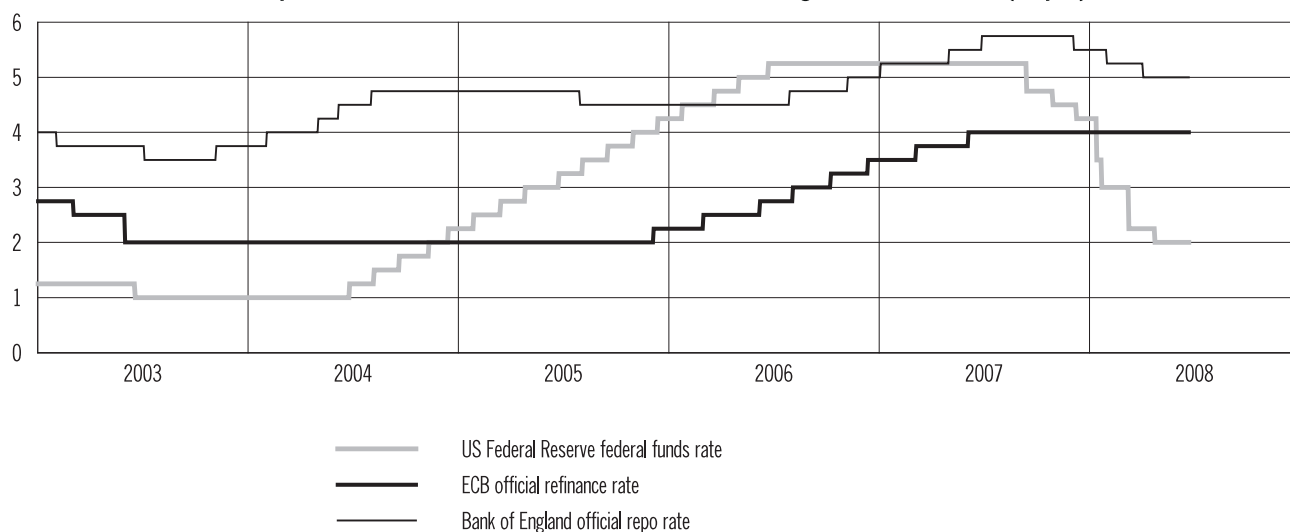
<sup>1</sup> Source: Reuters.

LIBOR on 6-month US dollar- and euro-denominated deposits (monthly average, % p.a.)



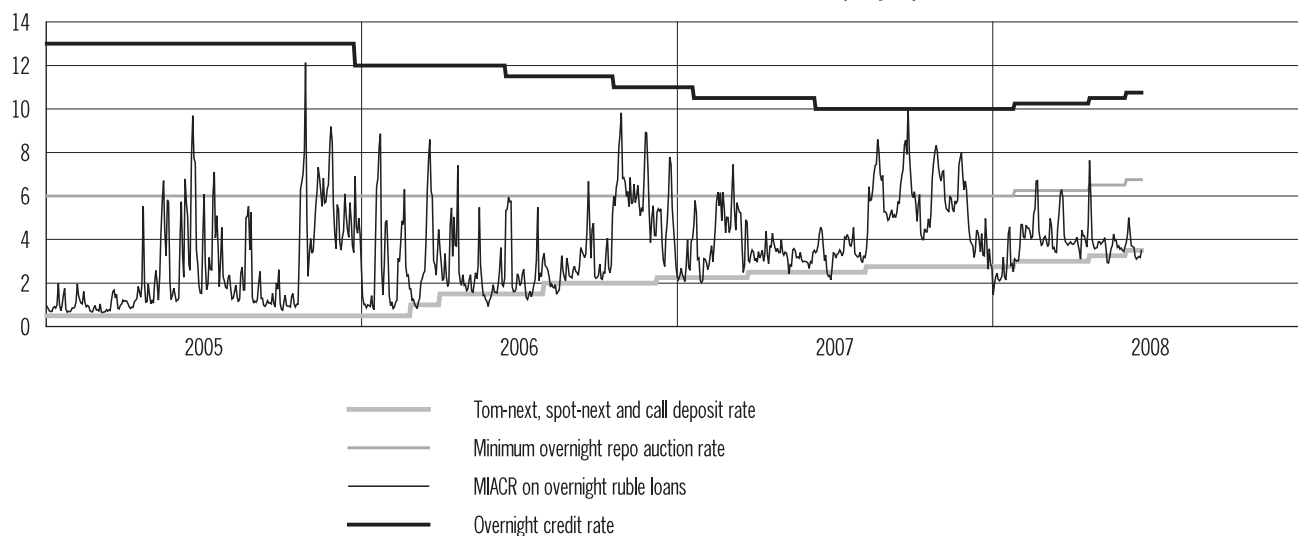
Source: Reuters.

European Central Bank, Federal Reserve and Bank of England interest rates (% p.a.)



Sources: ECB, Federal Reserve and Bank of England.

Bank of Russia interest rates and MIACR (% p.a.)



Source: Bank of Russia.

The minimum overnight repo auction interest rates were set at 6.5% p. a. on April 29, and 6.75% p. a. on June 10.

Bank of Russia average daily debt on instruments used to absorb banking sector surplus liquidity stood at 244.1 billion rubles in the second quarter of the year as against 333.9 billion rubles in the first quarter. At the same time, average banking sector debt to the Bank of Russia on instruments used to provide liquidity decreased quarter on quarter. In April-June 2008, it stood at 52.1 billion rubles as against 65.6 billion rubles in the previous quarter. As a result, the MIACR on overnight ruble loans approached the lower limit of the Bank of Russia interest rate band for most

of the second quarter, except the VAT payment period.

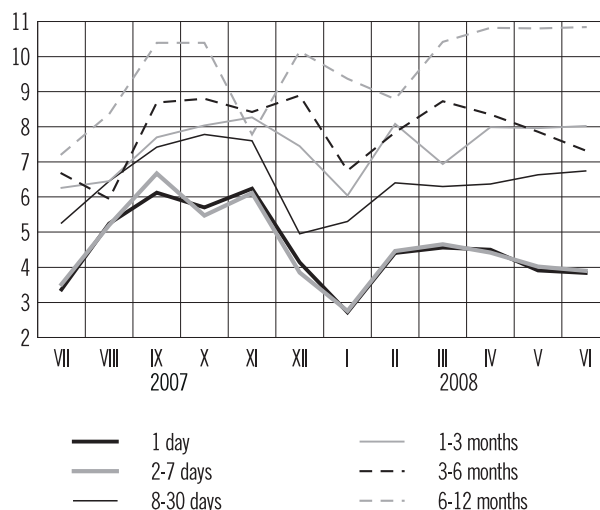
Interest rates on the ruble-denominated interbank loans rose moderately in the second quarter of the year following the raise in Bank of Russia rates. The average quarterly MIACR on overnight ruble loans edged up to 3.9% p. a. in the second quarter from 3.8% p. a. in the first quarter of 2008. The slight increase in the average level of interest rates was accompanied by the narrowing of the range of interest rate fluctuations. In the second quarter the overnight ruble MIACR varied between 2.9% p. a. and 7.6% p. a., whereas in the first quarter it fluctuated from 1.5% p. a. to 6.7% p. a. Banks' adaptation

Bank of Russia major operations (billion rubles)



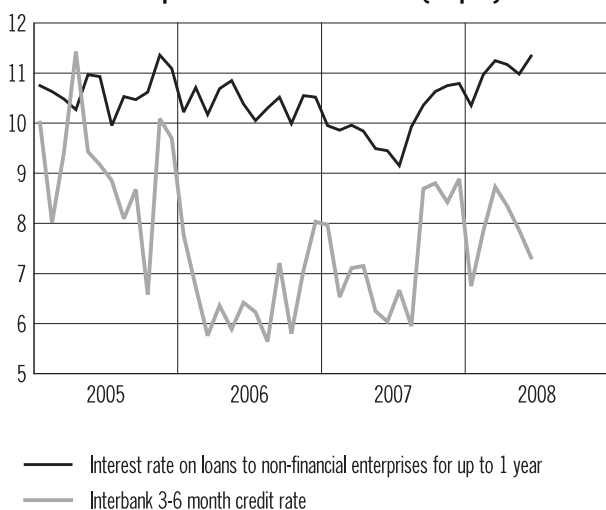
\* (-) signifies increase.  
Source: Bank of Russia.

Interest rates on interbank ruble loans (% p.a.)



Source: Bank of Russia.

**Interest rates on interbank loans and loans to non-financial enterprises extended in rubles (% p.a.)**

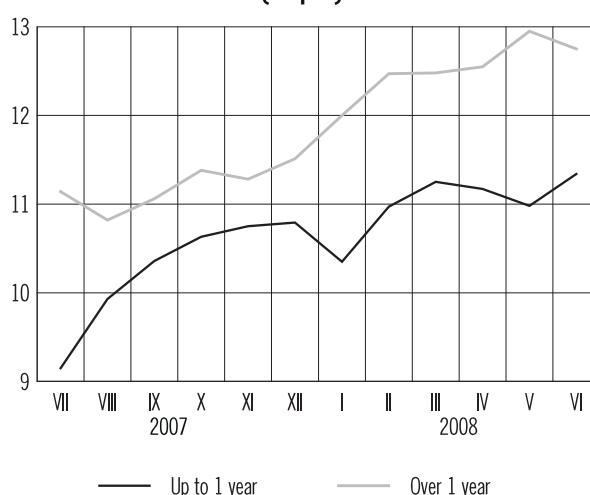


Source: Bank of Russia.

to the changed situation and partially restored availability of external funding by the end of the quarter accounted for the narrowing of the interest rate band.

Most of the Russian money market participants expected interest rates to rise in the second quarter, and the increased inclination of the interbank credit yield curve, caused by accelerated growth in longer-term interest rates, bears this out. Interest rates on interbank ruble loans placed by Russian banks for 2-7 days rose from 4.0% p. a. in the first quarter to 4.1% p. a. in 2008 Q2; interest rates on loans placed for 8-30 days increased from 6.0% to 6.6% p. a.; interest

**Interest rates on ruble loans to non-financial enterprises (% p.a.)**

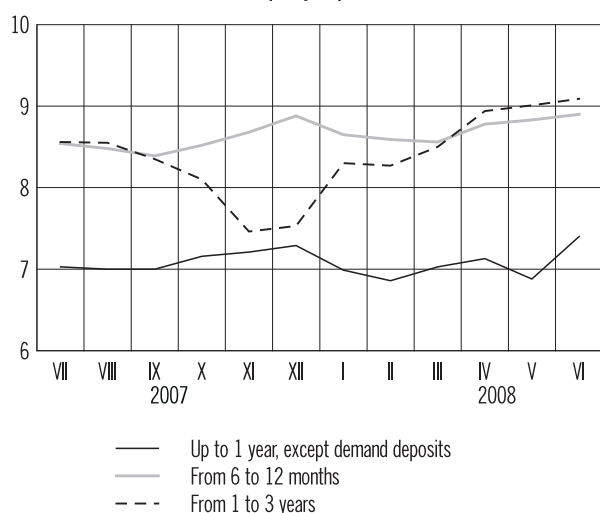


Source: Bank of Russia.

rates on 1- to 3-month loans went up from 7.0% to 8.0% p. a.

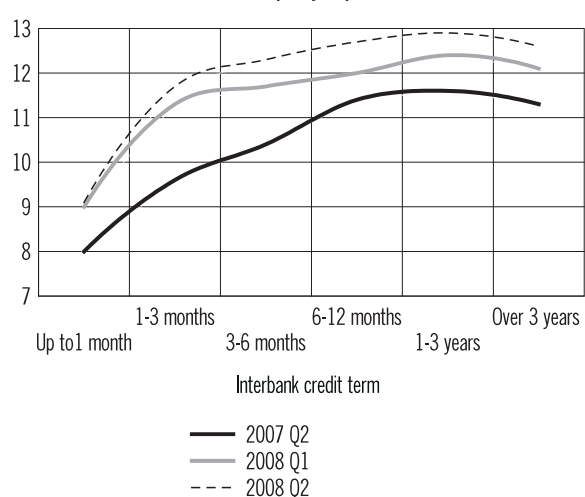
Interest rates on **household deposits** continued to rise in the second quarter as competition on the deposit market intensified, Bank of Russia raised its interest rates, inflation accelerated and inflationary expectations increased. The average rate on short-term household ruble deposits in the second quarter increased by 0.2 percentage points as compared with the first quarter and stood at 7.1% p. a. The average rate on long-term household ruble deposits rose by 0.7 percentage points to 9.0% p. a.

**Interest rates on household ruble deposits (% p.a.)**



Source: Bank of Russia.

**Yield curve for ruble loans to non-financial enterprises (% p.a.)**



Source: Bank of Russia.

The increased cost of internal funding for Russian banks, which still had limited opportunities for raising funds abroad, led to further growth in interest rates on **loans to non-financial enterprises**. The average rate on short-term loans to non-financial enterprises in the second quarter rose by 0.3 percentage points from the first quarter and reached 11.2%. The average quarterly interest rate on long-term loans increased by 0.4 percentage points in that period and stood at 12.8%.

Interest rates grew the least on loans with terms of up to 1 month (by less than 0.1 percentage points) and the most on loans with terms of 6 to 12 months (by more than 0.7 percentage points). As a result, the angle of slope of the yield curve for loans to non-financial enterprises increased in the second quarter and this may testify to higher inflation expectations and higher interest rates in the medium term.

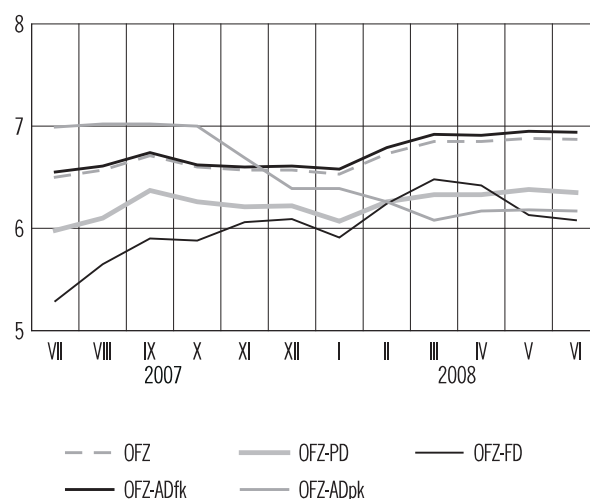
There were different prices on the **household ruble credit** market in the second quarter. The average quarterly interest rate on long-term loans rose by 0.3 percentage points from the first quarter and reached 15.4% p. a., while the average interest rate on short-term loans dropped by 0.3 percentage points to 20.6% p. a. The fall in short-term credit interest rates may be due to the adjustment of these rates after their sharp rise (by 1.2 percentage points) in the previous quarter.

### Asset prices

Yields on the **federal loan bonds (OFZ) market** in the second quarter remained at the March 2008 level. In April-June the OFZ effective market portfolio indicator (MPI) changed within a relatively narrow band (from 6.82% to 6.93% p. a.). At the end of the second quarter, the MPI stood at 6.87% p. a. as against 6.84% p. a. at the end of the previous quarter. The average quarterly effective MPI increased by 0.2 percentage points to 6.9% p. a.

The OFZ yield curve continued to rise in the second quarter. As the yield on the shortest-term bonds declined moderately and the yield on longer-term bonds rose, the angle of slope of the yield curve increased. This may indicate that market participants were expecting a rise in yield on government bonds.

OFZ portfolio average monthly yield (% p.a.)

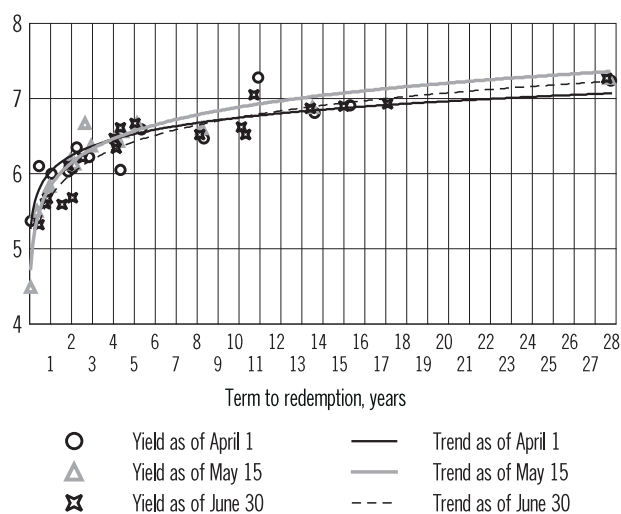


Source: Bank of Russia.

**Russian stock market** price dynamics were different in the second quarter of the year. In April and May Russian stock price rise significantly and in the middle of May the RTS Index had reached new historical highs. It should be noted that as before, demand for Russian stocks in that period was created by foreign portfolio investors, who made short-term investments in the most liquid instruments of Russian mining companies. In June, the outflow of foreign capital from the domestic stock market led to a major price correction.

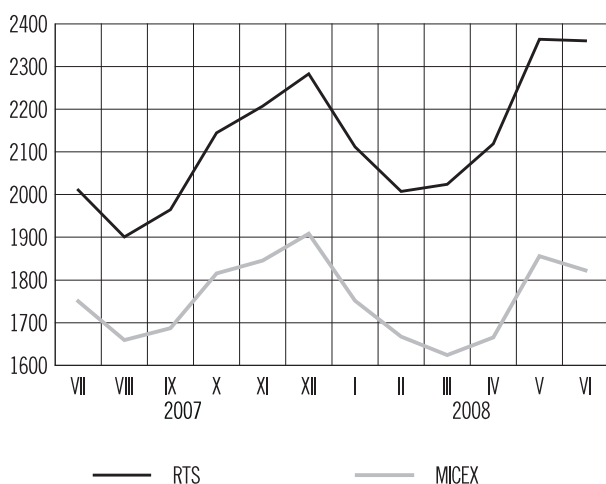
The average second-quarter levels of the major Russian stock indices, RTS and MICEX, exceeded the previous month's levels by 11.4% and 6.0%, respectively. This growth was partly

OFZ effective yield curve (% p.a.)



Source: Bank of Russia.

Russia's major stock indices (points)\*



\* Monthly averages.  
Source: Bank of Russia.

due to the low levels of these indices in the first quarter.

Russian stock price dynamics in the second quarter varied by sector and by issuer. There was a rise in the prices of oil and gas company shares and the shares of some metallurgy sector companies, which increased due to price growth in the world energy and metal markets, and the shares of some credit institutions. At the same time, the stock prices of major financial and energy sector issuers, telecommunications and communications, manufacturing, consumer goods producing and retail trade companies fell.

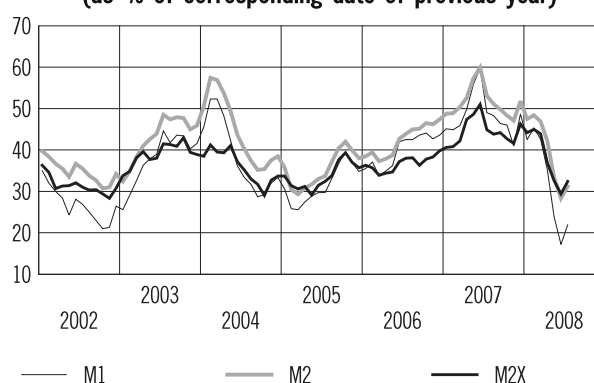
### Monetary aggregates

The slowdown in the annual growth in the **money supply** continued in the second quarter due to the dynamics of money demand and the conditions of money supply.

Rapid economic growth notwithstanding, growth in **money demand** this year may be slower than in 2007 due to accelerated inflation, the slowing of the de-dollarisation process and slower growth in asset prices.

Marked reduction in the value of Bank of Russia currency interventions amid the continued accumulation of funds in government accounts with the Bank of Russia, measures taken by the Bank of Russia within the framework of its currency and interest rate policy and reserve requirements contributed to the continuation in the second quarter of the tendency towards the slowing of annual growth in money supply. As a

Monetary aggregates (as % of corresponding date of previous year)

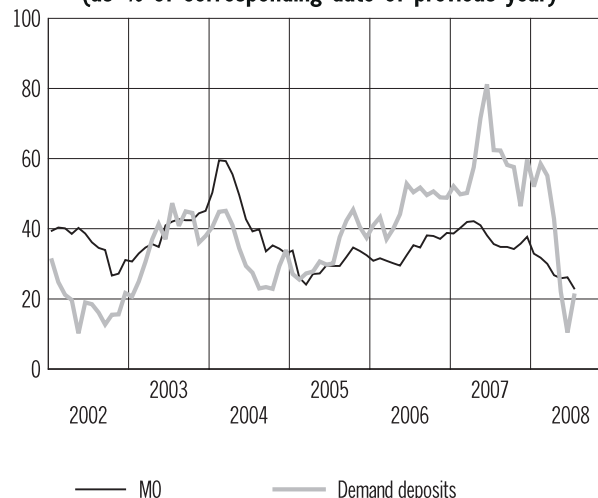


Definitions of aggregates:  
M1 is cash in circulation (M0) and demand deposits;  
M2=M1+ruble-denominated time accounts of resident non-financial enterprises and resident individuals;  
M2X (broad money) =M2+foreign currency deposits.  
Source: Bank of Russia.

result, the annualised rate of growth in **monetary aggregate M2** declined from 42.2% as of April 1, to 31.2% as of July 1, 2008 (53.1% as of July 1, 2007). The most significant slowing of annual growth in money supply was registered in April, when ruble supply contracted in absolute terms.

The annual rate of growth in **monetary aggregate M1** declined significantly in the second quarter of the year, from 35.2% as of April 1, to 21.9% as of July 1, 2008, which was considerably lower than a year earlier (49.0%). At the same time, the tendency towards the slowing of the annual rates of growth in cash, which began in 2007 amid significant growth in the value of individuals' payment for goods and services with

Major M1 components (as % of corresponding date of previous year)



Source: Bank of Russia.



### Money gap as an indicator of excess money supply in the economy

One of the monetary analysis objectives is to measure the excess (shortage) of money supply in the economy. For this purpose analysts use such an indicator as the deviation of the current level of money supply from its equilibrium value, which is known as money gap. One of the most common methods of determining the equilibrium value of money supply is the evaluation of the money demand function.

The money demand function is the dependence between the value of the actual money supply and the factors determining the money demand in the economy<sup>1</sup>:

$$m - p = \delta_0 + \delta_1 y + \delta_2 w + \delta_3 R - \delta_4 \pi, \text{ where}$$

$m - p$  is the money supply in real terms;

$y$  is the scaling variable that determines the transactional requirements of the economy (GDP or domestic demand in real terms);

$w$  is wealth (asset price index in real terms);

$R$  is the vector of yields on financial assets in the national and foreign currencies (interest rates and the pace of ruble appreciation);

$\pi$  is the rate of inflation;

$\delta_i$  is the elasticity of money demand determined by the  $i$  factor.

Assuming that the elasticity of money demand by the scaling variable is equal to 1, the money demand equation may be written down as the dependence of the rate of monetisation of the economy on the indicators described above.

$$m - p - y = \delta_0 + \delta_2 w + \delta_3 R - \delta_4 \pi$$

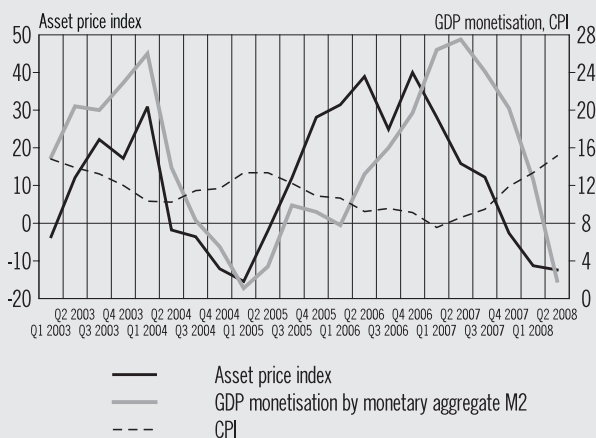
monetisation  
of the economy

The comparison of growth in the rate of monetisation of the economy and some of the factors that determine it is shown in the chart.

The existence of a long-term relationship between the rate of monetisation and its determinants, which is confirmed by econometric analysis, signifies that when this relationship is upset, one should expect such a change in the dynamics of the indicators included in the money demand function that will eventually lead to the restoration of the equilibrium. Specifically, when the deviation from the long-term relationship results from growth in money supply, equilibrium (according to the concept of the long-term neutrality of money) will be restored, with other things being equal, due to the rise in prices of goods and services or assets. It is important, therefore, to evaluate such kind of deviation as an indicator of potential inflationary pressure. In contemporary monetary analysis this indicator has come to be known as the money gap.

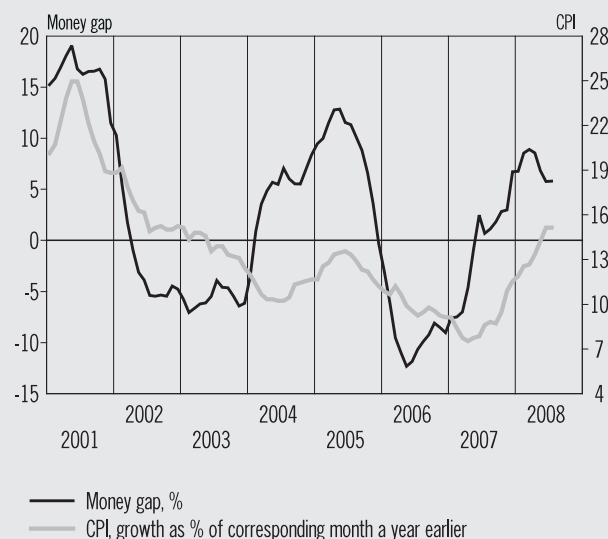
The money gap is the deviation of the current value of money supply from the equilibrium value, calculated on the basis of the money demand function, using current<sup>2</sup> values of the macroeconomic variables included in the long-term relationship. The greater the deviation, the greater the inflationary pressure of the monetary factors.

Asset price index\* (in real terms), CPI and monetisation of the economy (as of end of period, as % of corresponding period a year earlier)



\* RTS Index geometric average (in ruble terms) and housing price index.  
Sources: Bank of Russia, Rosstat.

Money gap and CPI



Source: Bank of Russia.

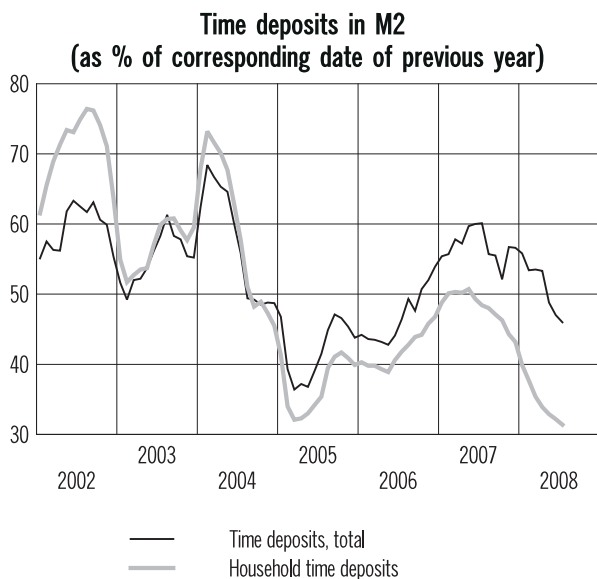
<sup>1</sup> Below is the logarithmic form of the money demand function.

<sup>2</sup> The value of the scaling variable is represented by its potential level.

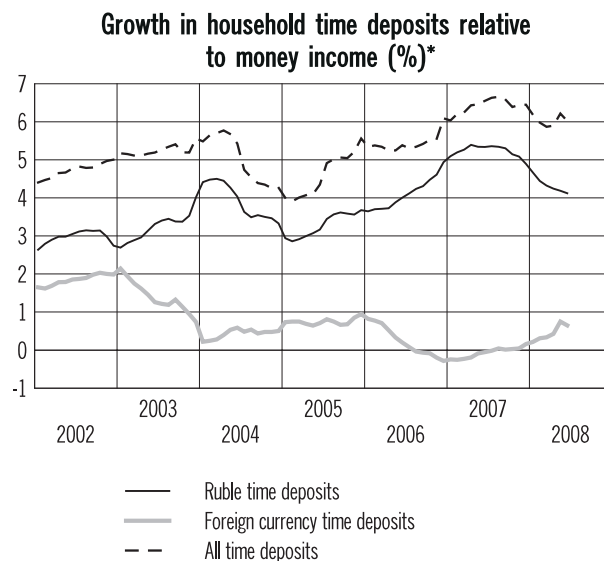
The dynamics of the money gap,<sup>3</sup> calculated for the Russian economy for the period from 2001 to 2008, testifies to its sustained growth from the middle of 2006. The accelerated growth in the money supply in 2009 and 2007 and the changed dynamics of some indicators that determine the money demand created a significant positive money gap in the economy by the beginning of 2008.

The money gap had been widening for 18 months and in the first half of 2008 it was on positive ground. This fact serves to show that the risks of growth in the money supply persist, affecting medium- and long-term price stability. The second quarter of the year saw a moderate tendency towards the narrowing of the money gap.

<sup>3</sup> The following variables were used in calculating the money gap: domestic demand, the domestic demand deflator, the rate of ruble appreciation against the bi-currency basket and the asset price index.



Source: Bank of Russia.



\* Calculated for the moving 12-month period.  
Sources: Bank of Russia, Rosstat.

bank cards, continued in the second quarter of this year. In addition, the value of foreign cash purchase by households, which increased in late 2007 and early 2008, could have some effect on the slowing of growth in cash supply. As a result, the annualised M0 growth slowed to 23.0% as of July 1, 2008, from 35.6% as of July 1, 2007.

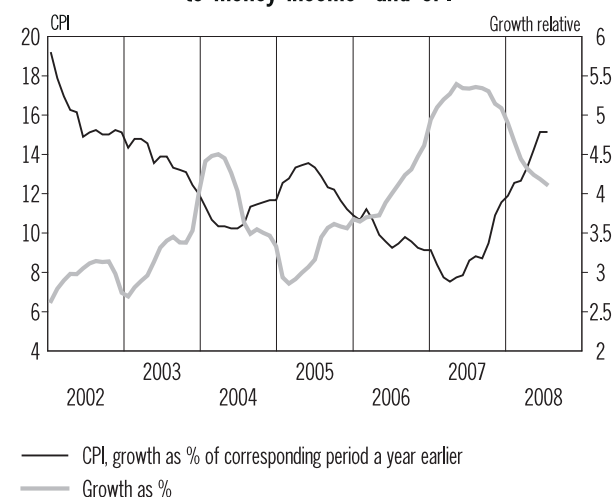
Demand deposit dynamics mainly reflected the movement of funds on the accounts of non-financial enterprises, which account for the largest part of this aggregate. The annual rates of growth in demand deposits fell sharply in the second quarter: from 42.8% as of April 1, 2008, to 21% as of July 1, 2008 (62.4% as of July 1, 2007). The most dramatic decline in the annual rate of growth in demand deposits occurred in April as the VAT payment procedure was changed earlier this year<sup>1</sup>. In addition, this slowdown in the annu-

<sup>1</sup> The VAT payment procedure was changed in 2008. Since February VAT has become a quarterly rather than monthly tax payable in the first month of the quarter following the accounting quarter.

al rates of growth was partly due to rapid growth in the value of demand deposits in the same period last year.

The annual rates of growth in the total value of **ruble-denominated time deposits** declined in the second quarter of this year and stood at 46.0% as of July 1, 2008 (60.1% as of July 1, 2007). At the same time, they were higher than the rates of growth in other monetary aggregates owing to significant increase in time deposits of non-financial enterprises (by 87.1% as of July 1, 2008).

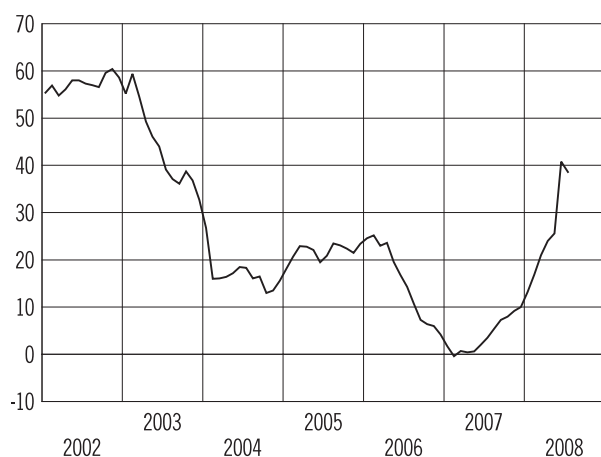
The slowing of ruble time deposit growth was a result of significant reduction in the rate of growth in **time deposits of households**, which began in 2007 and continued into the first half of this year. The annual rates of growth in ruble-denominated time deposits of households slowed to 31.4% as of July 1, 2008, from 39.9% as of April 1, 2008 and 48.4% as of July 1, 2007. The share of household time deposits in monetary aggregate M2 contracted from 28.9% as of January 1,

**Growth in deposits relative to money income\* and CPI**


\* Calculated for the moving 12-month period.  
Sources: Bank of Russia, Rosstat.

2007, to 28.4% as of July 1, 2008. The decline in public propensity to save money by depositing it with banks is also confirmed by the contraction of the ratio of time deposits growth to household income, which began in the latter half of 2007. The contraction of the ratio of household time deposits total value to household money income was less pronounced due to expansion of the share of foreign currency bank deposits, which began in the second half of last year.

There were several reasons for the sustained slowdown of growth in the value of household time deposits. One of them was price growth, which discouraged people from saving. The

**Household foreign currency deposits (growth as % of corresponding date of previous year)**


Source: Bank of Russia.

share of ruble deposits in household money income increased the most from the second half of 2005, that is, when the inflation slowed down. This trend ended as soon as price growth began to accelerate. Such bank deposit dynamics may be not only a result of inflation but also one of its causes. As price growth accelerates, the accumulation of financial assets and, consequently, money as a store of value become less attractive and people begin to spend more on consumption. This stimulates aggregate demand and leads to further growth in consumer prices.

As it has already been noted above, the annual growth in household foreign currency deposits has accelerated significantly since the middle of 2007 to more than 38% as of July 1, 2008, as against 3.5% on the same date of previous year. In addition, household demand for foreign exchange persisted and in the second quarter of the year net sales of foreign cash to individuals through exchange offices reached nearly \$4.1 billion, whereas in the same period last year banks were buying foreign exchange from individuals (net purchases amounted to nearly \$0.6 billion).

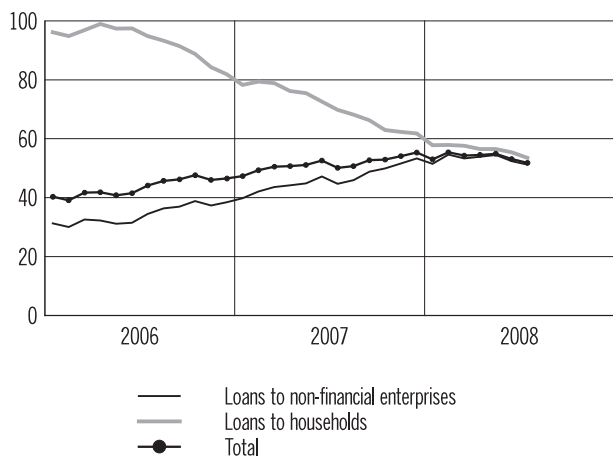
### Credit aggregates

The cost of ruble borrowings continued to rise in the second quarter of the year, affecting to some extent the dynamics of loans<sup>2</sup> to various categories of borrowers. Growth in credit to non-financial enterprises stood at 8.5% in the second quarter of this year as against 10.5% in the same period last year. Growth in credit to households continued to slow down: in the second quarter of this year, it stood at 12.2% as against 14.4% in the same period of 2007. This led to the slowing of the annual rates of growth in total value of loans in the second half of this year, which had been accelerating for more than two years. Nevertheless, the annual rate of growth in loan debt remained high at 51.8% as of July 1, 2008 (50.1% as of July 1, 2007).

The slowing of growth in credit to non-financial enterprises in the second quarter of the year was accompanied by a slight fall in fixed capital investment growth. One reason for the

<sup>2</sup> Credit aggregates discussed here and below are denominated in the national and foreign currencies.

**Loans to non-financial enterprises and households  
(growth as % of corresponding date of previous year)**

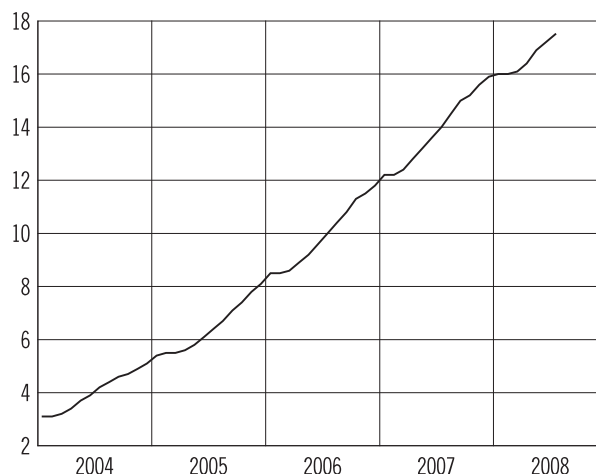


Source: Bank of Russia.

slowing of growth in credit was the tightening of lending conditions, including the increased cost of borrowing.

Despite the slowdown, the rates of growth in credit to households remain high and the

**Household loan debt to disposable  
money income (%)**

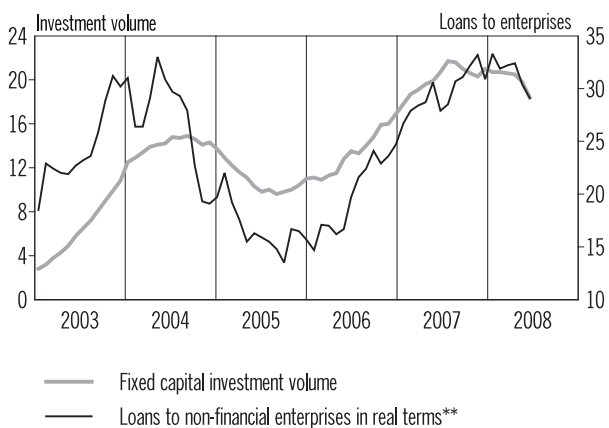


Source: Bank of Russia.

expansion of the share of loan debt in disposable money income reflects this.

Housing loans continue to grow faster than overall credit to households and the share of these loans in total household loan debt is expanding.

**Investment activity\* and loans to non-financial  
enterprises (growth as % of corresponding period  
of previous year)**

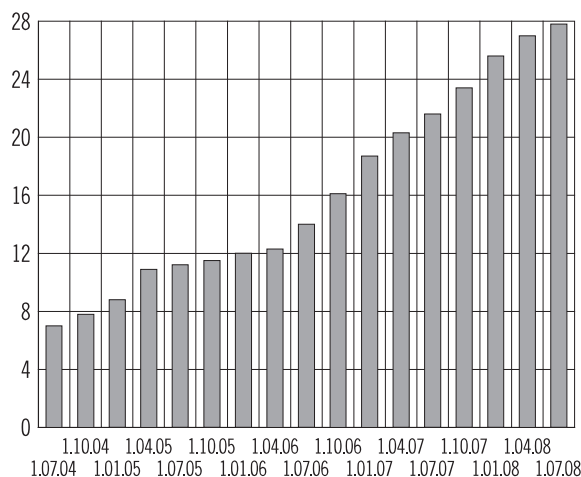


\* For the moving 12-month period.

\*\* As of the 1st day of the month.

Sources: Bank of Russia, Rosstat.

**Housing loans in total household loans (%)**



Source: Bank of Russia.

# Statistical Addendum

Table 1

## Consumer prices by group of goods and services (month on month, %)

	Monthly inflation	Core inflation	Food price growth	Food price growth <sup>1</sup>	Vegetable and fruit price growth	Non-food price growth	Growth in non-food prices excluding petrol prices <sup>2</sup>	Service price growth
<b>2006</b>								
January	2.4	0.8	2.0	1.0	11.3	0.4	0.5	6.2
February	1.7	1.2	3.0	1.9	12.6	0.5	0.5	1.0
March	0.8	0.7	1.2	0.9	3.2	0.4	0.4	0.7
April	0.4	0.4	0.3	0.3	-0.3	0.3	0.3	0.6
May	0.5	0.4	0.5	0.2	2.6	0.4	0.4	0.6
June	0.3	0.3	0.0	0.1	-0.6	0.3	0.3	0.7
July	0.7	0.5	0.9	0.7	2.7	0.4	0.3	0.6
August	0.2	0.6	-0.5	0.7	-10.0	0.8	0.5	0.8
September	0.1	0.8	-0.6	0.6	-11.0	0.8	0.6	0.5
October	0.3	0.5	0.0	0.4	-4.1	0.6	0.7	0.4
November	0.6	0.6	0.8	0.6	2.7	0.6	0.6	0.5
December	0.8	0.7	1.1	0.8	3.6	0.5	0.5	0.7
Full year (December on December)	9.0	7.8	8.7	8.5	10.3	6.0	5.7	13.9
<b>2007</b>								
January	1.7	0.6	0.9	0.6	4.1	0.4	0.4	4.7
February	1.1	0.5	0.8	0.5	3.6	0.3	0.4	2.6
March	0.6	0.5	0.8	0.5	3.2	0.4	0.4	0.6
April	0.6	0.5	0.8	0.5	3.1	0.4	0.4	0.5
May	0.6	0.3	1.0	0.1	7.8	0.4	0.3	0.5
June	1.0	0.4	1.7	0.4	12.2	0.3	0.3	0.6
July	0.9	0.9	1.4	1.4	1.9	0.4	0.4	0.6
August	0.1	1.1	-0.6	1.6	-16.1	0.6	0.5	0.5
September	0.8	1.6	1.0	2.2	-8.8	0.8	0.8	0.4
October	1.6	2.1	3.3	3.5	0.9	0.9	0.9	0.1
November	1.2	1.1	1.9	1.5	6.2	0.9	0.8	0.6
December	1.1	0.9	1.6	1.2	5.6	0.7	0.5	0.9
Full year (December on December)	11.9	11.0	15.6	14.9	22.2	6.5	6.4	13.3
<b>2008</b>								
January	2.3	1.1	1.9	1.2	8.3	0.6	0.6	5.4
February	1.2	1.0	1.7	1.3	5.1	0.6	0.6	1.4
March	1.2	1.1	2.0	1.5	5.9	0.7	0.7	0.6
April	1.4	1.3	2.2	1.8	5.5	0.9	0.7	1.0
May	1.4	1.1	2.1	1.5	6.4	0.8	0.6	1.0
June	1.0	0.9	1.1	1.2	0.4	0.7	0.5	1.1

<sup>1</sup> Excluding vegetable and fruit prices.

<sup>2</sup> Since March 2005 – Bank of Russia estimate.

Note: Tables 1 to 7 are based on Rosstat data and Bank of Russia calculations.

Table 2

**Consumer prices by group of goods and services  
(since start of year on accrual basis, %)**

	Monthly inflation	Core inflation	Food price growth	Food price growth <sup>1</sup>	Vegetable and fruit price growth	Non-food price growth	Growth in non-food prices excluding petrol prices <sup>2</sup>	Service price growth
<b>2006</b>								
January	2.4	0.8	2.0	1.0	11.3	0.4	0.5	6.2
February	4.1	2.0	5.0	2.9	25.3	0.9	0.9	7.2
March	5.0	2.8	6.2	3.9	29.3	1.3	1.3	8.0
April	5.4	3.2	6.5	4.2	28.9	1.6	1.6	8.6
May	5.9	3.6	7.0	4.4	32.3	2.0	2.0	9.3
June	6.2	3.9	7.0	4.5	31.5	2.3	2.3	10.0
July	6.9	4.5	8.0	5.2	35.0	2.7	2.7	10.7
August	7.1	5.1	7.4	6.0	21.6	3.5	3.2	11.5
September	7.2	5.9	6.7	6.6	8.2	4.3	3.8	12.0
October	7.5	6.5	6.7	7.0	3.7	5.0	4.5	12.5
November	8.2	7.1	7.5	7.6	6.5	5.5	5.2	13.0
December	9.0	7.8	8.7	8.5	10.3	6.0	5.7	13.9
<b>2007</b>								
January	1.7	0.6	0.9	0.6	4.1	0.4	0.4	4.7
February	2.8	1.1	1.8	1.1	7.8	0.7	0.8	7.4
March	3.4	1.7	2.6	1.7	11.2	1.1	1.2	8.0
April	4.0	2.2	3.3	2.1	14.7	1.5	1.7	8.6
May	4.7	2.5	4.3	2.3	23.6	1.9	2.0	9.1
June	5.7	3.0	6.1	2.7	38.6	2.2	2.3	9.8
July	6.6	3.9	7.6	4.1	41.2	2.6	2.8	10.5
August	6.7	5.0	7.0	5.8	18.5	3.2	3.3	11.1
September	7.5	6.7	8.1	8.1	8.1	4.0	4.2	11.6
October	9.3	8.9	11.6	11.9	9.0	4.9	5.1	11.7
November	10.6	10.1	13.7	13.5	15.7	5.8	5.9	12.4
December	11.9	11.0	15.6	14.9	22.2	6.5	6.4	13.3
<b>2008</b>								
January	2.3	1.1	1.9	1.2	8.3	0.6	0.6	5.4
February	3.5	2.1	3.6	2.5	13.9	1.2	1.2	6.8
March	4.8	3.2	5.7	4.0	20.6	2.0	1.9	7.5
April	6.3	4.5	8.0	5.9	27.2	2.9	2.6	8.5
May	7.7	5.7	10.2	7.5	35.4	3.7	3.2	9.6
June	8.7	6.7	11.4	8.7	36.0	4.4	3.7	10.8

<sup>1</sup> Excluding vegetable and fruit prices.

<sup>2</sup> Since March 2005 – Bank of Russia estimate.

Table 3

**Consumer prices by group of goods and services  
(month on month of previous year, %)**

	Monthly inflation	Core inflation	Food price growth	Food price growth <sup>1</sup>	Vegetable and fruit price growth	Non-food price growth	Growth in non-food prices excluding petrol prices <sup>2</sup>	Service price growth
<b>2006</b>								
January	10.7	8.2	10.2	9.1	21.1	6.5	6.0	18.1
February	11.2	8.7	11.9	10.1	28.4	6.6	6.1	16.7
March	10.6	8.7	10.9	10.0	19.2	6.7	6.1	16.1
April	9.8	8.2	9.4	9.0	12.7	6.4	6.0	15.9
May	9.4	7.9	8.7	8.5	11.1	6.4	6.0	15.6
June	9.0	7.8	8.0	8.1	7.0	6.4	6.0	15.3
July	9.3	7.8	8.7	8.3	11.9	6.3	5.9	15.0
August	9.6	7.9	9.2	8.5	15.6	6.6	6.0	15.0
September	9.5	7.9	9.3	8.5	16.4	6.2	5.8	14.5
October	9.2	7.8	8.8	8.3	14.4	6.1	5.7	14.1
November	9.0	7.8	8.7	8.3	12.4	6.0	5.7	13.9
December	9.0	7.8	8.7	8.5	10.3	6.0	5.7	13.9
<b>2007</b>								
January	8.2	7.7	7.6	8.0	3.1	6.0	5.7	12.3
February	7.6	6.9	5.3	6.6	-5.1	5.8	5.6	14.2
March	7.4	6.7	4.9	6.2	-5.2	5.8	5.6	14.0
April	7.6	6.8	5.4	6.3	-1.9	5.9	5.8	13.9
May	7.8	6.7	5.9	6.3	3.0	5.9	5.7	13.8
June	8.5	6.9	7.7	6.6	16.2	5.9	5.7	13.7
July	8.7	7.3	8.3	7.4	15.3	5.9	5.8	13.7
August	8.6	7.8	8.3	8.3	7.5	5.7	5.8	13.4
September	9.4	8.7	10.0	10.0	10.2	5.8	6.1	13.4
October	10.8	10.3	13.6	13.4	15.9	6.0	6.3	13.1
November	11.5	10.9	14.9	14.4	19.8	6.3	6.4	13.2
December	11.9	11.0	15.6	14.9	22.2	6.5	6.4	13.3
<b>2008</b>								
January	12.6	11.5	16.7	15.6	27.1	6.8	6.6	14.1
February	12.7	12.1	17.6	16.4	29.1	7.0	6.8	12.7
March	13.3	12.7	19.1	17.5	32.5	7.4	7.1	12.7
April	14.3	13.5	20.7	19.1	35.6	8.0	7.4	13.3
May	15.1	14.5	22.1	20.7	33.9	8.4	7.7	13.9
June	15.1	15.1	21.3	21.6	19.9	8.9	7.9	14.4

<sup>1</sup> Excluding vegetable and fruit prices.

<sup>2</sup> Since March 2005 – Bank of Russia estimate.

**Inflation growth over period since start of year due to price changes  
by group of goods and services (percentage points)**

	Foodstuffs <sup>1</sup>	Non-food products	Paid services	Vegetables and fruit	Inflation over period, %	Core inflation	Non-core inflation <sup>2</sup>
<b>2006</b>							
January	0.4	0.2	1.5	0.4	<b>2.4</b>	0.6	1.8
February	1.1	0.3	1.7	1.0	<b>4.1</b>	1.5	2.6
March	1.5	0.5	1.9	1.2	<b>5.0</b>	2.1	2.9
April	1.6	0.6	2.0	1.1	<b>5.4</b>	2.5	2.9
May	1.7	0.7	2.2	1.3	<b>5.9</b>	2.7	3.1
June	1.8	0.8	2.4	1.2	<b>6.2</b>	3.0	3.2
July	2.0	0.9	2.5	1.4	<b>6.9</b>	3.4	3.5
August	2.3	1.2	2.7	0.9	<b>7.1</b>	3.9	3.2
September	2.6	1.5	2.9	0.3	<b>7.2</b>	4.6	2.6
October	2.7	1.7	3.0	0.1	<b>7.5</b>	5.0	2.5
November	3.0	1.9	3.1	0.3	<b>8.2</b>	5.5	2.7
December	3.3	2.0	3.3	0.4	<b>9.0</b>	6.1	3.0
<b>2007</b>							
January	0.2	0.1	1.2	0.2	<b>1.7</b>	0.5	1.2
February	0.4	0.3	1.8	0.3	<b>2.8</b>	0.9	1.9
March	0.6	0.4	2.0	0.4	<b>3.4</b>	1.3	2.1
April	0.8	0.5	2.1	0.6	<b>4.0</b>	1.7	2.3
May	0.8	0.7	2.3	0.9	<b>4.7</b>	1.9	2.7
June	1.0	0.8	2.4	1.5	<b>5.7</b>	2.3	3.4
July	1.5	0.9	2.6	1.6	<b>6.6</b>	3.0	3.6
August	2.1	1.1	2.7	0.7	<b>6.7</b>	3.9	2.8
September	3.0	1.4	2.9	0.3	<b>7.5</b>	5.3	2.3
October	4.3	1.7	2.9	0.3	<b>9.3</b>	7.0	2.3
November	4.9	2.0	3.1	0.6	<b>10.6</b>	7.9	2.7
December	5.4	2.3	3.3	0.9	<b>11.9</b>	8.7	3.2
<b>2008</b>							
January	0.4	0.2	1.3	0.3	<b>2.3</b>	0.8	1.5
February	0.9	0.4	1.7	0.5	<b>3.5</b>	1.6	1.9
March	1.4	0.7	1.9	0.8	<b>4.8</b>	2.5	2.3
April	2.1	1.0	2.1	1.0	<b>6.3</b>	3.6	2.7
May	2.6	1.3	2.4	1.4	<b>7.7</b>	4.5	3.2
June	3.1	1.6	2.7	1.4	<b>8.7</b>	5.3	3.5

<sup>1</sup> Excluding vegetables and fruit.

<sup>2</sup> Growth in prices of goods and paid services not included in calculation of core consumer price index.



Table 5

**Monthly inflation growth due to price changes  
by group of goods and services (percentage points)**

	Foodstuffs <sup>1</sup>	Non-food products	Paid services	Vegetables and fruit	Inflation over period, %	Core inflation	Non-core inflation <sup>2</sup>
<b>2006</b>							
January	0.4	0.2	1.5	0.4	<b>2.4</b>	0.6	1.8
February	0.7	0.2	0.2	0.5	<b>1.7</b>	0.9	0.7
March	0.4	0.1	0.2	0.2	<b>0.8</b>	0.6	0.3
April	0.1	0.1	0.1	0.0	<b>0.4</b>	0.3	0.0
May	0.1	0.1	0.1	0.1	<b>0.5</b>	0.3	0.2
June	0.0	0.1	0.2	0.0	<b>0.3</b>	0.2	0.1
July	0.3	0.1	0.2	0.1	<b>0.7</b>	0.4	0.3
August	0.3	0.2	0.2	-0.5	<b>0.2</b>	0.5	-0.3
September	0.2	0.3	0.1	-0.5	<b>0.1</b>	0.6	-0.5
October	0.1	0.2	0.1	-0.2	<b>0.3</b>	0.4	-0.1
November	0.2	0.2	0.1	0.1	<b>0.6</b>	0.5	0.2
December	0.3	0.1	0.2	0.1	<b>0.8</b>	0.5	0.3
<b>2007</b>							
January	0.2	0.1	1.2	0.2	<b>1.7</b>	0.5	1.2
February	0.2	0.1	0.7	0.1	<b>1.1</b>	0.4	0.7
March	0.2	0.1	0.1	0.1	<b>0.6</b>	0.4	0.2
April	0.2	0.1	0.1	0.1	<b>0.6</b>	0.4	0.2
May	0.1	0.1	0.1	0.3	<b>0.6</b>	0.2	0.4
June	0.2	0.1	0.2	0.6	<b>1.0</b>	0.3	0.6
July	0.5	0.1	0.2	0.1	<b>0.9</b>	0.7	0.2
August	0.6	0.2	0.1	-0.8	<b>0.1</b>	0.8	-0.7
September	0.8	0.3	0.1	-0.4	<b>0.8</b>	1.3	-0.5
October	1.3	0.3	0.0	0.0	<b>1.6</b>	1.6	0.0
November	0.5	0.3	0.2	0.2	<b>1.2</b>	0.8	0.4
December	0.5	0.2	0.2	0.2	<b>1.1</b>	0.7	0.5
<b>2008</b>							
January	0.4	0.2	1.3	0.3	<b>2.3</b>	0.8	1.5
February	0.4	0.2	0.3	0.2	<b>1.2</b>	0.8	0.4
March	0.5	0.3	0.2	0.3	<b>1.2</b>	0.8	0.3
April	0.6	0.3	0.3	0.2	<b>1.4</b>	1.0	0.4
May	0.5	0.3	0.3	0.3	<b>1.4</b>	0.9	0.5
June	0.4	0.3	0.3	0.0	<b>1.0</b>	0.7	0.2

<sup>1</sup> Excluding vegetables and fruit.

<sup>2</sup> Growth in prices of goods and paid services not included in calculation of core consumer price index.

**Contribution to inflation growth over period since start of year  
by group of goods and services (%)**

	Foodstuffs <sup>1</sup>	Non-food products	Paid services	Vegetables and fruit	Core inflation	Non-core inflation <sup>2</sup>
<b>2006</b>						
January	16.0	6.1	59.5	18.3	24.5	75.5
February	27.2	7.7	40.9	24.1	37.2	62.8
March	30.1	9.1	37.6	23.2	42.4	57.6
April	30.5	10.3	37.9	21.3	45.7	54.3
May	29.3	11.8	37.2	21.8	46.7	53.3
June	28.6	12.9	38.3	20.2	48.4	51.6
July	29.6	13.5	36.7	20.2	49.7	50.3
August	32.7	16.8	38.5	12.1	55.4	44.6
September	35.7	20.2	39.6	4.5	63.4	36.6
October	36.3	22.4	39.4	2.0	66.7	33.3
November	36.2	22.9	37.8	3.2	67.3	32.7
December	36.5	22.5	36.4	4.5	67.1	32.9
<b>2007</b>						
January	13.4	8.3	69.0	9.3	29.5	70.5
February	14.9	9.2	65.3	10.6	31.3	68.7
March	17.8	11.6	58.1	12.5	38.3	61.7
April	19.6	13.5	52.9	14.1	42.8	57.2
May	18.0	14.3	48.3	19.4	41.6	58.4
June	17.6	13.7	42.7	26.0	40.4	59.6
July	22.9	13.9	39.2	23.9	45.8	54.2
August	31.7	16.9	40.8	10.6	58.5	41.5
September	39.3	18.7	37.9	4.1	69.9	30.1
October	46.6	18.6	31.1	3.7	75.4	24.6
November	46.3	19.2	28.8	5.7	74.5	25.5
December	45.7	19.4	27.8	7.2	72.8	27.2
<b>2008</b>						
January	18.9	9.3	58.1	13.7	36.2	63.8
February	25.1	12.1	47.9	14.9	46.1	53.9
March	29.7	14.7	39.0	16.6	52.7	47.3
April	33.0	16.5	33.9	16.6	57.0	43.0
May	34.2	17.1	31.1	17.6	58.5	41.5
June	35.2	18.2	30.8	15.7	60.5	39.5

<sup>1</sup> Excluding vegetables and fruit.

<sup>2</sup> Growth in prices of goods and paid services not included in calculation of core consumer price index.

Table 7

**Contribution to monthly inflation growth  
by group of goods and services (%)**

	Foodstuffs <sup>1</sup>	Non-food products	Paid services	Vegetables and fruit	Core inflation	Non-core inflation <sup>2</sup>
<b>2006</b>						
January	16.0	6.1	59.5	18.3	24.5	75.5
February	43.4	10.0	14.0	32.6	55.8	44.2
March	43.9	15.8	21.6	18.7	67.5	32.5
April	35.8	27.0	41.3	-4.2	90.9	9.1
May	16.1	27.6	29.9	26.4	57.3	42.7
June	15.3	34.9	59.7	-10.0	81.6	18.4
July	37.6	19.0	23.4	20.0	60.9	39.1
August	140.5	132.4	97.9	-270.7	249.5	-149.5
September	269.8	290.1	128.8	-588.7	678.9	-578.9
October	51.0	73.9	34.6	-59.5	145.8	-45.8
November	34.7	29.1	19.3	16.9	74.1	25.9
December	39.6	19.0	23.2	18.2	64.4	35.6
<b>2007</b>						
January	13.4	8.3	69.0	9.3	29.5	70.5
February	17.1	10.6	59.7	12.6	34.2	65.8
March	31.4	22.7	24.5	21.4	70.7	29.3
April	30.0	24.6	22.3	23.1	69.6	30.4
May	8.4	19.5	20.6	51.6	34.4	65.6
June	15.8	10.7	17.0	56.5	35.1	64.9
July	55.9	15.7	17.4	10.9	79.2	20.8
August	724.2	250.9	165.2	-1,040.4	1,016.5	-916.5
September	99.9	33.4	14.7	-48.0	160.7	-60.7
October	78.5	18.2	1.2	2.1	99.3	0.7
November	43.6	23.6	13.3	19.5	67.8	32.2
December	39.2	21.6	19.2	20.0	56.7	43.3
<b>2008</b>						
January	18.9	9.3	58.1	13.7	36.2	63.8
February	36.8	17.4	28.5	17.3	64.9	35.1
March	43.2	22.6	12.8	21.4	72.2	27.8
April	43.5	22.0	17.6	16.9	70.3	29.7
May	39.1	20.1	18.9	21.9	65.2	34.8
June	42.7	26.5	28.7	2.2	74.5	25.5

<sup>1</sup> Excluding vegetables and fruit.

<sup>2</sup> Growth in prices of goods and services not included in calculation of core consumer price index.

## Russia's key macroeconomic and financial indicators

		Year	Q1	Q2	Q3	Q4	
<b>Macroeconomic indicators</b>							
GDP	over period since start of year, billion rubles	2006	5,845	12,206	19,487	26,880	
		2007	6,748	14,497	23,324	32,987	
		2008	8,838				
	over period since start of year, as % of corresponding period of previous year	2006	106.3	106.9 <sup>1</sup>	107.1 <sup>1</sup>	107.4	
		2007	107.4	107.8	107.6	108.1	
		2008	108.5				
	as % of corresponding quarter of previous year	2006	106.3	107.4	107.5	108.0	
		2007	107.4	108.1	107.3	109.5	
		2008	108.5				
Industrial output indices	as % of corresponding quarter of previous year	2006	104.1	106.6	106.9	107.5	
		2007	107.2	107.1	105.5	105.7	
		2008	106.2	105.5			
	over period since start of year, as % of corresponding period of previous year	2006	104.1	105.3	105.9	106.3	
		2007	107.2	107.1	106.6	106.3	
		2008	106.2	105.8			
Agricultural output	as % of corresponding quarter of previous year	2006	102.1	101.8	101.4	110.4	
		2007	103.4	104.3	103.0	103.1	
		2008	104.5	104.2			
	over period since start of year, as % of corresponding period of previous year	2006	102.1	101.9	101.6	103.6	
		2007	103.4	104.0	103.4	103.3	
		2008	104.5	104.3			
Fixed capital investment	over period since start of year, billion rubles	2006	658.4	1,676.0	2,963.3	4,730.0	
		2007	916.6	2,365.7	4,129.3	6,626.8	
		2008	1,295.9	3,256.1			
	as % of corresponding quarter of previous year	2006	108.8	117.7	116.1	120.3	
		2007	122.8	124.2	118.2	120.6	
		2008	120.2	114.9			
Retail trade turnover	over period since start of year, billion rubles	2006	1,857.2	3,925.3	6,162.6	8,711.9	
		2007	2,257.3	4,799.2	7,597.6	10,866.2	
		2008	2,933.6	6,236.7			
	as % of corresponding quarter of previous year	2006	111.4	113.6	115.3	115.3	
		2007	114.7	115.7	116.7	116.7	
		2008	116.5	114.1			
Federal budget on accrual basis, as of end of period	revenue	billion rubles	2006	1,399.1	2,938.1	4,561.0	6,278.9
			2007	1,421.9	3,245.7	5,087.6	7,781.1
			2008	1,932.7	4,370.7		
		as % of GDP	2006	24.0	24.1	23.4	23.4
			2007	21.1	22.4	21.8	23.6
			2008	21.9	23.2 <sup>2</sup>		
	expenditure	billion rubles	2006	823.2	1,854.7	2,866.5	4,284.8
			2007	945.6	2,169.7	3,464.3	5,986.6
			2008	1,332.7	2,995.6		
		as % of GDP	2006	14.1	15.2	14.7	16.0
			2007	14.0	15.0	14.8	18.2
			2008	15.1	15.9 <sup>2</sup>		
Federal budget surplus on accrual basis, as of end of period	billion rubles	2006	575.9	1,083.4	1,694.6	1,994.1	
		2007	476.3	1,076.1	1,623.2	1,794.6	
		2008	600.0	1,375.1			
	as % of GDP	2006	9.9	8.9	8.7	7.4	
		2007	7.1	7.4	7.0	5.4	
		2008	6.8	7.3 <sup>2</sup>			

Note. Table 8 has been compiled from data collected by the Bank of Russia, the Federal State Statistics Service, the Ministry of Finance of the Russian Federation and the Federal Treasury. Beginning from April 2006, pursuant to Bank of Russia Ordinance No. 1660-U, dated February 17, 2006, the calculation of interest rates on bank lending and deposit operations includes data reported by branches of credit institutions.

Table 8 (continued)

		Year	Q1	Q2	Q3	Q4
<b>Socio-economic indicators</b>						
Nominal imputed average monthly per employee wage	rubles	2006	9,397	10,401	10,949	12,203
		2007	11,876	12,993	13,494	15,742
		2008	15,424	16,981		
	as % of corresponding quarter of previous year	2006	122.3	125.1	125.1	125.2
		2007	127.3	125.9	124.0	129.3
		2008	128.0	129.4		
	over period since start of year, as % of corresponding period of previous year	2006	122.3	123.7	124.1	124.3
		2007	127.3	126.6	125.7	127.8
		2008	128.0	128.7		
Real imputed average monthly per employee wage, as % of corresponding quarter of previous year		2006	110.3	114.3	114.3	114.8
		2007	118.2	116.6	113.9	116.1
		2008	113.4	112.7		
Household money income (per capita monthly average), rubles		2006	8,200.0	9,933.9	10,253.3	12,316.8
		2007	9,901.4	11,953.8	12,700.8	15,604.6
		2008	12,333.4	14,938.2		
Household real disposable money income	as % of corresponding quarter of previous year	2006	109.9	115.5	114.5	113.7
		2007	110.0	109.1	111.8	111.0
		2008	109.4	106.9		
	over period since start of year, as % of corresponding period of previous year	2006	109.9	...	...	113.5
		2007	110.0	109.5	110.4	110.7
		2008	109.4	108.1		
Household expenditures as % of income	purchase of goods and services	2006	73.1	67.7	71.0	65.6
		2007	74.1	69.4	71.3	65.8
		2008	76.4	70.8		
	compulsory payments and contributions	2006	10.8	10.3	10.4	10.5
		2007	12.8	12.4	12.0	13.0
		2008	12.7	13.0		
	growth in savings	2006	11.1	10.7	8.3	11.3
		2007	9.8	8.5	6.8	10.6
		2008	7.8	8.7		
	purchase of foreign exchange	2006	7.4	7.0	7.2	6.0
		2007	5.2	5.3	5.2	5.2
		2008	6.9	4.7		
	cash on hand	2006	-2.5	4.3	3.2	6.7
		2007	-1.9	4.4	4.7	5.4
		2008	-3.8	2.8		
Average imputed pension, total, rubles		2006	2,539	2,727	2,800	2,839
		2007	2,846	3,091	3,108	3,299
		2008	3,823	4,044		
Real imputed pension	as % of corresponding quarter of previous year	2006	107.8	107.2	103.7	102.5
		2007	104.1	104.9	102.0	104.3
		2008	119.0	113.9		
	over period since start of year, as % of corresponding period of previous year	2006	107.8	107.5	106.1	105.1
		2007	104.1	104.5	103.6	103.8
		2008	119.0	116.4		
Total number of unemployed (calculated using ILO methodology)	million	2006	5.7	5.5	5.0	5.0
		2007	5.2	4.5	4.3	4.4
		2008	5.1	4.8		
	as % of economically active population	2006	7.8	7.4	6.7	6.8
		2007	7.0	6.0	5.7	5.8
		2008	6.9	6.4		

Table 8 (continued)

		Year	Q1	Q2	Q3	Q4	
<b>Foreign economic activities</b>							
Price of Urals crude	over period since start of year, \$/barrel	2006	57.7	61.1	62.5	60.9	
		2007	54.0	59.7	64.0	69.5	
		2008	93.7	105.3			
	as % of corresponding period of previous year	2006	134.0	134.7	126.7	120.9	
		2007	93.5	97.7	102.4	114.1	
		2008	173.7	176.3			
Exports of goods	over period since start of year, \$ billion	2006	67.3	143.9	223.7	303.6	
		2007	71.7	155.4	244.9	354.4	
		2008	110.4	240.0 <sup>1</sup>			
	as % of corresponding period of previous year	2006	134.1	131.1	128.1	124.5	
		2007	106.5	108.0	109.5	116.8	
		2008	153.9	154.4 <sup>1</sup>			
Imports of goods	over period since start of year, \$ billion	2006	30.9	69.7	112.3	164.3	
		2007	42.8	95.5	153.9	223.5	
		2008	60.2	135.2 <sup>1</sup>			
	as % of corresponding period of previous year	2006	120.1	126.4	128.2	131.0	
		2007	138.6	137.1	137.0	136.0	
		2008	140.8	141.5 <sup>1</sup>			
Current account (over period since start of year), \$ billion		2006	30.4	54.7	78.6	94.3	
		2007	22.3	36.6	51.9	76.2	
		2008	37.7	69.4 <sup>1</sup>			
Private sector net capital outflow (inflow) (over period since start of year), \$ billion		2006	-5.6	15.0	27.4	41.8	
		2007	14.1	68.7	61.7	83.2	
		2008	-23.4	12.3 <sup>1</sup>			
Foreign investment in nonfinancial sector (according to Rosstat data)	over period since start of year, \$ billion	2006	8.8	23.4	35.3	55.1	
		2007	24.6	60.3	87.9	120.9	
		2008	17.3	46.5			
	as % of corresponding period of previous year	2006	146.0	141.9	131.7	102.7	
		2007	2.8 times	2.6 times	2.5 times	2.2 times	
		2008	70.1	77.1			
of which	direct	over period since start of year, \$ billion	2006	3.8	6.4	10.3	13.7
			2007	9.8	15.8	19.6	27.8
			2008	5.6	11.1		
		as % of corresponding period of previous year	2006	2.0 times	143.6	155.5	104.6
			2007	2.5 times	2.5 times	191.3	2.0 times
			2008	57.2	70.0		
	portfolio	over period since start of year, \$ billion	2006	0.2	0.5	0.7	3.2
			2007	0.2	1.1	1.5	4.2
			2008	0.1	1.2		
		as % of corresponding period of previous year	2006	2.9 times	2.9 times	182.3	7.0 times
			2007	85.8	2.2 times	2.3 times	131.8
			2008	62.5	104.4		
	other	over period since start of year, \$ billion	2006	4.7	16.5	24.4	38.2
			2007	14.7	43.4	66.7	89.0
			2008	11.5	34.3		
		as % of corresponding period of previous year	2006	117.2	139.1	122.8	95.3
			2007	3.1 times	2.6 times	2.7 times	2.3 times
			2008	78.7	79.0		
Russia's international reserves (as of end of period), \$ billion		2006	205.9	250.6	266.2	303.7	
		2007	338.8	405.8	425.4	477.9	
		2008	511.8	568.3			
Real ruble exchange rate indices, last month of quarter (as % of December of previous year) <sup>3</sup>	ruble vs. US dollar	2006	6.9	10.0	12.1	16.7	
		2007	2.3	3.8	8.1	15.0	
		2008	6.5	8.5			
	ruble vs. euro	2006	6.5	4.9	6.0	5.6	
		2007	3.1	4.1	4.5	5.8	
		2008	0.6	3.4			
	effective rate	2006	6.2	7.0	7.9	7.4	
		2007	2.7	3.3	3.8	5.1	
		2008	1.5	3.3			

Table 8 (continued)

		Year	Q1	Q2	Q3	Q4
<b>Financial market indicators (including Sberbank rates)</b>						
Average for period						
Overnight interbank credit rate, % p.a.	in rubles	2006	3.2	2.8	2.6	5.1
		2007	3.9	3.4	4.9	5.4
		2008	3.9	4.1		
	in US dollars	2006	4.4	4.8	5.2	5.2
		2007	5.2	5.2	5.1	4.5
		2008	3.2	2.2		
OFZ yields <sup>4</sup> , % p.a.		2006	6.8	6.9	6.8	6.7
		2007	6.6	6.6	6.6	6.6
		2008	6.7	6.9		
Interest rate on household time deposits, % p.a.	up to 1 year in rubles	2006	8.3	7.9	7.6	7.7
		2007	7.4	7.3	7.0	7.2
		2008	7.0	7.1		
	over 1 year in rubles	2006	7.6	5.2	5.2	5.4
		2007	7.9	7.5	7.1	6.8
		2008	7.4	8.0		
	up to 1 year in US dollars	2006	5.6	5.7	5.7	5.9
		2007	5.4	5.3	5.2	5.2
		2008	5.1	5.8		
	over 1 year in US dollars	2006	6.2	4.6	5.0	5.5
		2007	6.8	6.6	6.4	7.0
		2008	6.9	7.0		
Interest rate on credit to non-financial enterprises, % p.a.	up to 1 year in rubles	2006	10.4	10.6	10.3	10.4
		2007	9.9	9.6	9.8	10.7
		2008	10.9	11.2		
	over 1 year in rubles	2006	12.7	12.7	12.5	12.1
		2007	12.1	11.5	11.0	11.4
		2008	12.3	12.8		
	up to 1 year in US dollars	2006	8.6	8.4	8.6	8.5
		2007	8.7	8.8	8.4	9.1
		2008	8.1	8.0		
	over 1 year in US dollars	2006	10.5	10.2	10.4	10.0
		2007	10.3	10.1	9.3	9.8
		2008	9.3	9.9		
Interest rate on ruble-denominated promissory notes discounted by banks, % p.a.		2006	12.9	8.7	9.2	9.7
		2007	9.5	8.9	10.8	10.8
		2008	10.7	11.0		
MICEX rate in 'tomorrow' trades, ruble/\$		2006	28.0733	27.1897	26.8053	26.5910
		2007	26.3056	25.8599	25.5043	24.6525
		2008	24.2286	23.6190		
As of end of quarter						
RTS index, points		2006	1,434.99	1,494.63	1,549.99	1,921.92
		2007	1,935.72	1,897.70	2,071.80	2,290.51
		2008	2,053.93	2,303.34		
Refinance rate, % p.a.		2006	12	11.5	11.5	11
		2007	10.5	10	10	10
		2008	10.25	10.75		

Table 8 (end)

		Year	1.01	1.04	1.07	1.10
<b>Monetary indicators</b>						
M0, billion rubles		2006	2,009.2	1,928.8	2,233.4	2,400.8
		2007	2,785.2	2,741.2	3,027.5	3,220.9
		2008	3,702.2	3,475.5	3,724.9	
M2, billion rubles		2006	6,044.7	6,169.4	7,090.8	7,750.7
		2007	8,995.8	9,412.6	10,857.7	11,494.0
		2008	13,272.1	13,382.9	14,244.7	
Obligations included in broad money, billion rubles <sup>5</sup>		2007	10,149.4	10,898.4	12,033.4	12,699.7
		2008	14,636.7	14,918.3	15,926.6 <sup>2</sup>	
Net foreign assets, billion rubles <sup>5</sup>		2007	6,881.5	7,927.4	8,714.1	9,047.0
		2008	9,923.1	10,540.8	11,282.4 <sup>2</sup>	
Domestic claims, billion rubles <sup>5</sup>		2007	5,799.2	5,798.6	6,331.1	6,771.7
		2008	8,325.9	8,437.2	8,760.6 <sup>2</sup>	
Broad monetary base, billion rubles		2006	2,914.2	2,721.4	3,287.0	3,486.0
		2007	4,122.4	4,210.2	5,139.1	4,587.2
		2008	5,513.3	4,871.4	5,422.9	
Balances of correspondent accounts, billion rubles		2006	508.6	320.0	430.9	443.7
		2007	638.1	518.1	528.7	576.3
		2008	802.2	596.3	592.4	
M2 velocity	annual average	2006	4.4	4.3	4.1	4.0
		2007	3.8	3.6	3.4	3.2
		2008	3.1	3.0	3.0 <sup>2</sup>	
	change since start of year, %	2006	-6.5	-1.4	-4.8	-8.3
		2007	-13.2	-6.1	-12.2	-16.3
		2008	-18.8	-2.7	-3.0 <sup>2</sup>	
Monetisation of the economy (by M2 aggregate), %		2006	22.7	23.0	23.8	24.7
		2007	26.1	27.8	29.8	31.2
		2008	32.2	33.1	33.2 <sup>2</sup>	
Money multiplier	by broad monetary base	2006	2.07	2.27	2.16	2.23
		2007	2.18	2.24	2.11	2.51
		2008	2.41	2.75	2.63	
	change since start of year, %	2006	13.2	9.3	4.0	7.3
		2007	5.2	2.5	-3.2	14.8
		2008	10.3	14.1	9.1	
Foreign exchange rates		2006	28.78	27.70	26.94	26.78
		2007	26.33	26.01	25.82	24.95
		2008	24.55	23.50	23.41	
		2006	34.19	33.63	34.24	33.98
		2007	34.70	34.69	34.72	35.35
		2008	35.93	37.09	36.97	

<sup>1</sup> Estimate.

<sup>2</sup> Preliminary data.

<sup>3</sup> (+) signifies appreciation of the ruble, (-) signifies depreciation of the ruble.

<sup>4</sup> Effective OFZ market portfolio indicator.

<sup>5</sup> Presented in new format in compliance with requirements of the Monetary and Financial Statistics Manual (IMF, 2000).



Table 9

## Bank of Russia interest rates in 2008

Type of instrument	Purpose	Instrument	Liquidity injection/absorption period	Interest rate, % p.a.				
				Before 4.02.08	Before 29.04.08	Before 10.06.08	Before 14.07.08	After 14.07.08
Open-market operations	Liquidity injection	Lombard auctions	2 weeks/not lower than	7	7.25	7.5	7.75	8
		Auction-based (exchange and over-the-counter) direct repo operations	1-7 days/ not lower than	6	6.25	6.5	6.75	7
			1 week/not lower than	6.5	6.75	7	7.25	7.5
			3 months	9	9.75	Operations suspended		
		Purchase of government securities and OBR	–	–				
		Foreign exchange purchase	–	–				
	Liquidity absorption	Deposit auctions	4 weeks	Set by auction results				
			3 months					
		Bank of Russia bonds (including outright sales)	Up to 6 months	Set by auction results				
		Government securities sales	–	–				
Foreign exchange sales		–	–					
Continually conducted operations	Liquidity injection	Loans <sup>1,2</sup>	Intraday	0				
			Overnight	10	10.25	10.5	10.75	11
		Loans secured by non-marketable assets <sup>2</sup>	Up to 30 days	9.25		9.5	9.75	10
		Loans extended against the collateral of bills, claims under enterprise credit agreements or bank sureties <sup>3</sup>	Up to 90 days	7	7.25	7.5	7.75	8
			91 to 180 days	8	8.25	8.5	8.75	9
		Lombard loans <sup>1</sup>	1 day	8	8.25	8.5	8.75	9
			7 days	Set by average weighted Lombard auction rate <sup>4</sup>				
		Direct repo	1 to 7 days	8	8.25	8.5	8.75	9
			1 week	7	7.25	7.5	7.75	8
		Currency swap	Overnight (rubles part)	8	8.25	8.5	8.75	9
	Liquidity absorption	Deposit operations	Tom-next, spot-next and call	2.75	3.25	3	3.5	3.75
1 week, spot-week			3.25	3.5	3.75	4	4.25	

<sup>1</sup> Pursuant to Bank of Russia Regulation No. 236-P of August 4, 2003.

<sup>2</sup> Pursuant to Bank of Russia Regulation No. 312-P of November 12, 2007.

<sup>3</sup> Pursuant to Bank of Russia Regulation No. 273-P of July 14, 2003.

<sup>4</sup> 9% if two consecutive Lombard auctions are declared invalid (8.75% before 14.07.08; 8.5% before 10.06.08; 8.25% before 29.04.08; 8% before 4.02.08).

**Credit institutions' required reserve ratios (%)**

	Required reserve ratio for credit institutions' obligations to non-resident banks in Russian and foreign currency	Required reserve ratio for obligations to individuals in Russian currency	Required reserve ratio for other obligations of credit institutions in Russian and foreign currency
July 1, 2007 – February 29, 2008	4.5	4.0	4.5
March 1, 2008 – June 30, 2008	5.5	4.5	5
July 1, 2008 – August 31, 2008	7.0	5.0	5.5
Since September 1, 2008	8.5	5.5	6.0



